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Foreword

Governance cannot be separated from the basic principles of good governance, namely transparency, participation, and accountability as the main elements. The government always tries to apply the principles of good governance in making the policies. Meanwhile, the supreme audit institution (SAI) performs a central function within government accountability systems. It is generally aimed at promoting transparency, efficiency, effectiveness, and accountability of the public sector and improving the performance of government institutions. By scrutinizing the management and performance of public finances, SAI ensures that public resources are used wisely and efficiently for the benefit of the citizens. In carrying out their roles, both SAI and the government must continue to pay attention to the interests of other stakeholders based on morals, ethics, culture, and other applicable rules.

The article “Rereading Mathnawi Mawlana Jalal al-Din Rumi from the perspective of ethical management in the public sector” begins this edition. The article discusses how cultural values should be considered in the management of ethics in the public sector. This paper examines Mawlana Jalal al-Din Rumi’s masterpiece, *The Mathnawi*, as an example of a cultural source and its role in strengthening ethical management practice in public sector organizations.

Considering the roles of SAI to promote better management in the public sector, the article entitled “Assessing the development of performance audit methodology in the supreme audit institution: The case of Indonesia” observe the development of the performance audit methodology before the 2006 BPK revitalization, early developments for 2006-2010, and the maturity level process (2011 onwards). This article also suggests the importance of using big data analytics, the concept of governance audit, and the public policy aspect in performance audit in response to the new reality and challenges faced by BPK ahead.

More than a decade of implementation, regional autonomy still leaves various problems in the budget field. The regional fiscal capacity is still low, making it difficult for local governments to balance their regional revenues and expenditures. Low revenue budgets and higher regional expenditures result in budget stress. “Mapping of budget stress in Indonesia: Consequence on-budget implementation” aims to map the local government experiencing budget stress. Furthermore, this study examines and analyzes the consequences of budgetary stress on budget implementation throughout Indonesia during the 2016-2020 period.

The fourth articles concern on health services managed by local governments, the article “Analysis of regional financial independence, growth potential, and health services: A case study of regencies/cities in South Sulawesi” tries to analyze the relationship between financial independence and regional growth potential in the fulfillment of health service commitments in South Sulawesi Province.

In the audit methodology, an article entitled “Analysis of RBA implementation and the preparation of an audit program at Ministry of Villages, Development of Disadvantaged Regions and Transmigration” aims to analyze the implementation of RBA upon audits conducted by BPK. Risk-Based Audit (RBA) is an audit method that applies a risk approach in its implementation to perform an audit effectively and efficiently—at the end, producing quality audit results.

As we face today, the COVID-19 pandemic, which has not yet ended, forces us to continue innovating and adapting to change. BPK, as an external auditor institution, also strives to maintain and improve the quality of its audits to maintain public trust. An article inspired by audit quality is “The effect of audit cost, information technology, and auditor’s competence on

FOREWORD

audit quality during the COVID-19 Pandemic.” This study aims to determine the significance of audit costs due to budget refocusing, IT utilization, and auditor competence on audit quality during the pandemic.

Starting from June 2021, JTAKEN publishes seven articles in each edition. The closing article for this issue is entitled “The effect of audit opinions, implementation of audit recommendations, and findings of state losses on corruption levels within ministries and institutions in the Republic of Indonesia.” With the background that the prevalence of corruption in Indonesia is increasing every year, this study examines the impact of audit opinions, the implementation of audit recommendations, and findings of state losses by BPK on corruption in ministries and institutions.

Many thanks to the authors who chose Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara for 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 2021 edition can be helpful to enhance readers' knowledge and become a reference for the development of academics and practitioners and policy formulation.

Editor in Chief



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

Re-reading the Mathnawi of Mawlana Jalal al-Din Rumi from the standpoint of ethics management in public sector

Yasan Uzun

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 7(1) 2021: 1 - 18

It is widely believed that a virtuous state always commits to uphold and consistently implement ethical values. If ethics cannot be maintained in the public sector, it would drive unethical behaviors of public officials that ultimately damage the public reputation and cause nepotism, irregularities, waste of public resources, loss of lives and properties, etc. Meanwhile, implementing ethical values into practice for public sector management requires a systematical approach and policies. Since the culture of a nation also influences people's behaviors, thus the role of cultural values should be considered in the management of ethical values in the public sector. This study examines the master-piece work of Mawlana Jalal al-Din Rumi, The Mathnawi, as an example of a cultural resource. This study has two main purposes: Firstly, it aims to raise awareness about the advice of Mawlana Jalaleddin Rumi regarding the essentials of ethical management in the public sector through Math-nawi. The second aim is to encourage readers to analyze and evaluate their own cultural resources to understand and implement the ethical management philosophies they envisage through a systematic perspective. This study argues that the core elements of Mathnawi with supporting local cultural values can play a crucial role in strengthening the practice of ethical management in public sector organizations. Therefore, it can be said that Mathnawi includes advice regarding the key essentials of ethics management.

Keywords:

Ethics management; audit; Mawlana Jalal al-Din Rumi; Mathnawi, culture

DOI: 10.28986/jtaken.v7i1.500

Assessing the development of performance audit methodology in the supreme audit institution: The case of Indonesia

Nico Andrianto, Iwan P. Sudjali, R. Luki Karunia

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 7(1) 2021: 19 –37

Badan Pemeriksa Keuangan (BPK), or The Audit Board of the Republic of Indonesia, has introduced performance audits intensively since public sector audit reforms were initiated in 2001. However, the implementation of performance audits still faces several obstacles. This study examines the development of the performance audit methodology in BPK, which can be divided into three stages: before the revitalization of BPK in 2006, the initial development of performance audits during 2006-2010, and the maturity of the implementation of performance audits since 2011. This study concludes that several key factors have affected the implementation of performance audits at BPK, including the development of audit guidelines, the dynamics of medium-term government planning, the focus of the BPK's Management, and assistance provided by other supreme audit institutions (SAI). To address new realities and challenges in the future, more sophisticated performance audit methods need to be adopted by BPK, such as big data analytics, the adoption of governance audits, and employing public policy analysis. Without adopting such methods, the institutionalization of effective performance audits might not be achieved in the future.

Keywords:

Audit reform, performance audit, effective, methodology, SAI.

DOI: 10.28986/jtaken.v7i1.554

Mapping of budget stress in Indonesia: Consequence on budget implementation

Ronald Tehupuring

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 7(1) 2021: 39–57

Keywords:

Budget stress; budget implementation; decentralization; APBD

The phenomenon of a budget deficit in local governments at the provincial, regency, and city levels shows that there is budget stress. Budget stress is a regional fiscal condition reflected in the lower revenue budget, while regional expenditure is getting higher. The consequence of budget stress is low budget implementation, and it reduces the quality of services to the public. This study aims to map the regions experiencing budget stress at the local government levels. Furthermore, this study examines and analyzes the consequences of budgetary stress on budget implementation. The research sample used local governments at the provincial, regency, city levels throughout Indonesia during 2016-2020. This study uses Ordinary Least Square (OLS) to test the research hypothesis. This study groups the five regions with the highest budget stress during 2016-2020. The results of this study can contribute to the theory, methodology, and implementation related to the budget. The theory's contribution is that the political budget cycle can maintain government performance through various efforts to reduce budget stress. This study also found that budget stress can reduce budget implementation. Therefore, the government needs to pay attention to indicators of budget stress.

DOI: 10.28986/jtaken.v7i1.542

Analysis of regional financial independence, the potential for growth, and health services: A case study of regencies/cities in South Sulawesi

Azwar Iskandar

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 7(1) 2021: 59–76

Keywords:

Fiscal; financial independence; growth; health expenditure

This study aims to analyze: (1) the financial independence and commitment of health services in the region; (2) the potential for growth in supporting health services in the region; and (3) the relationship pattern between financial independence and regional potential for growth in order to achieve the goal of fulfilling health service commitments in the region. This study is explanatory research using a quantitative approach. The results show that: (1) the average level of financial independence of regencies/cities in South Sulawesi Province fall under the high category and relatively independent in terms of source and allocation of regional budgets; (2) the average growth of all regencies/cities in South Sulawesi Province shows positive figures which implies that the prospect of their economic growth has accelerated along with several problems in each regency/city; (3) some regencies/cities with large APBD do not have an increased allocation of resources for health expenditure. On the contrary, some regencies/cities that fall under the category of low budget and financial independence have a better commitment to health service and expenditure. In addition, almost all regencies/cities categorized as having good potential for growth ended up having low performance in health expenditure. The local government has carried out fiscal decentralization, which is defined as the freedom for regions in carrying out policies related to budget politics in the region. Notwithstanding the preceding, the role of the central government is still greatly expected to advocate for the improvement of health expenditure quality.

DOI: 10.28986/jtaken.v7i1.505

Analysis of RBA implementation and the preparation of an audit program at Ministry of Villages, Development of Disadvantaged Regions and Transmigration

Nur Meilani Tri Nugraheni, Bambang Pamungkas

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 7(1) 2021: 77—93

Risk-Based Audit (RBA) is an audit method that applies a risk approach in its implementation. By applying the RBA method, it is expected that an audit can be performed effectively and efficiently, thus producing maximum audit results. This study aims to analyze the implementation of RBA upon audits conducted by The Audit Board of Indonesia (BPK). Furthermore, this study analyzes the preparation of an Audit Program in line with the previously determined RBA. The research framework uses Agency Theory which emphasizes the relationship between management and principal. To ensure that management does not perform any manipulation, an independent third party must conduct the audit. This study applied a qualitative research methodology with a case study approach at BPK. The author expects to dig deeper into the application and implementation of RBA within BPK by using the case study approach support by audit documents and interviews with BPK Audit Team. The results showed that the implementation, performance, and monitoring of RBA by the BPK Audit Team were in line with the instructions and guidelines set by BPK.

DOI: 10.28986/jtaken.v7i1.489

Keywords:

Risk based audit; agency theory; BPK; audit program

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

Indra, Rindu Rika Gamayuni, Usep Syaipudin

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 7(1) 2021: 95—112

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

DOI: 10.28986/jtaken.v7i1.527

Keywords:

COVID-19; audit; government; accountability; financial statements

The effect of audit opinions, implementation of audit recommendations, and findings of state losses on corruption levels within ministries and institutions in the Republic of Indonesia

Muhamad Agung Budiman, Firdaus Amyar

Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 7(1) 2021: 113—129

Keywords:

Audit opinion;
recommendation;
state losses;
corruption

The prevalence of corruption in Indonesia is increasing every year. This fact has further undermined public confidence to strengthen governance and is a critical barrier to national development. This study aims to empirically examine the individual and combined impact of audit opinions, the implementation of audit recommendations, and findings of state losses by the Indonesian Supreme Audit Board (BPK) on the prevalence of corruption in ministries and institutions in the Republic of Indonesia. Using multiple linear regression analysis, this study used a purposive sampling method and investigated 72 ministries using secondary data from 2014 to 2017 obtained from BPK and the Corruption Eradication Commission of the Republic of Indonesia (KPK). This study indicates that audit opinions and the implementation of audit recommendations do not affect corruption in Indonesian ministries and institutions. In contrast, findings of state losses do have an influence. The combination of audit opinions, implementation of audit recommendations, and findings of simultaneous state losses do not affect corruption cases in Indonesian ministries and institutions. BPK can use the results of this study to formulate approaches and recommendations for auditing government financial reports that have a strong correlation with corruption eradication. Moreover, KPK needs to be more vigorous in its efforts to eradicate corruption, including establishing closer cooperation with BPK because the results of this research show that findings of state losses by BPK are closely related to corruption cases.

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Re-reading the Mathnawi of Mawlana Jalal al-Din Rumi from the standpoint of ethics management in public sector

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ABSTRACT

It is widely believed that a virtuous state always commits to uphold and consistently implement ethical values. If ethics cannot be maintained in the public sector, it would drive unethical behaviors of public officials that ultimately damage the public reputation and cause nepotism, irregularities, waste of public resources, loss of lives and properties, etc. Meanwhile, implementing ethical values into practice for public sector management requires a systematic approach and policies. Since the culture of a nation also influences people's behaviors, thus the role of cultural values should be considered in the management of ethical values in the public sector. This study examines the masterpiece work of Mawlana Jalal al-Din Rumi, The Mathnawi, as an example of a cultural resource. This study has two main purposes: Firstly, it aims to raise awareness about the advice of Mawlana Jalaleddin Rumi regarding the essentials of ethical management in the public sector through Mathnawi. The second aim is to encourage readers to analyze and evaluate their own cultural resources to understand and implement the ethical management philosophies they envisage through a systematic perspective. This study argues that the core elements of Mathnawi with supporting local cultural values can play a crucial role in strengthening the practice of ethical management in public sector organizations. Therefore, it can be said that Mathnawi includes advice regarding the key essentials of ethics management.

KEYWORDS:

Ethics management; audit; Mawlana Jalal al-Din Rumi; Mathnawi; culture

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INTRODUCTION

Ethics is a concept that relates to thinking and evaluating behavior from the standpoint of morality. The concept of “ethics” can be described as the branch of philosophy that defines what is good for the individual and society and establishes the nature of obligations or duties that people owe themselves and one another (EUROSAI TFAE, 2017). In the public sector, “ethics” contributes to the integrity of the public management by raising the morality level of it through encouraging and supporting ethical thinking of public officials. Suppose they do not display ethical behaviors in public service production and delivery. In that case, they could open the way to the unbearable costs in public sectors such as damages in public reputation, nepotism, irregularities, wasting of public resources, loss of lives and properties, etc. Thus, the ethical management of the public sector becomes an important area for management that should be handled carefully by leaders and managers. At this point, we can raise a question: How can ethics be managed in the public sector, or how can ethical behaviors of public officials be promoted? Since people’s behaviors are influenced by the nation’s culture and even of the civilization they belong to, those who want to manage ethics well in the public sector should also be aware of the culture and cultural values.

Culture is the identity of a nation, which brings people together under one umbrella to live upon the generally agreed values and beliefs. Culture identifies the values that shape the relationship among individuals, society, and the state. It also guides people by describing how those values can be put into practice to manage the public well. Cultural norms define what is encouraged, discouraged, accepted, or rejected within a group (Groysberg, Lee, Price, & Cheng, 2018). Therefore, by applying cultural re-

sources, leaders and policymakers can find out the essentials of successful ethics management in the public sector for the happiness and welfare of people, including public officials.

The author will attempt to present the essentials of ethics management in the public sector through applying to one of our cultural resources, the masterpiece work of Mawlana Jalaleddin Rumi, titled “The Mathnawi,” through this study. It includes such statements that could be considered as key essentials regarding the ethics management of the public sector and being a good public leader and official who know “what behavior is good and what is not.” Therefore, this paper mainly has two purposes: First of all, it aims to raise awareness about the advice of Mawlana Jalaleddin Rumi regarding the essentials of ethics management of the public sector through his Mathnawi. The second purpose is to encourage readers to look at their cultural resources regarding the works conducted to understand the ethics management philosophy they envisage through a systematic analysis.

The professional literature is abundant in ethical tools that can be used by managers in their private or public institutions: codes of ethics or principles of conduct, ethical committees, ethical audits, ethical procedures and policies, ethical training, ethical hotlines, whistleblowing procedures, and others (Puiu, 2015). According to Buang (2015), practicing leadership by a good example is imperative to strengthen accountability and integrity for the leaders and managers. The leaders must be morally strong and willing to take firm actions to ensure the subordinates are always clean, efficient, and trustworthy by becoming role models and ensuring that the existing controls and mechanisms effectively function.

In order to analyze Mathnawi well, we

should use a reference evaluation framework for this study's purpose, and those would benefit from the frameworks developed by the OECD regarding the key requirements of integrity management. Those requirements could be classified under the following management areas: Ethics Guidance, Human Resource Management Policies, and Approaches, also Ethics Monitoring and Controls (OECD, 2005). Those areas are building blocks and interrelated parts of a well-functioning ethics infrastructure. They provide a holistic approach to understanding public integrity management as a concept and develop relevant institutions, systems, and mechanisms for promoting ethics and countering corruption in public service. Ethics guidance refers to the development of codes of conduct/ethics for public officials; familiarization of public employees with the codes of ethics conduct through training and awareness-raising activities; development of ethical leadership attitudes; and ethics advising support to employees.

We know that “human” is the center of ethics management, and all business activities are carried out and led through human efforts. Thus, policies and management approach to recruit and maintain public officials committed to public values play important roles in realizing integrity in public management. In addition, value-based management understanding requires effective design and practice of human resource management policies, procedures, structures, and processes by considering ethical values and principles. Finally, ethics monitoring and control activities of management focus on maintaining ethics behaviors by encouraging risks management approach to deal with ethics risks, transparency and accountability mechanisms, stakeholder engagement policies, strengthening the functions of oversight bodies, etc.

LITERATURE REVIEW

Mawlana Jalal al-Din Balkhi-Rumi, the author of the renowned Mathnawi or “Rhyiming Couplets,” was born in 1207 in Balkh, now Afghanistan. In today’s Turkey, he lived most of his life in Konya, where he died in 1273. Mawlana, the Persian-language poet and philosopher, is considered one of the greatest Sufi masters, a well-known Ibn Arabi and Shams-e Tabrizi peer. He addressed humanity as a whole: “I do not distinguish between the relative and the stranger” (UNESCO, 2007). Mawlana Jalal al-Din Rumi is well known in the West and next to al-Ghazzali, perhaps the Sufi most studied by Western orientalis. A good portion of his writings has been translated into English, mainly through the efforts of the outstanding British orientalis R.A. Nicholson and A.J. Arberry’ (Chittick, 2005). Earlier scholars such as E. H. Whinfield, J. Redhouse, and C. E. Wilson had translated portions of the Mathnawi, but it was Nicholson’s work that was a true milestone of orientalism. He edited and translated the whole of the Mathnawi in six volumes and wrote two volumes of commentary. Arberry retranslated some of the stories from the Mathnawi as independent units (without Rumi’s continual didactic digressions) in *Tales from the Mathnawi*, London, 1963, and *More Tales from the Mathnawi*, London, 1968 (Chittick, 2005). The messages Mawlana wants to give for today’s (and also tomorrow’s) people besides faith could be stated briefly as follows: Obedience to Almighty Allah, being compassionate for His creatures, mercifulness, brotherhood, peace, love, purification, and all of the other values in line with them (Cebecioğlu, 2007).

His works can be stated as follows: “Divan-i Kebir” is a collection of poems recited by Mawlana over a wide span of time. It contains approximately 40 thousand couplets within twenty-one moderate-size divans, as well as one “Divan-i Rubai.” “Fih-i Ma-Fih”

connotes “What’s within is within” and contains Mawlana’s lectures. “Mecalis-i Seb’a,” as the meaning of the title “Seven Sermons” implies, includes Mawlana’s seven lectures. “Mektubat” consists of the 147 letters that Mawlana wrote to relatives, including his son Sultan Veled, friends, rulers, and state officials. “The Mathnawi” contains approximately 26 thousand couplets in six volumes, consisting of stories inspired by the Quran’s teachings about all that is created, as well as Prophet Mohammad’s (peace be upon Him) words and their morals (International Mevlana Foundation, 2020). Mawlana’s works were read in different languages worldwide, and his teachings inspired hundreds of poets. He was remembered as a “sultan of heart” by many nations and states, most notably by the Ottoman State (Pala, 2010).

It was known that the first eighteen lines of Mathnawi were written down personally, and the rest dictated to his student, Chalabi Husameddin. By its particular and universal messages, Mathnawi of Mawlana Jalal al-Din Rumi aims to unveil the secrets of human existence by making people familiar with the Divine love and essentials of a virtuous life. It provides living codes that enable people to beautify both their worlds and afterlives. Like his other works, Mathnawi is a mirror and commentary of the Holy Qur’an. Mawlana tells all of his stories and words of wisdom by taking verses in the Qur’an or hadiths of the Prophet as references (Yılmaz, 2007). The various states of the human soul (such as sadness, happiness, weaknesses, desires, even childishness, etc.) appear in Mathnawi exceptionally and clearly (Gölpınarlı, 1959). Mathnawi aims to make people mature morally and uses all of the stories and words of wisdom for this purpose (Konur, 2007). There are expressions of divine love and high manners in the works of Mawlana. Worlds, terms, symbols, abbreviations used to convey these feelings require

mystical, Sufic comments and explanations for the readers. Their explanations exist in the works of Sufi, mystic persons who had lived before, as well as they exist especially in his work, the Mathnawi (Karaismailoğlu, 2014). Mawlana describes Mathnawi as follows:

“This is the Book of the Mathnawí, which is the roots of the roots of the roots of the (Mohammedan) Religion in respect of (its) unveiling the mysteries of attainment (to the Truth) and of certainty; and which is the greatest science of God and the clearest (religious) way of God and the most manifest evidence of God... It is the cure for (sick) breasts, and the purge of sorrows, and the expounder of the Qur’án, and the (source of) abundance of (Divine) gifts, and the (means of) cleansing (sordid) dispositions.” (Rumi, 2020: 1/26-27).

RESULT AND DISCUSSION

The advice of Mawlana in Mathnawi Regarding Ethics Guidance for Public Sector

Integrity systems often begin with a code of conduct, code of behavior, or code of ethics. No matter which term is used, they usually start with either a series of principles or a delineation of behaviors that public servants are expected to avoid or observe (OECD, 2005). Code of ethics translates core values and principles into concrete standards in an easily understandable way. At the institutional level, codes of ethics/conduct articulate boundaries and expectations of behavior. They provide clear markers defining which behaviors are forbidden and which are expected (EUROSAI TFAE, 2014).

If we analyze Mathnawi, we see that Mawlana’s thoughts for people’s happiness in this world and the afterlife depend on values. Mawlana emphasizes many fundamental values which are necessary for private and pub-

lic life, such as “justice,” “honesty,” “cautiousness,” “having no lust for something,” “being knowledgeable,” “modesty,” “decency,” “working,” “cooperation” etc. For example; he refers to the value of “justice” by saying as follow:

“(The Divine Will uttered in) ‘Be, and it was’ hath bestowed the kingdom on Us, that the people may not cry out in lament to Heaven; That burning sighs may not soar upward; that the sky and the stars may not be shaken; That the empyrean may not tremble at the orphan’s wail; that no (living) soul may be marred by violence. We established a law (of justice) throughout the kingdoms (of the earth), to the end that no (cry of) ‘O Lord!’ should go up to the skies.” (Rumi, 2020: 3/4639-4642).

In his work, Mawlana gives tasks to people related to private life and public management by his statements in his work. For example: “Preserve the wing and do not indulge such lust, to the end that the wing of desire may bear you to Paradise.” (III/2137); “How should I be an enemy to the King’s treasure-house?” (V/4047); “You have devoured our property and are carrying off the iniquities (to the next world) (II/411); “So long as you accept no bribe, you are seeing; when you act covetously, you are blind and enslaved” (II/2753); etc.

Having analyzed Mawlana’s couplets in Mathnawi, we can conclude that Mathnawi is a work built on values. These values and the relevant statements could be taken as a reference to develop today’s codes of ethics for public management. For example, depending on the statements above, the following examples could be developed as behavioral standards in public management: Public officials should not use and benefit public property and resources for their benefits while carrying out their roles and responsibilities; Public officials should avoid public loss while managing public resources under their au-

thority and control; Public officials should deliver public services in compliance with legislation without making any discrimination, etc.

Alignment of public officials’ values with institutional values is crucial to maintain successful ethics performance in the public sector. One management approach to provide this alignment is the training of public officials to make them aware of what values they should follow, what behavior is correct, and what is not. Ethics training is a valuable tool for strengthening ethics and preventing corruption in public administration if applied together with other tools as part of a comprehensive anti-corruption and pro-integrity policy (OECD, 2013). Ethics training is a precondition of having an understanding of behavioral standards. Through ethics training, public officials become familiar with their ethics codes. Assuming that public officials, who get ethics training and develop themselves on the values and right behavior, reflect the good practice of behaviors to service users and people in their social lives, they could be actors of maintaining the sustainability of ethics culture in the public sector. In his work, Mawlana wants people to be aware of the Truth, their own essence, and correct behavior. To develop the human being materially and morally, he suggests many training and/or learning methods that can be benefited in private life and also in public management.

According to Mawlana, one should listen to what people say very carefully to learn values, the right, and wrong behavior, also be a “perfect man” in his sense. Thus, he starts his Mathnawi by saying, “Listen to ...” (I/1) He wants people to listen to what is said in the stories or by scholars, experienced ones about the right and the wrong, and take due lessons to get moral maturity. He also reminds people “the need of reading” to develop morally and learn the correct way of

behaving: "Haven't not you read in the Message of God (the Qur'án) Do not cast yourselves with your own hands into destruction?" (III/3422-3423) etc. In the eye of Mawlana, it is also important to develop the ability of understanding and perceiving what behavior is right and what is not: "Go, behold the foxy tricks played by the hare; behold how the hare made a plot to catch the lion." (Rumi, 2020: I/1029). Mawlana does not forget to mention the need for in-service training in terms of ethics. He points out this need in one of the stories in Mathnawi: "A certain rich man had a Hindú slave whom he had educated and enlivened (with knowledge). He had taught him science and all polite accomplishments; he had lighted the candle of erudition in his heart." (Rumi, 2020: VI/249-250).

Ethical leadership is essentially a leadership theory, which uses ethical concepts as a guide to managing subordinates. Since ethics deals with the principles of 'right' behavior and leadership with influencing other people to achieve goals, ethical leadership affects people through ethics (Luenendonk, 2020). Building and maintaining an institution of virtue is the responsibility of all public officials, but mainly the responsibility of leaders and managers. Virtuous administrators, i.e., ethics leaders, are supposed to be role models in disseminating ethics values to public officials, stakeholders and promoting ethical behaviors. They do their best to make ethical decisions, care about and respect their employees. They are sensitive people regarding ethical values and coordinate what should be done to put values into practice in their institutions. They manage the helm of the ship they administrate without deviating from ethical values. They take all precautions and practice them appropriately.

Mawlana, in the context of ethical leadership, first of all, emphasizes the need for a "leader" by stating that "The sensuous eye is

the horse, and the Light of God is the rider: without the rider the horse itself is useless." (Rumi, 2020: II-1286). He explains the main tasks and responsibilities of ethics leaders, in particular to the "King." When analyzed, we see that all these responsibilities refer to ethical leadership's ethical values and characteristics. Some of them are as follows: The king's/leader's business is (to show) justice and bounty (Rumi, 2020: VI/3969). A leader is the righteous man and not the prisoner of his lust and gluttony (Rumi, 2020: IV/3122). Leaders should be away from anger and lust since those two are rulers and lords over him/her (Rumi, 2020: II/1467-1468). They unite people they lead and manage and do not cause separations (Rumi, 2020: II/1750-1751). The graciousness of the good and wise leader makes a mark (impressed itself) on all staff (Rumi, 2020: I/2819), etc. According to Mathnawi, people follow the characteristics of their leaders: "*The head is always an Imám (leader and guide) to the foot.*" (Rumi, 2020: III/1548). And the reason for the corruption of society is the corruption of administrators/leaders: "*A fish stinks from the head, not from the tail.*" (Rumi, 2020: III/3080). Leaders should care about their subordinates (public officials) for the commitment to ethics values: "*Every king's messenger must be of his (the king's) kind..*" (Rumi, 2020: III/2734).

Ethics advising is related to provide confidential advice and guidance to staff on ethical issues (UNEO, 2020). While carrying out their responsibilities, public officials may come across situations in which they do not know how they should behave. Sometimes, because of changes in the working environment of officials, it could be not easy to comment on values and put them into practice. In such cases, leaders are supposed to provide ethics advisory service support to their employees. It would help public officials make the right decisions on time and sup-

port ethics management and culture. Mathnawi mentions the need to “applying for advice,” which is necessary for private life and delivery of public services. According to Mathnawi, counseling gives people perception and understanding, and through it, “the mind is helped by other minds” (Rumi, 2020: I/1043). Mawlana praises the thoughts and advice of experienced people by stating that “old intelligence bestows on people a new fortune” (Rumi, 2020: III/147). People should apply for righteous ones to find the right way and not fall into behavioral errors (Rumi, 2020: VI/2611-2612).

The advice of Mawlana in Mathnawi Regarding Human Resource Management Policies

Ethics management includes policies and practices that create conditions to ensure fair and impartial selection, promotion and remuneration and contribute to social respect (EUROSAI TFAE, 2017a). Regarding recruitment, the right jobs are done by the right people with due qualifications for the job requires. It is valid for both private and public businesses. Public officials to be recruited would use public power and public resources entrusted to them by the public and have the right to access public information. Thus, the recruitment of public officials is especially a sensitive area that should be handled carefully. Users of public services also expect public officials to follow public values in the production and delivery of services. Such an expectation makes a value-based recruitment policy and practices an essential requirement for ethics management.

Mawlana draws our attention to that those committed to public values should take places and roles in state management. For this purpose, Mawlana advises leaders of public management to have “evaluation/selection criteria” for an effective recruitment policy. If they are not set and applied, it would be

difficult to identify which applicant has due qualifications for vacancies:

“Whether you will or not, (so long as you are) with the lantern the form of falcon and the form of crow become visible (to you). Otherwise, (beware, for) these crows have lit (the lantern of) fraud: they have learned the cry of the white falcons.” (Rumi, 2020: IV/1699-1700).

An interview is an important selection tool in the eye of Mawlana. By it, public leaders/managers can identify those who have due potential in terms of honesty, commitment, and other public values for public jobs:

“Man is concealed underneath his tongue: this tongue is the curtain over the gate of the soul. When a gust of wind has rolled up the curtain, the secret of the interior of the house is disclosed to us...” (Rumi, 2020: 2/845-846); *“When a captive wants a lord (to buy him as a slave), he offers a preface (summary account) of his talent; (But) when he is ashamed (disgusted) at his buying him, he makes himself out to be sick and palsied and deaf and lame”* (Rumi, 2020: I/1212-1213).

Once people are recruited to public posts, they should be trained to be professional in their jobs. They should be equipped with due skills and knowledge their jobs require. They are supposed to be the protectors of public reputation at the same time. The development of skilled and experienced public officials would strengthen the perception of public service users regarding public reputation.

Considering that production and delivery of public service is an “art” by itself, Mawlana refers to the need of “having/finding a master” for the development of people. Professional masters guide public officials to obtain true knowledge on how to perform their duties: “Whoever takes up a trade (or profession) without (having) a teacher becomes a laughing-stock in town and coun-

try” (Rumi, 2020: II/590). Professional knowledge should be obtained from the right people, i.e., experienced, expert, and honest. Professional knowledge helps people to avoid wrong behaviors. Mawlana considers the right use of knowledge resources on due purposes for professional development:

“Though the (final) object of a book is the science (which it contains), (yet) if you make it a pillow (to rest on), it will become (serve as) that too; But this (function of being a) pillow was not its (final) object: it (the final object) was learning and knowledge and right guidance and profit.” (Rumi, 2020: III/2989-2990).

Regarding the assignment of public officials, merit-based assignment policies are the key success factors for an effective and fair human resource management system in the public sector. Users of public services expect to get them via competent public officials. If leaders/managers do not follow an effective assignment policy in place, it would be inevitable to cause deviation from the public good, disruption of works, loss of working motivation, etc. In all cases, that means ineffective use of public resources and waste of all potentials.

Mathnawi considers “merit” as the key criterion of a successful assignment policy. He emphasizes the importance of assigning competent and fair people to work by making references to the outcome of ineffective assignment policies: “Every unworthy one's hand makes you ill” (Rumi, 2020: II/327). He warns us regarding the potentially dangerous outcomes of making assignments to incompetent people. As Rumi (2020:IV/1444-1448) said “the worthless person who acquires wealth and office has become the seeker of his own disgrace. Either he behaves stingily and gives few presents, or he shows generosity and bestows (them) in the wrong place (unsuitably). When authority falls into the hands of one who has lost the (right)

way, he deems it to be a high position, (but in reality) he has fallen into a pit. He does not know the way, (yet) he acts as guide: his wicked spirit makes a world-conflagration.” One important issue Mathnawi tells us is related to the distribution of the workloads. Leaders/managers should be fair in the distribution of works to public officials: “Lay on the weak a task in proportion to their strength.” (Rumi, 2020: I/579).

As regards performance assessment, evaluating the performance of public officials is necessary to develop the quality of public service and promote a value-based performance. Through a well-structured performance assessment system in place, it is expected that public officials are appreciated fairly and would have self-confidence and a sense of commitment. Performance assessment is an excellent opportunity for public officials to develop themselves by being aware of their strengths and weaknesses if available, and it also reinforces the sense of self-esteem. Mawlana pointed out that works gave an idea about people's identity or characteristics. According to him, works should be done on time for a successful performance.

The examples of stories in Mathnawi show that those in the position of managers/leaders evaluate the performance of their subordinates and follow a reward-penalty approach. Such as in the story of Ayaz, Mawlana told us how the King praised the merits of Ayaz to Amirs and explained the reason for his high wage (Rumi, 2020: VI/385-400). In one of the stories in the Mathnawi, we learn that the King orders reduction in the allowance of a slave, neglecting the niceties of service to him (Rumi, 2020: IV/1490-1492).

Regarding the remuneration of public officials, it should be stated that wage is paid as a reward for the physical and intellectual ef-

forts of the workforce. It is a motivating factor for public officials in meeting their needs. Wage is paid for them so that they do not incline wrong and unethical behaviors such as bribe, irregularity, etc., and do not need anyone to meet their needs. In integrity-based public management, it is expected that people get fair rewards for their works, live a good life commensurating with their earnings, and do not take wrong paths with their greed for power, position or money, etc.

Mawlana cares about rewarding people for the efforts they put in the work. He thinks that every work/effort has a reward in return. The reward of a successful performer is also different from others. Mawlana explains this point of view in the story of Ayaz. Upon the question of Amirs regarding the salary of Ayaz, which is the salary of thirty Amirs, the King proves how Ayaz deserves his high wage (Rumi, 2020: VI/385-400). He considers that people who cannot display the expected performance will be decreased compared to successful ones. In a story, Mawlana tells us that the King orders reduction in the allowance of a slave, neglecting the niceties of service to him (Rumi, 2020: IV). Mathnawi also explains the rewarding policy of those who do not perform their jobs honestly and fairly.

Regarding the promotion of public officials who demonstrate successful performance in their posts/positions to the higher places, it is an important motivation element for them in terms of new tasks, responsibilities, and wages. Merit-based promotion policies and practices would be a helpful management approach adding value to improving the performance and integrity of public management through providing public services to be delivered by a professional workforce.

Mathnawi includes reference statements regarding career planning: “The first is for the sake of the second, like mounting on the steps of a ladder; And deem the second to be for the

sake of the third, (and so on) to the end, in order that you may arrive, step by step, at the roof.” (Rumi, 2020: IV/2892-2893). He also refers to the term “trial/testing” related to the promotion of workforce (Rumi, 2020: III/682). Thus, in his thoughts, “trial/testing” plays an essential function in a promotion. One should be hard-working in all of his/her jobs to get a fair promotion (Rumi, 2020: IV/2468).

Regarding the discipline of public officials, the disciplinary policy is an important tool to align public officials’ behaviors with institutional and public service values. Good disciplinary policies are expected to promote ethical behaviors and deter unethical behaviors of public officials. It is important to respond to the breaches of ethics values by appropriate sanctions, and it contributes to strengthening ethics culture in public sector management.

Mawlana presents us with some explanations regarding “crime” and “penalty,” which are the key concepts of discipline and criminal law. According to him, there should be a balance between each crime and penalty. He explains his ideas through the following statements:

The iniquity of evil-doers became (for them) a dark well: so have said all the wise. The more iniquitous one is, the more frightful is his well: (Divine) Justice has ordained worse (punishment) for worse (sin)” (Rumi, 2020: I/1309-1310).

He supports a gradual punishment approach to follow while deciding sanctions for wrongdoing of people (public officials). He clarifies his thoughts on this issue through the following statements in a story of Mathnawi:

“The thief cried out, saying, ‘O Prince of the land, this is my first offense. Mercy!’ ‘God forbend,’ said ‘Umar, ‘that God

should inflict severe punishment the first time. He covers up (the sin) many times in order to manifest His grace; then again, He chastises (the sinner) in order to manifest His justice,..." (Rumi, 2020: IV/168-170).

Mawlana thinks that the examination and investigation processes regarding a crime should be executed impartially. Those authorized to make a decision should avoid behaviors that would breach their objectivity. Those responsible for deciding trial processes regarding a crime/unethical behavior should reach a verdict/decision without delay. The right of defense should always be maintained in examination and investigation processes regarding a crime/wrongdoing. Mawlana brings explanations to his opinion through a story in his Mathnawi upon a gnat's complaint to Solomon, on whom be peace, against the wind. Solomon says:

"God had said to me, 'Beware, O judge! Do not hear one litigant without the other litigant. Until both litigants come into the presence, the truth does not come to light before the judge. If the (one) litigant alone raises a hundred clamors, beware, beware! Do not accept his word without (hearing) his adversary'" (Rumi, 2020: III/4647-4649).

The Advice of Mawlana in Mathnawi Regarding Ethics Monitoring and Control Policies

Ethics monitoring and control is ensured through an adequate legal framework that sets basic standards of behavior, effective accountability mechanisms, internal control and external audits, enforcement procedures, and transparency mechanisms to access public information, facilitating public involvement and scrutiny. It starts by identifying the specific vulnerabilities of the organizations' activity, organization, and culture also the consequent risks of unethical conduct as well as applying the appropriate policies and safeguards (EUROSAI TFAE, 2017a).

Managements should strengthen the internal control and risk management mechanisms in place. They cover a range of measures to prevent, detect and respond to fraud and corruption. These include policies, practices, and procedures that guide management and staff to fulfill their roles in safeguarding integrity by adequately assessing risks and developing risk-based controls (OECD, 2020). One of the management approaches that would ensure the sustainability of ethical behaviors of public officials is to follow and manage risks that could cause unethical behaviors. It would be meaningful for managements committed to integrity to estimate what kind of risks in designing and executing policies also decisions in any field of the work area might emerge. Having assessed relevant risks, it is the management's responsibility to take due precautions to deal with these risks. Let us remind that it is the management's responsibility to manage risks, but it is also the responsibility of all public officials to be aware of risky areas that could cause damage to public reputation and to help management take due precautions appropriately and execute them in place on time. To deal with risks (including ethics risks), Mawlana emphasizes the need to be prudent. He explains the meaning of "prudence" as a precaution in (the case of) two (alternative) plans: of the two, take the one which is far from craziness (Rumi, 2020: III3/2842). Mawlana thinks that by behaving prudently, one can see possible hazards and get rid of them appropriately.

Mawlana warns leaders and managers to be vigilant against possible risks (including ethics risks) that could become across in managing people and public service. The one behaving prudently would have an opinion regarding the outcome of work and behave appropriately. For effective management of risks (including ethics risks), all kinds of possible hazards/damages that could emerge

in case of realization of possible risks should be taken into account (Rumi, 2020: II/233).

Mathnawi explains the importance of foreseeing the risks in front of us in one of the stories, a “mule” asks a “camel” why it does not tumble on its head. The answer of the camel is very meaningful and interesting:

“My eye is clearer than yours; furthermore, it is also looking from on high: When I come up to the top of a high hill, I regard attentively the end of the pass; Then too God reveals to my eye all the lowness and loftiness of the way, (So that) I take every step with (clear) sight and am delivered from stumbling and falling” (Rumi, 2020: III/1746-1754).

Mathnawi also points out one important essential in risk management: appropriateness between the risk (including ethics risk) and relevant control activities. Thus, the control activities to deal with relevant risks should comply with their main purposes, i.e., to eradicate/decrease risk.

Regarding the transparency of management, state officials who have the public power and the authority of using and managing public resources make themselves visible against those entrusting public power and authority to them regarding the way they use them. Transparent management enables the public to follow them in every decision, transaction, activity, process, information, documents produced, etc. People feel trust against leaders/managers through the transparency of management. Also, transparency in management motivates leaders/managers to act in honesty and in line with legislation. “Transparency” is a necessity in terms of management who wants people to perceive honest management regarding themselves. However, the principle of transparency does not require management to follow a full transparency policy in every field of state. There may be some limitations identified by legislation regarding transparency in the

fields such as national security, defense, state secret, etc.

Mawlana also highlights the importance of the “value of secrecy” in business in necessary situations. If public management is the case, it is related to protect the secrets of state and institution for the sake of public good and security. Mawlana points out the “transparency-secrecy balance” at the same time. In some cases, some information could not be opened to the public because of public security, state secret, right of privacy, etc. Mawlana told us a story in which he explained how an Amír harassed a sleeping man into whose mouth a snake had gone. Without explaining to the man, Amir made the man vomit and got rid of the snake after a series of actions and commands. Upon the question of the man, Amir’s answer was very meaningful: *“If I had uttered a hint of it (the snake), your gall would instantly have turned to water. Had I told you the qualities of the snake, terror would have made you give up the ghost”* (Rumi, 2020: II/1878-1910). This story is an excellent example of why some information should not be explained when it is inappropriate to share.

Commitments of officials to the management are important in the eye of Mawlana. He reflects his thoughts regarding commitment and keeping management secrets in an exciting story. According to the story, the King tortures the slaves of the “Amíd of Khurásán” to disclose the place of buried treasure. But the slaves do not betray their master (Rumi, 2020: V/3165-3178).

Regarding the principle of accountability, it is a concept related to the principle of transparency. Public power, public posts, public resources, and titles are not entrusted to public officials for arbitrary use. All should be used in line with legislation and for the public good. Also, public officials have to explain how they use all of them to the public.

The accountability of public officials is essential in terms of sustainability of integrity management. Mathnawi reminds us that people would be accountable, first of all, to Almighty Allah. It also tells us about people's rights to hold leaders/public officials (including managers) accountable. Mathnawi includes examples of stories in which leaders/managers hold officials they manage accountable for their works. For example, in a story, Mathnawi tells us about a suspicion thrown upon Luqmán by the slaves and fellow servants. Master of Luqman holds all of them accountable for what they have done and puts all to the test (Rumi, 2020: I/3590-3595).

As regards auditing, it is one of the cornerstones of transparent and accountable public management. Public-sector auditing can be described as "a systematic process of objectively obtaining and evaluating evidence to determine whether the information or actual conditions conform to established criteria" (INTOSAI, 2020). Audit plays an important role in presenting findings, opinions, and suggestions towards improving decisions, transactions, activities, and management practices by taking into account the generally accepted audit standards. It also provides accountability of managers and public officials to the public. The audit identifies good practices and problematic issues in institutions' functioning and produces useful suggestions to maintain good practice or solve and correct difficult areas through audit reports.

Mawlana teaches us an important principle regarding problematic issues and audit philosophy as well:

"When the cause is unknown, the remedy for the illness is difficult (to find), and in that (case) there are a hundred grounds to which it may be referred. (But) when you have ascertained the cause, it becomes easy: knowledge of causes is the

means of expelling ignorance." (Rumi, 2020: IV/272-273).

The audit can be deemed a tool to identify institutions' deficiencies and help them to develop themselves through constructive and practical audit suggestions. Mawlana also uses the metaphor of "mirror" to describe audit function as well. Accordingly, "mirror" is a tool for institutions to evaluate themselves impartially. "Mirror/audit function" plays its role independently and shows the good, the beautiful, the ugly, and the bad. "Mirror/audit function," as a structure, should be unbiased and have a reputation in the eye of the public: *"The mirror that keeps hidden the defects of the face to flatter every cuckold is not a (true) mirror; it is hypocritical. Do not seek such a mirror so long as you can (help)"* (Rumi, 2020: IV/3854-3855).

To realize audit, we need "audit standards" to describe what should be in place to reach the truth and correct conclusions. Mawlana points out this fact by using the following statements:

"Balance makes balance correct; balance also makes balance defective. Whoever weighs the same (adopts the same standard) as the unrighteous falls into deficiency, and his understanding becomes dazed (Rumi, 2020: II/122-123);

"The pure (gold) shot a beam on the alloy: see that you choose not the gold on the ground of (mere) opinion, without a touchstone. If you have a touchstone, choose; otherwise, go, devote yourself to him that knows (the difference). Either you must have a touchstone within your soul, or if you know not the Way, do not go forward alone." (Rumi, 2020: II/745-747).

As regards the judiciary system, it secures the rights of people in a society. Since the realization of justice and enabling people to live in a society in which they enjoy their rights are the main responsibilities of a state, a robust judiciary system is a key requirement to carry out this responsibility. It is a necessary function also for rendering public

managers and officials accountable for their decisions, transactions, and activities.

Mawlana references the judge's position in a judiciary system to tell us about the importance of posts for judges. Mawlana thinks that judges should be attentive to maintain the "reputation" his or her position requires and reach verdict impartially and without being influenced. Mawlana cares about the role of "witness" for a fair trial. He is against false witnesses and emphasizes that legal evidence is part of a fair trial. According to Mawlana, the verdict should be established upon the truth in a judicial system. Otherwise, this system can cause many negative results (Rumi, 2020: IV/2175-2177).

As regards the gifts and benefits, relevant policies should be identified and introduced to public officials. In order to maintain public reputation and integrity, public officials are supposed to refuse any gift, benefit, or bribe offered to them related to public service, and they should not cause any expectation from the other party/ies. These kinds of offers or acceptances cause deviations from the principle of public interest, waste of public resources, and damages public reputation in the eye of stakeholders.

Mawlana tells us the principle of non-acceptance of gifts in the public job through the story of Solomon regarding gifts of Bilqis (Rumi, 2020: IV/653). However, Mawlana also gives us the example of accepting a gift reasonably offered and received in public management through the story of the Bedouin who presents a jug of water as a gift to the Caliph without evil intention. When the Caliph sees (the gift) and hears his story, he fills the jug with gold and adds (other presents) (Rumi, 2020: I/2853). Mawlana also hates bribery by saying: "*O eater of bribes, you eat the young elephant: from you too the Master of the elephant will wring the breath*" (Rumi, 2020: III/159).

The issue of conflicts of interest is a fundamental problem in ethical conduct in the public sector. A conflict of interest arises when public servants can personally benefit from actions or decisions made in their official capacity (UNDOC, 2020). It gives damages public service values by causing unethical behaviors. Therefore, the management of conflict of interests is a sensitive issue that should be handled carefully. Mawlana draws our attention to the concept of "conflict of interest" through different stories. In one of them, Mawlana tells us about Majnún (symbolizing leaders) and his she-camel (symbolizing public officials). Majnún's desire is speeding to the presence of that (beloved) Laylá; she-camel's desire is running back after her foal. Through this story in which she-camel is trying hard to keep its personal interest above, Mawlana reminds us that if public officials do not render their interests consistent with the institution's interests, it would not be possible for leaders and the public officials to go ahead together in public business.

As regards the principle of freedom of information, it strengthens the transparency of management. Public officials use public power, public authority, and public posts on behalf of all people (public) without discrimination. Thus, people expect to access all information and documents related to themselves or the public within the institution. People are informed about public officials' decisions, activities, and transactions, and they support public management to function by integrity depending on the rule of law.

According to Mawlana, knowledge and wisdom distinguish between the right and wrong paths. There are many example stories of information demands from management in Mathnawi. In one of the stories, Caliphate of Uthmán mounts the pulpit to deliver a sermon as a public service, and a person asks him the reason for seating himself on the step on the top of the pulpit. Upon the question

related to delivering public service, the Caliphate of Uthmán gives the due answer to the person (Rumi, 2020: IV/487-495). This example story presents us an important reference knowledge regarding leaders' responsibility to provide information to the public about the public service.

As regards the participative management understanding, promotion of stakeholder participation in management decisions, policies, projects, and activities supports transparency and credibility of management in the public's eye. Participative management contributes to maintaining public good in all areas of managements' policy development cycles (i.e., planning-executing, following-evaluating). This understanding provides valuable insights for management to act in line with legislation as well.

When we look at Mathnawi from this principle of ethics management, we see that Mawlana points out to it by stating that: "The (Divine) command, Consult them, came to the Prophet, though no counsel is to be compared with his own" (Rumi, 2020: I/3019). Mathnawi includes examples of stories regarding peoples' and public officials' participation in management decisions. For example, in one of the stories, Mawlana uses "animals" symbolizing the "people/public" and the "lion" symbolizing the "leader/manager" in public life. He tells us about the story of several animals suffering from the lion's ambush and the lion's acceptance of their suggestions to be safe from his attacks (Rumi, 2020: I/900-903;I/994). In another story, Mawlana tells us about Luqmán and how suspicion was thrown upon him by the slaves and fellow-servants. Luqmán suggests his master identify who is a real evil-doer, and his master accepts his suggestion. (Rumi, 2020: I/3584-3594).

As regards whistle-blowing, it is a concept related to disclosing information about cor-

ruption or other wrongdoing being committed to or by an organization to individuals or entities believed to affect action – the organization itself, the relevant authorities, or the public (Transparency International, 2020). Public official's wrong behaviors, causing serious damages to the reputation of the institution and state, should be reported to the authorities in place. If not, these kinds of behaviors would ruin the climate of honesty and integrity in the institution. Thus, in case of witnessing behaviors that could pave the way for damaging the public reputation or causing a public loss in public management, it is the main responsibility of state officials and other people to report these activities to authorized people. On the other side, errors, misunderstandings, client dissatisfaction, and unexpected problems occur in all administrative systems. Complaint handling can effectively resolve a problem before it becomes worse, providing a remedy to a client who has suffered disadvantage and nurturing good relations between government agencies and the public (Commonwealth Ombudsman, 2009). Thus, the efforts of aggrieved people to claim rights from each other or public institutions in the form of complaints should be respected, and complaint applications of people should be managed well as a requirement of a state delivering justice.

Mawlana tells us about how Ayáz was reported to the King (Mahmúd) by his rivals because of his closed chamber (Rumi, 2020: V/1857-1875). This story reminds us when needed, whistle-blowing mechanisms in the public sector should be operated; due investigation and research should be conducted, and the rights of people accused maliciously should be preserved. Regarding complaint, Mawlana reminds us of a story in which the gnat appeals for justice against the wind in the presence of Solomon (peace be upon Him) (Rumi, 2020: III/4624-4655). This story tells us that when needed, making a complaint is legitimate to maintain people's

rights and preserve justice. It also reminds us that all parties should be listened to, conduct a fair trial, and reach a correct verdict upon a complaint.

All in all, what Mathnawi tells us about the requirements of ethics management could be recognized as the requirements of today's ethics management as well. Today, it is generally agreed that organizations should demonstrate a commitment to integrity and ethical values. They should be committed to attract, develop, and retain competent individuals in alignment with objectives. They should identify and analyze risks to the achievement of its objectives across the entity. They should also develop control activities that contribute to mitigating risks to the achievement of objectives to acceptable levels etc. (COSO, 2013). International standards such as INTOSAI ISSAI 130 emphasizes on ethical values and requirements of SAIs to follow as an external audit function (INTOSAI, 2021). The Bangalore Principles of Judicial Conduct also identifies the key values and expected behavioral standards to be followed by judges in a judicial system (Council of Judges and Prosecutors, 2002).

CONCLUSION

Mawlana Jalal al-Din Rumi is a scholar addressing our and next generations' hearts and minds for centuries. As he tells us about the essentials of being "one" and "being united with the one," he also introduces us to the fundamental milestones of public management depending on justice and integrity. The problems experienced in today's public management oblige us to turn our directions towards our cultural values and resources and to hold firmly to them. Values and management approaches that are conveyed from the past to today through cultural resources, including traditions, show us which direction signs we should follow to solve today's public

management problems. They help us to put a step forward in peace and safety for tomorrow's world.

Mathnawi provides the readers the fundamental principles of behaviors (codes of conduct) and identifies the ways and methods by which people can develop themselves to recognize values. It emphasizes leader's and managers' critical leadership roles and responsibilities and reminds the necessity of receiving advice in all works. It displays the necessity of employment of right people in business (including state), and thus, identifies due value-based policies and approaches to recruit and manage people. Mathnawi also points out the importance of ethics monitoring and controls. It draws readers' attention to the principles, policies, and management fields to monitor and control ethical behaviors and institutionalize ethics and ethical behavior in public management.

Mathnawi, as highlighted before, presents us the fundamental ethics management essentials of public sectors regarding ethics guidance, ethics-based management policies of human resources, and ethics monitor and controls. When analyzed carefully, we see that Mathnawi includes constructive management points of view that could correspond to the ethics management frameworks and roadmaps developed by OECD under the concepts of "ethics infrastructure" and, more recently, "public integrity." However, institutions and many ideas have evolved over the period. Thus, we can say that Mathnawi includes advice regarding the essentials of ethics management, and there are many lessons and inspirations we can take from it. Furthermore, the advice of Mawlana in Mathnawi provides us many options to overcome public management problems today and tomorrow, as was the case in the past. Therefore, bearing in mind the statements mentioned in Mathnawi, we can develop the following suggestions to shape public man-

agement policies to strengthen ethics management in the public sector.

In the area of ethical guidance in public management:

1. Development and introduction of ethical codes identifying how public leaders, managers, officials, and people interacting with the public should behave are essential and should be promoted;
2. Training and awareness-raising activities regarding ethics values and ethics management (such as in-service training) should be provided to public managers and officials. They should be held responsible for raising their self-awareness on ethical values and maintenance of public integrity;
3. Public leaders and managers should promote ethics management in the public sector by being role model in implementing and supporting ethical values;
4. Counseling services regarding ethical values and their practices in professional life should be provided to public officials when they need.

In the area of human resource management:

1. Practical methods, tools, approaches, and control activities should be developed and practiced to recruit “right people consistent with public sector ethical values”;
2. Public sector organizations should provide guidance and training support to their public officials to have competent employees;
3. A merit-based approach should be followed regarding assignments and the promotion of public officials and managers in the public sector;
4. Performance appraisal system of public officials should have clear standards identifying weak and robust performance and be practiced effectively in place;
5. Performance level displayed by public officials and managers should be criteria for remuneration and rewarding policies;

6. Disciplinary policies and procedures should promote ethical behaviors of public officials and managers and deter them from unethical activities and decisions.

In the area of ethical monitoring and control activities:

1. Public sector organizations should be alert to integrity risks such as corruption, fraud, abuse, etc. and give adequate responses to mitigate their effects through due control activities;
2. Transparency and accountability are key features of integrity management, thus should always be maintained in public affairs;
3. Structures and functions supporting public transparency and accountability such as audit and judicial functions etc. should be strengthened to sustain public integrity;
4. Policies on gift and hospitality offers, management of conflict of interests, freedom of information, etc. should be identified and disseminated to public managers and officials;
5. Whistle-blowing and complaint mechanism should be promoted and implemented effectively to prevent unethical behaviors, protect public and individual rights, etc.

Public sector ethical values are not separate from the culture of the society they are in. Cultural values presented to today’s knowledge through cultural resources can point out universal values and social values. Cultural resources describing ideal behaviors through cultural values should be considered a valuable guide for developing effective road maps to promote integrity in public management. Therefore, we should re-discover our cultural resources for this study, Mathnawi, to prepare ourselves for tomorrow’s uncertainties by preserving the identity our civilization shapes. Finally, let’s say that this study is intended to motivate people for their

future studies by opening new horizons in their minds regarding ethics management and cultural resources.

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Assessing the development of performance audit methodology in the supreme audit institution: The case of Indonesia

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ABSTRACT

Badan Pemeriksa Keuangan (BPK), or The Audit Board of the Republic of Indonesia, has introduced performance audits intensively since public sector audit reforms were initiated in 2001. However, the implementation of performance audits still faces several obstacles. This study examines the development of the performance audit methodology in BPK, which can be divided into three stages: before the revitalization of BPK in 2006, the initial development of performance audits during 2006-2010, and the maturity of the implementation of performance audits since 2011. This study concludes that several key factors have affected the implementation of performance audits at BPK, including the development of audit guidelines, the dynamics of medium-term government planning, the focus of the BPK's Management, and assistance provided by other supreme audit institutions (SAI). To address new realities and challenges in the future, more sophisticated performance audit methods need to be adopted by BPK, such as big data analytics, the adoption of governance audits, and employing public policy analysis. Without adopting such methods, the institutionalization of effective performance audits might not be achieved in the future.

KEYWORDS:

Audit reform; performance audit; effective; methodology; SAI.

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INTRODUCTION

Performance audit is also referred to as value for money (VFM) audit in the UK (Parker, Jacobs, & Schmitz, 2018) or comprehensive auditing in Canada (Everett, 2003). It was introduced by several supreme audit institutions (SAIs) from developed countries in the late 1970s. During that time, developed countries such as the UK, Canada, and Australia embarked on extensive public management reform that emphasized the performance of the public sector (Nicoll, 2017). However, it is believed that the management of the public sector should be similar to the private sector because both public and private sectors have principle-agent problems (Lapsley & Miller, 2019).

In the new public management era, the demand for accountability and transparency goes beyond financial and legal accountability. Because resources are limited, the public demands their government spend public resources wisely, deliver results (effectiveness), attain efficiency, and continuously seek to reduce the cost of public services (economy). SAI is expected to verify the performance of the government in meeting these three aspects: economy, efficiency, and effectiveness (three “E’s”), and this expectation creates demand for performance audit (Grönlund, Svärdesten, & Öhman, 2011). Power (2003) labels the sudden increase of performance audit demand in developed countries as an “audit explosion.” Furthermore, several authors argue that the scope of performance audit should be expanded into other “E’s” such as ethics (Bringselius, 2018), environment (and sustainability) (Irawan & McIntyre-Mills, 2016), and equity (Everett, 2003; Johnsen et al., 2019; Reichborn-Kjennerud, 2013). In several countries, the scope of performance audit also includes compliance and policy audits (Grönlund et al., 2011; Pollitt, et al., 1999).

International Standards of Supreme Audit Institutions (ISSAI), published by the International Organization of Supreme Audit Institutions (INTOSAI), give the definition of a performance audit. The performance audit is an independent, objective, and reliable examination of whether government undertakings, systems, programs, activities, or organizations perform under the principles of economy, efficiency, and effectiveness and whether there is room for improvement (INTOSAI, 2019). Based on these definitions, there are two underlying characteristics of performance audit, which are (1) assessing performance on the economy, efficiency, and effectiveness aspects; and (2) providing recommendations for improving government performance.

Performance audit aims to fix existing weaknesses and not just find mistakes or determine who should be responsible for errors. As an independent institution, SAI is expected to see a problem objectively and provide recommendations to improve the performance of audited entities (Loke, Ismail, & Hamid, 2016; Pierre & de Fine Licht, 2019). The quality of public financial management and government services is expected to improve after the government implements performance audit recommendations. Thus, a performance audit is not only a tool to discharge accountability (Desmedt, Morin, Patryn, & Brans, 2017; Reichborn-Kjennerud, 2013) but also a tool for learning, change, and improvement (Desmedt et al., 2017; Raudla, Taro, Agu, & Douglas, 2016; Van Loocke & Put, 2011).

Previous research has addressed Performance Audit (PA) from several perspectives, such as the impact of performance audit on public administration (Bringselius, 2010; Raudla et al., 2016; Reichborn-Kjennerud & Vabo, 2017; Torres, Yetano, & Pina, 2016; Van Loocke & Put, 2011), key stakeholders of a SAI and their role in shaping performance

audit (Parker et al., 2018), the scope of performance audit (Bringselius, 2018; Grönlund et al., 2011), the development of performance audit in developed countries (Lonsdale, 2000, 2011; Pollitt, 2003) and the selection of performance audit themes (Nath, Othman, & Laswad, 2020). However, these studies focus on the context of developed countries, and there are limited studies on the development of performance audits in developing countries; thus, authors try to fill the gap in the literature by investigating the development of performance audits in developing countries. Specifically, the authors address following research questions:

1. What are the main factors that influence the development of performance audits in BPK?
2. Performance audit has a different objective, methodology, and criteria in comparison with financial or compliance audits. What types of performance audit methodology conducted by BPK?
3. What evolutionary methods are used in BPK's performance audit?

RESEARCH METHOD

This research uses a qualitative method to explain the development of performance audits in BPK. The empirical data were gathered from 1.291 performance audit reports published by BPK from 2016 to 2020, Summary of Semester Audit Results (Ikhtisar Hasil Pemeriksaan Semester, IHPS) from 2004 to 2020, four peer review reports, and BPK's performance audit manuals and guidelines. The IHPS contains a summary of all BPK audit reports in one semester and audit follow-up monitoring. Critical content analysis is used to elaborate performance audit reports, IHPS reports, peer review reports, and performance audit guidelines. The authors also interviewed several senior BPK's performance auditors to get their perspective and experiences based on peer re-

view conducted by other SAI and the development of performance audit in BPK to pursue data triangulation.

RESULT AND DISCUSSION

Performance Audit Development and Factors that Influence Performance Audit Development in BPK

While performance audit relatively matures in developed countries by 2006, it is a relatively new practice in BPK (Andrianto, 2015). The development of performance audit in BPK can be divided into three stages: before the revitalization of BPK (before 2006), initial development (2006-2010), and the maturity stage (2011 onwards). Every year, the number of performance audit increases steadily. Figure 1 presents the number of performance audits conducted by the BPK from 2004 to 2020.

Figure 1 shows that from 2006 the number of performance audits continued to increase and reached the highest number in the last ten years in 2016. Furthermore, although the number of performance audits began to decline in 2017, the number still shows a significant number until 2020. This data shows BPK's relatively strong commitment to conducting performance audits.

Before the revitalization of BPK (before 2006)

Before 2006, BPK's audit mandate is based on the Government Regulation in Lieu of Law (Peraturan Pengganti Undang-undang, Perppu) Number 7 of 1963, Perppu Number 6 of 1964, Law Number 17 of 1965, and Law Number 5 of 1973. These laws stated BPK is the external government auditor and a Supreme Audit Institution (SAI). Based on these regulations, BPK only conducted State Budget Implementation audit. BPK also as-

essed the effectiveness and economic aspects of government expenditures the audit. The performance audit was known with many terminologies, such as operational audit (the 1980s) and management audit (1990s). As shown in Figure 1, before 2006, the number of performance audits is low.

BPK was peer-reviewed for the first time in 2004. The peer review was conducted by the Office of the Auditor-General of New Zealand (OAG-NZ). The OAG-NZ reported that performance audit in BPK was not fully developed, and BPK was still learning to conduct performance audit correctly, the conclusion that be agreed by BPK’s senior performance auditor interviewed. BPK did not have a performance audit manual; therefore, BPK used international standards or other SAI guidance such as ISSAI and US Government Accountability Office (GAO) Yellow Book as performance audit guidance. BPK did not have a special unit to conduct a performance audit, so its financial auditors conduct its operational and management audits.

Moreover, BPK did not have auditors who have good capability to conduct the perfor-

mance audit. According to the OAG-NZ, most of the performance audits conducted did not satisfy 3 E’s audit methodology. The OAG-NZ recommended BPK to improve its capability on performance audit and provide intensive performance audit training to its auditors. As a follow-up peer review recommendation, BPK sent several auditors to learn performance audits to SAIs from developed countries such as GAO, Australian National Audit Office (ANAO), and OAG-NZ.

Initial development of performance audit (2006-2010)

Indonesian public financial management was undergoing major reform in the 2000s. The parliament passed three laws related to state finance: Law Number 17 of 2003 concerning State Finance, Law Number 1 of 2004 concerning State Treasury, and Law Number 15 of 2004 concerning The State Financial Management and Accountability Audit. It is followed by Law Number 15 of 2006 concerning the Audit Board of the Republic of Indonesia. Based on this regulation, BPK has a mandate to conduct a financial audit, performance audit, and special purpose audits (such as compliance audit and

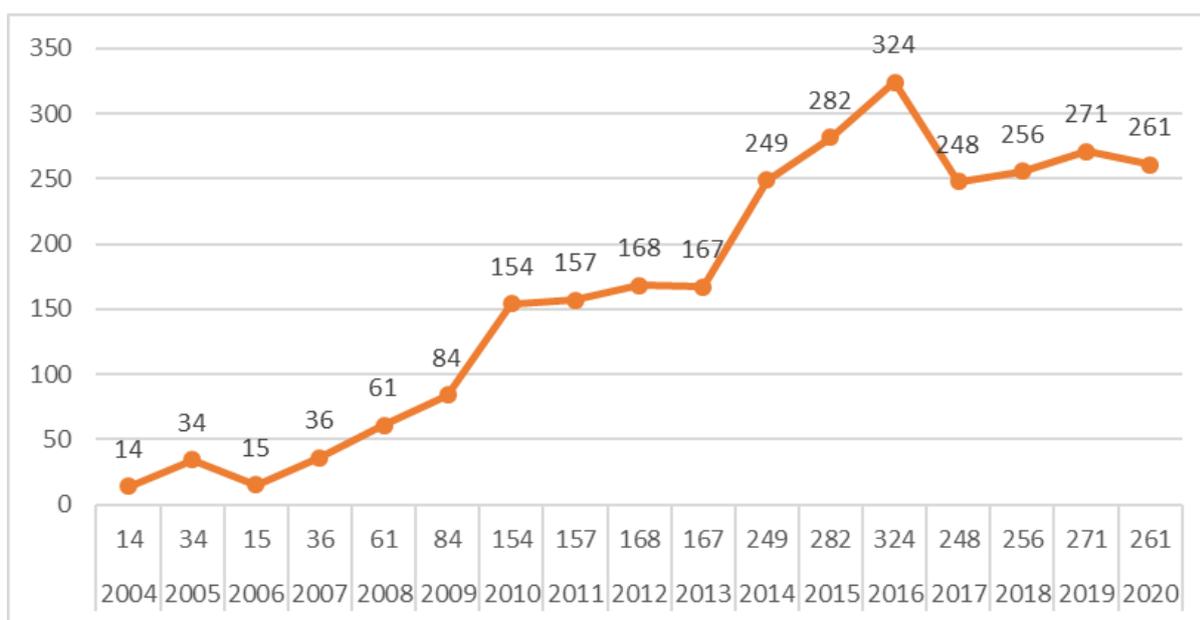


Figure 1. The Number of Performance Audit from 2004 to 2020
 Source: BPK RI (2004-2020); Rai (2008)

investigative audit). After Law Number 15 of 2006 was introduced, the number of performance audits increased. As shown in Figure 1, the number of performance audits is 36 in 2006 and increased to 157 in 2010. Start from 2005, all of BPK's audit results, including performance audit reports was published on BPK's official website as part of transparency and accountability (Andrianto, 2007).

The Netherlands Court of Audit conducted the second peer review in 2009. The Netherlands Court of Audit found that BPK still did not have a performance audit manual until 2008 and used performance audit manual draft as audit guidance. Finally, this performance audit manual was approved by BPK's Board on 5 June 2008, so BPK had a performance audit manual for the first time. The Netherlands Court of Audit concluded that BPK's performance audits complied with this performance audit manual. However, the reviewer concluded that BPK's performance audit manual needs to be improved. In addition, the Netherlands Court of Audit also stated that there were several deficiencies in the scope, methodology, and other aspects of BPK's performance audit. This conclusion was also agreed upon by BPK's senior performance auditor interviewed. These review findings were not surprising because performance audit was relatively new for the BPK's board members and auditors. The Netherlands Court of Audit also concluded that the performance audit methods in BPK were influenced by compliance and financial audit methodology. Moreover, it still needs more supervision through quality control and quality assurance to ensure the next performance audit focuses on the government's performance.

In this period, BPK received assistance from ANAO through the Government Partnership Fund (BPK, 2013), bilateral cooperation that ANAO deployed its performance audit experts to BPK to assist the development of

performance audit methodology in BPK. This bilateral cooperation continues until 2019. During this period, ANAO also assists with training for BPK auditors and consultations in conducting performance audits. The assistance of ANAO has a significant impact on BPK's audit methodology. It can be shown how BPK develops audit criteria similar to ANAO methods to develop audit criteria. BPK also continued receiving assistance from other SAI such as the GAO Fellowship program (2003–2009), NAO Secondment (2006), ANAO Secondment (2007 – 2010), and Jabatan Audit Negara (JAN) Malaysia Secondment (2009) to enhance its performance audit capacity. However, the influence of this assistance is not as strong as the impact of ANAO assistance. Nevertheless, these assistances improve the quality of BPK's performance audit.

The maturity of performance audit (2011 onwards)

Since 2011, the practice of performance audit in BPK can be considered mature. The number of performance audits conducted by BPK is more than 100 annually. BPK revised its performance audit manual in 2011. This new audit manual refers to INTOSAI performance audit guidelines, GAO's Yellow Book, and other performance audit manuals. In addition, BPK also produces several technical bulletins on performance audits based on international best practices. BPK has also continued its bilateral cooperation with the ANAO that deployed its Subject Matter Expert (SME) to support the revision of BPK's performance audit methodology. BPK also send its auditors to Australasian Council of Auditors-General (ACAG) Performance Audit Methodology Workshop in Canberra in 2017 and 2018. BPK has also got Tailor-Made Training on the public policy aspect of performance audit from Algemene Rekenkamer, the Netherlands, in 2013 and did a comparative study to South Africa in 2014.

The third peer-review was conducted by the SAI of Poland in 2014 and concluded significant improvements on the BPK's performance audit quality. The performance audit conducted by BPK already focused on identifying problems and providing recommendations for improvement of public services. However, several challenges were identified by the peer reviewer. First, there was no time flexibility to conduct a performance audit since the performance audit was only conducted in the second semester. In the first semester, BPK uses all resources to conduct financial audits. As a consequence, the SAI of Poland recommended BPK to start conducting performance audits in the first semester, the conclusion that also agreed by BPK's senior performance auditor interviewed.

In this peer review, Poland's SAI also highlighted the selection of performance audit themes, the absence of a special performance audit unit, and BPK's auditors' understanding of performance audit methodology. The SAI of Poland recommended that BPK selected essential issues and on the larger scale, not only on simple topics of an individual entity at the local government level, that the senior performance auditor interviewed called high impact performance audit. Furthermore, BPK needed to create a performance audit unit since BPK's auditors usually conducted three audits. The SAI of Poland believed that specialization would increase the expertise of BPK's auditors. However, this process needs to be managed smoothly to prevent BPK losing its current knowledge and capability. It also needs to be supported by a good process of recruitment, training, and knowledge management.

However, BPK still has no specialized unit for the performance audit unit until now, even though the peer reviewer from SAI of Poland (2019) recommends BPK to create a special performance audit unit. The auditors in this unit must only conduct the perfor-

mance audit. Regarding the selection of audit themes, BPK conducts a thematic performance audit. The audit topic for thematic performance audit is selected from significant national issues such as public financial management and education management during the COVID-19 Pandemic. In this period, the BPK started to share its knowledge of performance auditing within ASEAN Supreme Audit Institutions (ASEANSAI) members such as SAI of Vietnam, Cambodia, and Laos PDR (Jefriando, 2015; *BPK berbagi ilmu*, 2019; *BPK bantu SAI*, 2019). The knowledge sharing themes include how to develop performance audit guidelines and a training center.

At the maturity stage, the performance audit development in BPK is in line with the development plan prepared by the government, and it is indicated by the content of BPK Strategic Plan 2011-2015. BPK Strategic Planning stated that every audit unit has to conduct a performance audit. The focus is on government entities that provide services to the general public, such as Education Department and Health Department. However, the BPK Strategic Planning did not specifically state the performance audit topic. Thus, the audit topic selected by the audit unit was very diverse even though there was a general audit theme in Strategic Plan. The topic was chosen by Board Members and senior management, usually related to government programs, prioritizing several important topics such as education, health, public infrastructure, and social security system. In this period, BPK tries to formulate a report that summarizes the audit report results from 2009 to 2014. However, audit conclusions at the national level could not be formulated due to limited audit scope. Therefore, the government's performance in executing the Government's Medium-Term National Development Plan (Rencana Pembangunan Jangka Menengah Nasional, RPJMN) cannot be evaluated.

From 2016 to 2020, performance audits were directed to monitor the Government's Medium-Term National Development Plan 2016-2020. BPK Strategic Plan 2016-2020 contains focus or themes of performance audit for the next five years. Thus BPK started to conduct the thematic performance audit, which audit was focused on a particular theme. BPK created a technical team, a centralized coordination unit, and a Working Group to assist thematic performance audit teams that usually including auditors from the head office and regional offices. The thematic audit aims to formulate a conclusion on the implementation of government programs for five years period. In addition, the thematic audit is expected to provide insight into public financial management (Pramono, 2016). Hence, performance audit coverage should be sufficient, and BPK used a statistical method to generalize the audit results at the national level.

Performance Audit Development: New Experiences and Trend Ahead

In recent years, BPK has participated in several international performance audit events. First, BPK was actively involved in the IDI (INTOSAI Development Initiative) - ASOSAI (Asian Organization of Supreme Audit Institutions) 31st Cooperative Performance Audit of Disaster Management 2016. Second, BPK was also involved in IDI – INTOSAI Cooperative Performance Audit of Preparedness for the Implementation of Sustainable Development Goals 2017. Third, BPK was also involved in IAEA (International Atomic Energy Agency) Performance Audit on Management of Spent Fuel from Nuclear Power Reactors, Radio-Isotope Applications for Hydrology, Safeguards Analytical Services, and Technical Cooperation Program 2017. Recently, BPK conducted an audit on International Maritime Organization (IMO) in 2021 (*BPK terpilih jadi*, 2019), especially in World Maritime University and International Mari-

time Law Institute. These international audit experiences are fruitful to BPK, especially the IAEA audit. Because IAEA audits combine both financial and performance audits in a single long-form audit report (LFAR), this type of audit brings new practice to BPK (*BPK perbanyak pemeriksaan*, 2021). Currently, BPK tries to introduce LFAR in local government audits.

Another new development is related to the audit of the COVID-19 Pandemic. It is an extensive audit scale because BPK employs financial, performance, and compliance audits simultaneously, and the audit's scope covers both central and local governments' responses to the COVID-19 Pandemic. In this audit, the concept of combine audit, integrated audit, and comprehensive audit is introduced. Furthermore, the BPK is also introducing recommendations at the public policy level derived from performance audit results, such as managing the National Health Insurance Programme (2020) and Special Autonomy Fund for Papua and West Papua Province. BPK also tries to develop its capability by introducing the usage of governance audit, big data analytics to support the insight and foresight function of BPK. These new developments require BPK to respond appropriately by upgrading its performance audit methodology and guidance.

The development of Performance Audit Guidelines and Manuals

As part of the capacity development, BPK develops performance audit manual and performance audit guidelines. These performance audit guidelines and manuals are revised regularly to adapt to the new development in the performance audit. The first Performance Audit Guidance was introduced in 2008. This performance audit guideline is revised several times since performance audit topics are getting more various and complex.

The need for new revised Performance Audit Guidance was stronger in 2011 – 2015, since higher complexity of audit topic and broader audit coverage. Moreover, there was a need to get audit conclusions on the national level that needed statistical method guidance. BPK introduced new Performance Audit Guidance, Technical Guideline in Determining Key Audit Area, and Technical Guidelines in Developing Audit Criteria in 2011. This technical guideline was also completed with Supplementary Guideline in Formulating Audit Conclusion in 2015 and Technical Guideline in Developing Performance Audit Report in 2016. Furthermore, in 2019 BPK has also released supplementary guidelines of performance audit design. Recently, the Performance Audit Guidance was revised in 2020. Figure 2 describes the structure of audit standards and performance audit guidelines in BPK.

Performance Audit Guidelines (2008)

The first performance audit guideline developed by BPK is Performance Audit Guidelines 2008. Before these performance audit guidelines were developed, the performance auditors used international performance audit guidelines to conduct the audit. The 2008 Performance Audit Guideline substance in-

cludes an overview of Performance Audit, guidelines for planning, conducting, and reporting audits. The audit methods introduced in this guidance are data finding and data testing. The overview of the 2008 Performance Audit Guideline is shown in Appendix 1. Based on peer review in 2009, the Netherlands Court of Audit concluded that BPK Performance Audit Guideline had complied with INTOSAI and ASOSAI guidelines. This guidance has also provided auditors with a clear concept of performance audit (3E’s with examples) and its objectives, and basic competency of auditor needed. This guidance also guides the auditor to step the performance audit process from planning to reporting stage, explaining its relationship between many activities, and documenting the process to get the finding, conclusions, and recommendations. This guidance was used as a quality control measurement. BPK revised this guidance in 2011 to make the performance audit guidelines comply with international audit standards.

Performance audit guidelines/technical audit guideline (2011)

The 2011 Performance Audit Guidelines were introduced to revise several weaknesses of the 2008 Performance Audit Guidelines.

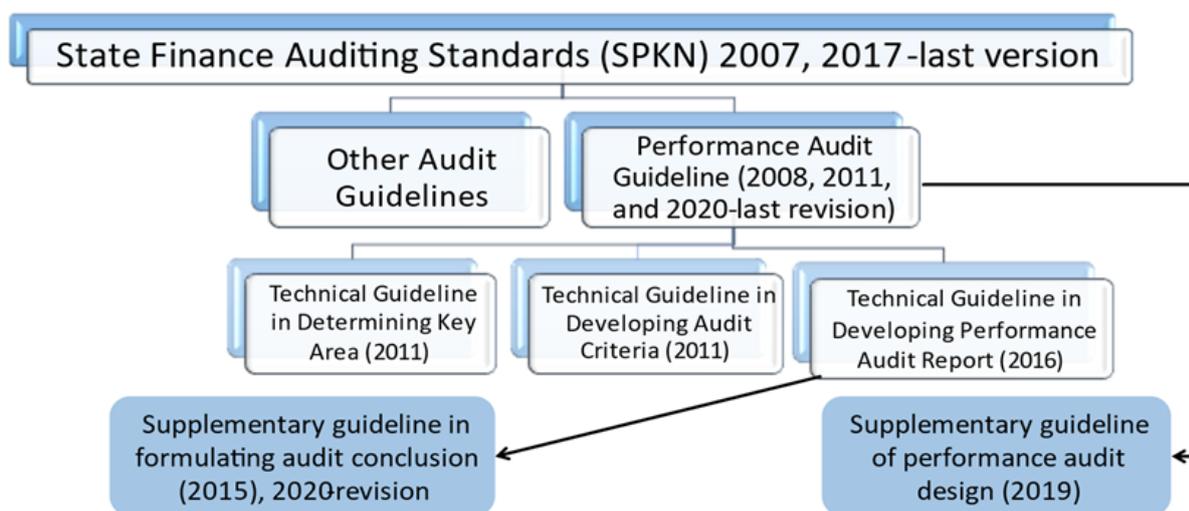


Figure 2. The Structure of Audit Standard and Performance Audit Guidelines in BPK

This guideline referred to international audit standards, with several adjustments to comply with national regulations. The 2011 Performance Audit Guideline substance still includes an overview of Performance Audit, guidelines for planning, conducting, and reporting audits but in a more detailed and comprehensive manner. There are two approaches introduced in these new guidelines, namely process and result performance audit approach. However, the process approach using Good Management Model was more popular than the results approach. In addition to these audit guidelines, there are also two technical guidance, namely Technical Guidance for Key Area Selection and Technical Guidance for Developing Performance Audit Criteria. The overview of the 2011 Performance Audit Guideline is shown in Appendix 2.

Supplementary guideline or technical guidelines (2015 - 2019)

During 2015-2019, three new technical guidelines were introduced to complete guidance at

the technical level. The technical guidelines were Supplementary Guideline in Formulating Audit Conclusion (2015), Technical Guideline in Developing Performance Audit Report (2016), and Supplementary Guideline of Performance Audit Design (2019). The overview of each technical guideline is shown in Table 1.

Supplementary Guideline in Formulating Audit Conclusion introduced variables to determine performance audit conclusion, the conclusion of performance audit method in many SAI's with examples, direct and indirect conclusions. The quantitative approach is also explained in formulating a conclusion with many examples; descriptive statistics, inferential statistics, Analytical Hierarchy Process (AHP), weighting/scoring with many scales, qualitative approach, cause and effect relationship, and fishbone diagram. This guidance also guides how to present a performance audit conclusion as part of the executive summary, audit result, and special chapter. It is also presented ex-

Table 1. Supplementary Guideline/Technical Guidelines (2015 - 2019)

Name of Guidance/ Technical Guidance	Content/Substance
Supplementary Guideline in Formulating Audit Conclusion (2015)	<p>The substance of the guidance, are: Preliminary; Theoretical basis; Conclusions in Audit; Formulation of Conclusions; Conclusion Presentation.</p>
Technical Guideline in Developing Performance Audit Report (2016)	<p>The minimum contain of Performance Audit Report in BPK are: Executive Summary; Preface/Introduction; Profile of audit objective; Audit result; Conclusions and recommendations; Appendix, annex, supplements.</p>
Supplementary Guideline of Performance Audit Design (2019)	<p>The substance of the guidance, are: Preface/Introduction; Overview of Performance Audit Design; Performance Audit Design with the Audit Objective on Economic and Efficiency Aspects; Design of Performance Audit with the Audit Objective on the Aspects of Effectiveness; Closing and Conclusion.</p>

Source: BPK RI (2015, 2016, 2019)

amples of responses from the audited entity/es.

The Technical Guideline in Developing Performance Audit Report explained the minimum content of Performance Audit Report in BPK. The guidelines give more flexibility in reporting performance audit results - different with financial audit report format, more alternatives of format, more flowing and avoid blocking system, presentation of table and graphic, also not providing "template" but minimum elements of the report. The guidelines also give many examples of the part of performance audit reports to broaden the auditor's perspective. While Supplementary Guideline of Performance Audit Design introduces examples of performance audit designs, namely the process/system approach, the problem approach, the results approach, and the mixed approach. The approaches presented are combined with aspects of the economy, efficiency, and effectiveness with many examples.

Performance audit guidance (2020)

In 2020, the Indonesian style of the fully adapted international standard introduced the new revision of performance audit guidance. The overview of the 2020 Performance Audit Guideline is shown in Appendix 3. This guidelines substance includes an overview of performance audit, defining performance audit topic, guidelines for planning, conducting, and reporting audit also follows up monitoring audit. The 2020 Performance Audit Guideline introduced direct reporting engagement, strategic planning, the concept of significance/materiality, and sampling techniques using probability or nonprobability sampling. It is also introduced data analysis using quantitative and qualitative methods.

The revision of the previous performance audit guidance is also introduced problem approach, the audit design matrix, audit

finding matrix, risk aspect in the performance audit, auditor competence, communication in audit, and follow-up audit. In response to the audit of the COVID-19 pandemic, BPK has also been released Technical guidance on performance audit in emergency period (2020) and revision of Supplementary Guideline in Formulating Audit Conclusion (2020) with many implementable examples.

The Performance Audit Methods

Before 2010, all of the performance audits have been conducted are individual audits. The topic of the individual audit varies from local government, state-owned enterprises, local hospitals, water producers until ministerial program and project at the national level. However, in 2010-2015 and 2016-2020, there is a tendency of introducing "thematic" performance audit in BPK. This process is alongside the process of assisting the implementation of the RPJMN. As a consequence, the percentage of thematic audit is increasing dramatically, reaching 72,66% in 2018. Furthermore, from the data found in 2018, 97% audit objective conducted by BPK is effectiveness, and the rest is related to economy and efficiency.

In terms of methods used, the evidence-gathering technique employed by BPK slightly changes in response to the changing audit process and the problem the auditors face. Appendix 4 summarizes the methods used by BPK during 2016-2020. Appendix 4 depicts the performance audit methods used, alongside the data analysis methods. Interviews, observation, survey/questionnaires, and document examination are the most common data gathering methods. This finding is similar to previous studies that found interviews, observation, survey/questionnaires, and document examination as the core of performance audit methods (Lonsdale, 2000, 2011). It is interesting to

examine the development in performance audit methods during this period. Review of the electronic database increases from 10 audits in 2016 to 61 audits in 2018, then declines to 8 audits in 2020. A similar pattern was also observed for the walkthrough. Pandemic COVID-19 might explain the decrease of the walkthrough, but further investigation is needed to find the cause of the decrease in the usage of review of the electronic database.

Overall, root cause analysis (RCA) is the most popular qualitative data analysis, while the analytical hierarchy process (AHP) is the most popular quantitative data analysis. It is not surprising that RCA is popular because performance auditors need to identify the root causes of a problem. Based on this root cause identification, the performance auditors can formulate audit recommendations. AHP is used to draw a conclusion. This method is unique for BPK because it is not used by others SAIs. AHP is introduced by several auditors that just completed master's and doctoral educations.

The historical review reveals that the emergence of the performance audit is mainly due to the intense attention to the public sector, the restructuring of the major public sector, SAI-led initiatives, similar developments in other countries, the initiative of the ruling government, and the presence of mandates to conduct this type of audit (Manaf & Athirah, 2010). Furthermore, a performance audit is an essential tool for achieving accountability and transparency and promoting efficiency and effectiveness (Leeuw, 2011, in Lonsdale, 2011).

While performance audit was implemented in developed countries since the 1970s following new public management, performance audit is not formally recognized in Indonesia until 2006. The performance audit was formally introduced in Indonesia after

Indonesian public financial management was reformed. Indonesia made major reforms and implemented new public financial management by introducing decentralization, result-based management, performance-based payment (Brinkerhoff & Wetterberg, 2013), and improving financial transparency and accountability by introducing accrual accounting (Mir & Sutiyono, 2013). The development of performance audits in BPK is driven by the adoption of public financial management and the introduction of the new law that strengthening the role of BPK as a supreme audit institution (Parker et al., 2018; Pollitt et al., 1999). Thus, the development of performance audits in BPK is similar to developing performance audits in developed countries.

Initially, BPK did not have sufficient personnel with good knowledge and skills to conduct performance audits. However, this study finds that the current audit methods employed by BPK are relatively similar to performance audit methods employed by other SAIs. BPK takes several steps to develop performance audit capacity by entering into bilateral cooperation with other SAIs and sending its auditors to study abroad. BPK receives assistance from ANAO to develop performance audit capacity. BPK also sends its auditors to the USA, Australia, New Zealand, The Netherland, Malaysia, and South Africa to study performance audit practice through secondment and short courses. In addition, the peer review process also has a significant contribution to the development of performance audits. Peer reviewers identify the weaknesses of performance audits in BPK. The BPK's Board Members usually give a high priority to peer review findings. These findings indicate that the role of SAIs from developed countries influences the development of performance audits in BPK.

The secondment programs conducted in several SAIs can improve auditors' knowledge and skills. Because BPK's auditors are mostly accountants, BPK provides scholarships to its auditors to take master's degrees in other disciplines such as public policy, public administration, environmental studies, and others. BPK also recruits many non-accountant auditors to bring diversity to the educational background of its auditors. Performance audit methodology is relatively similar to scientific research. Therefore BPK provides research methods training to most of its auditors. The existing auditors are also encouraged to acquire knowledge through short courses or training from the international community. Thus, the decision was taken by BPK's senior management to send its auditors to take post-graduate degrees also has an impact on the development of performance audit in BPK.

CONCLUSION

From the discussion above, it can be concluded that the development of the performance audit in BPK is influenced by the implementation of new state finance law and the implementation of new public financial management in Indonesia. The assistance by several SAIs such as ANAO, GAO, and AOG New Zealand also drive the development of BPK's performance audit. At the same time, the peer-review process also accelerates the development of performance audits in BPK. Finally, secondment programs and short courses also impact the development of BPK's performance audit capability.

The results of this study also indicate that other SAIs and International Audit Standards influence the development of performance audit methodology in BPK. Another aspect that influences BPK's performance audit methodology is the dynamics of the government's medium-term planning and

the BPK's board member's focus. SMEs also have an essential role in the development of the BPK's performance audit guidelines. In addition, it is also supported by secondary aspects such as seminars, workshops, and training accepted by BPK's auditor. BPK has a plan to provide the government with foresight about several scenarios and policy alternatives. In order to give meaningful foresight, BPK needs to improve its audit methodology. Authors recommend BPK obtain other knowledge and approaches such as governance auditing, big data analytics, and applying aspects of public policy to performance audits.

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APPENDICES

Appendix 1. Performance Audit Guidelines (2008)

Name of Guideline/ Technical Guideline	Content/Substance
Performance Audit Guidelines (2008)	<ul style="list-style-type: none"> ● Overview of Performance Audit. ● Audit planning: <ul style="list-style-type: none"> ⇒ Audit planning; ⇒ Problem identification; ⇒ Determining key area; ⇒ Determining object, objective, and audit scope; ⇒ Determining audit criteria; and ⇒ Drafting audit program, and team member audit plan. ● Conducting audit: <ul style="list-style-type: none"> ⇒ Data testing; ⇒ Drafting audit finding. ● Reporting audit result: <ul style="list-style-type: none"> ⇒ Drafting of audit report. <p>The audit methods introduced in this guidance are:</p> <ol style="list-style-type: none"> 1. Data finding: <ul style="list-style-type: none"> ● Short explanation of many sources of data. ● Method of data gathering: document review, interview/request of statement, questionnaire, and physical observation. ● Short explanation of validity and reliability of data. 2. Data testing: <ul style="list-style-type: none"> ● List of testing technique, such as interview, inspection, confirmation, analytical review (ratio, trend, pattern), sampling, flow chart, and analytics (regression analysis, simulation and modelling, analysis of qualitative data content) without any more explanation. ● Before using such testing evident technique, the auditor may consider: <ul style="list-style-type: none"> ⇒ The type and source of evidence; and ⇒ Time and cost of data testing. ● Comparing the result of evident testing with the audit criteria. ● Identification of cause and effect of the gap found between condition and criteria. ● Possibility of cause – effect analysis in identifying cause and effect of the audit finding.

Source: BPK RI (2008)

Appendix 2. Performance Audit Guideline (revision - 2011), Technical guideline in Determining Key Area (2011), and Technical Guideline in Developing Audit Criteria (2011).

Name of Guideline/ Technical Guideline	Content/Substance
Performance Audit Guidelines (2008)	<ul style="list-style-type: none"> ● Overview of Performance Audit. <ul style="list-style-type: none"> ⇒ Definition and objective of performance audit; ⇒ The differences of PA, financial audit, and compliance audit; ⇒ 3 E's concept; ⇒ Performance audit standard; ⇒ The Basic requirement of performance auditor; ⇒ Method of performance audit guidelines; ⇒ Activities in performance audit; ⇒ Performance audit approaches that are process-based and result-based.

Name of Guideline/ Technical Guideline	Content/Substance
Performance Audit Guidelines (2008)	<ul style="list-style-type: none"> ● Audit planning: <ul style="list-style-type: none"> ⇒ Activities in Audit planning; ⇒ Deciding potential audit topic; ⇒ Drafting preliminary audit program; ⇒ Understanding of the entity and problem identification; ⇒ Determining key area; ⇒ Determining objective and audit scope; ⇒ Determining audit criteria; ⇒ Drafting audit planning and detail audit program ● Conducting performance audit: <ul style="list-style-type: none"> ⇒ Objective; ⇒ Audit activities; ⇒ Data finding and data testing; ⇒ Drafting of audit finding; ⇒ Documentation. ● Reporting audit result: <ul style="list-style-type: none"> ⇒ Objective; ⇒ Activities in reporting audit result; ⇒ Drafting the audit report. <p>The new audit methods introduced in this guidance are:</p> <ol style="list-style-type: none"> 1. In part of understanding the entity, some steps can be used, such as: <ol style="list-style-type: none"> a. Review the analysis results of potential topic selection, review of laws and regulations; b. Standard Operational Procedure analysis; c. Observation; and d. Interview. 2. In parts of determining audit criteria, some methods can be used, such as: <ol style="list-style-type: none"> a. Review of laws and regulations; b. Identification of performance trend; c. Information of criteria that can be coming from a scientific journal, internet sources, and textbooks; and d. Result of a questionnaire, interview, observation, and other methods of data gathering.
Technical guideline in Determining Key Area (2011)	<p>Key Area: area/function/program/activity as the focus of the audit.</p> <ul style="list-style-type: none"> ● Determination of key areas enables utilization of audit resources efficiently and effectively. ● This guidance includes factors considered in selecting a key area, namely: <ul style="list-style-type: none"> ⇒ Risk to management; ⇒ Audit impact; ⇒ Auditability; ⇒ Significance of area
Technical Guideline in Developing Audit Criteria (2011)	<ul style="list-style-type: none"> ● Audit criteria present good practices, reasonable and attainable expectations of: <ul style="list-style-type: none"> ⇒ what should be according to laws, regulations or objectives; ⇒ what is expected, according to sound principles, scientific knowledge, and best practice; or ⇒ what could be (given better conditions). ● Criteria serve as: <ul style="list-style-type: none"> ⇒ communication basis both in the audit team and between audit team and entity's management. ⇒ basis for designing audit procedures. <p>The new audit methods introduced in this guidance are sources of criteria from audited entities; standards and indicators, best practice, scientific literature, benchmarking, opinion from expert/consultant, a procedure in developing criteria, form of criteria, and communicating criteria with audited entities.</p>

Source: BPK RI (2011a, 2011b, 2011c)

Appendix 3. Performance Audit Guidance (revision - 2020)

Name of Guidance/ Technical Guidance	Content/Substance
Performance Audit Guidance (revision - 2020)	<ul style="list-style-type: none"> ● Overview of Performance Audit. <ul style="list-style-type: none"> ⇒ Definition of performance audit; ⇒ Objective and benefit of performance audit; ⇒ 3 E's concept; ⇒ Main concepts of performance audit; ⇒ Performance audit process; ● Defining Performance Audit Topic: <ul style="list-style-type: none"> ⇒ Relationship between audit topic determination with BPK's strategic planning; ⇒ Operational planning; ⇒ Potential topic identification; ⇒ Defining audit topic. ● Performance audit planning: <ul style="list-style-type: none"> ⇒ Subject matter's initial understanding and preparation of audit planning report; ⇒ Drafting preliminary audit planning; ⇒ Conducting preliminary audit; ⇒ Drafting the detail of audit planning. ● Conducting performance audit: <ul style="list-style-type: none"> ⇒ Evidence finding and analysis; ⇒ Drafting of audit finding; ⇒ Audit finding. ● Reporting audit result: <ul style="list-style-type: none"> ⇒ Drafting the audit report; ⇒ Auditee response on finding and audit report finalization; ⇒ Delivery of audit report; ⇒ Documentation of audit report. ● Follow-up monitoring of audit report: <ul style="list-style-type: none"> ⇒ Follow up of recommendations of audit report

Source: BPK RI (2020)

Appendix 4. Audit Methods used by BPK during 2016-2020

Methods	2016	2017	2018	2019	2020
Evidence Gathering Technique					
Interviews	255	245	250	270	259
Observation	243	243	246	267	247
Survey/Questionnaires	243	222	234	174	192
Document Examination	243	243	249	268	256
Focus Group Discussion	97	143	13	127	163
Confirmation	74	96	172	233	231
Analysis (Analysis of Data/Result/Procedure)	9	15	167	99	182
Review of Secondary Data (Database electronic review)	10	45	61	59	8
Benchmarking	8	3	143	16	0
Walkthrough	5	2	86	82	11

Methods	2016	2017	2018	2019	2020
Expert Opinion	1	1	45	2	104
Comparison	11	3	6	6	1
Review of System	5	1	5	0	0
Verification		1	5	1	0
Sample Examinations			241	258	244
Physical Examinations			80	76	3
Qualitative Data Analysis Methods					
Content Analysis	117	53	0	0	1
Root Cause Analysis	23	11	117	114	102
Fishbone Analysis	7	4	1	4	7
Quantitative Data Analysis Methods					
Trend Analysis	89	10	90	9	0
Statistic Descriptive	44	10	2	0	1
Analytical Hierarchy Process (AHP)	34	47	106	128	125
Data Envelopment Analysis (DEA)		1	0	1	0
Weighting/ Scoring			21	17	21
Regression			0	1	2
Number of Reports Examined	255 ⁱ	248	256	271	261

*Sample Reports were chosen for examination



Mapping of budget stress in Indonesia: Consequence on budget implementation

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ABSTRACT

The phenomenon of a budget deficit in local governments at the provincial, regency, and city levels shows that there is budget stress. Budget stress is a regional fiscal condition reflected in the lower revenue budget, while regional expenditure is getting higher. The consequence of budget stress is low budget implementation, and it reduces the quality of services to the public. This study aims to map the regions experiencing budget stress at the local government levels. Furthermore, this study examines and analyzes the consequences of budgetary stress on budget implementation. The research sample used local governments at the provincial, regency, city levels throughout Indonesia during 2016-2020. This study uses Ordinary Least Square (OLS) to test the research hypothesis. This study groups the five regions with the highest budget stress during 2016-2020. The results of this study can contribute to the theory, methodology, and implementation related to the budget. The theory's contribution is that the political budget cycle can maintain government performance through various efforts to reduce budget stress. This study also finds that budget stress can reduce budget implementation. Therefore, the government needs to pay attention to indicators of budget stress.

KEYWORDS:

Budget stress; budget implementation; decentralization; APBD

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INTRODUCTION

Law Number 23 of 2014 concerning Local Government states that regional autonomy is the right, authority, and obligation of the autonomous region to regulate and manage government affairs and the interests of the local public within the system of the Unitary State of the Republic of Indonesia. This condition shows that local governments are given the authority and responsibility to manage their regions to improve the public's welfare. Siregar (2015) explains that the administration of government affairs in the regions is carried out based on the principles of decentralization, concentration, and assisting duties.

The principle of decentralization is the transfer of government affairs by the central government to autonomous regions based on autonomy. The principle of autonomy is the basic principle of implementing a local government based on regional autonomy. Furthermore, the principle of deconcentration is the delegation of a portion of government affairs under the jurisdiction of the central government to governors as representatives of the central government, to vertical agencies in certain areas, and/or to governors and regents/mayors as the person in charge of general government affairs. Finally, the third principle is assisting duty as an assignment from the Central Government to autonomous regions. The duty is to carry out a portion of government affairs under the central government's authority or from the provincial government to regencies/cities.

The implementation of regional autonomy in Indonesia reduces the local governments' dependencies on the central government because they are given the authority and responsibility to manage their regions more optimally. However, the implementation of regional autonomy has positive and negative consequences for local governments. The

positive consequence is that the authority given is more like "residual power" or "open arrangement" because all powers are given to the regions except for matters handled by the central government, such as national fiscal and monetary, defense and security, foreign affairs, also judiciary and religion (Namlis, 2018). Furthermore, Namlis (2018) explains that the approach to strengthening the province goes so far by attracting matters that have been managed by the regencies/cities (mining, forestry, maritime affairs, and fisheries) into the affairs of the provincial government. The negative consequence of implementing autonomy for local governments with limited potential is experiencing difficulties in increasing regional revenues in financing regional expenditures. Badrudin and Siregar (2015) use the term expenditures to describe capital expenditures and evaluate the role of regional autonomy to improve public welfare by using capital expenditures and economic growth as mediating variables. Huda (2015) explains that the implementation of regional autonomy, on the one hand, can provide broad authority to local governments, but on the other hand gives greater responsibility to local governments to improve public welfare.

Local governments with higher potential resources are among the fortunate regions when regional autonomy is implemented. The regional potential is the initial capital to achieve regional revenue. When managed optimally, the regions can overcome fiscal difficulties in contrast to local governments with limited potential resources available. They have the opportunity to experience fiscal difficulties in financing regional expenditure needs. Therefore, these regions depend on fiscal balance transfers from the central government to local governments in financing regional expenditure needs. Siregar (2015) explains that fiscal balance transfers from the central government are allocated in the State Revenue and Expenditure Budget

(Anggaran Pendapatan dan Belanja Negara, APBN) in financing regional needs due to decentralization, which consists of general transfer funds and special transfers. General transfer funds are funds allocated in the APBN for regions to be used under regional authorities to finance regional needs in implementing decentralization. On the contrary, special transfer funds are allocated in the APBN for regions to help finance special activities, both physical and non-physical, which are regarded as regional affairs.

An important implication of the limited availability coupled with sub-optimal management of regional resource potential is the emergence of fiscal or budget stress. Arnett (2011) explains that budget stress is the fiscal situation of local governments when regional revenue sources are low, while regional expenditures are getting higher in financing public needs. The deficit as a form of budget stress that the media have widely covered is also experienced by the Jambi Provincial Government. The Jambi Province shows a budget deficit of up to Rp158.8 billion in the Draft of Local Government Budget (Rancangan Anggaran Pendapatan dan Belanja Daerah, RAPBD) of 2021. Its planned expenditure is significantly higher than its projected revenue. In 2021, the regional expenditure for this Province reaches Rp4.2 trillion and consists of operational expenditure of around Rp3.3 trillion, capital expenditure of around Rp185.2 billion, unexpected expenditure of around Rp20 billion, and transfer expenditure of around Rp734.7 billion. Based on the regional revenue target compared to the projected regional expenditure needs, Jambi provincial government experienced a deficit of Rp158.8 billion. The shortage will be covered by regional financing of around Rp176.8 billion and capital injected by Bank Jambi of around Rp18 billion. The decline in the target of Local Own-source Revenue (Pendapatan Asli Daerah, PAD) in 2021 affects this deficit condition.

The Jambi Province PAD target in the 2021 RAPBD is only around Rp4 trillion, and its provincial revenue decreased by 14.19% compared to the 2020 Local Government Budget (Anggaran Pendapatan dan Belanja Daerah, APBD) of around Rp4.7 trillion. The decrease in the regional revenue target was due to a decrease in the PAD target and a decrease in central government transfer revenue, which could not be targeted optimally given the economic recovery situation resulting from the Covid-19 pandemic (Saragih, 2020).

At the city government level, the Tangerang city government has a budget deficit in 2020, reaching Rp581 billion. The Tangerang City 2020 APBD has been approved in the amount of Rp5.162 trillion but has a deficit due to an imbalance between regional expenditures and revenues. The 2020 APBD is used for the indirect expenditure of Rp1.651 trillion and direct expenditure of Rp3,510 trillion. Meanwhile, the allotted regional revenue is Rp4.580 trillion. Therefore, there was a budget deficit of Rp581 billion. The Tangerang city government will use the budget covered from their Unspent funds at the end of the 2019 fiscal year (Sisa Lebih Penggunaan Anggaran, SILPA) to cover this deficit. In addition, several options are in place to cover this deficit, such as establishing cooperation in infrastructure development with third parties, in order for the development to run in the next three years until 2022 and payment to be executed in the following year. Another option is a financing plan that involves regional banks (Fauzi, 2019).

At the regency level, Jember Regency experienced a budget deficit in 2019, which reached Rp351 billion. This deficit is permitted by existing regulations and does not exceed the allowable limit. In the 2019 APBD, approved revenues were recorded at Rp3.622 trillion, while total expenditures

reached Rp3.973 trillion, resulting in a deficit of Rp351 billion. According to the Jember Regency Government, this deficit is natural in budgeting dynamics because the 2019 Revised local government budget will still receive additional funds. The Jember Regency Government said that Regional Apparatus Organizations (Organisasi Perangkat Daerah, OPD) and their work programs must be ready since the approval of the APBD and maximizes budget absorption (Kusbiantoro, 2018).

Budget implementation is an important part of the budgeting process with the availability of regional revenues to finance local government administration. Local governments that have low revenue potential and high regional expenditures have the opportunity of budget stress. Local governments that are experiencing budget stress have caused uncertainty on the APBN formulation. As a result, the government has tried to find solutions to shift regional revenue and expenditure components. Budget stress that arises in the budget posture encourages local governments to increase regional revenues by seeking potential revenue through local taxes or retribution. This is important to meet the increasingly complex regional expenditure needs. In addition, local governments experiencing budgetary stress need to pay attention to the structure of their regional expenditures and determine priority programs.

Lhutfi, Ritchi, and Yudianto (2020) explain that one way to detect the local governments' financial capacity to reduce dependencies on the central government is through the composition of regional revenues in question. The higher regional revenue composition indicates that local governments have the ability to implement regional autonomy more independently. Thus they reduce their dependency on the central government. On the other hand, lower regional revenue composition indicates that local governments

have a higher dependency on the central government. This condition shows that it is pertinent to study the regional budget stress in implementing regional autonomy to evaluate the performance of local governments in carrying out public service needs. Local governments must continue to increase regional revenue through potential new revenue sources to cover the regional budgets that increase every year.

Based on the description mentioned before, this study aims to map the regions in Indonesia, both at the provincial and regency/city government levels, which experience high budget stress due to a lack of regional revenue in financing the implementation of regional expenditure. Another objective is to examine and analyze the consequences of budget stress on local government budget implementation.

LITERATURE REVIEW

Budget Implementation and Budget Stress

Rakhman (2019) elucidates that budget implementation is an important mechanism in the budgeting process. The budget implementation process is divided into two crucial parts: implementing the revenue and expenditure budgets. Furthermore, Siregar (2015) divided the implementation of the revenue budget into two processes: receiving revenue and making a revenue accountability report. In comparison, implementing expenditure consists of preparing budget implementation documents, setting up a cash budget, issuing a letter of provision of funds, submitting a payment request letter, issuing pay orders, issuing funds disbursement orders, and issuing accountability reports. The budget implementation is important due to government expenditure which accounts for most regional economic activities (Rakhman, 2019). Oliewo (2015) explains that budget

implementation among local government agencies is an important central government concern.

Boukari and Veiga (2018) measure budget stress by comparing the difference between the revenue and expenditure budgets against the revenue budget, which shows the local government's fiscal situation when the budget is being prepared and approved. When the fiscal condition of the local government deteriorates, which is indicated by a negative budget stress ratio, thus the local government is experiencing a budget deficit. Thus, the budget deficit experienced by local governments indicates regional autonomy that is not supported by the harnessing of regional potentials. In addition, sub-optimal management of regional resources has resulted in budget stress for these local governments.

Aldag, Kim, and Warner (2019) also Kim (2017) explain that fluctuating budget stress puts tremendous stress on local governments in increasing revenue through expanding the tax base to increase development. Shi and Varuzzo (2020) reveal that local governments which have succeeded in overcoming gaps and budget stress change local tax policies, development incentives, and higher quality of services. The research result shows that cities with a high level of urbanization have a high level of fiscal stress, a shortage of undeveloped land, and stress on regional development (Shi & Varuzzo, 2020). Existing budget stress and high population growth rates create stress for regional economic development to generate funding for regional service expansion and investment. Hevesi (2006) explains that budget stress assesses regional financial conditions, which in general shows local governments experiencing difficulties in operational financing and other budget-related problems. This condition has negative consequences for budget implementation due to limited revenues to finance regional expenditure.

Budget Stress in Local Government

The local government in Indonesia consists of provinces, regency and city governments. The province's governments are 34 provinces, and a governor leads each province. Furthermore, there are more than 500 city and regency governments in Indonesia. The city government is led by a mayor, while at the regency government level, it is led by a regent. Rakhman (2019) explains that every local government must go through a budgeting process every year. For example, the budgeting process in the 2017 fiscal year began to be compiled in March-September 2016 and ratified in October-December 2016. Subsequently, budget implementation began January 1-December 31, and supervision began March 2016-June 2018. In comparison, budget accountability lasted from January 2016 to January-June 2018 (Siregar, 2015).

The main reason for the failure of local governments to improve the quality of services to the community is caused by budget stress. Budget stress shows that regional expenditure needs are increasingly complex but are not supported by a high regional revenue structure. Based on the report published by the Advisory Commission on Intergovernmental Relations (ACIR) in 1973, which is one of the initial studies on the fiscal health of city governments, states explicitly that there are six indicators of fiscal or budget stress. Those indicators are the imbalance of operational funds; current period expenditure patterns that consistently exceed current earnings over several years; excess current operating liabilities over current assets; short-term operating loans payable at the end of the fiscal year, or cash loans from restructured funds; high and increasing level of delinquency in property taxes; and a substantial reduction in property values (ACIR, 1973).

Some of these factors have triggered the emergence of budget stress experienced by local governments. Armawaddin, Syarif, and Bungin (2020) explained that budget stress would reduce local government capital expenditures because the existing regional revenues were insufficient to meet regional expenditures. However, Anggraeni and Kiswanto (2018) show that the existence of financial stress due to regional autonomy requiring regions to increase regional revenue has not improved regional financial performance. This condition is due to the local government's efforts in increasing regional revenue by exploring new revenues in the form of existing regional potentials that have not been able to cover the APBD, which continues to increase continuously every year. As a result, the dependence of local governments on the central government is still high.

Hariani and Febriyastuti (2020) explain that the implementation of regional autonomy aims to reduce the dependence of local governments on the central government. However, the negative consequence is fiscal or budget stress. Budget stress represents the financial condition of local governments. Gorina, Maher, and Joffe (2016) explain that budget stress is the financial condition of local governments when local governments cannot provide services to the community and meet their operational needs. When budget stress is high, it provides opportunities for local governments to explore potential tax revenues. Local government efforts through tax potential are one of the efforts of local governments to explore the regional potential to increase regional revenue so that local governments can reduce dependence on balancing funds sourced from the central government (Hariani & Febriyastuti, 2020).

Therefore, mapping needs to be done to the local government, namely provincial, regency, and city governments, to detect budget stress. Budget stress mapping is important

as a form of evaluating the performance of local governments and as material for preparing various strategies or efforts to balance revenue and expenditure so that they do not threaten the quality of service to the public.

Consequences of Budget Stress on Budget Implementation

Mahmudi (2019) explains that the planning stage is crucial in the regional financial management cycle because the output of the planning stage is the RAPBD, which will be processed into the APBD. APBD is the backbone or blueprint for regional development for local governments that have an important function in distributing, allocating, and strengthening regional finances. In short, the direction and orientation of regional development policies can be reflected in the APBD. Siregar (2015) explains that the process of preparing the RAPBD has five main processes, namely the preparation of the general budget policies (Kebijakan Umum Anggaran, KUA), the preparation of temporary provisional budget priorities (Plafon dan Prioritas Anggaran Sementara, PPAS), the preparation of circulars for the budget and work plan of a local government agency (Rencana Kerja dan Anggaran Satuan Kerja Perangkat Daerah, RKA SKPD), the preparation of the RKA SKPD, and the preparation of the RAPBD which will be discussed and ratified into the APBD.

The preparation of the RAPBD includes the revenue, expenditure, and financing budgets that local governments will use in financing the administration of their government. This condition shows that local governments with the potential of regional resources can increase regional revenue and manage to spend more effectively to support service needs to the community. The quality of service to the society is the local government's motivation to use their budgets and a political tool to improve local government perfor-

mance and gain political support from the community. Bruck and Stephan (2006) explain that the political budget cycle theory regarding revenue and expenditure budget estimates serves as a political tool to manage public expectations of government performance as a whole, especially when elections are approaching. Heinemann (2006) explains that to increase popularity and gain political support, leaders use financial planning as an instrument to describe a better fiscal future. A leader who influences revenue and expenditure budget estimates has the potential to manage revenue and expenditure budgets and expand his public services in the hope of increasing his chances of being re-elected in the next term. Ratmono and Sholihin (2017) explain that one of the government's main goals is to improve the welfare of the public so that the government seeks to achieve a fiscal balance by maintaining regional financial capacity that comes from tax revenues other sources to meet the interests of the public. One of the essential features in realizing this balance is the ongoing political process to harmonize the various interests in society.

Ratmono and Sholihin (2017) explain that the budget has an essential role in government financial accounting and reporting. This is because a budget is a public policy statement of a fiscal target that describes the desired balance between expenditure, revenue, and financing. Local governments that have high regional potential and are well managed will utilize their budget to finance their expenditure needs to prevent local governments from experiencing any budget deficit. On the other hand, for local governments whose resources are limited and whose budget management is less than optimal, the potential for a budget deficit will arise. The budget deficit indicates that the local government is experiencing budget stress problems.

Boukari and Veiga (2018) explain that budget stress shows the fiscal situation of local governments when drafting the budgets while regional revenues are unable to cover higher regional expenditure. Fluctuating budget stress puts tremendous stress on local governments to increase revenue by expanding the tax base to increase development (Aldag et al., 2019; Kim, 2017). Local governments can address budget stress, change their local tax policies, increase regional development, and increase service quality (Shi & Varuzzo, 2020).

Several previous studies have shown that fiscal stress or budget stress has a negative effect on local government performance. Research by Hanif and Suparno (2017) shows that budget stress can reduce the absorption of local government budgets. In contrast to Hanif and Suparno (2017), Sari, Diana, and Junaidi (2021) research show that budget stress positively affects economic growth. However, Hariani and Febriyastuti's research (2020) demonstrates that budget stress has no significant effect on the efficiency ratio of government independence performance. The efficiency ratio is measured by comparing the costs incurred by local governments to obtain PAD to realize PAD revenues. Therefore the smaller this ratio, the more efficient the performance of local governments is in collecting PAD (Mahmudi, 2019). Some of the results of these studies indicate inconsistencies in research findings regarding the effect of budget stress on local government performance. However, this study focuses more on the negative consequences of budget stress in reducing budget implementation, thus supporting the research of Hanif and Suparno (2017). Its importance is that local governments are experiencing budget stress as indicated by their low revenue budgets, while increasing regional expenditures have resulted in local governments experiencing difficulties implementing the expenditure

budgets. Based on this description, the hypothesis author proposed that budget stress constitutes a negative effect on budget implementation.

RESEARCH METHOD

The source of this research data was obtained through the website www.djpk.go.id. The sample used is the local government budget consisting of 34 provinces, 93 cities, and 415 regencies for five years from 2016 to 2020. So the total subject of observation is 2,710, with details of 170 provincial governments, 465 city governments, and 2,075 regency governments.

The research framework prepared by the author is presented in Figure 1. This study uses the definition and measurement of variables to explain the research variables more specifically. Hartono (2013) states that defining the concept means operationally explaining the object's characteristics into observable elements so that the concept can be measured and operationalized in the research. The result is a concept definition of each variable used by researchers in the study. The definitions and measurements of the varia-

bles used by authors in this study are shown in Table 1.

The test method used by the author in this study is the OLS (Ordinary Least Square) method. Therefore, the author needs to carry out some classical assumption tests as a condition for using OLS. The aim is to minimize residuals in order to reduce bias in conclusions. In other words, the classical assumption test aims to obtain BLUE (Best Linear Unbiased Estimator) research results. The classic assumption test used is the heteroscedasticity, multicollinearity, and autocorrelation test. The author does not use the normality test because the number of sample observations in this study has met the minimum sample size in accordance with the central limit theory (Cooper & Schindler, 2013). Furthermore, the multicollinearity test using the rule of thumb $VIF < 10$ showed no correlation between the independent variables in the research model. The heteroscedasticity test uses Huber-white-Hinkley consistent variance and standard error to correct the parameter values obtained by the ordinary least square method. The author can directly use the output as the final result of the test (Ghozali & Ratmono, 2017). The autocorrelation test uses the rule of thumb with a DW

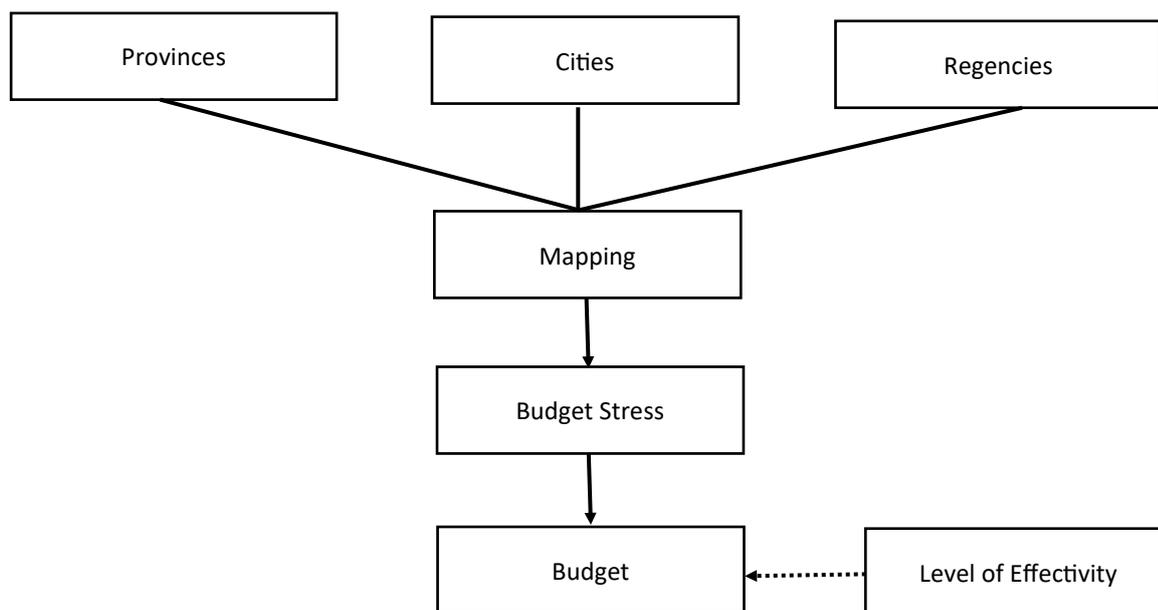


Figure 1. Research Framework

Table 1. Definition and Measurement of Variables

Variable Definitions	Measurement	Scale
<p>Budget Implementation The condition of the local government which shows the amount of the total expenditure realization against the total regional expenditure budget (Rakhman, 2019)</p>	$\text{Budget Implementation} = \frac{\text{Actual Expenditure}}{\text{Budget Expenditure}} \times 100\%$ <p>(Rakhman, 2019)</p>	Ratio
<p>Budget Stress Regional fiscal conditions when local government revenues are low, while regional expenditure is getting higher (Chapman, 2003)</p>	$\text{Budget Stress} = \frac{\text{Revenue} - \text{Expenditure}}{\text{Revenue}} \times 100\%$ <p>(Boukari & Veiga, 2018)</p>	Ratio
<p>Level of Effectivity Conditions that indicate the level of local government output against local government revenue targets (Mahsun, 2013)</p>	$\text{Level of effectivity} = \frac{\text{Actual Revenue}}{\text{Budget Revenue}} \times 100\%$ <p>(Mahsun, 2013)</p>	Ratio

value range of 1.54-2.46, which shows that the research model does not have autocorrelation problems (Winarno, 2015).

RESULT AND DISCUSSION

This study aims to map regions that experience high budget stress on local governments in Indonesia at the provinces, city, and regency levels. In addition, this study also examines the consequences of budget stress on budget implementation. An increasingly negative ratio of budget stress indicates that local governments are experiencing increased budget stress. The author formulated the categories of local governments experiencing high budget stress by calculating the budget stress ratio for the last five years, from 2016 to 2020. Subsequently, the author calculates the budget stress ratio by doing a cross-section and compares it with the mean budget stress ratio of the research sample. The rule of thumb for local governments that experience high budget stress occurs when the budget stress ratio > mean budget stress ratio. The mean sample budget stress ratios over the past five years are presented in Table 2.

Table 2 shows that there are 27-31 provinces that experience budget stress, while out of 93 city governments, there are 80-84 city and 342-462 regency of 415 regency governments experiencing budget stress between 2016 and 2020. The mean value of budget stress on provinces, city, and regency governments shows the highest value in 2016 and the lowest in 2019. This condition showed that in 2016 the average local government in Indonesia experienced an increase in higher expenditure than the total revenue. Furthermore, the authors classify local governments with high budget stress (greater than the average budget stress) into five groups according to the fiscal year, as shown in Appendix 1.

At the provincial government level, North Kalimantan Province has experienced budget stress for the past five years. Therefore, it is included in the category of the top five provinces in terms of budget stress. Furthermore, Riau, Bangka Belitung, and Bengkulu Province experienced budget stress for three years. As a result, they were included in the category of the top five provinces in terms of budget stress. The provincial governments of North Kalimantan and Aceh are among

Table 2. Mean of Local Government Budget Stress 2016-2020

Local Government	N	Year	Mean
Provinces	29	2016	-7,931
	27	2017	-5,800
	31	2018	-6,546
	28	2019	-4,610
	30	2020	-6,804
Cities	84	2016	-9,260
	82	2017	-6,977
	82	2018	-7,438
	80	2019	-6,843
	84	2020	-7,987
Regencies	362	2016	-6,212
	351	2017	-5,900
	359	2018	-5,827
	342	2019	-4,619
	353	2020	-5,645

the two provinces with budget stress during the last two years (2019-2020). Therefore, these two provincial governments need to give substantial attention to the regional potential to increase regional revenue sources in minimizing budget stress for the following year. In 2020, Southeast Sulawesi, North Maluku, and Jambi provincial governments were included in the top five provinces with high budget stress, but during 2016-2019 were not included in the top five categories of high budget stress.

At the city government level, Cimahi City is included in five cities with the largest budget stress for four years (2016-2019). However, in 2020, the Cimahi City Government managed to get out of the provinces with the highest budget stress. Likewise, Depok City was previously included in five cities with the largest budget stress for three years (2016, 2017, and 2019). Meanwhile, the Bukit Tinggi City Government, including the municipal government, experienced above-average budget stress in 2017, and 2018-2019 was not among those experiencing the highest

budget stress. However, interestingly, in 2020, the Bukit Tinggi City Government again experienced quite a high budget stress. This condition shows that local governments need to be consistent and optimal in managing regional potential to cover the increase in regional expenditures and mitigate budget stress.

On average, the regency government only entered the highest budget stress once during 2016-2020. This condition indicates an opportunity for budget stress to occur in all regency governments in Indonesia if they do not manage regional potential and meet regional expenditure needs. In 2020, four regencies just entered the five categories of regency governments with the highest budget stress: Bojonegoro, Sigi, Donggala, and Kapuas.

Based on the mapping exercise of budget stress of the local government, be it provinces, city, and regency governments, this study provides a positive signal to regions with high budget stress to keep trying to reduce

budget stress by expanding the base of local tax or retribution revenues (Aldag et al. 2019; Kim, 2017). This condition is also explained by Shi and Varuzzo (2020) that local governments that have succeeded in overcoming budgetary gaps and pressures have expanded local tax policies, development incentives, and improved service quality as alternative efforts.

Furthermore, this study presents information about the magnitude of the three research variables used, namely budget stress, budget implementation, and level of effectiveness, in Table 3. Table 3 shows that the total sample observations of the combined sample of local governments, namely, province, city, and regency governments amount to 2,710 observations. Budget implementation conditions that occur in all research samples reached an average of 57.18%. This condition shows that the actual expenditure on the expenditure budget is only able to be absorbed by 57.18%. In the same condition, the local government experiences budget stress of 4.97%, which shows that the availa-

bility of regional potential to meet regional expenditure needs is still minimal, so a strategy is needed to increase regional potential. Finally, the level of effectiveness of local governments reaching 67.77% is still far from optimal, namely 100%. The level of effectiveness indicates that the budgeted revenue target can only achieve a revenue realization of 67.77%.

In the context of the provincial government, the average budget realization that occurred in the provincial government reached 57.16%. This condition shows that the actual expenditure on the expenditure budget is only able to be absorbed by 57.16%. Under the same conditions, the provincial government experienced average budget stress of 4.95%. This condition shows that the availability of regional potential to meet regional expenditure needs remains minimum because the level of effectiveness of local government only reached 66.77%, far from optimal. Therefore a strategy is needed to increase and maximize regional potential.

Table 3. Descriptive Statistics of each Variable

Variables	N	Mean	Std.Dev
All Sample			
Budget Implementation	2.710	57,183	33,044
Budget Stress	2.710	-4,976	6,763
Level of Effectivity	2.710	67,771	28,840
Provinces			
Budget Implementation	170	57,168	31,774
Budget Stress	170	-4,952	7,765
Level of Effectivity	170	66,775	29,297
Cities			
Budget Implementation	465	56,745	31,239
Budget Stress	465	-6,596	7,730
Level of Effectivity	465	67,853	27,893
Regencies			
Budget Implementation	2.075	57,282	33,549
Budget Stress	2.075	-4,615	6,383
Level of Effectivity	2.075	67,834	29,023

City governments in Indonesia with a total sample of 465 observations can only absorb 56.74% of the budget and are still below the absorption of the provincial government budget. This condition shows that the expenditure budget absorbed is only 56,74%. In the same condition, the city government experienced budget stress of 6.59%. This condition shows that the availability of regional potential to meet regional expenditure needs is still minimal, thus, a strategy is needed to increase regional potential. The level of effectiveness of the local government is still far from optimal, although it is still higher than the provincial government, which is 67.85%. This means that the realization of revenue only reached 67.85% of the set target. From the 2075 observation samples at the regency level, the regency government could only absorb a budget of 57.28% with budget stress of -4.61% on average. This condition shows that the availability of regional potential to meet regional expenditure needs is still low compared to city and provincial governments. At the same time, the

level of effectiveness of the regency government reached 67.83%.

Table 4 shows the correlation test results on all research samples, both provincial, city and regency governments. The highest correlation occurs between the level of effectiveness with implementing the budget in a positive direction. This condition shows that local governments that can achieve the revenue budget target will use their budget optimally to finance their expenditure needs. When viewed from the three levels of local government, it can be seen that the city government has the highest correlation between the level of effectiveness and budget implementation, which is 0.975 compared to the regency and provincial governments. This condition shows that a higher level of effectiveness is achieved at the city government level and is positively related to budget implementation than at the regency and provincial government levels.

Table 4. The Correlation Test Results

Variables	Budget Implementation	Budget Stress	Level of Effectivity
All Sample			
Budget Implementation	1,000		
Budget Stress	0,054	1,000	
Level of Effectivity	0,973	-0,026	1,000
Provinces			
Budget Implementation	1,000		
Budget Stress	0,147	1,000	
Level of Effectivity	0,970	0,062	1,000
Cities			
Budget Implementation	1,000		
Budget Stress	0,103	1,000	
Level of Effectivity	0,975	0,012	1,000
Regencies			
Budget Implementation	1,000		
Budget Stress	0,032	1,000	
Level of Effectivity	0,973	-0,045	1,000

The proposed hypothesis is that budget stress has a negative effect on budget implementation. Based on the results of hypothesis testing in Appendix 2, for all samples, the effect of budget stress on budget implementation has a coefficient value of 0.388 and a t-statistic of 10.093 at a significance level of 1%. While at the provincial level, the effect of budget stress on budget implementation has a coefficient value of 0.354, t-statistic of 4.707, at the city level coefficient value of 0.369, t-statistics of 4.354, and the regency level the coefficient value of 0.405, t-statistics of 8.591 at the level of 1% significance. Thus the hypothesis is accepted, budget stress has a negative and significant effect on budget execution. Appendix 2 also shows that city governments have an Adjusted R² value of 96% and higher than regency and provincial governments. This condition indicates that the effect of budget stress on budget execution is higher in city governments throughout Indonesia. After testing the hypothesis, the author also conducted a sensitivity test, the results of which were presented in Appendix 3. The sensitivity test shows results that are in accordance with the main test results: budget stress has a negative and significant effect on budget implementation. In addition, according to the main test results, the effect of budget stress on budget implementation is higher for city governments than for regency and provincial governments.

Budget stress is a condition of limited regional revenue that can affect public administration in financing regional expenditure needs (Arnett, 2011). Chapman (2003) explains that budget stress is a condition of local government when regional revenue is low while regional expenditure is high. One of the essential effects of budgetary pressure is the budget deficit. This study provides information that local governments experience budget stress due to the realization of revenue targets that are not achieved (can be seen

from the average level of effectiveness that is not optimal). They experience a budget shortage to finance their regional expenditures. On the other hand, the average budget implementation of local governments is also not optimal, even below the value of the level of effectiveness. It is necessary to study further the process of preparing local government budgets, whether regional expenditures have been affected by local government needs. In addition, the determination of regional revenue targets must also be more precise.

Furthermore, the results of this study can be said to be in line with the research of Ar-mawadin et al. (2020), which states that budget stress has a significant negative effect on expenditure, especially capital expenditure. Also, Hanif and Suparno (2017) state that budget stress affects budget absorption. In addition, as stated by Muryawan and Sukarsa (2016), budget stress has become common since the emergence of regional autonomy, which gives local governments the authority to manage their finances but requires regions to be more independent. Therefore, the ability of local governments to be more intensive in exploring regional potential is an important element in the success of regional responses to budget stress problems.

CONCLUSION

The results of this study can contribute to the theory, methodology, and implementation related to the budget. The theory's contribution is that the political budget cycle can be used to maintain government performance through various efforts to reduce budget stress. The more optimal management of regional resource potential is the government's effort to increase popularity to get political support from the community so that the budget is used as a political instrument. Furthermore, the methodological contribution of this research is the mapping of budgetary

pressures on local governments at the provincial, city, and district levels, which provides a new method framework for detecting the direction and policies of local governments in dealing with regional fiscal conditions.

This study also found that budget stress can reduce budget implementation. Therefore, the government needs to pay attention to indicators of budget stress, as requested by ACIR (1973), and make various efforts to increase regional revenue to meet the implementation of regional expenditures due to increasingly complex regional needs. Local government can utilize the untapped potential for regional revenue and the potential benefits of investment to attract potential investors as a strategy. Mahmudi (2019) explains that the analysis of regional potential is carried out to determine the types of taxes and retribution of a specific area, whether they are included as potential, prime, developing, or underdeveloped areas. If local taxes and retribution are classified into potential and developing categories, tax and retribution intensification and retribution will be carried out. Furthermore, the prime category needs to be intensified, and the underdeveloped category needs to be reviewed or even removed.

Finally, the limitation of this study is the measurement of budget stress which only focuses on the research of Boukari and Veiga (2018). This study provides opportunities for further researchers to map budget stress using other relevant measurement methods or specifically conduct a case study in a local government experiencing budget stress. Case study research can fill in the gaps in empirical research and directly provide solutions to the causes and budget stress on the research object.

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APPENDICES

Appendix 1. Mapping Budget Stress in Indonesia

Provinces Government				
Budget Stress > Mean of Budget Stress 2016	Budget Stress > Mean of Budget Stress 2017	Budget Stress > Mean of Budget Stress 2018	Budget Stress > Mean of Budget Stress 2019	Budget Stress > Mean of Budget Stress 2020
Riau Province	North Kalimantan Province	North Kalimantan Province	North Kalimantan Province	South East Sulawesi Province
North Kalimantan Province	Riau Province	Bangka Belitung Province	Aceh Province	North Maluku Province
West Sulawesi Province	Bangka Belitung Province	Bengkulu Province	North Sulawesi Province	Aceh Province
Bangka Belitung Province	Bengkulu Province	Riau Province	DKI Jakarta Province	Jambi Province
West Papua Province	West Sulawesi Province	Bali Province	Bengkulu Province	North Kalimantan Province
Cities Government				
Budget Stress > Mean of Budget Stress 2016	Budget Stress > Mean of Budget Stress 2017	Budget Stress > Mean of Budget Stress 2018	Budget Stress > Mean of Budget Stress 2019	Budget Stress > Mean of Budget Stress 2020
Kediri City	South Tangerang City	Tanjung Balai City	Tanjung Balai City	Palu City
South Tangerang City	Cimahi City	Bima City	Gunung Sitoli City	Pasuruan City
Cimahi City	Padang Panjang City	Gunung Sitoli City	Cimahi City	Jambi City
Madiun City	Bukit Tinggi City	Manado City	Depok City	Bukit Tinggi City
Depok City	Depok City	Cimahi City	Bengkulu City	Madiun City
Regencies Government				
Budget Stress > Mean of Budget Stress 2016	Budget Stress > Mean of Budget Stress 2017	Budget Stress > Mean of Budget Stress 2018	Budget Stress > Mean of Budget Stress 2019	Budget Stress > Mean of Budget Stress 2020
Tana Tidung Regency	Tana Tidung Regency	Pidie Jaya Regency	Muna Barat Regency	Bojonegoro Regency
Tanah Laut Regency	Tanah Laut Regency	Teluk Bintuni Regency	Sintang Regency	Sigi Regency
Siak Regency	Penajam Paser Utara Regency	Maybrat Regency	Maybrat Regency	Donggala Regency
Pelawaran Regency	Kepulauan Mentawai Regency	Hulu Sungai Tengah Regency	Bombana Regency	Kapuas Regency
Malinau Regency	North Toraja Regency	Penajam Paser Utara Regency	Kepulauan Yape Regency	Tanah Laut Regency

Appendix 2. Hypothesis Test Result

Independent	Method: OLS Dependent: Budget Implementation All Sample		Method: OLS Dependent: Budget Implementation Provinces		Method: OLS Dependent: Budget Implementation Cities		Method: OLS Dependent: Budget Implementation Regencies	
	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.
Budget Stress	0,388	10,093***	0,354	4,707***	0,369	4,354***	0,405	8,591***
Level of Effectivity	1,117	199,229***	1,046	49,387***	1,091	98,460***	1,129	170,655***
Const.	-16,637	-39,121***	-10,942	-6,183***	-14,895	-16,402***	-17,462	-35,679***
F-Stat.	28141,28***		16457,322***		5669,867***		21405,03***	
R ²	0,954		0,948		0,960		0,953	
Adjusted R ²	0,954		0,948		0,960		0,953	
Durbin-Watson	1,589		1,606		1,869		1,561	
N	2.710		170		465		2.075	

Notes: The assumption of multicollinearity using VIF <10 indicates no multicollinearity problem. Budget stress and the level of effectiveness of the VIF are 1.021 <10 (All samples). Budget stress and VIF effectiveness level are 1.009 <10 (Provinces). Budget stress and the level of effectiveness of VIF are 1.008 <10 (Cities). Budget stress and the level of effectiveness of VIF are 1.034 <10 (Regencies). The heteroscedasticity assumption uses Huber-white-Hinkley (HC1) heteroscedasticity consistent standard errors and covariance to correct heteroscedasticity problems. The assumption of autocorrelation using the standard value of Durbin Watson (DW) with a range of 1.54-2.46 indicates that there is no autocorrelation problem (Winarno, 2015). A negative Budget stress ratio calculation shows that local governments are experiencing budget stress. Positive OLS regression coefficient shows that Budget stress has a negative effect on budget implementation. *** level of 1%

Appendix 3. Sensitivity Test Result

Independent	Method: OLS Dependent: Budget Implementation All Sample		Method: OLS Dependent: Budget Implementation Provinces		Method: OLS Dependent: Budget Implementation Cities		Method: OLS Dependent: Budget Implementation Regencies	
	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.
Budget Stress	-3,642	-7,850***	-3,433	-2,316**	-4,019	-3,734***	-3,583	-6,663***
Level of Effectivity	1,116	188,522***	1,052	47,503***	1,094	88,599***	1,126	162,621***
Const.	-15,361	-28,306***	-10,163	-4,998***	-13,916	-10,730***	-16,092	-25,981***
25320,72***	1375,700***		19407,39***		5669,867***		21405,03***	
0,949	0,942		0,949		0,960		0,953	
0,949	0,942		0,949		0,960		0,953	
1,621	1,651		1,586		1,869		1,561	
2,710	170		2,075		465		2,075	

Notes: Multicollinearity assumption using VIF <10 indicates no multicollinearity problem. Budget stress and VIF effectiveness level are 1.025 <10 (All samples). Budget stress and VIF effectiveness level are 1.007 <10 (Provinces). Budget stress and the level of effectiveness of VIF are 1,000 <10 (Cities). Budget stress and the level of effectiveness of VIF are 1.036 <10 (Regencies). The heteroscedasticity assumption uses Huber-white-Hinkley (HC1) heteroscedasticity consistent standard errors and covariance to correct heteroscedasticity problems. The assumption of autocorrelation using the standard value of Durbin Watson (DW) with a range of 1.54-2.46 indicates that there is no autocorrelation problem (Winarno, 2015). The measurement of Budget stress uses a dummy variable with a value of 1 for local governments with a negative value calculation for the budget stress ratio, and vice versa with a value of 0 for local governments with a positive value for the budget stress ratio calculation. Negative OLS regression coefficient indicates that budget stress has a negative effect on budget implementation. ***, ** level of 1%, 5%.



Analysis of regional financial independence, the potential for growth, and health services: A case study of regencies/cities in South Sulawesi

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ABSTRACT

This study aims to analyze: (1) the financial independence and commitment of health services in the region; (2) the potential for growth in supporting health services in the region; and (3) the relationship pattern between financial independence and regional potential for growth in order to achieve the goal of fulfilling health service commitments in the region. This study is explanatory research using a quantitative approach. The results show that: (1) the average level of financial independence of regencies/cities in South Sulawesi Province fall under the high category and relatively independent in terms of source and allocation of regional budgets; (2) the average growth of all regencies/cities in South Sulawesi Province shows positive figures which implies that the prospect of their economic growth has accelerated along with several problems in each regency/city; (3) some regencies/cities with large APBD do not have an increased allocation of resources for health expenditure. On the contrary, some regencies/cities that fall under the category of low budget and financial independence have a better commitment to health service and expenditure. In addition, almost all regencies/cities categorized as having good potential for growth ended up having low performance in health expenditure. The local government has carried out fiscal decentralization, which is defined as the freedom for regions in carrying out policies related to budget politics in the region. Notwithstanding the preceding, the role of the central government is still greatly expected to advocate for the improvement of health expenditure quality.

KEYWORDS:

Fiscal; financial independence; growth; health expenditure.

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INTRODUCTION

The fiscal decentralization policy in Indonesia has been implemented since 2001 in line with the implementation of regional autonomy policies. Decentralization is the transfer of responsibilities, authorities, and resources for personnel, funding, and several other items from the central to local Government (Khusaini, 2006). Decentralization can also be interpreted as delegating authority, budget receipt or finance both administratively and utilization purposes (Adi & Puspa, 2009). Therefore, one of the definitions of fiscal decentralization in the format of handing over autonomy in the financial sector to regions is the process of testing the role and empowerment of regions in development (Oates, 1972; 1993; 2011; Christia & Ispriyarsa, 2019; Ali & Maisyuri, 2018). The implementation of regional autonomy policy responds to various regional aspirations in Indonesia that want to increase their role and independence in managing its authority and responsibilities for community services and regional development.

The implementation of fiscal decentralization aims to achieve regional independence, especially in supporting the implementation of regional development, accelerating growth, and delivering excellent service to the community (Agustina, 2013; Haryanto, 2019; Azimi, 2020). By achieving this aspect of self-reliance, regions will develop their potential in optimal capacity (Litvack & Seddon, 1999). The financial independence of the region will have a positive impact on reducing the dependence of the State Budget (Anggaran Pendapatan dan Belanja Negara, APBN), especially through the Transfer to Regions and Village Funds (Transfer ke Daerah dan Dana Desa, TKDD) components. The region is expected to be able to allocate this source of funds to productive sectors to encourage increased investment in the region as well as in sectors that have an impact

on improving public services and can increase public contribution to Regional Own-source Revenue (Pendapatan Asli Daerah, PAD) (Urip & Indahyani, 2017). TKDD is one of the components of the central government expenditure that plays a significant role as an instrument of fiscal policy in strengthening the implementation of fiscal decentralization. It accelerates regional development to improve the quality of public service delivery and social welfare. Within the APBN's structure for government expenditure, TKDD consists of two significant components: Transfer to Regions (Transfer ke Daerah, TKD) allocated to provinces, regencies, cities, and Village Funds earmarked to villages.

TKDD consists of four main elements: First, the Balance Fund. Balance fund consists of: (i) General Transfer Fund (Dana Transfer Umum, DTU), a type of transfer funds allocated to fund the implementation of government affairs that become regional authorities, taking into account aspects of autonomy, as well as balance and equitable regional financial capabilities, including the General Allocation Fund (Dana Alokasi Umum, DAU) and the Revenue Sharing Fund (Dana Bagi Hasil, DBH); (ii) Special Transfer Fund (Dana Transfer Khusus, DTK), i.e., funds allocated to regions to fund activities that have been directed or set to be used to improve public services and achieve national priorities. Such fund consists of Physical Special Allocation Fund (Dana Alokasi Khusus, DAK) and Non-physical DAK. Second, the Regional Incentive Fund (Dana Insentif Daerah, DID) is allocated to provide incentives and at the same time as an instrument to spur improvement of regional performance in financial management, governance, development, basic public services, and community welfare. Third, the Special Autonomy Fund (Otonomi Khusus, Otsus), Additional Infrastructure Fund (Dana Tambahan Infrastruktur, DTI), and Privilege Fund (Dana

Keistimewaan), notably the type of transfer funds allocated specifically for regions that receive asymmetric autonomy policies under the law, such as Provinces of Papua, West Papua, Aceh, and D. I. Yogyakarta. Fourth, the Village Fund is allocated to villages as one of the sources of village revenue from the APBN to fund village development and community empowerment under the Law on Villages (Kementerian Keuangan, 2018).

Fiscal decentralization then developed into the core of the implementation of regional autonomy. Through a responsible fiscal decentralization process, local governments will be able to increase economic growth and the welfare of their communities. Therefore, regional autonomy is not just a delegation of authority but rather increased community participation in the process of regional economic development (Kaloh, 2002). Although considered to be best practice, there are still some weaknesses related to fiscal decentralization. Some of the weaknesses that are likely to present themselves include: (1) the creation of a gap between rich and poor regions; (2) threat to economic stabilization due to inefficient macroeconomic policies; (3) reduced efficiency due to lack of representation of the people's representative institutions with indicators showing that public hearing mechanism is still weak; and (4) expansion of corruption network from the central level to the region (Haryanto, 2019).

In the implementation of fiscal decentralization itself, it is known that the philosophy of "money follows function" as the main principle must be taken into account and implemented (Fatoni, 2020; Haryanto, 2018; Mudayen & Maridjo, 2018; Siregar & Badrudin, 2017). The principle means that all forms of handover of the central government's authority to local governments should include the submission of funding sources (Bahl, 2000; Korompot & Warongan, 2017). At the implementation level, the principle of

"money follows function" is then aligned into the form of a policy framework through Law Number 33 of 2004 on Financial Balance between national and local governments. In the regulation, the central government prepares TKDD mechanism as a follow-up to this philosophy. It becomes one way to maintain the balance of growth between regions in fiscal decentralization when the inter-regional competition system is perfect (Kharisma, 2013).

The concept of decentralization in this regulation is also expected to achieve development goals by granting control rights to people with information and incentives. Therefore, such decisions that suit their needs can be made and expected to improve public services' quality and efficiency to fulfill sectoral services and commitments to the community (Hirawan, 2007; Bardhan & Christopher, 1999). Health services are seen as fulfilling sectoral commitments in the region and constitute a government affair. Such commitment has been delegated from the central government to the local government following the mandate of Article 10 paragraph (1) and (3) Law Number 32 of 2004 concerning Local Government and Government Regulation Number 38 of 2007 concerning the Division of Government Affairs. According to the Law, delivery of health services is a commitment that the local government must perform to its people (Fajar & Indrawati, 2020; Muliza, Zulham & Seftarita, 2017; Bandiyono, 2018).

The problem concerning the mechanism of fulfilling regional commitments related to health services is exciting to analyze. Although no longer viewed as a new issue, the study on evaluating the implementation of decentralization has always been a discussion that draws the attention of various parties, including researchers and related policy-holders. Various studies continue to be developed, following the many weaknesses and

problems of managing the Regional Budget (Anggaran Pendapatan dan Belanja Daerah, APBD). The APBD revenues of most regions are still heavily dependent on transfer funds from the central government, and APBD expenditure is less qualified as it is mostly used for employee and operational expenditures. Furthermore, many regions have not succeeded in meeting the minimum allocation of expenditure directly related to essential public services, such as education, health, and infrastructure (Kementerian Keuangan, 2018).

Several studies have examined and analyzed the financial independence of the region and its potential economic development. Haryanto (2017) analyzed mapping regional financial independence in exercising its authority by comparing natural resources producing regions (Sumber Daya Alam, SDA) and non-SDA, using quadrant methods, share analysis, and growth. Based on the analysis of the quadrant method, it was found that only Badung Regency falls under quadrant I. All non-SDA regions are in quadrant II, while the entire SDA producing region falls into quadrant III minus Indragiri Hilir Regency. In quadrant IV, of all the research locus, there is only Indragiri Hilir Regency. Based on these results, the government is obliged to focus the policy of transfer to regions located in quadrant IV so that these regions can make various improvements towards better conditions in the future. Based on the results of share calculation, it can be seen that the share value of SDA-producing regions during the period of 2010-2014 is higher on average than the share value of non-SDA regions, except Badung Regency, which has an average share of 88.47. Meanwhile, from the results of growth calculation, non-SDA regions have a higher growth value than SDA-producing regions.

Pilat and Morasa (2017) examined the financial capabilities of a region, namely Manado

City, using share and growth calculation methods. This study concluded that the financial capability condition of Manado City was far from ideal. Based on the calculation of share and growth results during the period of 2011-2015, an average value of a share of 18.792% and average growth of 120.503% is obtained. Thus the position of Manado City falls under quadrant II which means that the condition was nowhere near. This implies that the Government of Manado City is required to dig deeper into the region's potential to increase PAD further, which plays a significant role in APBD. Based on the calculation of the Manado Financial Capability Index over five years, the index scale shows the figure of 0.577, which indicates that the financial capability of Manado City is relatively high. The high level of financial capability of the Government of Manado City results from a large amount of financial assistance from the central government, which is depicted in the analysis of the independence ratio. This is in stark contrast to the mandate of regional autonomy that demands independence and authority of the Local Government in carrying out its domestic affairs.

Haryanto (2019) analyzed fiscal capacity and expenditure of environmental functions with case studies in provinces throughout Indonesia from 2010 to 2017. This study discovered that regions that still fall into the category of low financial independence consist of West Sulawesi Province, East Nusa Tenggara Province, Maluku Province, Papua Province, and Gorontalo Province. Gorontalo and West Sulawesi Provinces are examples of new autonomous regions formed in the era of fiscal decentralization. The inclusion of the two regions is fascinating to be reviewed as an evaluation of whether the formation of the new area is appropriate or not. What requires thorough attention is the inclusion of Papua Province in this category because the central funds held by the government so far have been very significant in terms of the

amount. In the growth analysis, in general, the average growth of all provinces across Indonesia showed negative figures from 2010-2017. The condition suggests that the prospect of economic growth is slowing due to several problems. Some relatively small regions with a decrease in economic growth rate are Gorontalo Province by -0.27%; South Sulawesi Province is about -0.38%; South Kalimantan Province with -0.44%; and Special Province of Yogyakarta of -0.67. Only Central Sulawesi Province recorded an average positive economic growth of 1.48% among other regions in Indonesia from 2010 to 2017.

However, studies and references focusing on evaluating the decentralization implementation, financial independence, and public services as outlined before are still limited to national scope. Studies on decentralization implementation and its relation with public services at the regional level are very few. Therefore, it should be a crucial agenda to prioritize. Each region has different characteristics and geographical conditions that can affect the performance of its regional finance. Moreover, when the regulation states that regional financing must be supported from the mechanism of APBD, findings show that the realization of APBD utilization in many regions is more dominated by a routine expenditure of government apparatus than the allocation of capital expenditure and development (Haryanto, 2019; Rahmawati & Fauziah, 2020). The main problem related to regional independence is the key to success, especially at the regional level.

This study was conducted to analyze the independence of each regency/city through share indicators and prospects of regional economic development through growth indicators to address the problem as mentioned earlier. This analysis using share and growth is then mapped into regional quadrants to see their respective positions in the overall

scope at the provincial level. This study will evaluate the implementation of fiscal decentralization and public services at the regional level, especially in regencies/cities in eastern Indonesia. Data was collected from regencies/cities in South Sulawesi Province as a case study to represent the region. This study is different from previous studies which still review decentralization on a national scale (Badan Kebijakan Fiskal, 2011; Direktorat Jenderal Perimbangan Keuangan/DJPK, 2018; Haryanto, 2019). This study chooses South Sulawesi Province as the object for three reasons: (i) its achievement of having a relatively high Gini Index (second highest) in Eastern Indonesia, where economic inequality greatly affects the quality of government public services in the region, especially in health services; (ii) availability and completeness of data compared to other provinces related to research models and analysis; and (iii) it is one of the main representations of the Eastern Indonesia economy and records a relatively dynamic economic growth rate in Sulawesi, Maluku, and Papua compared to other provinces in the region.

In detail, some of the research questions include what is the province's financial independence status as an aggregate of regencies/cities, both derived from PAD (tax and non-tax), DAU, and DAK, in supporting regional financial independence? How is the province's potential growth as an aggregate of regencies/cities supporting health services in the region? Or how is the relationship between fiscal capacity and regional potential for growth with the fulfillment of health service commitments in the region?

By considering those questions, the aim of this study are:

1. Analyze the financial independence and commitment of health services in the region;
2. Analyze the potential for growth in sup-

- porting health services in the region;
3. Analyze the relationship pattern between financial independence and regional growth potential with the fulfillment of health service commitments in the region.

Academically, this study is expected to provide information about the regional fiscal capacity to fulfill health service commitments, especially in implementing fiscal decentralization in the region (South Sulawesi Province). This study is also expected to add research references in the financial balance between central and local government, especially in studies related to regional transfer funds and public services. In practical terms, the results of this study are expected to be used as consideration for policymakers related to central and regional financial balance policies and the improvement of health services in the region.

RESEARCH METHOD

Based on its objectives, this study is classified as explanatory research that aims to explain the relationship between two or more variables or research based on the theory that will be used to test a phenomenon that occurs (Creswell, 2010; Hamdi & Ismaryati, 2019). This study will explain the relationship between regional independence and the future economic prospects of the behavior of APBD constituent variables by analyzing the level of regional financial independence and its growth prospects at the first level.

When viewed from the approach side, this study is classified as a type of quantitative research with different characteristics with qualitative research that emphasizes the depth of data. Quantitative research emphasizes the analysis of numerical figures be processed using statistical methods (Creswell, 2010; Hamdi & Ismaryati, 2019). The quantitative approach uses shared data

represented by PAD, Balanced Fund, and APBD expenditure of each regency/city in this study. Numeric numbers are also used to calculate the rate of growth or growth of APBD in the future. Thus, quantitative data from this study is indeed entirely produced from APBD analysis.

The data used in this study includes secondary data as it is collected from APBD presented by official government agencies, namely the Directorate General of Financial Balance, Ministry of Finance (<http://www.djpk.kemenkeu.go.id/>). The secondary data are in the form of APBD expenditure realization data for 2015 to 2019. The year 2015 was selected based on the consideration that five years is considered sufficient time for regencies/cities to carry out the concept of decentralization in an improved, mature and effective manner since 2010, the beginning of fiscal decentralization. Thus, 24 regencies/cities will be analyzed. In order to explain the characteristics of each region, a quadrant analysis is applied.

The analysis method used is a Share Analysis to explain the condition of APBD independence in the region and a growth method to see aspects of growth that reflect the future economic prospects in a region. The use of Share Analysis serves to analyze the APBD strength of each region in financing various expenditures. At the same time, the use of Growth Analysis will help provide direction and signals for the future economic growth of a region. Mathematically, the share indicator is calculated using the following comparison or ratio (Haryanto, 2019).

$$Share = \frac{(PAD + DPR)}{Total\ Expenditure} \times 100\%$$

$$Growth = \frac{(PAD + DPR)_t - (PAD + DPR)_{t-1}}{(PAD + DPR)_{t-1}} \times 100\%$$

Description:

PAD : Regional Own-source Revenue

DPR : Balanced Fund (Fiscal Balance

Transfers)

t : Current Period

t-1 : Previous Period

Total Expenditure : Total of Government (Regencies/Cities) Expenditure in APBD

Based on the formulation of share and growth and analysis of the relationship between district/city health function expenditures in South Sulawesi Province, the variables used and their definitions are presented in Table 1.

There are 24 districts/cities to be analyzed. The Quadrant analysis method is used to explain the characteristics of each region. The quadrant analysis method divides each region into equal quadrants with the following

explanation:

1. Quadrant I describes the superior area with a high share and growth value. The amount of share value implies that the region has qualified regional independence, while positive growth means that the region has economic growth prospects in the future;
2. Quadrant II describes areas with high growth values, although with inadequate share value. The large value of growth indicates that this group of regions has a good expectation of improving economic conditions in the future. While the low share value can be caused by some cases, either because the budget expenditure burden is too large or weak revenue capability in the budget;

Table 1. Research Variables

No.	Variable	Description
1.	PAD	The Value of Regional Own-source Revenue in regencies/cities consists of: a. Local Tax Revenue b. Regional Retribution Revenue c. Local own Source Assets Revenue d. Other Legitimate Local Own-source Revenue
2.	DPR	Value of Balance Fund (Fiscal Balance Transfers) or TKDD in regencies/cities consists of: a. Tax Revenue Sharing Fund/Non-Tax Revenue Sharing Fund b. General Allocation Fund c. Special Allocation Fund
3.	Total of Local Expenditure	The total value of local expenditures in regencies/cities consists of: a. Indirect Expenditure 1) Employee Expenditure 2) Interest Expenditure 3) Subsidies Expenditure 4) Grant Expenditure 5) Social Assistance Expenditure 6) Revenue Sharing Fund Expenditure to the Province/Regency/City and Village Governments 7) Financial Assistance Expenditure to the Province/Regency/City and Village Governments 8) Unexpected Expenditure b. Direct Expenditure 1) Employee Expenditure 2) Goods and Services Expenditure 3) Capital Expenditure
4.	Health Function Expenditure	The total value of regional expenditure on health functions/services in the regencies/cities.

Source: DJPK, 2018

3. Quadrant III describes groups of regions with large share numbers but low growth. Thus, this third quadrant is the opposite of quadrant II. The amount of share in the area in the third quadrant is due to the remaining large contribution of revenues in the budget, but in the future, begin to show a negative growth rate. If associated with regional characteristics, this group of quadrant III can represent the condition of mining areas that have entered the twilight period;
4. Quadrant IV describes the most unsatisfactory regional group as it represents underdeveloped areas with low regional independence and relies heavily on the central government with no positive economic growth prospect in the future. Based on these characteristics, it can be seen that the regions in quadrant IV must be treated as the top priority of all forms of development policy in the region, both from the central and local governments. The policy in question includes policy improvement, which includes planning and budgeting.

Meanwhile, to see the pattern of relationships between regional capacity or fiscal space, potential for growth, and commitment to fulfilling health service through expenditure on health functions in the region, this study used Scatter Plot and Pearson Correlation techniques through the IBM SPSS Statistics 22 application. The correlation coefficient (r) shows the degree of correlation between the variables in the range -1 to $+1$ ($-1 < r \leq +1$). The significance test level of influence and relationships between variables, this study uses an alpha or significance level of 0.05 . If the significance value of each variable is smaller than the alpha value (0.05), then the influence or relationship is considered significant.

RESULT AND DISCUSSION

The first analysis used is the Share analysis to determine the strength of the APBD of each region. The results of the share analysis presented in Table 2 show that in general the average level of independence of districts/cities in South Sulawesi Province during the 2015-2019 period is included in the high category with a share value of 86.07% . So in general, districts/cities in South Sulawesi Province are quite independent in terms of sources and budget allocations.

The five regencies/cities with the largest independence between 2015 and 2019, notably Luwu Timur regency with an independence rate of 127.88% , which falls under the very high category, followed by the city of Makassar by 121.59% , the city of Pare-Pare by 94.57% , Tana Toraja regency by 91.29% , and Soppeng Regency with 87.06% . Regencies/cities that still fall into regions with low financial independence consist of regencies/cities such as Wajo, Palopo, Pinrang, Luwu, and Bone.

Based on the condition of each region, the majority of regions still depend on revenue derived from Other Legitimate Regional Own-source Revenue (Lain-lain Pendapatan Asli Daerah yang Sah, Lain-lain PAD yang sah) consists of (a) the proceeds of not segregated regional assets; (b) the result of employment or utilization of not segregated regional assets; (c) demand deposit revenue; (d) interest revenue; (e) indemnity claims; (f) gains from foreign exchange; and (g) commissions, deductions, or other forms as the proceeds and/or procurement of goods and/or services by regions. Meanwhile, some regencies/cities depend on regional tariffs, such as Bantaeng, Gowa, Jeneponto, Luwu, Sidenreng Rappang, and Tana Toraja. While others, depending on the revenue derived from local tax, notably Maros, Pangkajene and Islands, Makassar, and Luwu Timur.

Bone, Luwu, and Palopo require serious attention as these regencies/cities have been at the level of dependence on receiving aid from the central government for a long time. These three regencies have obtained significant central government funds and are included in the top 10 regencies with the largest average balance fund value during 2015-2019. Bone with Rp1.489 trillion, Luwu Rp1.364 trillion, and Palopo with Rp940.906 billion. This fact is a fascinating subject to be examined more thoroughly to identify whether the distribution of transfer funds to the region has been effective or not. One issue that warrants attention is the funds invested by the central government. Although such funds have been very significant in terms of amount, it has not

been able to bring financial independence to all the regions in an equitable manner.

The results of the Growth analysis, as presented in Table 3, show that, in general, the average growth of all regencies/cities in South Sulawesi Province from 2015–2019 is positive. Thus, the prospect of economic growth is increasing along with several problems in each district/city. In 2017, the growth of South Sulawesi Province experienced a slowdown with a negative growth value but could continue to grow in the following years.

The five regencies/cities that recorded the largest average positive economic growth among other regions in South Sulawesi

Table 2. Share Analysis Results of Regency/City in South Sulawesi Province during 2015-2019

No.	Regency/City	Year/Share (%)					Mean
		2015	2016	2017	2018	2019	
1	Bantaeng	85.90	87.64	79.54	88.25	85.93	85.45
2	Barru	83.42	93.06	92.85	84.48	81.33	87.03
3	Bone	76.15	84.14	80.04	78.70	77.55	79.31
4	Bulukumba	72.94	86.73	84.60	84.09	82.14	82.10
5	Enrekang	84.83	81.51	87.55	83.90	81.30	83.82
6	Gowa	75.30	88.17	91.00	79.57	80.23	82.86
7	Jeneponto	83.68	84.18	85.15	87.08	83.39	84.70
8	Selayar Islands	64.54	66.20	93.40	91.59	89.47	81.04
9	Luwu	80.13	73.57	79.04	77.18	79.86	77.96
10	Luwu Timur	104.30	122.01	136.12	136.37	140.59	127.88
11	Luwu Utara	73.62	87.32	83.44	80.83	76.36	80.31
12	Makassar	188.17	215.60	73.81	63.32	67.04	121.59
13	Maros	80.50	92.04	86.15	87.56	87.27	86.70
14	Palopo	62.17	74.90	87.38	75.17	84.83	76.89
15	Pangkajene Islands	82.03	90.65	87.65	86.58	86.74	86.73
16	Pare-pare	92.35	82.91	89.81	104.84	102.91	94.57
17	Pinrang	90.79	94.77	67.47	64.96	66.50	76.90
18	Sidenreng Rappang	88.02	82.92	81.99	90.76	89.72	86.68
19	Sinjai	86.07	87.05	87.48	84.83	86.26	86.34
20	Soppeng	89.39	112.19	72.83	83.29	77.59	87.06
21	Takalar	65.53	67.02	102.68	93.13	96.65	85.00
22	Tana Toraja	100.36	87.05	93.11	88.49	87.45	91.29
23	Toraja Utara	77.26	80.69	80.82	82.58	75.83	79.44
24	Wajo	33.38	35.05	67.95	70.21	63.94	54.10
Mean		84.20	89.89	86.33	85.32	84.62	86.07

Province between 2015 and 2019 were Luwu Timur Regency (26.82%), followed by Bantaeng Regency (12.79%), Jeneponto Regency (11.14%), Sidenreng Rappang Regency (10.93%), and Pare-Pare city (10.46%). In contrast, Wajo Regency/city, Pinrang, Makassar, Luwu Utara, and North Toraja are regencies/cities that have a regional composition with a large economic growth slowdown rate.

Wajo Regency again falls into the category of regencies with relatively low economic growth prospects. The status of Wajo regency becomes very interesting to look at further when it is classified as a region with a significant dependency on the central government's assistance while having a low future econom-

ic growth rate. Concerning the fact that the main source of PAD of Wajo regency comes from Other Legitimate Regional Own-source Revenue, the achievement of public service commitments, especially in health service delivery, also seems to still depend heavily on central government's assistance.

Based on the Regional Fiscal Review Report of South Sulawesi Province year 2019 the composition of local government consolidated employee expenditures of 41.52% dominated expenditures, both state budget and regional budget in 2019. Then followed by Consolidated Goods Expenditure of 31.56% and Consolidated Capital Expenditure of 19.80%. This demonstrates that expenditure on productive sectors, namely capital ex-

Table 3. Growth Analysis Results of Regency/City in South Sulawesi Province During 2015-2019

No.	Regency/City	Year/Share (%)					Mean
		2015	2016	2017	2018	2019	
1	Luwu Timur	6.85	37.08	79.56	7.53	3.1	26.82
2	Bantaeng	24.08	41.07	-24.25	15.15	7.89	12.79
3	Jeneponto	24.38	23.3	-7.67	6.73	8.96	11.14
4	Sidenreng Rappang	25.95	26.35	-0.72	1.08	1.99	10.93
5	Pare-pare	18.82	23.13	0.53	-4.89	14.69	10.46
6	Tana Toraja	21.26	9.14	24.38	-7.02	2.61	10.07
7	Luwu	22.97	18.74	-6.9	1.48	12.42	9.74
8	Selayar Islands	10.49	23.45	1.75	15.96	-3.64	9.6
9	Takalar	13.91	25.8	7.41	-6.53	7.01	9.52
10	Sinjai	24.18	28.1	-4.26	-1.86	1.02	9.43
11	Maros	8.3	36.76	-10.88	10.01	1.63	9.17
12	Gowa	11.34	27.47	11.28	-7.52	2.95	9.1
13	Enrekang	30.77	16.11	-2.79	-2.35	1.16	8.58
14	Bone	13.19	22.7	4.2	-1.7	4.05	8.49
15	Palopo	22.72	31	-10.51	-12.27	9.81	8.15
16	Soppeng	16.36	36.54	-24.42	14.89	-3.8	7.91
17	Bulukumba	18.89	23.08	2.46	-6.48	1.48	7.89
18	Pangkajene Islands	18.24	25.85	-7.64	2.81	-0.83	7.69
19	Barru	25.96	19.82	5.83	-10.28	-3.74	7.52
20	Toraja Utara	5.88	13.92	5.62	12.86	-2.36	7.18
21	Luwu Utara	1.6	29.17	-0.3	1.83	1.07	6.67
22	Makassar	12.55	32.84	-17.5	-8.71	6.56	5.15
23	Pinrang	18.76	20.01	-27.42	6.27	-2	3.12
24	Wajo	15.03	12.43	-12.32	-0.45	-1.04	2.73
Mean		17.19	25.16	-0.61	1.11	2.96	9.16

penditures and goods expenditures, are not optimum enough to boost economic growth in South Sulawesi Province. The fiscal challenge in south Sulawesi's regional economy is how to improve the leading sector and potential sector in the development and strengthening of the economy in the future (Kementerian Keuangan, 2019).

After conducting a partial analysis using the Share Analysis and Growth Analysis, all regencies/cities are reanalyzed using quadrant methods. According to their quadrants, the Quadrant Analysis method calculates and divides all regencies/cities in South Sulawesi Province into four quadrants of regions with their respective characteristics. The results of the quadrant analysis for all regencies/cities in South Sulawesi Province are presented in Table 4.

The analysis entails several regions in quadrant I with regional details: Luwu Timur, Tana Toraja, Sidenreng Rappang, Sinjai, Pare-Pare, and Maros. As explained earlier, regencies/cities in quadrant I are the ready area and deemed feasible to be an area with great regional independence, and followed by a positive prospect or economic potential in the future. Its readiness and feasibility can be measured based on APBD independence and relatively good economic prospects. The region within quadrant I, as not only is the capacity of the APBD is substantial, expendi-

ture is also being rationally managed. These favorable conditions must be maintained and developed in the future in order to create independent areas and reduce the burden of dependency on assistance from the central government. The success of some regencies/cities, of course, must be replicated in other regencies/cities while bearing in mind the aspects of locality and characteristics of each regency/city.

Regencies/cities located in quadrant II are Bantaeng, Takalar, Jeneponto, Selayar Islands, and Luwu. Regions in quadrant II are areas with the potential for growth in good economic conditions. Relating the results in quadrant II with the Share Analysis results, almost all regions in quadrant II are not included in the lowest share group, except for Wajo Regency. The strategy that needs to be taken to reduce the regions in quadrant II is primarily to create a rational budget expenditure burden because the economic outlook in the future is still positive. The positive future economic outlook must be maintained and developed to be the main driving force for regional economic development. Local governments must be able to create a positive investment climate to attract private investors to invest their capital and accelerate economic growth in the region.

There are four regencies/cities in this third quadrant: Makassar, Soppeng, Barru, and

Table 4. Quadrant Analysis Results of Regency/City in South Sulawesi Province During 2015-2019

Quadrant			
I	II	III	IV
Luwu Timur	Bantaeng	Makassar	Gowa
Tana Toraja	Takalar	Soppeng	Enrekang
Sidenreng Rappang	Jeneponto	Barru	Bone
Sinjai	Selayar Islands	Pangkajene Islands	Palopo
Pare-pare	Luwu		Bulukumba
Maros			Toraja Utara
			Luwu Utara
			Pinrang
			Wajo

Pangkajene Islands. Quadrant III comprises regencies/cities with a high average share. However, due to the high share capability, it began to face a slowdown in the outlook for economic growth in the future. While in quadrant II, the region’s strategy is the rationalization of APBD expenditure, quadrant III necessitates a strategy of an immediate shift of sector by applying ample funds from the oil and gas sector. Through a shift of priority sector, the region is expected to restore its positive growth in support of future sustainable regional economic growth. The issue in quadrant III is how the region can avoid a “natural curse” to make sure that its wealth of natural resources can benefit the communities within the region.

Similar to regions in other provinces, most regencies/cities fall into quadrant IV (Haryanto, 2019). In this study, 9 out of a total of 24 regencies/cities are included in the fourth quadrant. This quadrant illustrates the most unattractive regional conditions. On the one hand, the regions lack adequate fiscal capacity and financial capability, and on the other hand, the region does not have a good future economic outlook. For the government itself, the regions in quadrant IV

can be the main recommendations for policy-making and the implementation of policies to accelerate economic growth and development in the region. Looking at the characteristics of regions in quadrant IV, they are mostly regions that have long existed and have the authority to carry out. The central government can also see the regions in quadrant IV as the main target of various policies so that in the future, these regions can be moved to a better quadrant.

From the results of mapping the fiscal capacity of South Sulawesi Province and the results of data consolidation for all districts/cities, the analysis is continued by looking at the realization of expenditure on health functions in districts/cities during 2015–2019 and related patterns for development. The observation data can be seen in Figure 1, where the provincial average threshold is Rp188.3 billion. Based on the provincial threshold, several regions with the realization of expenditure on health functions in the APBD are above average, such as regencies/cities of Bone, Gowa, Luwu Utara, Makassar, Maros, Pangkajene Selayar Islands, Pare-Pare, Pinrang, Takalar, and Wajo. Meanwhile, regencies/cities such as Bantaeng,

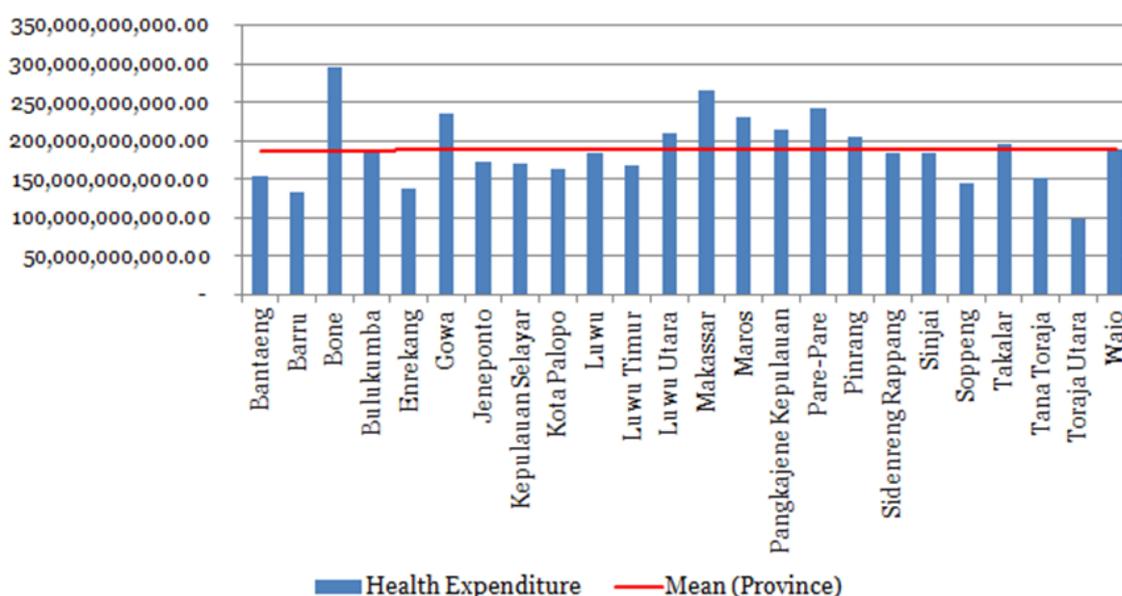


Figure 1. Average Expenditure for Health Functions of Regencies/Cities in South Sulawesi Province During 2015-2019

Barru, Bulukumba, Enrekang, Jeneponto, Selayar Islands, Palopo City, Luwu, Luwu Timur, Sidenreng Rappang, Sinjai, Soppeng, Tana Toraja, and North Toraja have allocations that are below the provincial threshold value.

Interestingly, if traced further, there is a premise that links these areas with the relatively large fiscal capacity of APBD. Some regencies/cities that fall into the large APBD category are not spending expenditures for large health functions, such as Luwu Timur, Tana Toraja, Sidenreng Rappang, and Sinjai. Politics and APBD commitment in the regional Medium Term Development Plan (Rencana Pembangunan Jangka Menengah Daerah, RPJMD) seems to be the determining factor. Therefore, the government must constantly remind the importance of fulfilling the budget of functions and health services in the region embedded in the government's plan and budgeting documents. In contrast, some regencies/cities that fall into low budget fiscal capacity have better health care commitment in areas with a considerable average expenditure of health functions, such as Bone, Gowa, Luwu Utara, Pinrang, and Wajo Regency.

When associated with previous analyses, almost all the areas in quadrant I had relatively low average health function expenditure. It is noted that only the regencies/cities of Maros

and Pare-Pare become areas in quadrant I, having a relatively large allocation of health functions expenditure. The findings are otherwise precisely out of sync when passed down to detail areas in quadrants II, III, and IV. Areas in quadrant IV, such as Bone, Gowa, Luwu Utara, Pinrang, and Wajo, do not have large fiscal and APBD capacity but have a good commitment to health expenditure. This is confirmed by the correlation analysis's result between health function expenditure and share levels in regencies/cities with negative relationship patterns/directions presented in Table 5 and Figure 2.

Table 5. Pearson Correlation Results

Variable	Health Expenditure	Share	Growth
Health Expenditure	1	-0.099 (0.647)	0.120 (0.577)
N	24	24	24

* Ratio of Health Expenditure to Total Local Government Expenditure

**Correlation is significant at the 0.01 level (2-tailed)

In line with the results showing areas with high growth potential, almost all districts/cities included in the top five categories have low performance related to the amount of health function expenditure allocation in the budget. A slight deviation occurs in this case only in the city of Pare-Pare. It should be considered in the future that the issue of sustainability and a high commitment to health should be the main aspects of concern in forming a healthy structure for regional eco-

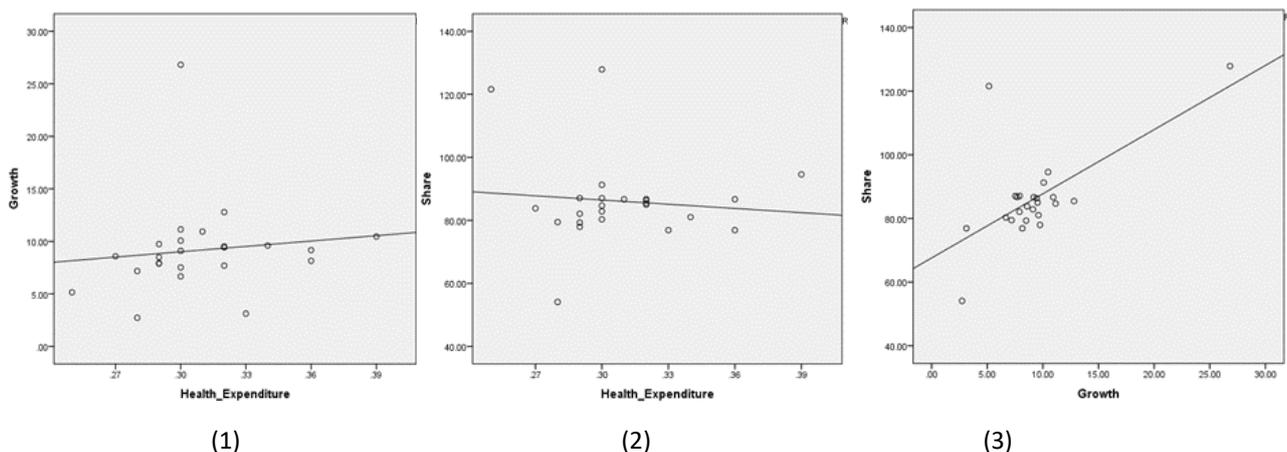


Figure 2. Relationships Between Health Expenditure, Share and Growth

conomic development. This is confirmed by the results of the correlation analysis between health function spending and the growth rate of districts/cities, which have a positive, although not strong, relationship pattern/direction.

In an effort to accelerate regional development and TKDD, it is also necessary to strengthen and increase funding sources derived from PAD that have not been optimally utilized, especially to increase regional independence. Considering that there is still much potential for PAD, especially from local taxes and local levies that have not been managed effectively and efficiently, especially in regencies/cities that still depend on Other Legitimate Regional Own-source Revenue. Efforts to strengthen the extraction of PAD resources are undertaken, among others, through strengthening local taxing power by expanding the levy base and providing discretion in the determination of tariffs by regions according to the community's ability.

Furthermore, to accelerate the development and provision of infrastructure, improve the quality of public services and support the improvement of regional economic growth, policies for the development of regional financing sources should be established. Such policy is notably the Local Government Cooperation with Business Entities (Public-Private Partnership, PPP). In addition to the development of regional funding sources, other essential aspects require priority and handling to improve public service delivery quality, especially health. By prioritizing these other aspects, it is expected that the efficiency, effectiveness, and productivity of APBD expenditure and regional financial management can be improved. This is because the quality of regional expenditure thus far has remained unsatisfactory, which is shown among others from:

1. most of the regional expenditures are used for the employee rather than capital expenditures;
2. most regional expenditures use cost standards, both Standard Input Cost (Standar Biaya Masukan, SBM), Standard Output Cost (Standar Biaya Keluaran, SBK), in trillion Rupiah and Unit Price Standard (Standar Satuan Harga, SSH), which are higher than the central cost standard;
3. programs/activities in regional budgeting, over-budgeting, and lack of focus;
4. many regions have not met the mandatory expenditure allocation for education, health, and infrastructure;
5. regional expenditure management has not used an integrated and transparent electronic-based planning, budgeting, and implementation system; and
6. uneven output achievement, as reflected by the high inequality of public services between regions.

These conditions are problems and challenges that will be used as the basis for policy improvement. Such policy improvement can enhance the quality of regional expenditure assignments and regional revenue management policies from PAD and TKDD (revenue assignment), which is in line with budgeting reform measures and the improvement of regional financial management policies.

After all, the results of this study have powerful policy implications, mainly if it is associated with several critical issues of regional development and fiscal decentralization. Some findings on regional self-reliance indicators and future economic prospects are the best inputs for improving fiscal decentralization policies at the provincial and national levels. Other policy implications are also related to the region's commitment to delivering quality health services by allocating health function expenditures in the budget. The proposed hypothesis is that some areas with high fiscal capacity in the APBD auto-

matically have a large allocation of health function expenditures. However, the findings of the study did not prove this to be appropriate. Some findings ought to be an outlier when some areas with large fiscal capacity in the budget do not have a high budget commitment. On the contrary, some regions with low fiscal capacity in the APBD have a big commitment in allocating funds for health function expenditures. Although these regions have freedom in carrying out policies related to budget politics in the region due to decentralization, the role of the central government is still highly expected in providing various advocacy for improving expenditure patterns, especially in the health sector.

CONCLUSION

Based on the results of the analysis and discussion, several conclusions have been drawn. First, in general, the average level of independence of regencies/cities in South Sulawesi Province during the period of 2015-2019 fall into a high category with a share value of 86.07%. This implies that, in general, regencies/cities in South Sulawesi Province are relatively independent in the source and allocation of regional budgets. However, some regencies/cities still fall into the category of regions with low financial independence, such as Wajo, Palopo, Pinrang, Luwu, and Bone Regencies.

Second, the average growth of all regencies/cities in South Sulawesi Province showed positive figures from 2015–2019. The prospect of economic growth has accelerated with several problems in each regency/city. East Luwu regency is recorded as the regency with the highest growth of 26.82%. Interestingly, Wajo Regency is classified as an area with significant dependence on central assistance and a low economic growth rate going forward.

Third, some regencies/cities that fall into large APBD do not have large expenditures on health functions, such as East Luwu, Tana Toraja, Sidenreng Rappang, and Sinjai Regency. In contrast, some regencies/cities that fall into the category of low fiscal capacity APBD precisely commit to improving health services in areas with a large average expenditure of health functions, such as Bone, Gowa, North Luwu, Pinrang, and Wajo. Almost all of the areas in quadrant I have relatively low average health function expenditure. Areas in quadrant IV, such as Bone, Gowa, North Luwu, Pinrang, and Wajo Regency that do not have large fiscal and APBD capacity, have a good commitment to health expenditure. This is confirmed by the analysis results on the correlation/relationship between health function expenditure and share levels in regencies/cities with negative relationship patterns/directions. In addition, almost all regencies/cities that fall into the good category in the growth potential turned out to have low performance in terms of the amount of health function expenditure and allocation in the budget.

The realization of government expenditure as an economic stimulus needs to be continuously encouraged. The absorption of the budget as an economic stimulus in the future becomes the key to increasing fiscal independence, given the size of the infrastructure budget. Therefore, connectivity, essential services, and increased production will be added value in various business fields. Real sector activities that continue to grow will improve the quality of growth and increase fiscal independence from local governments.

Data limitations are an obstacle in this study. The data was collected from the period of 2015–2019. The update of the 2020 budget data is also seen as an interesting issue to address in further research. Furthermore, there is a need to expand the content of the

discussion, which involves non-APBD aspects and some other thematic issues in development, such as the impact on poverty alleviation, gender, and inclusivity. Since 2020, the central and local governments have been actively working in handling the impact of the COVID-19 pandemic that has hit the world, where the role and contribution of the government through regional expenditure instruments, mainly health functions, is crucial.

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Analysis of RBA implementation and the preparation of an audit program at Ministry of Villages, Development of Disadvantaged Regions and Transmigration

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ABSTRACT

Risk-Based Audit (RBA) is an audit method that applies a risk approach in its implementation. By applying the RBA method, it is expected that an audit can be performed effectively and efficiently, thus producing maximum audit results. This study aims to analyze the implementation of RBA upon audits conducted by The Audit Board of Indonesia (BPK). Furthermore, this study analyzes the preparation of an Audit Program in line with the previously determined RBA. The research framework uses Agency Theory which emphasizes the relationship between management and principal. To ensure that management does not perform any manipulation, an independent third party must conduct the audit. This study applied a qualitative research methodology with a case study approach at BPK. The author expects to dig deeper into the application and implementation of RBA within BPK by using the case study approach support by audit documents and interviews with BPK Audit Team. The results showed that the implementation, performance, and monitoring of RBA by the BPK Audit Team were in line with the instructions and guidelines set by BPK.

KEYWORDS:

Risk based audit; agency theory; BPK; audit program.

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INTRODUCTION

State finances encompass all of the rights and obligations of the state that has monetary value and everything in the form of money or goods that can be utilized as state property in connection with the implementation of these rights and obligations (Law Number 17 of 2003). This is consistent with the bureaucratic reforms that have been implemented since the 1997 Indonesian economic crisis. Therefore, state finances are one of the areas targeted for reform. State finances reform is viewed from the management perspective and is supported, among other things, by three laws and regulations, namely Law Number 17 of 2003 concerning State Finance, Law Number 1 of 2004 concerning State Treasury, and Law Number 15 of 2004 concerning State Financial Management and Accountability Audit.

There are currently 34 ministries in Indonesia, with different nomenclatures and business processes according to their respective responsibilities. One of the ministries with a fairly complex business process is the Ministry of Villages, Development of Disadvantaged Regions and Transmigration (Kementerian Desa, Pembangunan Daerah Tertinggal, dan Transmigrasi; Kemendesa PDTT). It is formed by merging several directorate generals from three ministries. Each directorate general has its business processes, so the merger process requires significant adjustments. In addition, Kemendesa PDTT's work units were sporadic, making the monitoring process difficult. Furthermore, based on Government Regulation Number 60 of 2014 regarding Village Funds sourced from the State Revenue and Expenditure Budget, Article 21 paragraph (1), the Minister in charge of Villages determines priorities for the utilization of Village Funds. This means that Kemendesa PDTT has the authority to set priorities for the utilization of village funds for each fiscal year. Village

funds are funds derived from State Budget (Anggaran Pendapatan dan Belanja Negara, APBN) allocated for villages which are transferred through Regional Budget (Anggaran Pendapatan dan Belanja Daerah, APBD). It is used for financing governance, implementing development, community development, and community empowerment (Government Regulation Number 60 of 2014).

Apart from having the authority to set priorities for the use of village funds for each fiscal year, based on Government Regulation Number 43 of 2014 Article 131 paragraph (1), Kemendesa PDTT has the authority to regulate related affairs on village facilitators. Furthermore, matters concerning village facilitators are further regulated in the Regulation of the Minister of Villages, Development of Disadvantaged Regions, and Transmigration Number 3 of 2015. This regulation underlies the budget in the form of incentives for village facilitators at Kemendesa PDTT.

The problem that arises based on the background above is that the Kemendesa PDTT has business processes involving several directorate generals in several ministries, so it requires the ability to synergize with one another. In addition to the business processes of each directorate, the process of combining their assets must be adjusted. Each of these merged directorates possesses assets that were previously listed in the previous ministry. As a result, when the directorate joins Kemendesa PDTT, the assets will be removed from the previous ministry and registered in the financial statement of Kemendesa PDTT. The merger of these assets must be executed properly so that the value recorded in the financial statements of Kemendesa PDTT conforms with the actual conditions. In addition, Kemendesa PDTT also has significant expenditure, with a particular characteristic of spending on goods delivered to the public. Expenditures are allocated for the procurement process at the central govern-

ment, but the entire implementation is executed in the regions. Since the entire procurement process is carried out at the central government at Kemendesa PDTT head office, the person in charge is also located at the head office, but the implementation is conducted at the regional level. As a result, monitoring the procurement's implementation will be difficult. Not all procurements, particularly those completed at the end of the fiscal year, can be directly monitored. Given the high value of the procurement, this is a high-risk movement.

Furthermore, public expectations of accountability for state finances are pretty high. One of the topics discussed is the transparency and accountability of state financial management. Compiling financial statements is one way to demonstrate accountability. As a budget user, a minister or head of the institution is responsible for compiling and submitting financial statements of the state ministries/institutions under their leadership following Law Number 17 of 2003. Likewise, Kemendesa PDTT must be accountable for the budget that has been utilized. One of the accountability is related to the use of funds to assist village funds. However, there are still several problems related to village fund facilitators. Dianto (2018) explained three problematic aspects: the quantity, quality, and division of facilitation work. There are problems with the limited physical ability of professional village facilitators in providing services and a lack of focus on community empowerment activities for the quantity aspect.

Furthermore, the problem in terms of the quality aspect is that there are professional village facilitators whose background education is not in empowerment and community assistance. Moreover, the issue with the division of facilitation work is the imbalanced workload versus the honorarium received. In addition, the problem of village facilitators

was also discussed in research conducted by Lobar, Ogotan, and Londa (2018), who concluded that in the implementation, the role of the village facilitators was not optimal due to their inadequate capacity.

The 1945 Constitution of the Republic of Indonesia delegates the task of auditing state finances to The Audit Board of Indonesia (BPK), as referred to in Article 23 paragraph (5). Therefore, BPK must gain the trust of stakeholders or users of financial statements. BPK needs to improve the quality and benefits of its Audit Reports (Laporan Hasil Pemeriksaan, LHP), including the quality of opinions rendered, to earn this trust. BPK has taken several steps to improve the quality and benefits of the LHP and the opinions provided. One of them is by implementing a Risk-Based Audit (RBA). Therefore, BPK must accordingly ensure that the RBA has been appropriately performed. When BPK has performed RBA properly, an audit program is expected to conform to the mapped risk, allowing audit implementation to run effectively and efficiently.

Based on the background description, the problem formulations in this study are (1) How is the implementation of RBA performed by the auditor at Kemendesa PDTT? (2) How to compile an Audit Program in line with the RBA at Kemendesa PDTT? (3) How will the auditor perform and monitor the implementation of RBA at Kemendesa PDTT? This research aims to find out and analyze the implementation of RBA in Kemendes PDTT, the Audit Program prepared based on the RBA, and the implementation and monitoring process carried out.

LITERATURE REVIEW

There have been several previous studies on risk assessment and RBA implementation. However, most of the studies are quantitative in nature, they are not conducted in the

public sector, and the findings do not include the development of an audit program. One of the previous studies related to RBA was conducted in the public sector. It applied a qualitative approach, i.e., a study in one of the regencies in East Java for the 2013 fiscal year. This study concluded that RBA had been applied at the audit planning stage, and the factors that influenced auditor behavior did not affect the implementation of RBA (Sastra, Yuhertiana, & Budiwitjacksono, 2018).

Another case study on RBA at BRI Bank in Bandung Regency by Rozali and Mohammad (2015). The study was quantitative and applied a saturated sampling method. The study discussed the effect of Risk-Based Internal Auditing implementation in terms of fraud prevention in BRI Bank Bandung Region internal audit. According to the findings of this study, BRI Bank has implemented Risk Based Internal Auditing. This had a positive impact on fraud prevention as well. Other research has found a strong but not statistically significant link between risk-based auditing on the annual audit plan and private entities in the financial sector. Planning an audit with a risk-based approach positively correlates to the size of the audited entity. Internal audit is more proactive in implementing Enterprise Risk Management (ERM) in smaller organizations and, more importantly, in the financial and private sectors (Castanheira, Rodrigues, & Craig, 2009). Another research on Risk-Based Internal Audit by an internal audit suggests that it may have more audit findings to be disclosed compared to conventional auditing. This audit findings can be a formal finding that should be reported in audit reports, business aspects that must be attracted the attention of management for decision making, whether each should be handled or not, and finally preparing and presenting informal finding that is not included in the final audit report (Coetzee & Lubbe, 2014).

Another previous study was a case study in Uasin Gishu Regency. This study discussed the effect of a RBA approach on the application of the internal control system. This study concluded that the RBA approach had a positive effect on the application of the internal control system. The challenges faced in implementing RBA in the application of the internal control system were the lack of relevant knowledge, lack of experience, lack of late tools to identify risks, and lack of relevant principles or guidelines in implementing RBA (Nyarombe, Musau, Kawai, & Kipyegon, 2015). Meanwhile, another research conducted by Young (2020) discussed the identification of determinants for an operational risk management framework, that could serve as a guide towards a RBA approach.

RBA is a concept assuming that the higher the risk from an area, the higher the attention in the given audit area. Therefore, an auditor must understand business processes before identifying business risks. Understanding business processes include understanding risk and systems control to achieves the goals and objectives of an organization. A risk-based approach assists auditors in planning the audit process to contribute to better governance, robust risk management, and more reliable control (Pickett, 2015). In addition, RBA is also defined as a paradigm shift, from the traditional approach to system auditing, and finally to RBA (Nyarombe et al., 2015).

RBA will be effective in terms of strategic objectives, which will indicate targets, making it possible to perform efficient audits. It also links risk to business objectives, smarter facilitations, faster and sharper risk mitigation (Bechara & Kapoor, 2012). In comparison, Messier Jr. (2014) stated that the definition of RBA is the primary framework that guides the audit of financial statements. Meanwhile, Zacchea (2003) states that the

RBA process is a systematic, rational, and defensible technique used to identify potential risks. It is also a factor-based process for quantitatively estimating the risks involved in the audit universe. In addition, it is focusing attention on the audit areas most vulnerable to risk and allocating limited audit resources to the most productive audit target. Based on some of the identifications, it is possible to conclude that RBA is a method of auditing that involves performing an audit while considering the risks ahead. One of the purposes of using this method is to perform an effective and efficient audit by selecting the appropriate audit target. Thus, it is necessary to conduct an analysis related to the implementation of RBA in an audit, its effect on the preparation of an audit program, and the implementation and monitoring of RBA in an audit.

Audit opinions are an assessment of the fairness of an entity's financial statements rather than an assessment of the truth of such statements. An audit opinion is a fair conclusion based on the audited information. An opinion is reasonable if it is free from bias and dishonesty and is based on the full disclosure of information. However, a reasonable opinion can only be issued when financial statements are correct and free from material misstatements (Chen, Cumming, Hou, & Lee, 2013). Law Number 15 of 2004 states that audit opinions in the public sector are based on conformity with government accounting standards, adequate disclosure, compliance with laws and regulations, and the effectiveness of the internal control system. Audits of ministerial and institutional financial statements may result in unqualified, qualified, or adverse opinions or a disclaimer (Tsipouridou & Spathis, 2015).

Recommendations in an audit outline the remedial actions to be taken by the audited entity's management (Kyei, 2016); they are based on the auditor's opinions concerning a

particular situation and must reflect the auditor's knowledge and judgment (Sawyer, 2006). The recommendations given by BPK are divided into various groups, which are weaknesses in the internal control system, potential for state losses, and administrative findings. However, audit recommendations do not always relate to violations of the law or fraud. Audit recommendations in the form of administrative findings are made to improve administration within a public entity. They can be resolved with administrative sanctions in the form of reimbursement of money to the state treasury as outlined in BPK Regulation Number 2 of 2017 concerning the Monitoring of the Follow-Up of Recommendations of BPK's Audit Results.

This study also refers to agency theory explaining the importance of transparency and accountability in the public sector. Agency Theory explains the existence of an agency relationship, where a company is a collection of agreements or contracts between parties having economic resources (the principals) and management (agents) having a task in managing the use and control of resources. Agents receive the delegation of authority from the principals to make decisions, but these decisions are not necessarily in line with the principals' wishes (Jensen & Meckling, 2009). The agency relationship, on the other hand, creates problems. There are two problems, i.e., (1) the existence of information asymmetry. This information asymmetry will occur when management as an agent has more information than the principals, both in terms of information on the company's financial position and operating position. (2) the emergence of a conflict of interest because the agent does not always have the same goal with the principals (Messier, Glover, & Prawitt, 2014).

A company may intentionally deceive or mislead users of financial statements, especially investors, by preparing and disseminating

material misstatements of financial statements. Fraud in financial statements is committed by top executives, for example. Manipulation of financial records, misreporting, intentional misinterpretation, inadequate disclosure, and manipulation of aggressive accounting practices are all examples of fraud. Management does this to conceal their performance (Rezaee, 2002). As a result, there is a conflict of interest between company management and company management stakeholders. As a result, management will attempt to maintain its performance in front of stakeholders through various means, one of which is financial report fraud.

In the public sector, government officials, as the party in charge of administering public services, have access to more information, allowing them to make decisions or policies that are solely for their benefit, ignoring the interests and welfare of the people. To address this issue, the government must strive to present financial statements transparent and accountable (Setyaningrum & Syafitri, 2001). Therefore, an independent third-party audit is required to ensure that the presented financial statements are accountable. RBA is one of the audit methods available. However, due to the broad scope of the audit, an audit method capable of producing an effective and efficient audit is needed, namely the RBA, where an audit is carried out by considering risks. Meanwhile, for internal control, this research framework uses the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework. Control based on COSO is a framework that contains a description of professional practice that establishes efficient business systems and processes and effective internal controls. COSO framework has proven to provide an excellent result. The COSO framework defines risk as a process carried out by an entity, management, or other personnel designed to provide assurance related to the achievement of objectives with catego-

ries such as operating effectiveness and efficiency, reliability of financial statements, and compliance with the prevailing laws and regulations. Apart from using Agency Theory, this study also uses the COSO framework, Audit Risk Model, its four tests, and BPK guidelines. BPK guidelines used including Audit Management Guidelines, Risk Assessment Technical Guidelines, Technical Guideline for Understanding and Testing the Internal Control System, and State Ministry/Agency Financial Statements (Laporan Keuangan Kementerian Negara/Lembaga, LKKL), State General Treasurer Financial Statements (Laporan Keuangan Bendahara Umum Negara, LKBUN), and Central Government Financial Statements (Laporan Keuangan Pemerintah Pusat, LKPP) Guidelines.

The Audit Management Guidelines are based on the Audit Board of the Republic of Indonesia (BPK RI) Decree Number 5/K/I-XIII.2/10/2015 dated 27 October 2015. These Audit Management Guidelines are the reference for conducting audits of the management of state finances and state financial responsibility. The stages discussed in these guidelines are the audit planning stage, audit implementation stage, and audit reporting stage. Thus, it is expected that the audit is in line with the standard. These Audit Management Guidelines govern the overall management of audits, whether in Financial Audit, Performance Audit, or Special Purpose Audit. The Audit Management Guidelines emphasize the existence of quality control and quality assurance. Quality control is performed to ensure that audits are performed in compliance with applicable standards and regulations. In addition, quality control will ensure that all audit stages have been performed on time, are comprehensive, documented, implemented, and have been reviewed in stages (BPK RI, 2015).

Technical Guidelines for Risk Assessment

are stipulated by BPK based on BPK RI Decree No. 3/K/I-XIII.2/4/2017 dated April 17, 2017. Auditors will face time constraints, limited human resources, and cost constraints while performing their audit duties. As a result, the auditor must consider performing the audit in high-risk areas. The Technical Guidance for Financial Audit Risk Assessment aims to guide financial audit risk assessment and ensure consistency in applying risk assessment methods. The Technical Guidelines for the Financial Audit Risk Assessment discusses the risks in the audit, i.e., audit risk, inherent risk, control risk, detection risk, and fraud risk (BPK RI, 2017).

In addition, BPK also stipulates Technical Guidelines for Understanding and Testing the Internal Control System through Audit Board of the Republic of Indonesia (BPK RI) Decree Number 2/K/I-XIII.2/7/2012 dated July 6, 2012. In performing the audit, the auditor is required to assess the effectiveness of the Internal Control System. This assessment reflects the auditor's expectations on internal control's ability to prevent or detect material misstatements and if they do occur, they will be corrected. This internal control system assessment serves as a consideration in planning an audit, concerning the nature of an audit, the timing and scope of an audit (BPK RI, 2012).

Auditors implement an Audit Risk Model to obtain audit evidence by considering risks in preparing audit procedures (Arens, Elder, Beasley, & Hogan, 2017). This Audit Risk Model will help the auditors to decide the amount and type of evidence needed. The Audit Risk Model describes the relationship between Acceptable Audit Risk (AAR), Planned Detection Risk (PDR), Inherent Risk (IR), and Control Risk (CR). The Audit Risk Model is described as follows:

$$\mathbf{AAR = PDR \times IR \times CR}$$

Planned Detection Risk is the risk of audit

evidence failing to detect material misstatements. Meanwhile, Inherent Risk is used to measure the auditor's assessment of the susceptibility of an assertion of material misstatement before considering the effectiveness of internal control. Furthermore, Control Risk is related to the auditor's assessment of the risks of material misstatement that can occur and cannot be prevented or detected promptly based on the company's internal control. However, Acceptable Audit Risk is a measure of the risk that the auditor accepts related to the possibility of material misstatement in the financial statements after the audit is completed and an unmodified opinion has been issued (Arens et al., 2017). Furthermore, four types of tests represent audit procedures in response to identified risks in the audit risk model. The four tests are control tests, substantive tests of transactions, substantive analytical procedures, and balance-details tests. The four tests are expected to generate enough appropriate audit evidence.

RESEARCH METHOD

This study applies the case studies method since it aims to explore the phenomenon of actual occurring problems, and researchers must be directly involved to understand the problem. The method is expected to yield an understanding of how risk assessment is carried out at Kemendesa PDTT. Therefore, an appropriate audit program can then be arranged. The sampling technique used is purposive sampling, with criteria for the business process, the entity's risks, and the problem regarding the entity. Case studies were conducted at BPK, especially the unit that handled Kemendesa PDTT for the fiscal year 2018. Subsequently, communication was performed with the financial statement review team of Kemendesa PDTT for the fiscal year 2018 to explore further the implementation of RBA conducted by BPK auditors.

The research method used is qualitative. According to Satori and Komariah (2011), qualitative research is a type of research that focuses on social phenomena/events/symptoms and then reveals the existing meaning of these events to be used as valuable lessons for the development of a theoretical concept. This is similar to this study, in which the results are expected to provide benefits in the form of an in-depth overview of the RBA implementation by BPK auditors for auditing the financial statements of Kemendesa PDTT. The study was conducted by collecting relevant information through open interviews with the audit team and analyzing the audit working papers.

Sources of data for this study were from BPK and Kemendesa PDTT, both primary and secondary data. The secondary data included the 2018 Audited Financial Statements and audit working papers. An audit working pa-

per is a note or documentation made by an auditor concerning the procedure taken, tests performed, information obtained, and audit conclusion. This audit working paper can be documented in the form of paper and/or electronic media. This audit working paper is performed at the planning stage, implementing the audit, and reporting the audit results. Meanwhile, the primary data used were interview results with BPK audit team.

The first problem formulation is RBA implementation in the financial statement audit of Kemendesa PDTT fiscal year 2018 and its compliance with the guidelines set by BPK. This study analyzes BPK guidelines concerning the Audit Risk Model based on secondary data in the audit working papers and primary data in interviews with the Audit Team Leader, Audit Sub-Team Leader, and Technical Controller. The second problem is analyzing the preparation of an audit program.

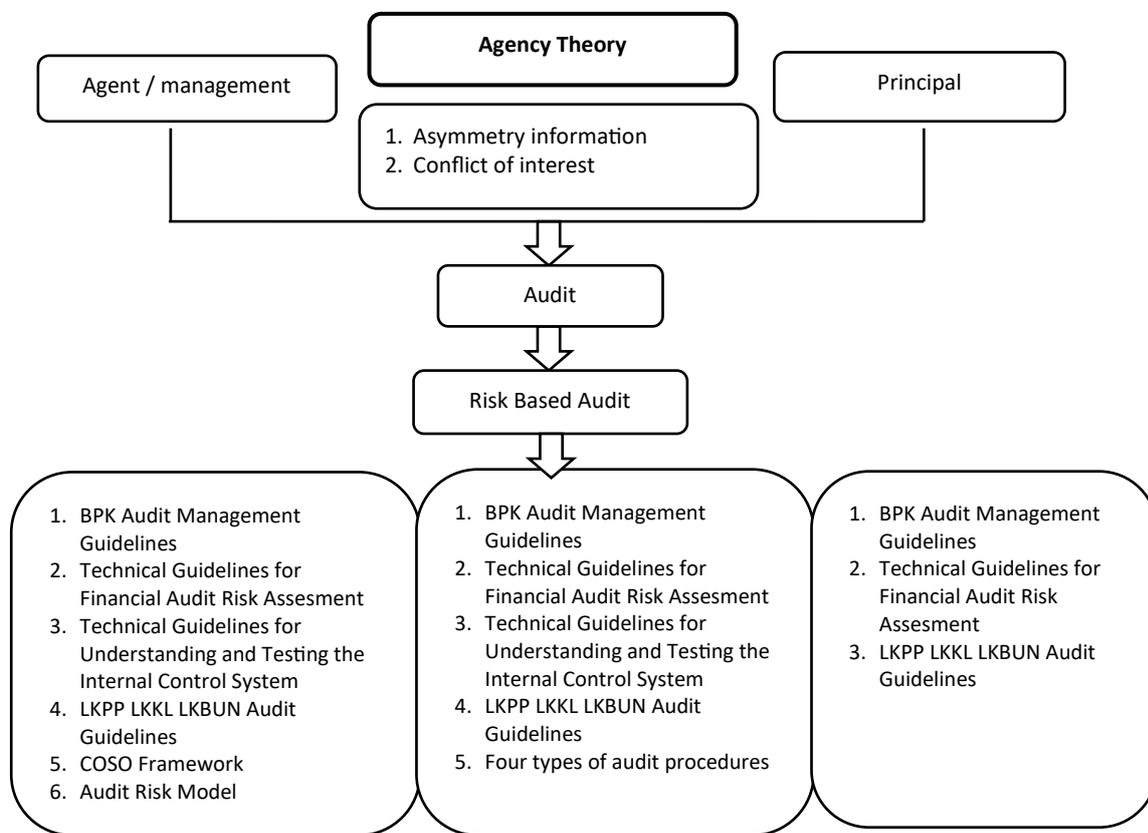


Figure 1. Research Framework

The preparation of this audit program is based on previously identified risks and their compliance with the guidelines set by BPK. The third problem is related to the implementation and monitoring of RBA with the guidelines set by BPK.

RESULT AND DISCUSSION

The audit of 2018 Kemendesa PDTT's financial statements implemented RBA as shown in its audit working paper. There are two sections related to the audit working paper: Internal Control System and Process Business Comprehension and Risk Comprehension and Assessment. This understanding is based on the results of the internal control system audit conducted by the previous audit team and then complemented by an ongoing analysis of internal control conditions of Kemendesa PDTT. One method of understanding the ongoing internal control system is by distributing questionnaires and conducting walk-throughs. Based on the audit working paper, the internal control system and process business comprehension comprise three parts: Comprehension of financial statement system, Comprehension, and inventory of Kemendesa PDTT internal regulation, program, and activities Internal Control System comprehension applying COSO approach.

As mentioned earlier, the Audit Team's steps in performing an internal control system and process business comprehension conform with Technical Guidelines for Understanding and Testing the Internal Control System published by BPK. In addition, based on interview results with the Audit Team Leader regarding the steps in the internal control system and process business comprehension of the entity, those steps provided a complete illustration about the audited entity's internal control system and process business. Meanwhile, for risk comprehension and assessment, the auditor identified IR, CR and CR assessment, Busi-

ness Risk Matrix (BRM) assessment, Fraud Risk Assessment Matrix (FRAM) assessment, and risk assessment matrix. For Audit Risk (AR), BPK has decided to use 5% AR. Furthermore, the analysis of related documents and regulations was carried out, and interviews were conducted to obtain more in-depth information about the implementation of RBA on the audit of Kemendesa PDTT's financial statements. Interviews were conducted with five respondents, namely Technical Supervisor, Head of the Audit Team, Head of the Audit Sub-team 1, Leader of the Audit Sub-team 2, and Leader of the Audit Sub-team 3.

Based on the interview results, it was identified that the steps taken by auditors in applying RBA to Kemendesa PDTT's 2018 financial statement audit were based on Technical Guidelines on Financial Audit Risk Assessment (Petunjuk Teknis Penilaian Risiko Pemeriksaan Keuangan) based on the Decree of the Audit Board of Indonesia Number 3/K/I-XIII.2/4/2017. In addition to the technical guidelines, the auditors also referred to the LKPP, LKKL, LKBUN Audit Guideline which is outlined in the Decree of the Audit Board of Indonesia Number 2/K/I-XIII.2/2/2016. The application of this RBA was also supported by comprehending and testing of the Internal Control System which in the implementation referred to Technical Guidelines for Understanding and Testing the Internal Control System published under BPK Decree Number 2/K/I-XIII.2/7/2012.

This RBA began in the audit planning stage. However, there was an opportunity to perform an evaluation based on RBA during the following steps based on the ongoing development. Based on the document and interview analysis, the first step was comprehending the Internal Control System and entity process business. One of the tools used in this step was a questionnaire which was distributed to relevant authorities. Each

of the results of the questionnaire was given a weighted value. However, the weight of this score does not directly reflect the internal control system, but rather the auditor's professional judgment is still needed to adjust the score. In the audit of Kemendesa PDTT's financial statement, the audit team also conducted a professional judgment to adjust the initial score based on the professional judgment. Professional judgment is taken by considering the things that affect the assessment score of each element. In the audit of Kemendesa PDTT's financial statement, things that affect professional judgment include communication of policies and rules regarding sanctions to all employees, identification of risks that can hinder the preparation of the financial statement, work realization that is not under an agreement or contract, valid or nor proof of transaction, and follow up on recommendations of previous BPK audits.

The next step was risk comprehension and assessment by setting the IR and CR level for each business process and account, which was continued by business process risk assessment and fraud risk assessment. Those various assessments would result in a general risk assessment matrix. In the audit working papers, it can be seen that the Audit Team conducted an IR assessment. It is also supported by interview results saying that IR assessment is conducted. The assessment value was conducted on accounts in financial statements by considering four criteria: transaction types, subjectivity level on consideration required by accounting standards, vulnerability level on misuse or theft, and factors related to misrepresentation due to fraud.

As consideration for the four criteria mentioned earlier, the auditors also applied BRM and FRAM considerations. BRM illustrates an entity condition with significant risks resulting in inability of the entity to reach the goals. This inability to reach the goals will

affect the accountability of the financial statement, efficiency, effectiveness, and obedience towards regulations. Meanwhile, FRAM functions to identify and detect fraud risks resulting in misrepresentation in the financial statements. There are three types of fraud, they are corruption, asset abuse, and mislead presentation. Auditors then analyzed fraud type, classification, impact, possibilities, and causes and performed additional alternative procedures to ensure that fraud could be detected. Eventually, IR assessment at each account was conducted by considering the four mentioned factors, BRM and FRAM. Then, the IR percentage scale and IR level of the account were determined.

Furthermore, based on audit working papers and supported by interview results with Audit Team Leader, it was identified that Auditors had conducted an assessment on CR of entity's business process and CR of relevant accounts. The CR was a result of internal control system comprehension and IR assessment. For further internal control system comprehension, auditors referred to technical instructions of internal control system comprehension and testing. In identifying the CR, auditors went through two stages. They controlled risk assessments at transaction cycle and account levels.

Based on interview results with Audit Team Leader and document analysis, it could be identified that after identifying the AR, IR, and CR, auditors would determine the Detection Risk (DR). This DR illustrates a risk in which auditors cannot detect material misrepresentation while conducting a substantive procedure. The aim of identifying this DR is to enable auditors to determine audit procedures and audit evidence that should be collected. If auditors identify DR as low, in-depth substantive testing will be performed with extensive audit evidence in audit working papers. On the contrary, if DR

is identified as high, auditors will perform limited substantive testing with relatively less audit evidence.

From that analysis, the author concludes that the application of RBA by BPK auditors has complied with the technical instructions on internal control system comprehension and testing and technical instructions on risk assessment published by BPK. The risk assessment technical guidelines on financial audit and technical guidelines on understanding and testing internal control systems by BPK are in line with the COSO framework. One of the tools used to collect data and information on an entity's internal control system is a questionnaire. There are two questionnaires involved: the internal control system questionnaire at the entity level and the internal control system questionnaire at the transaction and activity levels. The first questionnaire at the entity level comprises five control components: control environment, risk assessment, control activity, information and communication, and monitoring. These five components are based on components developed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Internal control system questionnaire will then be delivered to the entity's head or other authorities at this entity level. Auditors will also conduct interviews to confirm the delivered answers. Then, considering results or conclusions on five internal control system components in the first questionnaire (at the entity level), the second questionnaire at the transaction cycle level is prepared. Within the questionnaire at the transaction cycle level, the auditor seeks information related to assertions. However, in the LKPP LKLL LKBUN guidance, in regards to control risk, it is mentioned that auditors can document a control system to identify controls determined by the entity to mitigate the identified inherent risks during the first audit. This

means that the auditor can skip this step for the next audit, and the assessment can use documentation from the previous audit. The risk lies when entity control changes, but auditors have used the previous audit document. As a result of such a condition, auditors must perform a re-identification.

The application of RBA by BPK auditors has matched with the technical guidelines for understanding and testing the internal control system, technical guidelines of risk assessment, technical guidelines of financial audit risk, and technical guidelines for understanding and testing internal control system by BPK suited with Audit Risk Model stated by Arens et al. (2017). Thus, the audit of the fiscal year 2018 Kemendesa PDTT's financial statement conforms with the Audit Risk Model. Therefore, the audit of Kemendesa PDTT's financial statement fiscal year 2018 has implemented the fundamental steps of the Audit Risk Model.

Hereafter, the auditors arranged an Audit Program based on the RBA. Based on the working paper document analysis and interview results with the Audit Team, the arrangements of audit program were initiated by comprehension of research objects, then continued with an audit program arrangement by Audit Team Leader and handed over to Technical Controller for a review. Review from the Technical Controller aims to ensure that Audit Program has been arranged based on relevant implementation guidelines and technical guidelines. Then, based on audit working paper analysis, it is identified that Auditors in arranging the audit program design have considered results of entity internal control system comprehension and testing as well as results of risk assessment. After auditors identify the DR level, they will decide on an audit strategy. For example, if auditors identify DR as low, the implemented substantive procedure effectiveness will be high. Meanwhile, for low detection risk,

auditors consider conducting in-depth substantive testing.

The analysis results of audit working papers and interviews with the Audit Team Leader indicate that auditors have compiled an audit program based on the RBA and the guidelines set by BPK. However, the correlation between audit time and arranged audit program is not explicitly explained in these guidelines. Kemendesa PDTT's financial statements audit fiscal year 2018 requires eight additional audit days. The additional time assignment letter is to complete the report and write the audit worksheet.

The guidelines of audit program arrangement, which BPK determines, are also in line with audit procedure arrangement, which is a continuation of the Audit Risk Model. In arranging an audit procedure, there are four types of tests conducted. These four tests are expected to result in adequate and appropriate audit evidence. The first test is a test of controls where auditors perform control tests to gain adequate and precise evidence in assessing control effectiveness. The second test is a substantive test of transactions to determine whether the transactions have been recorded correctly. The third test is substantive analytical procedures which main aim is to detect possibilities of misreports in financial statements and provide substantive evidence. Finally, the fourth test is the test of details of balances which focus on account final balance (BPK RI, 2016). Based on the audit working paper analysis, the audit procedures prepared by the audit team have followed the audit procedures as a continuation of the Audit Risk Model.

After preparing an audit program by applying RBA, auditors would then implement and monitor the RBA. The implementation of this RBA runs concurrently with the implementation of the audit. This is a realization of the previously prepared audit plan-

ning. Based on the audit working paper analysis, the audit team implemented an audit strategy based on the determined DR result in implementing the RBA. This is a realization of the previously prepared audit planning. On accounts with low DR, the audit team conducted in-depth substantive tests, relying little on control. In practice, the audit team, apart from conducting in-depth substantive tests, also performed limited control tests. Meanwhile, in its implementation, although it is not the focus of the audit, medium DR is still considered. Accounts with medium DR are subject to tests of controls in practice, with limited substantive tests. In the audit of Kemendesa PDTT's financial statements, no accounts were considered to have high DR.

Based on the audit working paper analysis and interview with Audit Team Leader, Audit Sub-team Leader, and Technical Controller, the entire implementation of this audit program would be reported in stages in the form of a weekly report to get a review. First, each team member would provide a weekly report containing the things done that week, the progress, and problems faced in the audit. Then team member's weekly report would be compiled by the audit sub-team leader. Furthermore, the Audit Team Leader would compile a weekly report from each audit sub-team leader and submit it to the technical controller. This weekly report is a form of monitoring the implementation of RBA.

The entire process of implementing this audit program will be documented in audit working paper. Audit working papers are documentation that contains audit procedures and tests that have been carried out, information or data obtained, and conclusions. The audit working paper is prepared based on the audit program. Furthermore, the auditor will compile the cover sheet and complete it with the result of performing au-

dit procedures. The cover sheet and the result of performing audit procedures in the audit of financial statements of Kemendesa PDTT have been prepared based on an individual working program. The cover sheet and the results of the implementation of audit procedures monitor an audit to ensure that every step in the audit program has been carried out. Based on the audit working paper analysis, the cover sheet and the results of the implementation of audit procedures are prepared by members of the audit team, reviewed by the Audit Team Leader, and approved by the Technical Controller.

The analysis and interviews results show that the implementations of RBA and the audit are carried out simultaneously. Thus, all steps of the audit implementation have followed the guidelines set by BPK. However, in the composition of the audit team, there was no quality controller, so the role that the quality controller should have played was not optimal. A quality controller's role is to ensure that the audit's objectives, expectations, and scope are met and that the audit runs smoothly (BPK RI, 2015). In addition, a quality controller also has a role in ensuring that the audit findings comply with the audit standard and audit guidelines.

CONCLUSION

The 2018 Kemendesa PDTT's financial statements audit team has implemented RBA following BPK guidelines. The RBA stages in BPK guidelines follow the Audit Risk Model, which considers Audit Risk, Detection Risk, Inherent Risk, and Control Risk. For BPK guidelines that govern the understanding of the internal control system, BPK uses the COSO Framework approach, which encompasses five components: control environment, risk assessment, control activities, information, communication, and monitoring. In its application, one of the approaches uses

instruments in the form of questionnaires and interviews to describe the five components. However, in the LKPP LKKL LKBUN guidelines established by BPK, in terms of control risk, it is stated that the audit team documents the control system during the first audit and then identifies the controls that the entity has implemented to mitigate the identifiable inherent risk. It means that for further audits, this step can not be done by the audit team. For the assessment, the following audit team can use documentation of the control system from the previous audit. The risk lies when there is a change in the control system and the audit team is still using the previous audit document. Therefore, the audit team must re-identify it.

In preparing an audit program based on previously identified risks, the audit team refers to guidelines set by BPK. One component of the audit program is the audit procedures. In detail, the preparation of the audit procedure is outlined in LKPP LKKL LKBUN guidelines. Several tests are performed in its preparation, namely, testing balances, analytical tests, tests of controls, substantive tests of the transaction, and substantive tests of balances. Each of these tests contains details of the steps that must be taken during the audit. The tests in BPK guidelines conform with tests on audit procedures that continue the Audit Risk Model. In preparing audit procedures as a follow-up to the Audit Risk Model, there are four tests: the test of controls, substantive tests of transactions, substantive analytical procedures, and tests of details of balances. However, the guidelines set by BPK do not explain in detail the relationship between the audit period/time and the preparation of the audit program. Therefore, the audit program implementation still requires additional assignments as the period in the primary assignment has been completed. There is an additional letter of assignment for eight days in the audit of Kemendesa PDTT's financial statements for the year 2018.

Furthermore, in implementing and monitoring RBA, BPK auditors have referred to BPK guidelines. One of the approaches used for this monitoring is through weekly reports. In addition, weekly reports will be arranged in stages for further review, and feedback will be provided. However, in the composition of the audit team on the audit of Kemendesa PDTT's financial statements, there was no Quality Controller. As a result, the Quality Controller's role was not well represented. In the Audit Management Guidelines, a Quality Controller's role is to ensure that the objectives, expectations, and scope of the audits are met and ensure the smooth running of the audit process. In addition, a Quality Controller also has a role in ensuring that the audit findings comply with the audit standard and guidelines. By applying RBA methods in this audit, the implementation is more focused on the risks that have been previously mapped, and leads to a better monitoring process.

Based on the study results, it is identified that in conducting financial statement audit, BPK should also consider the entity's characteristics being audited during an audit planning stage in addition to applying RBA method. Therefore, a specified audit period can be set to address the needs of the auditor.

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APPENDICES

Appendix 1. Comparing RBA Steps in BPK Guideline with Audit Risk Model

No	Audit Risk Model	BPK Guideline
1	Comprehension of business and client industry	Comprehension of the internal control system and business process in technical guidelines for understanding and testing the internal control system
2	Assessment of client business risks	Control Risk Matrix application to illustrate and determine control risk level. This CRM is regulated in technical guidelines for understanding and testing the internal control system. Moreover, in financial audit risk assessment technical guidelines, there are steps of conducting a control risk assessment.
3	Assessment in material misrepresentation risks generated from IR and CR assessment results	This assessment in material misrepresentation risks is written in financial audit risk assessment technical guidelines in the detection risk level - identification stage, where material misrepresentation risks are a combination of IR and CR.
4	Audit Risk Model $AAR = PDR \times IR \times CR$ Description: AAR: Acceptable Audit Risk PDR: Planned Detection Risk IR: Inherent Risk CR: Control Risk	The formula used in this DR calculation is written in the financial audit risk assessment technical guidelines at the detection risk level-identification stage. The formula is: $AR = DR \times IR \times CR$ Description: AR: Audit Risk DR: Detection Risk IR: Inherent Risk CR: Control Risk

Appendix 2. Comparing BPK Audit Procedures with Audit Procedure in Audit Risk Model

No	Further Audit Procedures in Audit Risk Model	BPK Audit Procedures
1	Test of controls, evidence obtained from inspection, observation, client inquiries, and re-performance	<p>Test of controls</p> <p>Audit procedures prepared by the auditor include:</p> <ul style="list-style-type: none"> a) Document inspection and direct observation b) Interview and document inspection c) Studying policies and procedures d) Interview and document review e) Main conclusions about the reliability of control
2	Substantive tests of transactions, with evidence obtained through inspection, client inquiries, reperformance, and recalculation	<p>Substantive tests of balances</p> <p>Audit procedures prepared by the auditor include:</p> <ul style="list-style-type: none"> a) Comparing the balance at the end of the previous year with the balance at the beginning of the following year b) Recalculation of account balances c) Inspection of the balance value determination mechanism <p>Substantive tests of transactions</p> <p>Audit procedures prepared by the auditor include:</p> <ul style="list-style-type: none"> a) Obtain details of the transactions that make up the related account balance b) Examination of source documents to ensure transactions have been recorded at the correct value and period c) Enter the adjusting journal or reclassification journal (if any) into Lead Schedule (LS) and Supporting Schedule (SS) d) Ensure that the ending account balance matches the account balance on the consolidation
3	Substantive analytical procedures with evidence obtained through client inquiries and analytical procedures	<p>Analytical procedures</p> <p>Audit procedures prepared by the auditor include:</p> <ul style="list-style-type: none"> a) Comparing the current period's balance with the previous year b) Analyze the fluctuations that have occurred c) Interviews with relevant officials
4	Tests of details of balances with evidence obtained through physical examination, confirmation, inspection, client inquiries, reperformance, and re-calculation	<p>Financial statement analytical procedures:</p> <ul style="list-style-type: none"> a) Identification of the relationship between accounts b) Analytical test by comparing accounts c) Analytical test by comparing the realization and the budget d) Compare the balance at the beginning of the current year with the balance at the end of the previous year e) Check whether accounts have been recorded accordingly f) Discussions with competent authorities regarding the impact of policy changes or fundamental errors



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

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ABSTRACT

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

KEYWORDS:

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

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INTRODUCTION

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

According to Law number 15 of 2004 concerning The State Financial Management and Accountability Audit, BPK must submit an audit report on government financial statements to the House of Representatives (Dewan Perwakilan Rakyat, DPR) two months after receiving the financial statement from the government. The audit of the financial statements for the financial year of 2019 shall be carried out in April and must be submitted to related parties by 31 May 2020. The COVID-19 pandemic was still affecting several provinces in Indonesia when the audit took place. Therefore, auditors

must be more competent, professional and acquire the ability to adapt to changes and prevail limitations with the increasing public demand for clean government with complex task dimensions during the COVID-19 pandemic. Auditors with competencies, notably information and technology (IT) competency in auditing activities during the COVID-19 pandemic, are expected to produce high-quality BPK audit reports that meet stakeholders' expectations even though auditors performed audits under limited conditions.

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

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

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

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

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

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

LITERATURE REVIEW

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

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

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

Peecher (2005) in Salehi et al. (2017) explains various definitions of audit quality. Audit quality is often defined as the level of observations that conform to relevant or

generally accepted standards or rules. The State Financial Audit Standards (Standar Pemeriksaan Keuangan Negara, SPKN), specifies that:

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

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

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

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

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

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

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

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

According to Supriadi et al. (2019), the notion of competence is an individual attitude that a person has consisting of technical and non-technical factors such as personality and behavior, soft skills, and hard skills. Meanwhile, their research concludes that auditor competence is a skill that an auditor must possess to carry out his duties properly, which consists of knowledge, skills, abilities, suitability of personal behavior so that the audit results are objective. According to Nugroho and Fitriany (2019), audit competence has a relationship with audit costs and audit quality. Competence arising from adequate professional expertise is a quality that is needed to carry out an audit objectively. However, competence cannot be built upon experience alone; other qualities need to be taken into consideration in order for the auditor to arrive at the right decision, as a person relies on other attributes in addition to experience (Ilmiyati & Suhardjo, 2012). According to Furiady and Kurnia (2015), it is evident that auditor competence positively affects audit quality. They stipulated that the increase in auditor competence shows that

auditors have great curiosity, have broad insight, can handle uncertainty, and can work in teams. Research conducted by Cheng, Liu, and Chien (2009) aims to determine the relationship between human capital and auditor quality to determine audit quality. The empirical results of their research indicate that the quality of auditors is positively related to human capital, thus determines the quality of audits given to clients. Zahmatkesh and Rezazadeh (2017) prove that the professional competence of auditors has a significant effect on audit quality. Auditors acquire more profound knowledge and better assessments to achieve audit quality by increasing their professional competence.

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

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

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

H3: Auditor competence affects the quality

of BPK audit during the COVID-19 pandemic.

RESEARCH METHOD

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

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

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

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

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

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

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

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

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

RESULT AND DISCUSSION

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

Table 1. Respondent Data

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

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

Measurement Model Testing/Outer Model

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

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

Table 2. Average Variance Extracted (AVE) Value

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

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

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

Table 3. Fornell-Larker Criterion Value

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

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

Table 4. Reliability Test Result

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

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

Structural Model Testing/Inner Model

Structural model testing is carried out to see the relationship between constructs or latent variables as seen from the coefficient of determination/R-Square (R²) of the research model. From the inner Model Test results, the variable audit costs, IT utilization, and auditor competence can explain the R-Square (R²) of 0.611 variants on the overall measurement of audit quality variables. Therefore the model is included in medium/moderate models but has approached the excellent category.

Hypothesis Testing

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

Audit costs have a positive relationship with audit quality because the path coefficient is positive (0.198), the t-statistics is 1.566 (< p-table) and the p-value is also greater than 0.10. In other words, the audit cost variable is not related to the quality of audit results. Therefore, based on the observations, reduc-

ing audit costs due to the COVID-19 pandemic will not reduce the quality of BPK audits. This indicates that the budget reallocation during COVID-19 empirically does not affect or will not reduce audit quality. In addition, the audit costs received by auditors in auditing assignments/workloads that the government has provided have empirically not been able to contribute to the improvement of audit quality by BPK auditors. In detail, the test results show that the indicators which explain the income structure is not proportional to the risk and job responsibilities have a more negligible effect on the audit costs variable compared to other indicators. While the indicators that explain the structure of income are by the experience/service period received by the auditors have the highest level of influence on audit quality compared to other indicators in the audit costs variable.

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

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

Table 5. Hypothesis Testing

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

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

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

In addition, from the number of respondents, it is apparent that 38 auditors (54.29%) out of 70 respondents use the application

less than 3 times during the assignment, even though they have been working as auditors for more than 6 years (74.29%). This shows that auditors who have worked for a long time and senior auditors must continue to renew their interests and abilities in Information Technology.

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

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

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

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

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

CONCLUSION

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

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

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APPENDICES

Appendix 1. Indicators of Variables

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

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

Appendix 2. Loading Factor Indicator Value

Indicators	Audit Cost	Use of IT Audit Quality	Auditor Competence	Audit Quality	Results
BA1	0,705				Valid
BA2	0,698				Invalid
BA3	0,712				Valid
BA4	0,875				Valid
BA5	0,867				Valid
BA6	0,741				Valid
BA7	0,756				Valid
BA8	0,799				Valid
BA9	0,712				Valid
T11		0,588			Invalid
T12		0,780			Valid
T13		0,734			Valid
T14		0,682			Invalid
T15		0,673			Invalid
T16		0,702			Valid
T17		0,764			Valid
T18		0,682			Invalid
T19		0,798			Valid
T110		0,784			Valid
T111		0,816			Valid
T112		0,780			Valid
T113		0,776			Valid
T114		0,789			Valid
KA1			0,613		Invalid
KA2			0,685		Invalid
KA3			0,784		Valid
KA4			0,830		Valid
KA5			0,836		Valid
KA6			0,735		Valid
KA7			0,839		Valid
KA8			0,902		Valid
KA9			0,862		Valid
KA10			0,815		Valid

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

The effect of audit opinions, implementation of audit recommendations, and findings of state losses on corruption levels within ministries and institutions in the Republic of Indonesia

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ABSTRACT

The prevalence of corruption in Indonesia is increasing every year. This fact has further undermined public confidence to strengthen governance and is a critical barrier to national development. This study aims to empirically examine the individual and combined impact of audit opinions, the implementation of audit recommendations, and findings of state losses by the Indonesian Supreme Audit Board (BPK) on the prevalence of corruption in ministries and institutions in the Republic of Indonesia. Using multiple linear regression analysis, this study used a purposive sampling method and investigated 72 ministries using secondary data from 2014 to 2017 obtained from BPK and the Corruption Eradication Commission of the Republic of Indonesia (KPK). This study indicates that audit opinions and the implementation of audit recommendations do not affect corruption in Indonesian ministries and institutions. In contrast, findings of state losses do have an influence. The combination of audit opinions, implementation of audit recommendations, and findings of simultaneous state losses do not affect corruption cases in Indonesian ministries and institutions. BPK can use the results of this study to formulate approaches and recommendations for auditing government financial reports that have a strong correlation with corruption eradication. Moreover, KPK needs to be more vigorous in its efforts to eradicate corruption, including establishing closer cooperation with BPK because the results of this research show that findings of state losses by BPK are closely related to corruption cases.

KEYWORDS:

Audit opinion; recommendation; state losses; corruption.

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INTRODUCTION

State finance is one of the main elements of public administration. It plays a crucial role in achieving a just and prosperous society (The 1945 Constitution of the Republic of Indonesia). The Indonesian government has established an independent institution, the Supreme Audit Board (BPK), to audit state finances and government accountability. In many countries, such audits are a necessary institutional arrangement in modern public governance and can play a unique role in controlling and preventing corruption (Liu & Lin, 2012). The deterrent effect of government audits can be intensified by the publication of audit results and holding individual bureaucrats accountable (Hu, 2005; Gong, 2010). Suppose corruption is a virus that endangers the economic security and social harmony of a country. In that case, a government audit institution should be an immune system that detects, fights, and eliminates viruses (Liu & Lin, 2012).

Crimes concerning state finances, and particularly corruption, are complex and challenging issues in Indonesia. The Indonesian government is striving to eradicate corruption in various ways, including establishing a Corruption Eradication Commission (Komisi Pemberantasan Korupsi, KPK), a superior law enforcement agency with authority to

carry out investigations and prosecutions. The government has also implemented bureaucratic reforms, including the provision of remuneration allowances for civil servants. These allowances seek to reduce acts of corruption based on economic need by providing sufficient remuneration to support living costs, thus ensuring civil servants perform their duties honestly and comply with all applicable laws and regulations.

In 2017, Transparency International Corruption Perception Index ranked Indonesia at 96th place out of 180 countries, with a Corruption Perception Index of 37 (Transparency International Indonesia, 2017). Corruption is a complex problem that hampers economic development, political democracy, and social harmony in China (Zhou & Tao, 2009). Many studies on the determinants and factors affecting corruption have found that corruption is related to discretionary power, incomplete or weak legal institutions, and inadequate supervision (Zhou & Tao, 2009; Gong, 2010). Previous studies indicate that, despite efforts by the government, corruption is still prevalent in Indonesia. The data in Figure 1 shows that corruption cases in Indonesia are increasing every year, supporting those facts. The data also shows that ministries and institutions are the most significant contributors.

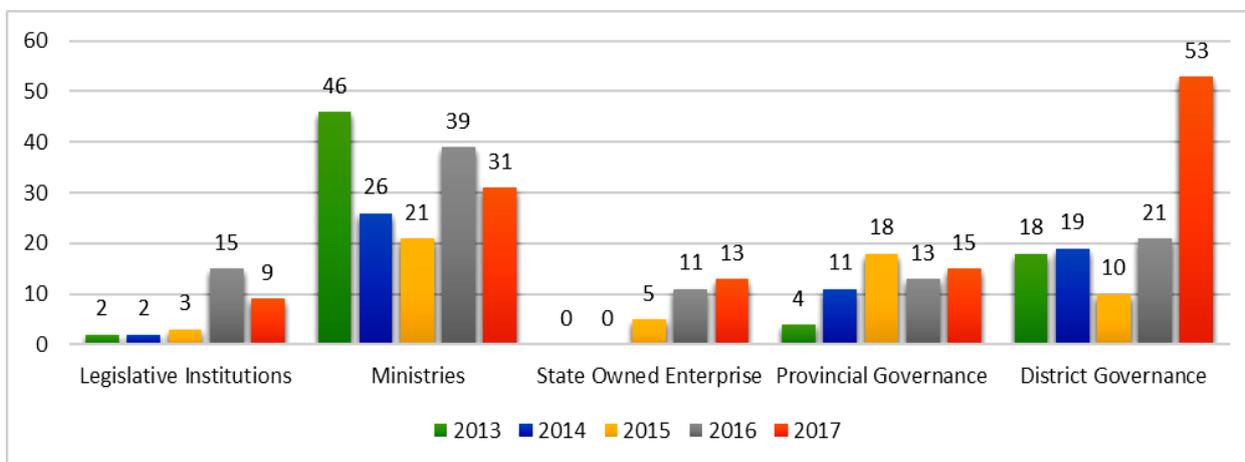


Figure 1. Corruption Cases by Institution
Source: KPK (2018)

Pasaribu (2017) used a causative research methodology to analyze the effect of BPK audit opinions on corruption in Indonesian district governments in 2006, 2008, 2010, and 2015. The study showed that both unqualified and qualified audit opinions have a significant effect on corruption. On the other hand, Heriningsih and Marita (2013) analyzed the influence of audit opinions and the regional government's financial performance on corruption within the Governments of districts on Java Island. They found that these factors do not affect the level of corruption in the Java region. This research aims to find empirical evidence of the effect of audit opinion and local government's financial performance on the corruption level in the cities and regencies within the Java region between the period of 2008-2010.

Rini and Sarah (2014) supported these findings, concluding that audit opinion did not affect local government corruption levels. The study examined the relationship between financial reporting quality proxy areas, namely the audit opinion of the financial statements and the information disclosure of district local governments (Laporan Keuangan Pemerintah Daerah, LKPD), and the level of corruption in Indonesia. In addition, Liu and Lin (2012) looked into government auditing and corruption control, evidence from China's provincial panel data. Their findings indicate that the number of irregularities detected in government auditing is positively related to the corruption level in that province. It means that the more severe the corruption is in a province, the local audit institutions will find more irregularities in government accounts. Moreover, post-audit rectification effort is negatively related to the corruption level in that province, indicating that greater rectification effort is associated with less corruption.

Aside from those studies, the relationship between government audits and corruption

has received little attention. Accordingly, this study sought to determine the effect of the audit opinion, implementation of audit recommendations, and findings of state losses by BPK concerning corruption within ministries and institutions in Indonesia. No previous studies have examined the effect of audit recommendations on corruption using the same variables, objects, and measurements. In addition, almost all previous studies have investigated local governments, whereas this study focus on ministries and institutions of the Republic of Indonesia, representing a novel research direction.

LITERATURE REVIEW

This study drew on agency theory and expectation gap theory. Agency theory considers that a principal-agent relationship arises when one or more principals employ agents to provide a service and then delegate decision-making authority to those agents, causing adverse selection and moral hazard. The term adverse selection means that managers and other insiders know more about the state and prospects of the company than outsiders (i.e., investors). In contrast, moral hazard refers to the fact that the activities carried out by a manager are not entirely known by shareholders or lenders (Ujiyantho & Pramuka, 2007). Agency theory incorporates essential assumptions about human nature, organization, and information. First, it assumes that humans will act opportunistically, prioritizing their interests over organizational interests. Second, it considers that agents will be motivated to increase their compensation and improve their future career prospects, whereas principals will be motivated to increase their utility and profitability.

Conflicts between agents and principals will occur because principals cannot continuously monitor agents' activities. Agents hold important information about their capacity,

work environment, and organization as a whole, leading to information asymmetry, such as an imbalance of information between principals and agents (Eisenhardt, 1989). In the context of government policy, agency theory explains the conflicts between ministries and agencies, acting as agents, and the community, acting as principals, regarding the use of the State Budget (Anggaran Pendapatan dan Belanja Negara, APBN). As shown in Figure 2, this represents a principal-agent relationship between the government and its citizens. Accordingly, this study investigated whether public-sector audits can overcome this agency problem.

The expectation gaps occur where there are differences in perceptions between two parties. In this case, the auditor’s perceptions differ from those of the users of the financial statements. The expectation gap is the difference between what the public and users of financial statements believe to be the responsibilities of accountants and auditors on the one hand and what accountants and auditors believe to be their responsibilities, on the other hand (Guy & Sullivan, 1988). There are two components of the expectation gap: the fairness gap (i.e., the gap between what is expected by users of audit services and what is done by the auditor) and the performance gap (i.e., differences between the public’s perceptions of auditors and the auditor’s performance results). The perfor-

mance gap comprises of short standard gap and short performance gap (Porter, 2012). The expectation gap is divided into three components: the reporting gap i.e., differences in perceptions between the auditors and the public regarding what the auditor should report, the performance gap i.e., whether the auditor acts by the applicable standards, and the liability gap i.e., the different perceptions of the auditor and the public regarding the auditor’s supervisory authority (Titard, Braun, & Meyer, 2004). Konrath (2002) defined the expectation gap as shown in Figure 3.

An audit of a public sector organization is an objective, systematic process intended to test the accuracy and completeness of the information presented in the organization’s financial statements to increase transparency and reduce budget leakage (Bastian, 2010; Schelker & Eichenberger, 2010; Blume & Voigt, 2011). Law Number 15 of 2014 states that public sector audits seek to ensure that state finances are managed in an orderly, efficient, effective, transparent, and fair manner also compliance with all laws and regulations. Government audit can act as a solid deterrent to corruption practices only if performed adequately and if auditors ensure that all audit recommendations are fully implemented (Olken, 2007).

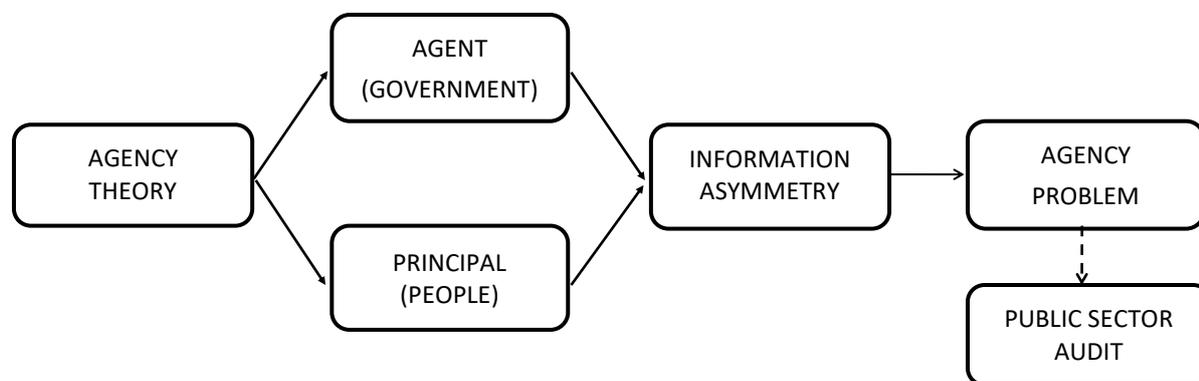


Figure 2. Information Asymmetry Schemes in Public Sector Audits

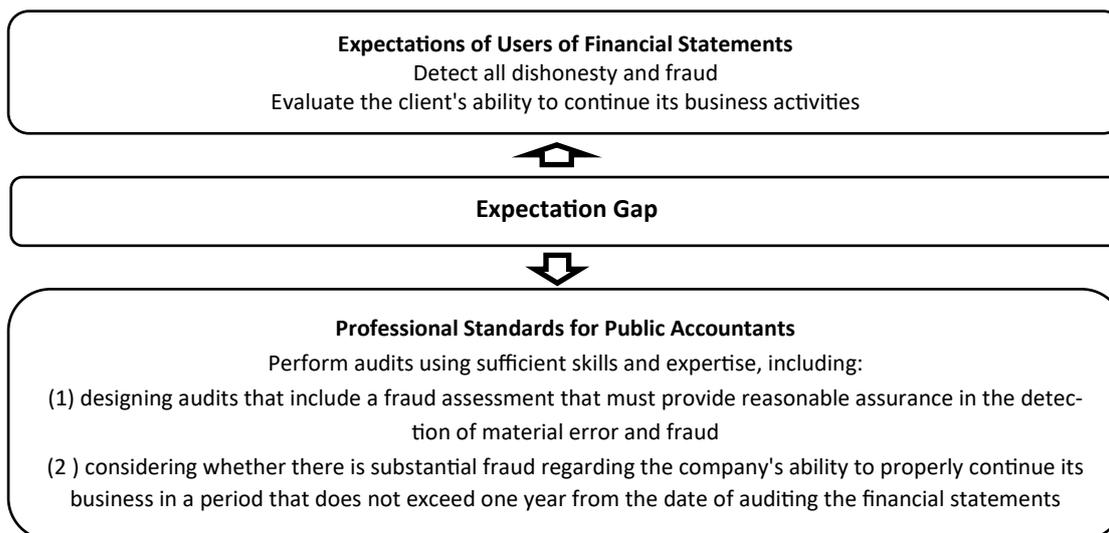


Figure 3. Expectation Gap Scheme in Public Sector Audit

Audit opinions assess the fairness of an entity's financial statements rather than assessing the truth of such statements. An audit opinion is a fair conclusion based on the audited information. An opinion is reasonable if it is free from bias and dishonesty and is based on the full disclosure of information. However, a reasonable opinion can only be issued when financial statements are correct and free from material misstatements (Chen, Cumming, Hou, & Lee, 2013). Law Number 15 of 2004 states that audit opinions in the public sector are based on the criteria of conformity with government accounting standards, adequate disclosure, compliance with laws and regulations, and the effectiveness of the internal control system. Audits of ministerial and institutional financial statements may result in unqualified, qualified, or adverse opinions or disclaimers (Tsipouridou & Spathis, 2015).

Recommendations in an audit outline the remedial actions taken by the audited entity's management (Kyei, 2016). They are based on the auditor's opinions concerning a particular situation and must reflect the auditor's knowledge and judgment (Sawyer, 2006). The recommendations given by BPK are divided into various groups based on the effect of the findings, which are weaknesses

in the internal control system, potential for state losses, and administrative findings. The audit recommendations do not always relate to violations of the law or fraud. Audit recommendations on administrative findings are carried out for administrative improvement in public entities and can be resolved by administrative sanctions. As for the findings related to the potential for state losses, the recommendations can be in the form of returning money to the state treasury. Furthermore, the entity must follow up on recommendations no later than 60 (sixty) days after the audit result report is received as outlined in BPK Regulation Number 2 of 2017 concerning Supervision of Follow-up to BPK Audit Result Report Recommendations.

The benefits of audits do not necessarily lie in the recommendations given but instead in how well the audited entity's recommendations are put into effect. Officials must respond to the recommendations in an audit report and provide an answer or explanation to BPK. The audited officials must carry out a follow-up to the BPK recommendations. BPK reviews the answers or explanations received from entity officials to determine whether follow-up has been carried out in accordance with BPK's recommendations. The review results are classified as a follow-

up in accordance with the recommendations, not in accordance with the recommendations, not yet followed up, or recommendations cannot be followed up (BPK RI, 2017c).

There are two main types of audit findings: internal control systems and findings on non-compliance with laws and regulations. These findings sometimes cause state or regional financial losses. According to Law Number 15 of 2006, state or regional financial losses are actual and particular shortages of money, securities, or goods as a result of intentionally or negligently unlawful acts. BPK assesses the state losses caused by treasurers, state-owned enterprise (Badan Usaha Milik Negara/Badan Usaha Milik Daerah, BUMN/BUMD) managers, and other institutions or bodies that manage state finances. Law of The Republic of Indonesia Number 20 of 2001 concerning Amendment of Law Number 31 of 1999 concerning Eradication of The Crime of Corruption describes that state losses are calculated based on the findings of the authorized agency or appointed public accountant. At the same time, government corruption eventuates when a person unlawfully enriches themselves or others (including corporations) in a way that can harm a country's finances or economy. Indonesian law defines 30 forms of corruption, including bribery, extortion, and conflict of interest in procurement. One form of corruption is proof that someone has caused a state financial loss (Law Number 20 of 2001).

Studies have found that existing levels of corruption are unfavorable to development (Gould & Amaro-Reyes, 1983; United Nations, 1990; Mauro, 1995). However, it is important to empirically determine the actual effect of corruption on economic growth, as well as its mechanism of influence. It is proven that corruption has harmed the ratio of investment to Gross Domestic Product (GDP) (Mauro, 1995; Barro, 1991); every 1% increase in the level of corruption reduces

the investment growth rate by about 0.72% (Mo, 2001). According to the Greed-Opportunity-Need-Exposure (GONE) theory, corruption is caused by four factors. Those are greed (i.e., the potential for greedy behavior that exists in everyone), opportunity (i.e., the state of the organization, agency, or community that enables someone to commit fraud), need (i.e., the resources needed by an individual), and exposure (i.e., the actions or mistakes of the perpetrator of corruption) (Bologna, 2006). The direct consequences of corruption include wasting resources, inefficient resource allocation, and reduced investment and economic growth (Shleifer & Vishny, 1993; Yang et al., 2001).

RESEARCH METHOD

This study adopted a quantitative approach and was conducted at BPK. This study employed a conceptual framework that outlined the relationship between the independent variable consisting of audit opinions (X₁), the implementation of the audit recommendations (X₂), and the finding of state losses (X₃). While corruption cases in Indonesian ministries and institutions were used as the dependent variable (Y), as shown in Figure 4.

Data on corruption cases were obtained from the website of KPK (www.kpk.go.id), whereas data on the independent variables were obtained from BPK's Summary of Semester Audit Results (Ikhtisar Hasil Pemeriksaan Semester, IHPS) from 2014 to 2017. The sample for this study was selected using the purposive sampling technique, which included 32 ministries and 40 institutions. The operational definitions and measurement indicators for each variable are as follows. Audit opinion (X₁) is the auditor's professional statement on the fairness of the financial statements in all material respects. Authors used the audit opinion indicator issued by the BPK at IHPS 2014-2017 with a score of 2

for institutions that received unqualified opinions and 1 for institutions that received non-unqualified opinions.

Completion of audit recommendations (X2) is an activity and/or decision made by the audited official and/or other competent parties to carry out recommendations of BPK's audit. The indicator used to measure this variable is the ratio of the completion rate of audit recommendations on each institution. While State loss findings (X3) are shortages of money, securities, and goods, the real and definite amount as a result of acts against the law, whether deliberately or negligently. The indicator to measure this variable, researchers used the findings of state losses at ministries and institutions during 2014 to 2017. Corruption Case (Y) as the dependent variable is defined as an act against the law, enriching oneself, benefiting oneself/other people/corporations, abusing the authority/opportunity/available facilities they have because of their rank or position in such a way that they are detrimental to the state. The indicator used in this variable is a list of corruption cases issued by the KPK from 2014-2017 with nominal measurements.

The hypothesis of this study are:

H1: an unqualified opinion has a partial negative effect on corruption cases in ministries and institutions in the Republic of Indonesia. An unqualified audit opinion is the auditor's professional judgment on the presented financial statements fairly and free from material misstatement. As a result, users of financial statements can use these financial statements for decision-making without worrying about misleading information. Therefore, the authors argue that unqualified opinion has a negative effect on corruption cases in Indonesian ministries and institutions.

H2: implementations of audit recommendations have a partial negative effect on corruption cases in ministries and institutions in the Republic of Indonesia. The recommendation is a suggestion from the auditors based on the audit results, which is aimed at the authorized person or institutions to take corrective action and/or improve the governance of state finances. Follow-up audit recommendations are carried out by the audited official and/or other competent parties to respond to audit recommendations. Consequently, the level of completion of the au-

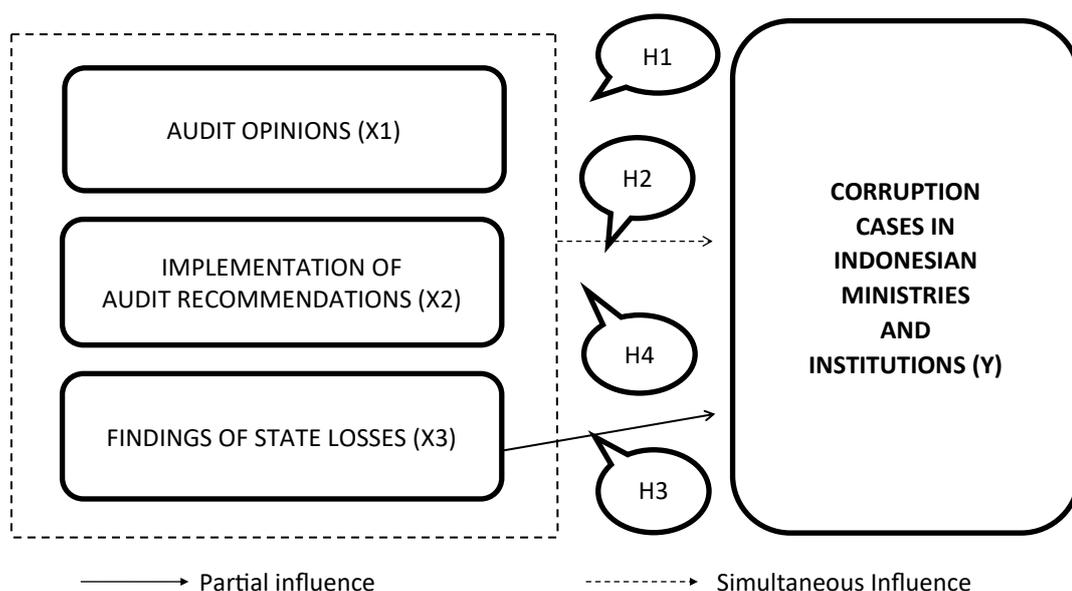


Figure 4. Conceptual Framework

dit results recommendations will reflect the improvement of an institution in managing state finances; hence institutions can be free from corruption.

H3: Findings of state losses have a partial positive effect on corruption cases in Ministries and Institutions in the Republic of Indonesia. BPK had the authority to assess and determine the number of state losses resulting from acts against the law and negligent acts committed by state financial managers. The authors argue that the findings of state losses will be directly proportional to corruption cases that occurred in Indonesian ministries and institutions. With the three previous hypotheses, the authors offer the fourth hypothesis, H4: audit opinion, completion of audit recommendations, and findings of state losses have a simultaneous effect on corruption cases in Ministries and Institutions in the Republic of Indonesia. The multiple linear regression method is used to test the hypothesis.

RESULT AND DISCUSSION

Table 1 summarizes the descriptive statistics of all the data obtained for this study, while the appendix presents comprehensive data for each variable. The data obtained in this study indicate that between 2014 to 2017, 76.74% of the Indonesian ministries and institutions received unqualified audit opinions, whereas 26.23% received qualified opinions. In terms of implementing audit recommendations, 39.24% of the Indonesian

ministries and institutions completed more than 75% of recommendations. In terms of state loss findings, the Ministry of Public Works and Public Housing recorded the highest state losses between 2014 and 2017 (Rp12.3 trillion). In contrast, the National Public Procurement Agency (Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah, LKPP) recorded the lowest state losses (Rp121 million).

The total number of research samples (n) was 288, and the sample consisted of 72 public entities (32 Ministries and 40 Institutions) over four years from 2014 to 2017. Because the variable uses an ordinal scale, Audit Opinion (X1) cannot be described nominally ("2" is an unqualified opinion and "1" is a qualified opinion). The lowest value for Implementation of Audit Recommendations (X2) was 0.00%, which represented the level of completion of audit recommendations in the Ministry of Religion in 2017. The average X2 value was 62.22%. Findings of State Losses (X3) had a minimum value of Rp2,368,000 representing the state losses of the Cabinet Secretariat in 2014. The highest value was Rp12,281 trillion concerning the state losses of the Ministry of Public Works and Public Housing in 2016. Corruption Cases (Y) had a minimum value of 0.00%, relating to 88.94% of the sample, whereas the highest value comprising 6 cases was related to the House of Representatives. The coefficient of determination (R2) measures a model's ability to explain variations in the dependent variable. Table 2 shows the results of the coefficient of determination test.

Table 1. Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Error	Deviation-Standard
Audit opinions	288	1	2	1.7674	.02494	.42325
Implementation of audit recommendations (%)	288	.00	100.00	62.2246	1.60138	27.17626
State loss findings (IDR)	288	2.3M	12,281T	314,234B	78,844B	1,338
Corruption cases	288	.00	6.00	.3681	.05488	.93142
Valid N (list-wise)	288					

The R2 value on Table 2 was 0.144, or 14.4%, indicating that the independent variables represented only 14.4% of the influence on the dependent variable; other variables outside this research model influenced the remaining 85.6%. Husna, Rahayu, & Triyanto (2017) examined factors influencing corruption using audit opinion and audit findings as independent variables and discovered a lower R2 value of 2.5%. The T-test, or partial test, determines whether the independent variables partially influence the dependent variable. As shown in Table 2, the T-test value for X1 (audit opinion) is 0.312 ($p > 0.05$). The calculated t value was 1.022, less than t table = 1.679. Based on this, H1 was rejected, indicating that audit opinions do not significantly impact corruption cases in Indonesian ministries and institutions. These findings are also consistent with Husna et al. (2017), who discovered that audit opinion does not affect the level of corruption in local governments. A positive or unqualified audit opinion cannot guarantee that the audited entity is free of corruption (Pasaribu, 2017; Heriningsih & Marita, 2013; Putri, 2018). For example, corruption is still prevalent in the House of Representatives, the Ministry of Transportation, and the Constitutional Court, despite these bodies receiving unqualified audit opinions. This result is in line with the BPK's explanation that the main consideration in conveying four types of opinions is the fairness of presenting financial statement posts following the Government Accounting Standard. Fairness does not necessarily signify that a transaction is truthful (BPK RI, 2011).

Whether or not an entity is corrupt is not based on financial statement audit opinions. An auditor focuses its opinion on significant or material issues; the auditor does not examine all transactions but instead uses sampling techniques to determine which transactions to examine. Corruption cases do not always involve APBN/APBD, but somewhat illegitimate transactions such as bribery with company funds; such transactions are difficult to detect because they do not appear in financial statements (BPK RI, 2019). According to Indonesia Corruption Watch, the most effective mode of corruption in 2018 was an abuse of authority. Although there were only 20 cases involving abuse of authority, the value of losses (Rp3.6 trillion) was the highest of all forms of corruption (Irfan, 2019).

The T-test value for X2 (audit recommendation implementation) was 0.085 ($p > 0.05$). The t value was 1.750, which was higher than the t table. According to this, H2 was rejected because the implementation of audit recommendations has no significant impact on corruption cases. The average level of implementation of audit recommendations was 75.3%, indicating many recommendations that were not considered appropriate or had not been responded to by public entities. The level of implementation of audit recommendations was not very influential on corruption cases; it could only be said to be influential if using a significance level of 0.10. The results in Table 2 meet one of the criteria for finding that one variable influences another (i.e., the t value was greater than the t table). However, mi-

Table 2. Summary of Coefficients of Determination Test, T-test, and F-test Result.

Variable	Coefficients of determination	T-test		F-test	
	R2	T	Sig	F	Sig
Audit opinions	.144	1.022	.312	2.570	.066 ^b
Implementations of recommendations		1.750	.087		
State loss findings		2.066	.044		

nistries and institutions such as the Constitutional Court, Supreme Court, and the Ministry of Villages, Disadvantaged Regions, and Transmigration have all proven to have implemented more than 90% of audit recommendations. However, corruption cases are still prevalent in these ministries and institutions.

The T-test value for X₃ (the findings of state losses) was 0.044 ($p < 0.05$). The t value was 2.066, which was higher than the t table (1.679). Based on this, H₃ was accepted, the findings of state losses had a significant positive effect on corruption cases in Indonesian ministries and institutions. The results indicated that the state losses identified by BPK significantly influenced the number of corruption cases in ministries and institutions.

The F test is used to determine whether all independent variables jointly influence the dependent variable. Based on the results shown in Table 2, the F value was 2.570, less than the F table (2.790). Based on this, H₄ was rejected; audit opinions, implementation of audit recommendations, and state loss findings did not significantly affect corruption cases in Indonesian ministries and institutions. The results of this study indicated that, in combination, the three independent variables did not have a significant influence on corruption cases; they could only be said to be influential if using a significance level of 0.10. The significance value obtained (0.06) was close to the required level of 0.05. This may be because each independent variable also involves factors unrelated to corruption (e.g., administrative findings).

CONCLUSION

The study results showed that 14.4% of the corruption cases in ministries and institutions of the Republic of Indonesia were influ-

enced by audit opinion, implementation of audit recommendations, and findings of state losses. The remaining 85.6% were influenced by other factors like internal control, bureaucratic reform, etc. Audit opinion and implementation of audit recommendations partially do not significantly affect corruption cases in ministries and institutions in Indonesia. This result can be explained by the fact that many corruption cases occur outside and are not reflected in recording activities or transactions that affect financial statements, such as bribes or gratuities. Meanwhile, the audit recommendations given are not always related to corruption. There are three groups of findings that form the basis for providing audit recommendations: weaknesses in the internal control system, potential state losses, and administrative findings. Findings of internal control and administrative irregularities are not part of the corruption.

State loss findings partially have a significant effect on corruption cases in the ministries and institutions in the Republic of Indonesia. This is because the findings of state losses are in the form of monetary loss and similar things whose exact amount is caused by violations of statutory regulations or negligence of state financial managers. Therefore, any findings of state losses are a strong indication of the occurrence of corruption cases. Simultaneously, the audit opinion, implementation of audit recommendations, and findings of state losses do not significantly affect corruption cases in ministries and institutions in the Republic of Indonesia. This could be due to each independent variable has factors that are not included in corruption.

Based on the findings of this study, we recommend that the BPK conduct a more thorough investigation of cases involving state losses to eradicate corruption. It is also hoped that BPK will continue developing au-

dits and recommendations for audit implementation closely related to eradicating corruption. Furthermore, ministries and institutions that get unqualified opinions from BPK are advised not to be complacent because this study shows that audit opinion cannot be used as an indicator that an entity is free from corrupt practices. Finally, the KPK must be more aggressive in eradicating corruption, including by collaborating with the BPK. This study shows that BPK's findings on state losses are closely related to corruption cases.

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Appendix

Appendix 1. Comprehensive Research Data

No.	Ministries and Institutions	Variable				
		Audit Opinion (X1)		Completion of Recommendation (X2)	State Loses (X3)	Corruption Case (Y)
		Qualified	Other Opinion	(%)	(Rp)	
1	Ministry of Defense (Kementerian Pertahanan)	1X	3X	80,60	18.843.856.115.479	0
2	Ministry of Foreign Affairs (Kementerian Luar Negeri)	3X	1X	64,15	80.661.395.807	2
3	Ministry of Communication and Informatics (Kementerian Komunikasi dan Informatika)	2X	2X	50,61	6.652.722.603.809	0
4	National Code Agency (Lembaga Sandi Negara)	3X	1X	75,61	80.316.084.722	0
5	National Defense Institute (Lembaga Ketahanan Nasional)	3X	1X	91,61	5.261.180.283	0
6	The Coordinating Ministry for Political, Legal, and Security Affairs (Kemenko Polhukam)	4X	0X	100,00	11.632.287.364	0
7	Ministry of Internal Affairs (Kementerian Dalam Negeri)	4X	0X	44,54	348.538.054.995	2
8	Ministry of civil servant empowerment and bureaucratic reform (Kementerian PAN dan Reformasi Birokrasi)	4X	0X	86,04	2.105.201.889	0
9	Ministry of State Secretariat (Kementerian Sekretariat Negara)	4X	0X	61,35	110.719.257.587	0
10	National Civil Service Agency (Badan Kepegawaian Negara)	4X	0X	60,52	53.246.016.456	0
11	Ministry of Agrarian Affairs and Land Administration / National Land Agency (Kementerian Agraria dan Tata Ruang / Badan Pertanahan Nasional)	4X	0X	32,87	27.393.429.807	1
12	National Archives (Arsip Nasional)	3X	1X	97,76	992.290.983	0
13	General Election Commissions (Komisi Pemilihan Umum)	1X	3X	40,04	148.222.846.832	0
14	Ministry of Law and Human Rights (Kementerian Hukum dan Hak Asasi Manusia)	4X	0X	39,38	301.294.418.941	3
15	National Prosecutor's Office (Kejaksaan RI)	3X	1X	46,07	83.318.802.101	0
16	Indonesian National Police (Kepolisian Republik Indonesia)	4X	0X	40,22	74.255.263.212	3
17	National Commissions of Human Rights (Komisi Nasional Hak Asasi Manusia)	1X	3X	56,35	26.517.171.272	0
18	Constitutional Court (Mahkamah Konstitusi)	4X	0X	85,87	794.632.303	9

No.	Ministries and Institution	Variable				
		Audit Opinion (X1)		Completion of Recommendation	State Loses	Corruption Case
		Qualified	Other Opinion	X2 (%)	X3 (Rp)	Y
19	House of Representatives (Dewan Perwakilan Rakyat)	4X	0X	53,53	25.824.476.824	16
20	Regional Representative Council (Dewan Perwakilan Daerah)	4X	0X	77,89	6.181.592.457	3
21	Supreme Court (Mahkamah Agung)	4X	0X	82,90	23.695.777.935	11
22	Judicial Commission (Komisi Yudisial)	4X	0X	93,50	594.823.173	0
23	Corruption Eradication Commission (Komisi Pemberantasan Korupsi)	4X	0X	65,81	12.044.727.249	0
24	National Narcotics Agency (Badan Narkotika Nasional)	4X	0X	73,02	13.210.085.590	0
25	Ministry of Agriculture (Kementerian Pertanian)	3X	1X	44,71	991.593.816.439	0
26	Ministry of Environment and Forestry (Kementerian Lingkungan Hidup dan Kehutanan)	2X	2X	22,22	57.876.810.499	2
27	Ministry of Maritime Affairs and Fishery (Kementerian Kelautan dan Perikanan)	2X	2X	51,13	490.722.584.509	0
28	Ministry of Public Works and Public Housing (Kementerian Pekerjaan Umum dan Perumahan Rakyat)	3X	1X	32,23	14.431.782.231.488	8
29	Ministry of Transportation (Kementerian Perhubungan)	4X	0X	66,79	5.128.949.394.978	9
30	Ministry of Village, Development of Disadvantaged Regions and Transmigration (Kementerian Desa, Daerah Tertinggal dan Transmigrasi)	2X	2X	36,95	157.064.776.038	6
31	Agency for Meteorology, Climatology and Geophysics (Badan Meteorologi, Klimatologi dan Geofisika)	3X	1X	96,78	7.680.452.089	0
32	Ministry of Industry (Kementerian Perindustrian)	4X	0X	65,83	53.314.822.368	0
33	Ministry of Trade (Kementerian Perdagangan)	4X	0X	61,85	23.983.177.953	0
34	Ministry of Cooperatives & SMEs (Kementerian Koperasi & UKM)	4X	0X	40,80	962.739.191.385	0
35	Ministry of Energy and Mineral Resources (Kementerian Energi Sumber Daya Mineral)	2X	2X	46,56	7.581.647.378.390	7
36	Ministry of State Owned Enterprise (Kementerian Badan Usaha Milik Negara)	4X	0X	41,50	155.377.949.337	1
37	Ministry of Research and Technology and Higher Education (Kementerian Riset Teknologi dan	3X	1X	52,74	962.329.818.165	4

No.	Ministries and Institution	Variable				
		Audit Opinion (X1)		Comple- tion of Recomen- dation	State Loses	Corrup- tion Case
		Quali- fied	Other Opinion	X2(%)	X3(Rp)	Y
38	Agency for the Assessment and Application Technology (Badan Pengkajian dan Penerapan Teknologi)	3X	1X	62,15	39.966.822.560	0
39	Indonesian Institute of Science (Lembaga Ilmu Pengetahuan Indonesia)	4X	0X	67,13	5.337.302.208	0
40	National Nuclear Energy Agency (Badan Tenaga Nuklir Nasional)	4X	0X	86,89	4.287.715.265	0
41	Nuclear Energy Regulatory Agency (Badan Pengawas Tenaga Nuklir)	3X	1X	86,21	35.833.688.729	0
42	Geospatial Information Agency (Badan Informasi Geospasial)	1X	3X	55,18	373.733.149.856	0
43	Institute of Aviation and National Space (Lembaga Penerbangan dan Antariksa Nasional)	3X	1X	80,41	14.258.084.523	0
44	Ministry of Religion (Kementerian Agama)	2X	2X	36,75	941.154.005.693	4
45	Ministry of Social Affairs (Kementerian Sosial)	2X	2X	53,44	4.927.126.186.923	0
46	National Board of Disaster Management (Badan Nasional Penanggulangan Bencana)	4X	0X	44,42	152.280.985.980	0
47	Ministry of Empowerment Women and Child Protection (Kementerian Pemberdayaan Perempuan dan Perlindungan Anak)	2X	2X	85,56	8.500.564.613	0
48	Ministry of Health (Kementerian Kesehatan)	4X	0X	51,59	161.131.133.100	5
49	Ministry of Labour (Kementerian Ketenagakerjaan)	2X	2X	36,49	359.546.679.054	0
50	National Population and Family Planning Board (Badan Kependudukan dan Keluarga Berencana Nasional)	1X	3X	47,46	10.536.267.073	0
51	National Agency of Drug and Food Control (Badan Pengawas Obat dan Makanan (BPOM))	4X	0X	76,48	2.886.616.765	0
52	Ministry of Education and Culture (Kementerian Pendidikan dan Kebudayaan)	4X	0X	19,46	3.235.141.890.252	3
53	Ministry of Tourism (Kementerian Pariwisata)	3X	1X	31,78	140.978.667.558	0
54	Ministry of Youth and Sports (Kementerian Pemuda dan Olahraga)	0X	4X	39,92	809.881.463.545	5
55	National Library (Perpustakaan Nasional)	2X	2X	71,82	4.573.406.543	0
56	Ministry of Finance (Kementerian Keuangan)	4X	0X	65,40	9.940.551.427.208	2
57	Ministry of National Development Planning (Kementerian Perencanaan Pembangunan Nasional (Bappenas))	4X	0X	58,83	4.573.292.081	0

No.	Ministries and Institution	Variable				
		Audit Opinion (X1)		Completion of Recommendation (X2(%))	State Loses (X3(Rp))	Corruption Case (Y)
		Qualified	Other Opinion			
58	Financial Supervisory and Development Board (Badan Pengawasan Keuangan dan Pembangunan)	4X	0X	86,93	6.124.649.477	0
59	Statistics Indonesia (Badan Pusat Statistik)	3X	1X	54,52	139.388.233.543	0
60	National Agency for Placement and Protection of Indonesian Workers (Badan Nasional Penempatan dan Perlindungan Tenaga Kerja Indonesia (BNP2TKI))	4X	0X	73,94	28.708.111.936	0
61	Sidoarjo Mud Management Agency (Badan Penanggulangan Lumpur Sidoarjo (BPLS))	3X	1X	72,63	25.386.842.841	0
62	Television Public Broadcasting Agency, Television of Indonesia (Lembaga Penyiaran Publik Televisi Republik Indonesia (TVRI))	0X	4X	25,41	685.717.997.438	0
63	Radio Public Broadcasting Agency, Radio of Indonesia (Lembaga Penyiaran Publik Radio Republik Indonesia (RRI))	0X	4X	56,94	4.576.552.225	0
64	Batam Free Trade Zone and Free Port Concession Agency (Badan perusahaan Kawasan Perdagangan Bebas dan Pelabuhan Bebas Batam (BP Batam))	2X	2X	68,15	115.576.078.827	0
65	Suramadu Regional Development Agency (Badan Pengembangan Wilayah Suramadu)	3X	1X	90,43	13.499.678.301	0
66	National Search and Rescue Agency (Badan SAR Nasional (BASARNAS))	4X	0X	96,62	74.692.915.385	0
67	Business Competition Supervisory Commission (Komisi Pengawas Persaingan Usaha)	4X	0X	71,75	1.186.316.838	0
68	The General Election Supervisory Agency (Badan Pengawas Pemilihan Umum (BAWASLU))	3X	1X	69,42	16.025.884.183	0
69	National Agency for Management Border (Badan Nasional Pengelola Perbatasan (BNPP))	4X	0X	71,70	267.604.691.013	0
70	The National Public Procurement Agency (Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah (LKPP))	3X	1X	40,74	5.244.888.174	0
71	Secretariat of Ministry (Sekretariat Kabinet)	4X	0X	83,22	1.849.413.737	0
72	National Agency for Cuntered Terrorism (Badan Nasional Penanggulangan Terorisme (BNPT))	4X	0X	100,00	3.255.511.862	0
TOTAL	TOTAL	221	67	62,22	90.499.578.056.017	106

Notes: Data is summarized by combining data from 2014 to 2017. Opinion data shows the number of opinions received from 2014 to 2017. Recommendation completion data is presented with the average percentage of recommendation completion from 2014-2017. State loss data is presented with total state losses during 2014 to 2017.

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 ±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.

The image shows the homepage of the JTAKEN journal. At the top, there is a navigation bar with links for HOME, ABOUT, ONLINE SUBMISSION, ISSUES, and CONTACT. The main content area features a login form with fields for Username and Password, a 'Forgot your password?' link, and a 'Keep me logged in' checkbox. To the right, there is a 'SERTIFIKAT' section and an 'ADDITIONAL MENU' section with links to Editorial Team, Reviewer, Peer Review Process, Reviewer Guidelines, and Indexed by. The page also includes a search bar and a 'Register' button in the top right corner.

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.

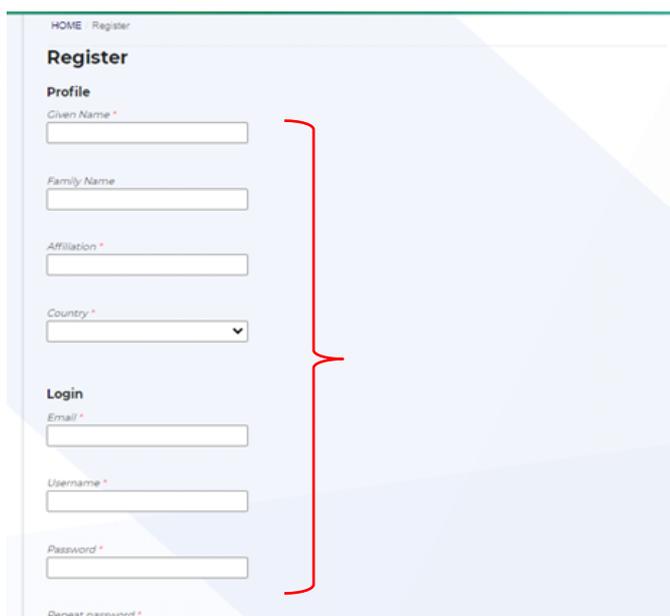
The image shows the registration form page. It is divided into two main sections: 'Profile' and 'Login'. The 'Profile' section includes fields for Given Name, Family Name, Affiliation, and Country. The 'Login' section includes fields for Email, Username, Password, and Repeat password. A red bracket on the right side of the form groups the Profile and Login sections together.

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.

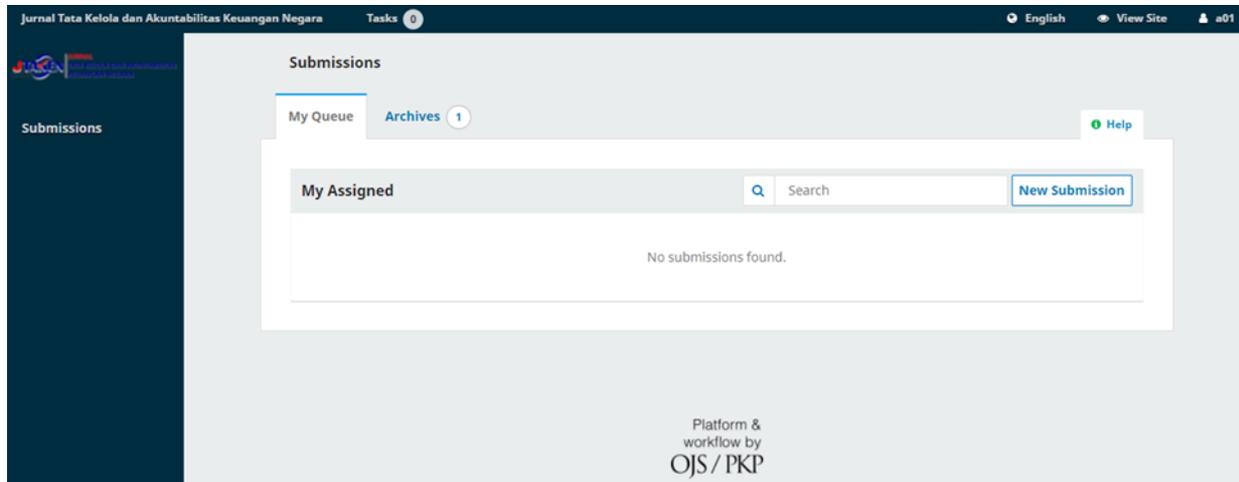


Figure 1. Create New Submission

- 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.

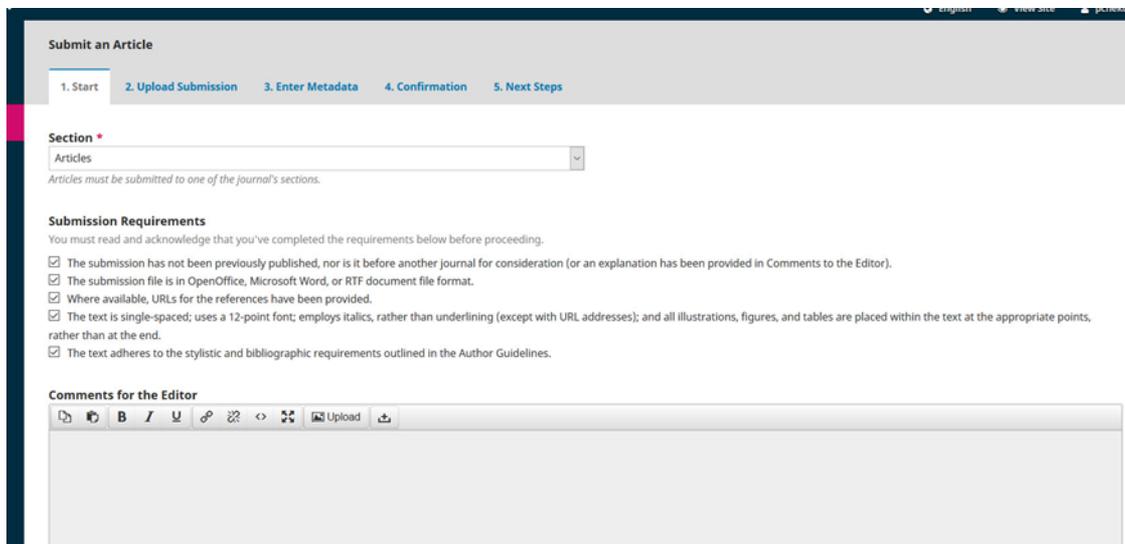


Figure 2. Step 1 Submit an Article

- 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.

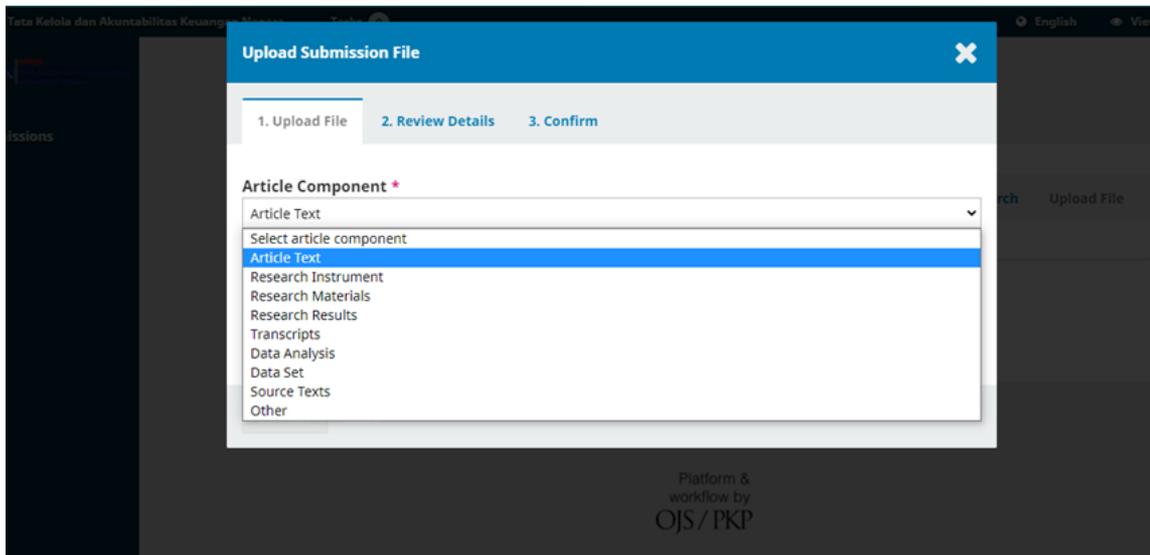


Figure 3. "Uploading the Submission" Page (1)

- 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.

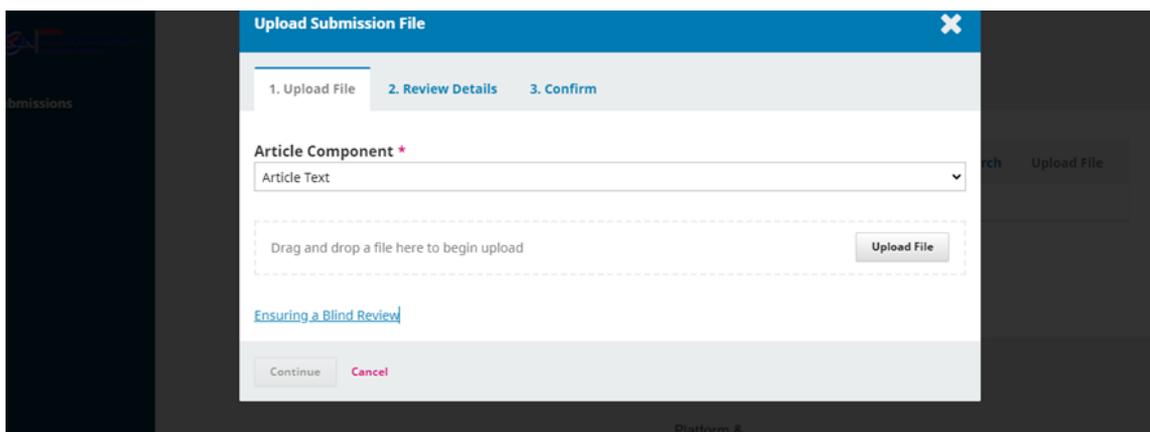


Figure 4. "Uploading the Submission" Page (2)

- 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.

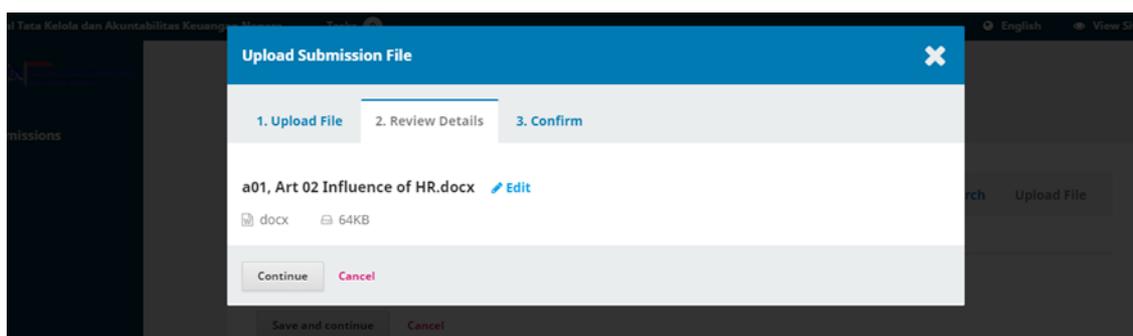


Figure 5. "Starting the Submission" page (3)

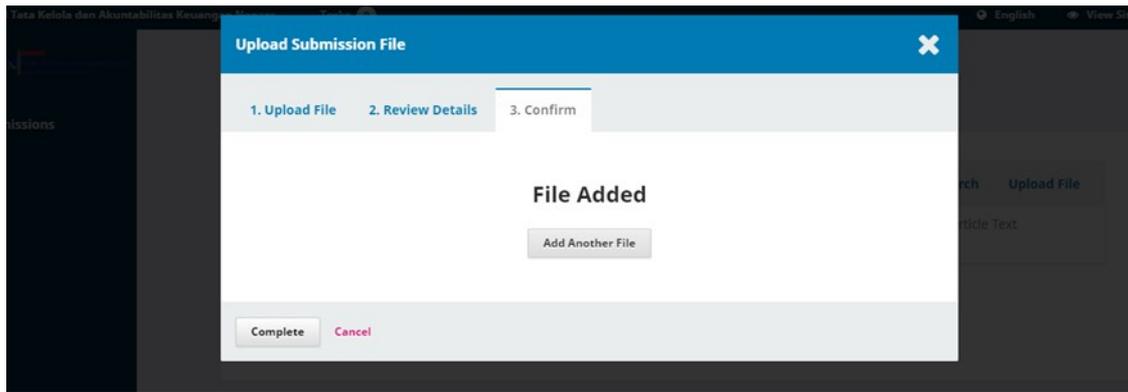


Figure 6. Uploading the Submission (4)

- 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.

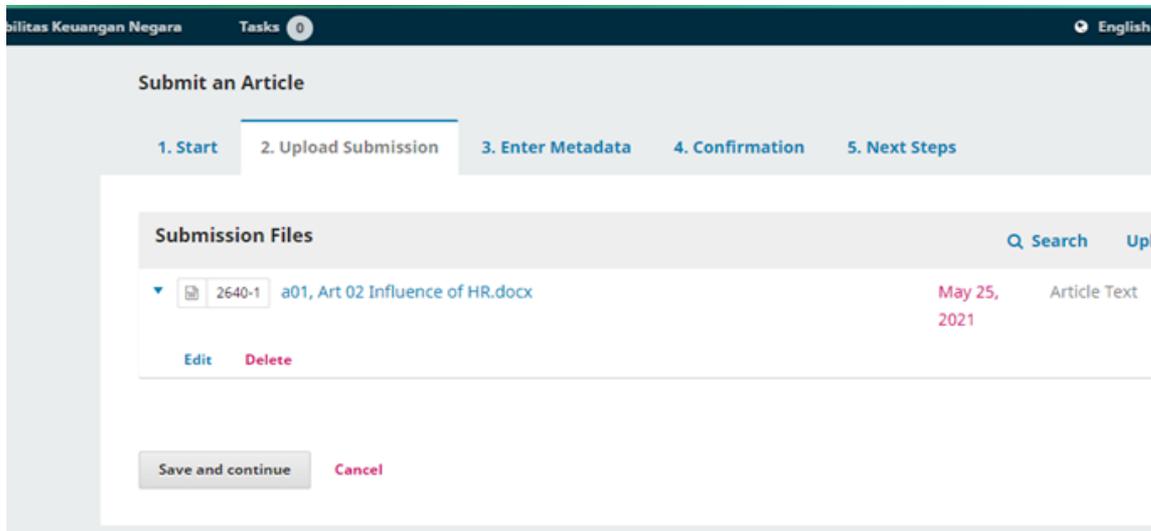


Figure 7. Uploading the submission (5)

- 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.

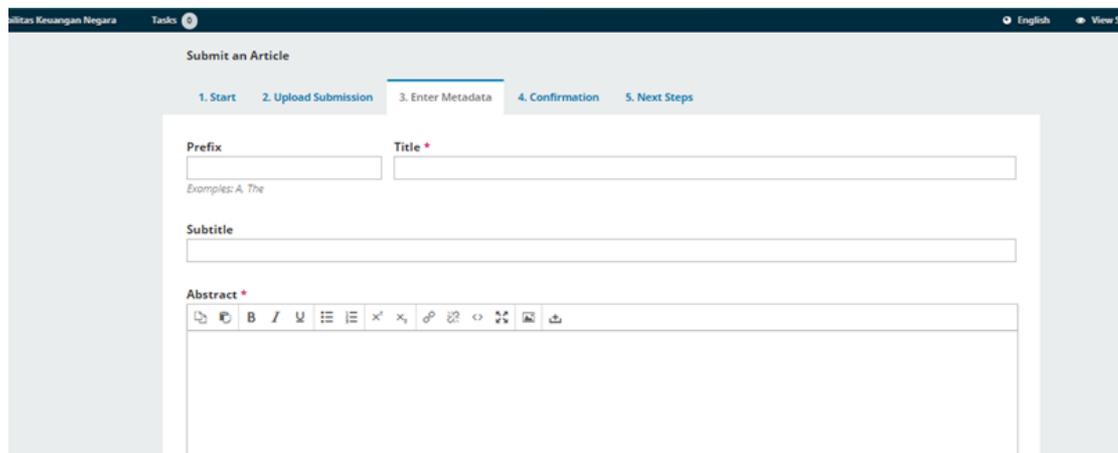


Figure 8. Enter Metadata

- 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.

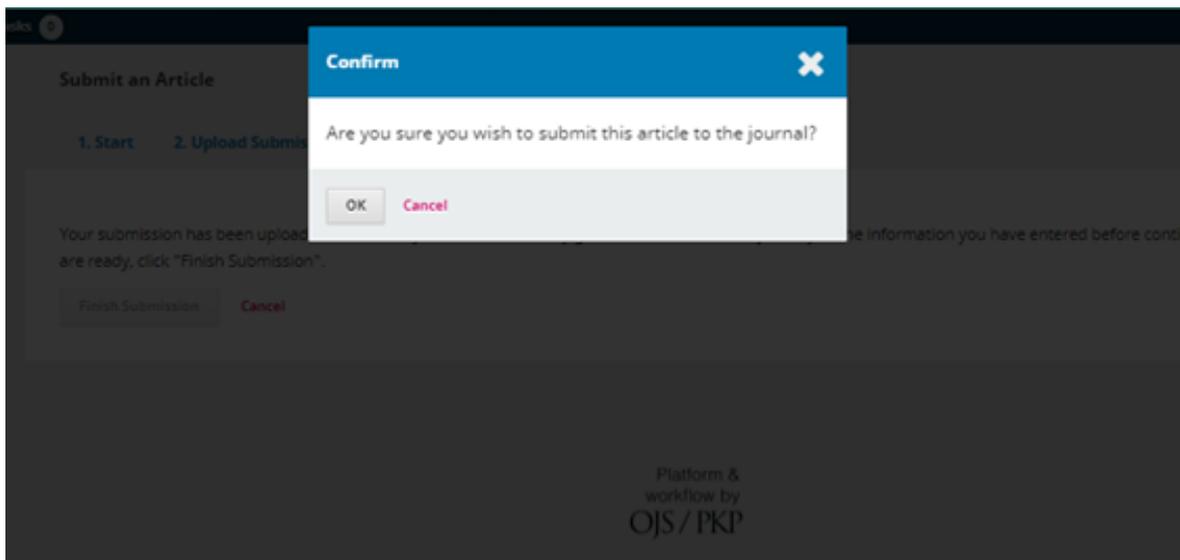


Figure 9. Finish Submission

- 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.

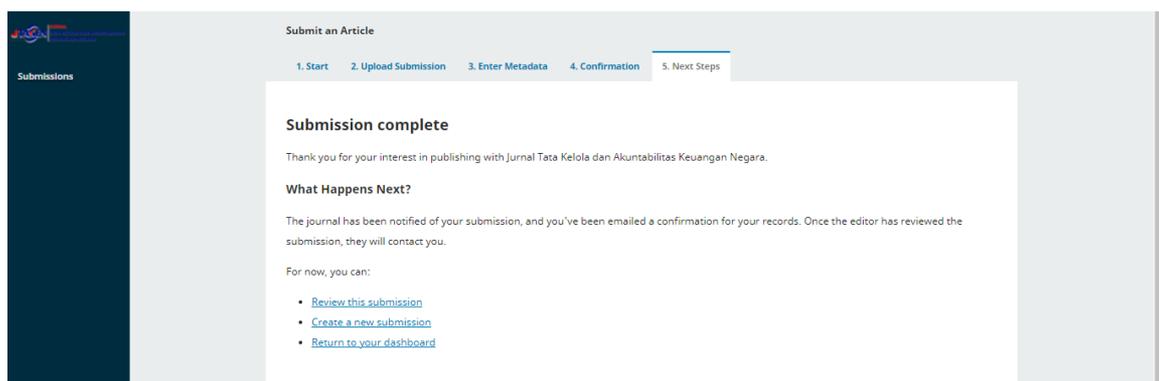


Figure 10. Submission Complete

- 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.

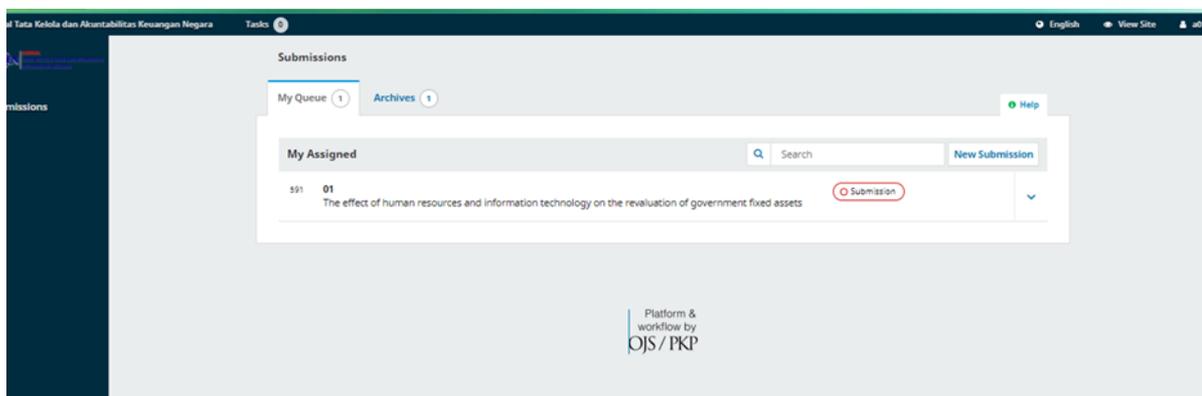


Figure 11. Monitoring Submission

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.

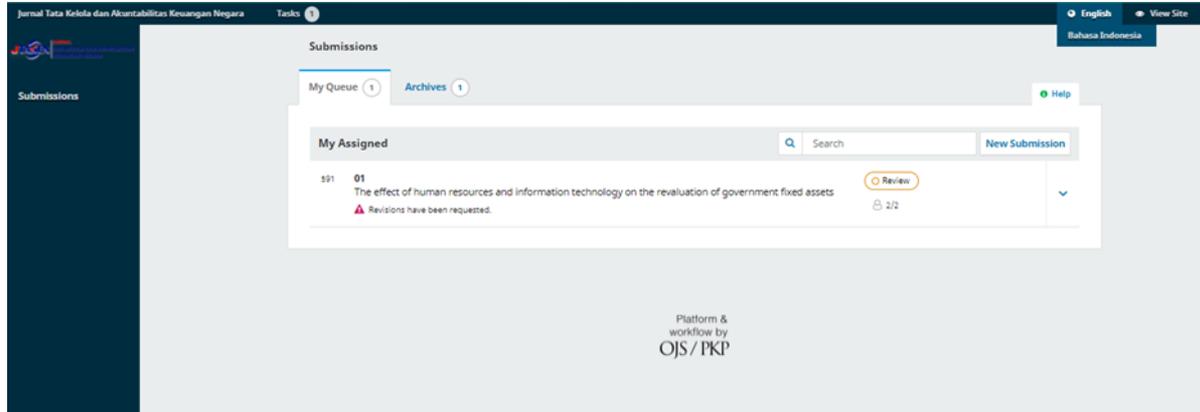


Figure 12. Responding to a Review

- 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.

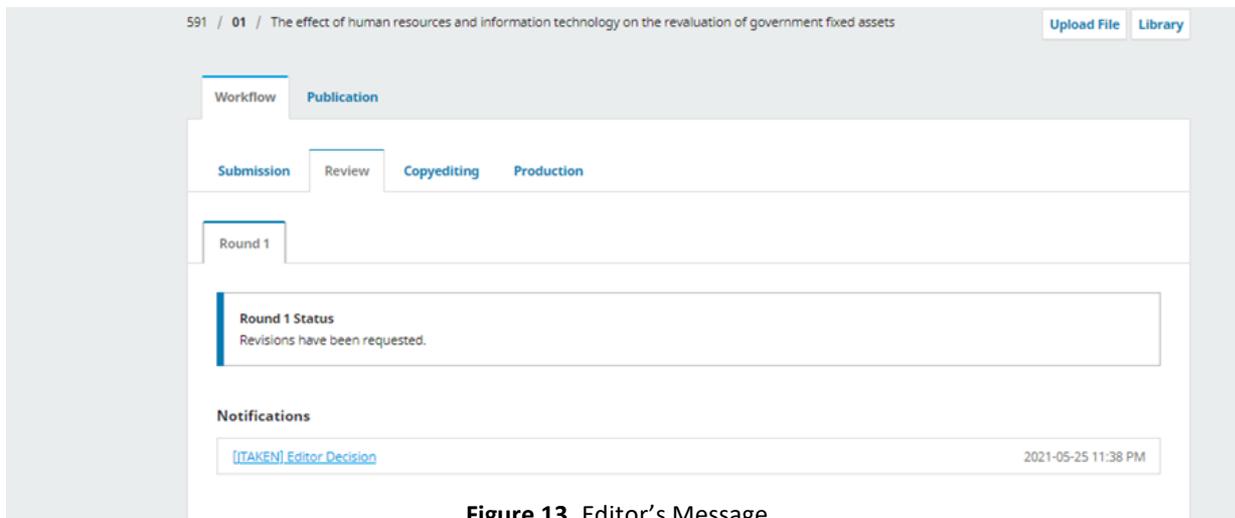


Figure 13. Editor’s Message

- 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.

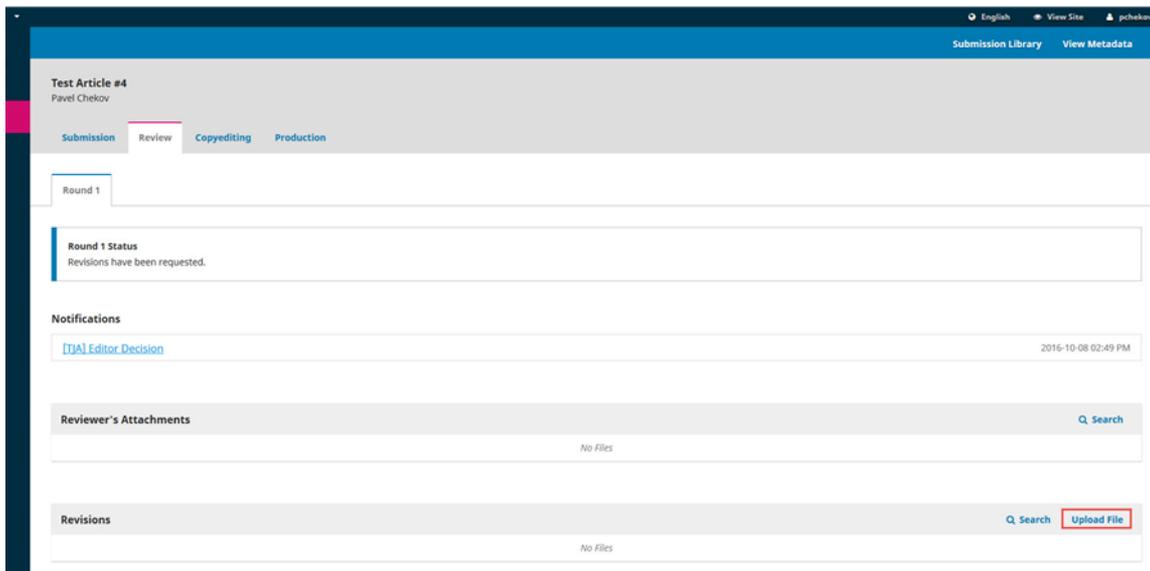


Figure 14. Upload Revision

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.

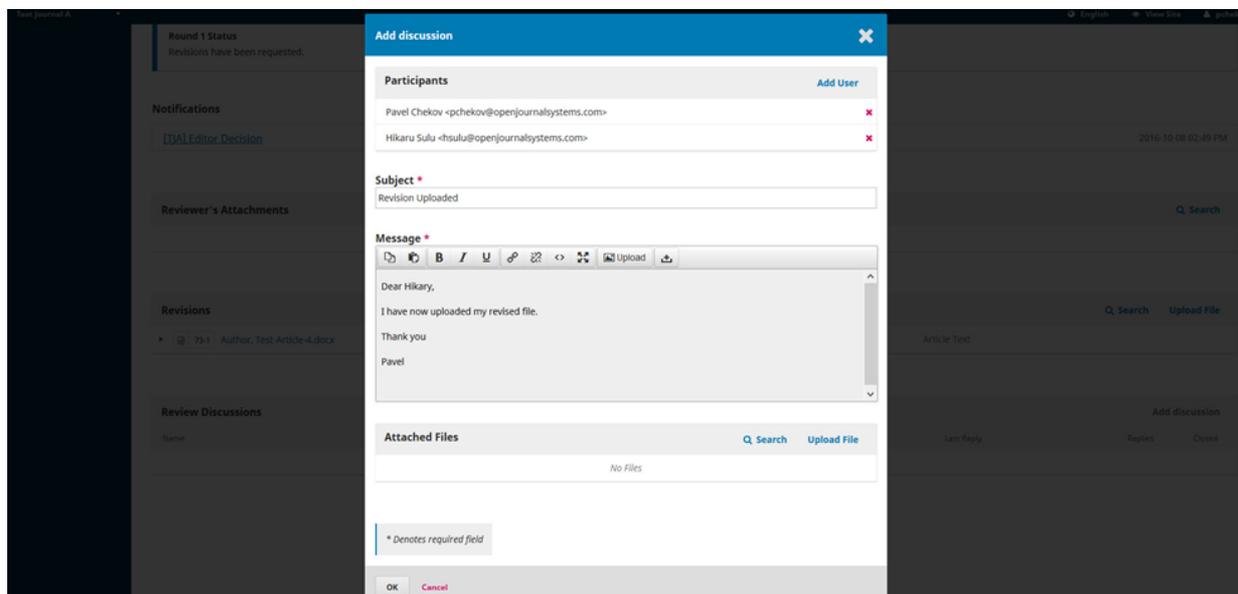


Figure 15. Add Discussion

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 galley (e.g., PDFs, HTML, etc.) before publication.

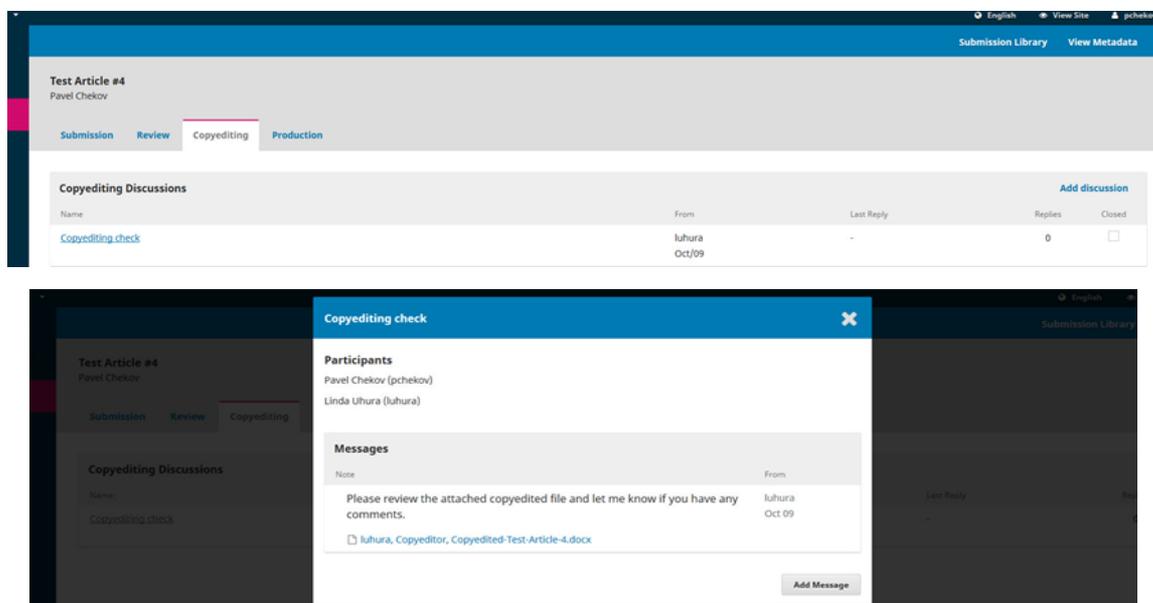


Figure 16. Copyediting stage

Proofreading Stage

The next step in the workflow is to inspect the submission files that have been converted into galley (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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