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Overlapping assistance distribution of the Indonesian government's scheme for small and micro-scale enterprises during COVID-19

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The Indonesian Government introduced a financial government scheme called Bantuan Produktif Usaha Mikro (the BPUM) to protect and support the operations of small and microscale enterprises (SMEs) during the difficulties of the COVID-19 pandemic. This study describes the BPUM distribution based on the characteristics of its recipients. Using the 2021 National Socioeconomic Survey and the binary logistic regression method, it is found that BPUM tends to be allocated to recipients with levels of education below university level, who are male, have access to the internet, and live in urban areas. Surprisingly, the BPUM is also distributed to the beneficiaries accessing microfinance, such as People's Business Credit (Kredit Usaha Rakyat, KUR). However, those beneficiaries are not supposed to be the scheme's recipients. This situation indicates that BPUM is not being accurately distributed. In contrast, the BPUM is also distributed to households that receive several social protection programs simultaneously, including those from the State Budget, Local Government Budget, and Special Autonomy Funds (Otsus) at the local level. Furthermore, the study reveals issues with data integration and highlights inefficiencies in budget allocation. These findings serve as valuable insights for program evaluation, aiming to enhance the allocation of BPUM or another similar program to rightful recipients and increase its effectiveness in supporting SMEs.

Investigating accountability of state subsidies for political parties

Chandra Puspita Kurniawati, Oktarika Ayoe Sandha, Sutthi Suntharanurak, Entang Adhy Muhtar, Ramadhan Pancasilawan

Regulations stipulate that a political party must prepare financial reports to facilitate sound financial management and accountability of the state subsidies it receives. However, its accountability remains problematic, raising a question: How do the related policies deal with the accountability of state subsidies for political parties? This study aims to evaluate issues related to accountability in the policies governing the management of state subsidies for political parties. This study is normative legal research. Within a meta-analysis framework, critical analysis of the relevant policies in the form of laws and regulations and other reliable sources of information is carried out. The study finds that the policies provide rules to ensure eligible political parties' right to obtain state subsidies and employ audit and administrative sanctions to enhance state subsidy accountability. Nevertheless, the policies still overlook important issues related to vertical accountability of political parties and government, horizontal accountability of government, internal control mechanisms, supervision requirements, and formal and material responsibilities by relevant in-charge parties. Moreover, the running audit practices do not provide much value for improvement. This study provides policy-makers a new perspective on relevant studies so that the government will consider the comprehensive management of state subsidies for political parties by relevant in-charge parties before elevating the value of the subsidies.

Local government internal auditor stress and burnout: Supervisor support as a moderating variable

Agil Novriansa, Fida Muthia

This study aims to empirically examine the direct relationship between stress arousal and burnout and the moderating effect of supervisor support on the relationship between the two dimensions experienced by local government internal auditors. This study uses an online survey method with a questionnaire. The sample for this study was 155 local government internal auditors from 17 City/Regency Government Inspectorate Provinces from Southern Sumatra. Based on the data analysis using SEM-PLS, the results of this study indicate that stress arousal is positively related to emotional exhaustion and depersonalization but not to reduced personal accomplishment. The results of this study also indicate that supervisor support is able to moderate the relationship between stress arousal and burnout. Supervisor support can reduce the effects of stress arousal on emotional exhaustion and depersonalization experienced by local government internal auditors and strengthen the effects of stress on personal accomplishment. Theoretically, this study supports the conservation of resources theory, which shows that supervisor support is a resource that acts as an effective coping strategy in reducing the effects of stress arousal and preventing burnout. The results also provide insights for policymakers to develop interventions for communication and monitoring based on personal conditions to improve interpersonal relations between supervisors and subordinates.

Does village fund audit affect village development? An empirical study of villages in Aceh Province

Sayid Reza Helmi, Khoirunurrofik

It is well-known that additional cases of misappropriating village funds are reported yearly. Without adequate oversight and control, the fraud and corruption trends in village funds will continue to prevail and hinder village development. The increase of funds transferred to villages has failed to eliminate the number of underdeveloped villages in Indonesia, which is still 24.39% nationally and 36,15% in Aceh Province. This study examined whether the local government's audit of village funds positively affects village development as measured by the Village Development Index (IDM) value. The relationship between audits, the number of auditors, and audit fees on village development is examined using a quantitative approach and the regression method. A qualitative technique was also used to gain insights into the implementation of village fund audits. The study found a positive relationship between auditing and audit fees for IDM, while the number of auditors is unrelated to IDM. Compared to unaudited villages, audited villages have higher IDM scores. Despite having a good relationship, the implementation of the audit faced challenges, among others, the lack of legislation, the absence of auditing and accounting standards, the auditor's ambiguous authority, the scarcity of audit resources, and the local government's recklessness in performing their duties.

Unraveling the impact of social assistance and capital expenditure on poverty rates in Papua's Region

Nurfatma Restu Mahanani, Geger Adelia

The Indonesian government has made various efforts to reduce poverty, including through policies in government spending. The spending realized by the government is expected to be able to encourage an increase in people's welfare and reduce poverty. This study aims to analyze the effect of government spending, especially social assistance expenditure and five types of capital expenditure, on the poverty rate, using data at the regional/city level in the Papua province from 2011 to 2019. This study also uses other supporting variables, namely the Gini ratio, Gross per capita Regional Domestic Product (GRDP), school participation rate, and ratio of community health centers. The data used is secondary data obtained from Statistics, The Audit Board of The Republic of Indonesia (Badan Pemeriksa Keuangan, BPK), and the Ministry of Health. The data analysis technique used in this study is panel data regression analysis with a fixed effect model. The analysis showed that out of the six types of government expenditure studied, only capital expenditure for roads, networks, and irrigation significantly reduces the poverty rate.

Detecting the corruption pattern and measuring the corruption detection pace at the Indonesian village level

Hepnu Nur Prihatmanto, Mas Dadang Enjat Munajat, Ira Irawati

Despite widespread reports of corruption in 74,961 village authorities in Indonesia, the government has yet to establish an effective mechanism to detect and prevent corruption at the village government level. Therefore, this study provides an overview of corruption in villages by perpetrator profile, village development, and corruption detection pace to identify the highest-risk authorities exposed to corruption and implement preventive measures. Supported by a qualitative descriptive strategy for interpreting the data, this study analyzed 186 villages whose governing bodies engaged in corruption and were prosecuted by law enforcement officials from 2015 to 2021. The result shows that Java is more focused than other regions on prosecuting corruption cases in rural areas. Moreover, corruption cases in Java and Sumatra regions concentrate on developing villages. Outside of these two regions, most corruption occurs in disadvantaged villages. Village corruption cases were detected on average 2.72 years after the onset of corruption. These findings address a gap in previous research by exploring the variation in losses resulting from village corruption cases across different regions. The study underscores the significance of implementing regulations that mandate regular audits and other detection policies customized to specific attributes, such as region, development level, perpetrator profiles, and fraudulent scheme trends.

An experiment on bribery, tenure duration, and punishment severity in the Indonesian public finance context

Amanda Wijayanti, Wisnu Setiadi Nugroho, Rijadh Djatu Winardi, Yudhistira Hendra Permana, Muhammad Ryan Sanjaya

Against the backdrop of increasing concern over corruption, this study delves into a laboratory experiment investigating the intricate dynamics of bribery concerning the duration of official tenures and the efficacy of punitive measures. Experimental methods prove pivotal in unraveling the complexities inherent in corrupt behaviors. The study unfolds a compelling pattern, shedding light on the interplay between public officials and civilians, particularly emphasizing the impact of officials' tenure duration on bribery. It brings forth a crucial correlation between familiarity with officials and a heightened likelihood of bribery, with extended tenures amplifying this susceptibility. The concept of "fixed pairing" accentuates the role of prolonged official incumbency in influencing bribery tendencies. Additionally, introducing punitive measures with financial repercussions proves effective in curbing bribery incidents and associated givebacks, particularly when applied to bribe recipients, suggesting heightened stakes public officials face. The study demonstrates the potential of dual treatments involving random pairings and punitive approaches to reduce the magnitude of bribes and givebacks. This study underscores the necessity of curtailing prolonged official tenures to mitigate bribery tendencies, offering insights into enhanced governance and ethical conduct through strategic rotational shifts and robust penalties. These comprehensive findings contribute valuable perspectives to addressing corruption and enhancing ethical standards within public institutions.

Follow-up implementations on audit results in the local government of Banten Province

Natta Sanjaya, Retno Sunu Astuti, Andi Wijayanto, Dyah Lituhayu

Follow-up on implementing the recommendations based on the BPK audit result in the Banten Provincial Government has not been effective due to the completion time of the follow-up not being up to standard and the audited entity having difficulty carrying out the follow-up. This study aims to determine the effectiveness and challenges in implementing the policy of completing follow-up on the results of the BPK audit in the Banten Provincial Government. This study uses a descriptive qualitative approach and primary data collection techniques (observation and interviews) with informants purposively selected from BPK and local government. The technique used for data analysis is interactive models. Results show that the policy has not covered all target groups and has no impact on direct improvement changes. Decision-making has not supported the sustainability of completing follow-up audit results. The Inspectorate's mediation effectiveness is hindered by limited personnel and budget resources. Based on the implementation environment, actors have not been fully involved in monitoring the follow-up progress, and leaders do not have the commitment and assertiveness to encourage follow-up on audit results. The potential implication of this study suggests that the BPK should consider reformulating technical policies to ensure the effective and measurable completion of follow-up recommendations on audit results.

Conflict of interests in declaring state/regional loss of tax income in Indonesia

I Nyoman Wara, Dumaria Simanjuntak, Reny Yemimalina Sinaga

Empirical and juridical gaps exist in fulfilling the element of loss in state/regional (of income) as referred to in the law in Indonesia. This study aims to address two existing issues. First, to point out the illegal practices by DJP in declaring losses to state/regional (of income) in Indonesia's taxation field. Second, to suggest or offer a legal concept regarding the competent agency's constitutional authority in declaring losses to the state/regional (of income) in Indonesia's taxation field. Two conclusions are drawn based on a normative legal study using the theory of checks and balances. First, the calculation of losses on state/regional (of income) in the field of taxation does not comply with the mandate of the constitution, namely independent, accountable, and transparent because there are no applicable tax laws and regulations to regulate procedures and experts who calculate losses on state/regional (of income) areas in the field of taxation in Indonesia. Second, because losses to the state/regional (income) in the field of taxation are part of state finances, and to align with the principle of checks and balances, the constitutional authority of the competent agency in declaring it is The Audit Board of the Republic of Indonesia (BPK). Therefore, referring to BPK's authority to declare losses in state/regional (income) in Indonesian taxation is recommended.

The development of knowledge management Implementation at the financial and development supervisory agency (BPKP)

Andhika Pratama Tirta Wijaya, Pande Made Kutanegara, Achmad Djunaedi

The Financial and Development Supervisory Agency (BPKP), a pivotal public sector entity tasked with internal audit functions, recognizes the paramount importance of effectively managing auditors' experience and expertise. This study aims to delineate the Knowledge Management (KM) implementation stages within BPKP, a topic scarcely explored in Indonesian public-sector research. This study uses an abductive approach with a case study method by explaining a series of events over time with theory-based analysis. The results showed that the KM implementation in BPKP was carried out in four stages: preparation at the local level by conducting change management, work culture development, and initial research; implementation at the local level; implementation at the national level with a focus on the development of process, human, and technology aspects; and national development focuses on laying the groundwork for KM culture. There are KM implementation steps carried out by BPKP but not explained in the theory proposition: change management and developing a work culture that supports KM processes, initial research, benchmarking, and KM implementation regulations. BPKP needs to assess the maturity level of KM to determine the focus areas that need to be improved. This study contributes conceptually to KM frameworks tailored for public sector entities.

Overlapping assistance distribution of the Indonesian government's scheme for small and micro-scale enterprises during COVID-19

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ABSTRACT

The Indonesian Government introduced a financial government scheme called Bantuan Produktif Usaha Mikro (the BPUM) to protect and support the operations of small and microscale enterprises (SMEs) during the difficulties of the COVID-19 pandemic. This study describes the BPUM distribution based on the characteristics of its recipients. Using the 2021 National Socioeconomic Survey and the binary logistic regression method, it is found that BPUM tends to be allocated to recipients with levels of education below university level, who are male, have access to the internet, and live in urban areas. Surprisingly, the BPUM is also distributed to the beneficiaries accessing microfinance, such as People's Business Credit (Kredit Usaha Rakyat, KUR). However, those beneficiaries are not supposed to be the scheme's recipients. This situation indicates that BPUM is not being accurately distributed. In contrast, the BPUM is also distributed to households that receive several social protection programs simultaneously, including those from the State Budget, Local Government Budget, and Special Autonomy Funds (Otsus) at the local level. Furthermore, the study reveals issues with data integration and highlights inefficiencies in budget allocation. These findings serve as valuable insights for program evaluation, aiming to enhance the allocation of BPUM or another similar program to rightful recipients and increase its effectiveness in supporting SMEs.

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INTRODUCTION

The COVID-19 pandemic has had a significant global impact, socially and economically. The economic downturn affected business communities, regardless of their size, but smaller businesses (small and microscale enterprises/SMEs) may have been at a greater disadvantage due to higher levels of vulnerability (OECD, 2020). Although Asian countries had different policy responses to maintain their SMEs' sustainability, most countries applied income and profit tax deferrals, loan guarantees, direct lending to SMEs, and wage subsidies. According to the OECD (2020), only a few countries responded by applying special grant/cash transfer schemes. The Malaysian Prihatin Rakyat Economic Stimulus Package (PRIHATIN) provided cash transfers to compensate for income loss (Ahmad et al., 2020; Hasin et al., 2021; Mustapa & Mohamad, 2021). Singapore implemented the Self-Employed Person Income Relief Scheme (SIRS) and the Productivity Solutions Grant (PSG) (OECD, 2020; Chow & Ho, 2021). In developed countries such as the United States, assistance was provided to small businesses through the Coronavirus Aid, Relief, and Economic Security program, which comprised the Paycheck Protection Program (PPP), Small Business Administration (SBA) loan forgiveness, and Economic Injury Disaster Loan (Bartik et al., 2020; Humphries et al., 2020; Li, 2021).

The Government of Indonesia introduced the Productive Assistance for Microenterprises (Bantuan Produktif Usaha Mikro, BPUM) program to help SMEs survive during the COVID-19 pandemic. The BPUM fund was sourced from the State Budget (Ishak et al., 2022). In 2020, approximately 9.11 million SMEs were BPUM recipients, which increased to more than 12 million SMEs in 2021 (Nasution et al., 2020). Each SME with specific criteria received IDR 1.2 million in 2021 (Ishak et al., 2022). The budget for the BPUM in the second year (2021) reached IDR 36 trillion, proving the program's priority status and underscoring the government's commitment to economic restoration during the pandemic (Nasution et al., 2020). Furthermore, because SMEs in Indonesia are the backbone of the national financial system, capital assistance is critical (Digdowiseiso & Hamrin, 2022; Rinaldi et al., 2022; Ishak et al., 2022).

Indonesian SMEs needed the BPUM to revive their businesses. Based on the results of the Statistics Indonesia survey, 57.20% of SMEs required capital assistance during the pandemic (BPS, 2021a). This is also consistent with studies such as Umboh et al. (2022), Marlinah (2020), Digdowiseiso and Hamrin (2022), also Ishak et al. (2022). Furthermore, 23 million SMEs have never received financing from financial institutions (Hidayati & Rachman, 2021).

The BPUM was proven to impact businesses to be instrumental in maintaining their business (Hermawan, 2022; Ishak et al., 2022; Iskandar et al., 2021; Kemenangan & Setiawan, 2021). In contrast, the research of Kaawoan et al. (2022) concluded that the effectiveness of the BPUM has not been assessed concretely. The BPUM has been unable to increase income (Nurrahma et al., 2022), profit/revenue (Nabilah & Siswanti, 2022), or improve economic conditions (Rahma, 2022; Desky, 2021). In addition, there have been distribution constraints

in terms of discrepancies between the target and the realization of the recipients (Hitipeuw et al., 2022; Kaawoan et al., 2022; Wajong et al., 2022; Imelda, 2022; Kusumawati, 2022; Fauziah et al., 2022; Mustofa & Yunita, 2021). Meanwhile, distribution was carried out based on the established procedures (Rozzaq, 2021; Kaawoan et al., 2022; Wajong et al., 2022; Nurmalasari et al., 2022; Kusumawati, 2022).

Some studies on the BUPM, such as Kaawoan et al. (2022), Wajong et al. (2022), Imelda (2022), Kusumawati (2022), Fauziah et al. (2022), also Mustofa and Yunita (2021), highlighted the effectiveness of the BPUM, its impact on business actors, and the characteristics of business actors at the regional level. However, few studies examined the characteristics of households receiving BPUM with a large sample. A large sample will help minimize the sampling error rate as this study applies to it.

Information about the characteristics of BUPM recipient households is essential for evaluating the program, for example, whether there is any overlap in the distribution of government aid programs. According to the Fiscal Policy Agency (BKF, 2020), the challenge of providing the BPUM is that BPUM recipients also received other assistance due to the lack of integrated and validated data (Ishak et al., 2022; Wijayaningsih et al., 2021). Various kinds of assistance prevent the impact of the pandemic at the household level; for example, the Ministry of Social Affairs (Kemensos) continues routine social protection programs such as the Family Hope Program (Program Keluarga Harapan, PKH) and the Noncash Food Assistance (Bantuan Pangan Nontunai, BPNT) program (Kemensos, 2021 September 22). Various local government assistance programs also derive from the Special Autonomy (Otonomi Khusus, Otsus) fund (BPS, 2021c). Local governments can also distribute social assistance to recipients in addition to the Ministry of Social Affairs programs (Ruhyana & Ferdiansyah, 2020).

In addition to linking the accessibility of the BPUM with other government assistance, it is also important to analyze the accuracy of the BPUM distribution based on the Regulation of the Minister of Cooperatives and SMEs (Permenkop UKM) Number 2 of 2021, one of which is related to access People's Business Credit (Kredit Usaha Rakyat, KUR). Therefore, this study examines the characteristics of BPUM-recipient households according to KUR access, the acquisition of other government assistance, and the characteristics of recipients, such as gender, age, education level, internet access, and residence. This information is then used to obtain an overview of the BPUM distribution. Furthermore, this will be a reference for the government's assessment of assistance distribution. This study will also enrich the literature on the effectiveness of state budgets according to objectives, namely preventing SME failure in times of crisis.

RESEARCH METHOD

This study used secondary raw data from the March 2021 National Socioeconomic Survey (Survei Sosial Ekonomi Nasional, the Susenas) conducted by Statistics Indonesia (Badan Pusat Statistik, BPS). The unit of analysis is all households holding SMEs recorded in the

Susenas. Binary logistic regression is used to identify the factors distinguishing BPUM recipients from non-BPUM recipients. The method produces a tendency (odds ratio). SPSS.20 is used for processing. In addition to using inference analysis with binary logistic regression, the study uses descriptive analysis, visualizing data with tables and graphs that are further discussed.

In binary logical regression processing, the response variable is access to BPUM, with a value of "1" assigned for households receiving the BPUM; otherwise, "0." Meanwhile, the explanatory variables are categorized into two main variables: the KUR access and the acquisition of other assistance. Based on the Regulation of the Minister of Cooperatives and SMEs (Peraturan Menteri Koperasi dan UKM) Number 2 of 2021 concerning General Guidelines for BPUM distribution, the requirements for BPUM recipients are Indonesian citizens who have businesses and never previously received BPUM funds, not currently receiving KUR, and not government employees. Therefore, the accessibility of KUR is the main explanatory variable in this study apart from other assistance. According to the BKF (2020), one problem that may occur in the distribution of BPUM is the duplication of assistance. Other assistance programs studied included PKH, BPNT, and local government assistance. Thus, this study assumes that BPUM recipients did not receive further assistance.

In addition, this study used explanatory variables in the form of control variables, which are SME owners' demographic characteristics, such as education, gender, age, place of residence, and internet access. Although no literature associates these variables with BPUM accessibility, other studies can be referenced. BPS (2018a) examines the tendency to access capital for SME entrepreneurs according to gender and level of education, with the result indicating that males and entrepreneurs with higher levels of education are more likely to obtain credit assistance from financial institutions. According to this assumption, for productive aid such as the BPUM that requires that entrepreneurs not get KUR, it is assumed that male and low-educated SME owners are more likely to obtain BPUM. This is also supported by the fact that most SME actors did not complete higher education, are female, and are older than 40 years (BKF, 2020). Meanwhile, the BPS data show that more than 40% of SME managers have an elementary school education or did not finish elementary school (BPS, 2018b). In terms of gender, COVID-19 had a greater impact on women in terms of job loss and income decline (ILO & OECD, 2020a; ILO & OECD, 2020b), as well as empowerment (Kania et al., 2021).

Another variable associated with BUPM accessibility is the type of residence area. Based on the BPS study (BPS, 2021b), residents who were temporarily unemployed or unemployed due to COVID-19 were likelier to live in urban areas. This is understandable because more activity restrictions are imposed in urban areas while implementing pandemic mitigation policies (Istiqomah & Suherningtyas, 2022; Nissa et al., 2020; Romdiati & Noveria, 2022). In Indonesia, COVID-19 spread from the epicenter of Jakarta to other urban areas near other outer Java Island areas (Olivia et al., 2020).

This study also included internet access as a factor influencing the acquisition of BPUM.

This is based on the problem of the BPUM promotion/communication, which is not optimal (Ishak et al., 2022; Dzakiyati & Astuti, 2021), such that few people registered themselves as prospective BPUM recipients with local governments (Nasution et al., 2020). The information related to the BPUM was accessed more often by those with internet access. This assumed that the online media information also influenced the decision of SME owners to register. The form of the logistic regression model with logit transformation per Agresti (2018) that will be formulated is as follows:

$$Ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_{61} X_{61} + \beta_{62} X_{62} + \beta_{63} X_{63}$$
$$+ \beta_7 X_7 + \beta_8 X_8 \qquad \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where ρ is the opportunity for SMEs to obtain the BPUM; $X_1, \ldots X_8$ are explanatory variables as written in Appendix; β_0 is constant coefficient value; and $\beta_1, \ldots \beta_8$ are coefficients on each explanatory variable. Meanwhile, the odds ratio value is an exponential function for each coefficient. For example, the odds ratio of local government assistance acquisition is exp X_1 = 2. This illustrates that the tendency of SME owners to obtain the BPUM in the case of households that also receive local government assistance is twice that of SME owners who do not receive local government assistance.

It is necessary to conduct a G test or Likelihood Ratio Test to examine the role of explanatory variables to response variables simultaneously or as a whole (Agresti, 2018). Furthermore, partial testing is carried out to test whether an explanatory variable is worthy of inclusion in the model. The hypotheses for each variable were tested using the Wald test (W) on Formula 2, with i is the first variable, valued at 1 through 8 (see Appendix); S(βi) = default error conjecture for the coefficient βi; and βi is presumptive value for the parameter . The rejection criterion (reject H0) on the Wald test is if the P-value < α.

$$W = \frac{\hat{\beta}_i}{SE(\hat{\beta} i)} \qquad \ldots\ldots\ldots\ldots\ldots (2)$$

RESULT AND DISCUSSION

The 2021 increase in the BPUM budget was evidence of the Indonesian Government's commitment to help SME business actors survive during the pandemic. In 2021, as many as 15 million business actors were targeted as BPUM recipients (Nasution et al, 2020). When calculated on a proportional basis, the BPUM target recipients represented 46% of all SMEs in Indonesia, with the number of SMEs as many as 26 million, according to BPS data (2018a).

Meanwhile, based on the 2021 Susenas data processing results, of approximately 75 million households, 9% (6.8 million) owned SMEs (Figure 1). Thus, based on the household criterion, all these households should have obtained the BPUM. However, the Susenas data tend to indicate fewer SMEs than the number observed in the data based on a business approach because it is possible for one household to have several SMEs. The data of the BPUM recipients also
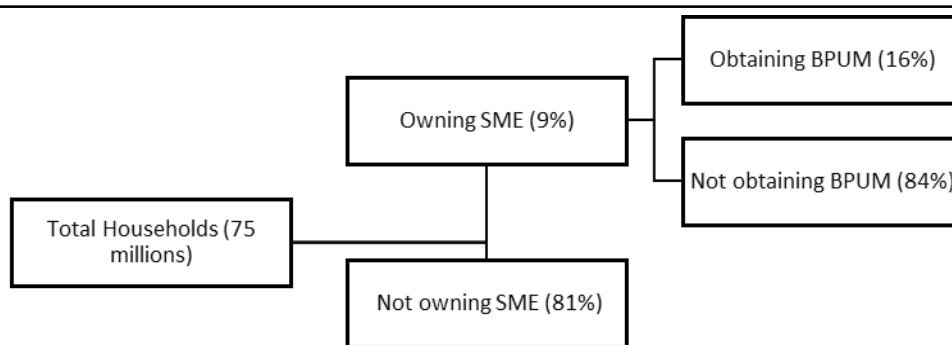
Figure 1. Household distribution according to SME ownership and the BPUM acquisition
Source: Raw Data Susenas 2021, processed

shows this. Sixteen percent of the 9% of households that owned SMEs were BPUM recipients. Compared to the overall target mentioned above (46% of SME actors), the Susenas SME data are fewer. Employing the household approach is a limitation of this study.

The absolute number of households owning SMEs and obtaining the BPUM by province is shown in Figure 2. The more households with SMEs, the greater the number of BPUM recipients (Pearson correlation = 0.91). The province with the highest number of households owning SMEs is Central Java, but the largest BPUM recipient is West Java. This is understandable because the impact of COVID-19 is more pronounced in West Java Province. This is also in line with the BPS (2022a) Small Micro Industry (Industri Mikro dan Kecil, IMK) study in 2020 that shows the 1.9 million businesses in Java Island affected by COVID-19 are mainly in the Central Java, East Java, and West Java Provinces. According to DJPK (2021) and Ishak et al. (2022), 45% of BPUM was distributed in Java. Therefore, the distribution of the BPUM-recipient households by province was based on the provincial severity of the COVID-19 impact. Because Java Island had a high rate of spread of COVID-19, social distancing restrictions were also greater, especially in urban areas (Olivia et al., 2020). This aligns with the data in Table 1, showing that urban households receive more BPUM than those in rural areas (19 ver-
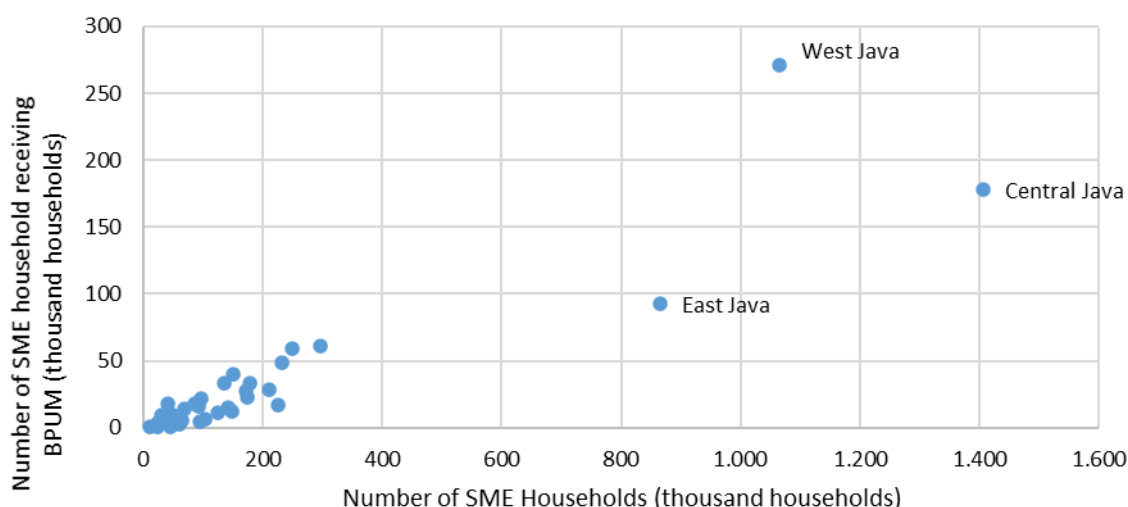
Figure 2. Distribution of the number of households that have SMEs and the number of BPUM Recipients by province
Source: Raw Data Susenas 2021, processed

Table 1. Percentage of households that have SMEs according to various characteristics

Household characteristics		Do not obtain BPUM	Obtain BPUM
KUR (Acquisition of KUR)	Do not obtain KUR	83. 74	16. 26
	Obtain KUR	83. 63	16. 37
Local aid (Obtain assistance from local government)	Do not obtain local government assistance	85. 13	14. 87
	Obtain local government assistance	80. 11	19. 89
Social aid (Acquisition of PKH and or BPNT social assistance)	Do not obtain social assistance	84. 39	15. 61
	Obtain social assistance	81. 59	18. 41
Location (Residence)	Rural Areas	87. 63	12. 37
	Urban Areas	80. 81	19. 19
Sex (Gender of the owner of the SME)	Female	85. 22	14. 78
	Male	83. 53	16. 47
Education (Level of Education of SME owners)	Elementary/non-schooling	85. 84	14. 16
	Junior High School/equivalent	80. 96	19. 04
	High school/equivalent	81. 73	18. 27
	College/University	84. 48	15. 52
Internet (internet access of SME owners)	Not using internet	85. 52	14. 48
	Using the internet	82. 17	17. 83

sus 12%). However, 81% of SME owners in urban areas received no BPUM.

The critical finding in this study is that social assistance by households overlapped. More households obtaining the BPUM received local government assistance than those who did not receive local government assistance. In addition, more households obtaining the BPUM also received PKH and BPNT social assistance. This situation is paradoxical, positive, and negative. While it is positive if the BPUM recipient is an impoverished household, it may be negative if many other households received no assistance from the government. That is, various types of assistance are received by certain households only. However, analyzing this potential requires further studies.

Another interesting finding is that obtaining the BPUM was more common in households whose household members also obtained the KUR. Obtaining the BPUM was prohibited for households that received the KUR benefit. Nevertheless, this study had limited access to KUR data to determine whether these BPUM recipients are similar to those who received KUR. However, from the distribution of data obtained, nearly all households had only one SME. Thus, it is assumed that the BPUM recipient who is the KUR recipient is the same individual. The province with the most BPUM and KUR recipients is Central Sulawesi. In addition to Central Sulawesi, 11 other provinces have cases above the national level, with a causal number of 2.15% (Figure 3). Therefore, these provinces require extra attention.
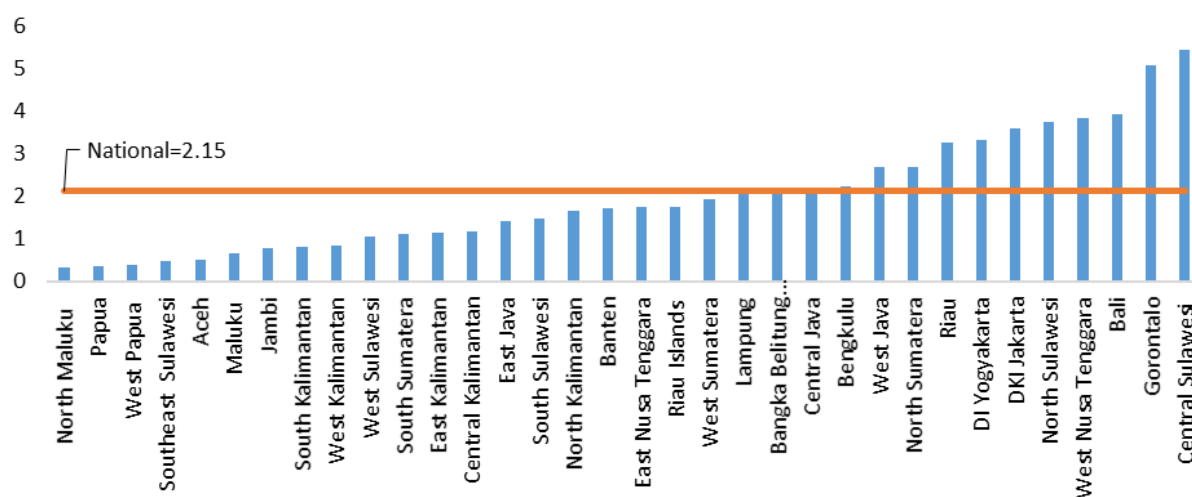
Figure 3. SME Households receiving BPUM and KUR at the same time by province (%)
Source: Raw Data Susenas 2021, processed

Furthermore, BPUM recipients were predominantly male. There were also more BPUM recipients with junior high school education/equivalent than other educational categories. In addition, more BPUM recipients accessed the internet than those who did not. Meanwhile, data analysis using logistic regression produced exciting results. First, the age and gender variables of the BPUM recipients did not significantly distinguish household accessibility to the BPUM. Households receiving local government assistance were 1.5 times likelier to obtain BPUM than households not receiving local government assistance. The odds ratio or tendency is the highest compared to other variables.

According to BPS (2021c), local government assistance is money/goods from local governments to individuals, families, groups, and/or communities that aim to protect against possible social risks. Thus, various types of local government assistance exist, including routine and nonroutine, cash and noncash. Due to the lack of integrated data, there is a potential for duplication of assistance. Different budget allocations, data on beneficiaries that are not integrated, and social assistance distribution systems are the main problems in mapping beneficiaries during the pandemic (Rahmansyah et al., 2020). Moreover, the definition of people affected by Covid-19 is still unclear (Mufida, 2020).

When mapped by province, as seen in Figure 4, the households with SMEs in DKI Jakarta received the most local government and BPUM assistance simultaneously. The cases were 22.74% of all households with SMEs in that province. In contrast, Papua and West Sulawesi were the provinces with the fewest cases of SME households that obtained the least assistance from the local government and the BPUM.

The tendency of households receiving social assistance and BPUM simultaneously was also higher than that of households that did not receive social assistance (odds ratio 1.3). As mentioned above, this may be negative if it turns out that there were still many poor households that did not receive any assistance. In contrast, many households obtained various types of assistance simultaneously. This will be more unfortunate if the recipients of social assistance
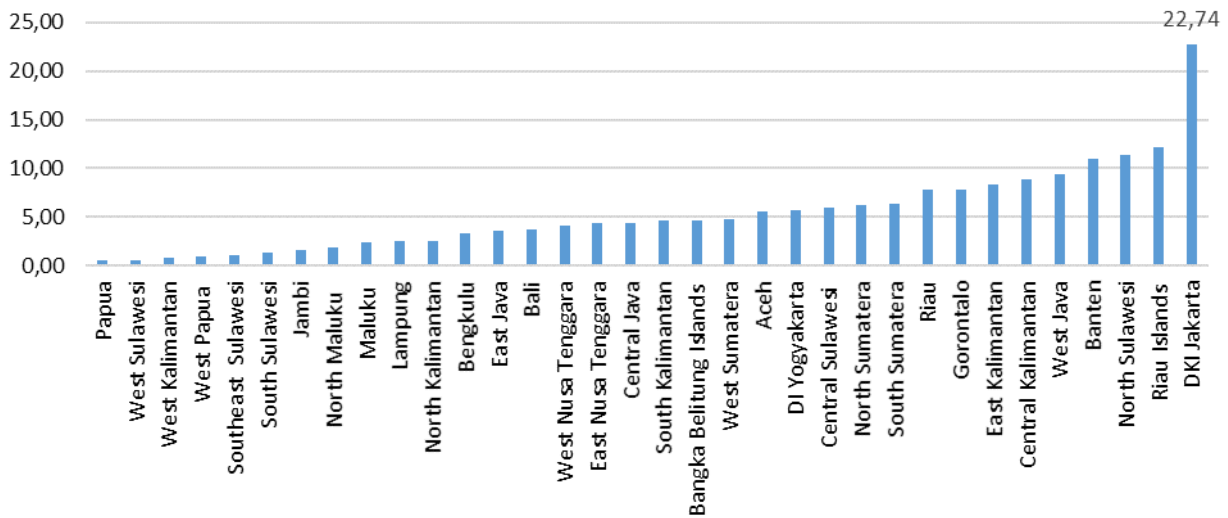
Figure 4. SME Households receiving BPUM and local government assistance at the same time by province (%)
Source: Raw Data Susenas 2021, processed

(PKH and BPNT) also tend to be less on target, as revealed by Sofianto (2020), Beni and Manggu (2020), BPS (2022b), Hasimi (2020), Aisyah et al. (2021), and Kurniawan (2020).

The provinces with the most cases of SME households that received social assistance in the form of PKH or BPNT and BPUM at the same time are Central Sulawesi and North Sulawesi (Figure 5). Meanwhile, the fewest cases were recorded in Papua. When linked to the poverty rate in the province, although North Sulawesi had a relatively low poverty rate, many households received social assistance and the BPUM at the same time; a similar situation occurred in Banten. Therefore, in these provinces, attention must be paid to assessing whether the various assistance programs are given to the appropriate parties.

The use of the internet in daily activities also served as a differentiating factor in the accessibility to the BPUM. The tendency of internet users to obtain the BPUM was 1.2 times that of those who did not use the internet. This is quite concerning, as internet access was not only
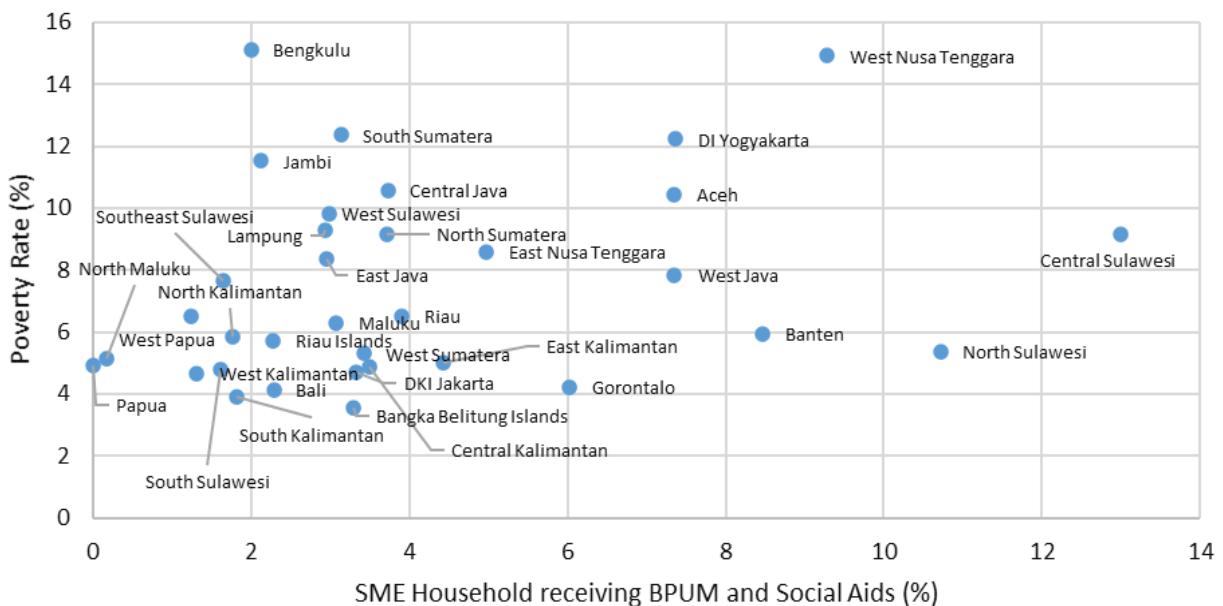
Figure 5. SME Households receiving BPUM and social aid at the same time and poverty rate by province (%)

one of the supporting factors of business development but also to obtain government assistance (Alwendi, 2020; Roosdhani et al., 2012). In Indonesia, many SMEs still do not have access to information technology, as shown by the results of the BPS study (2018a).

Level of education is also a variable that distinguishes SMEs that receive the BPUM and those that do not. However, the results of this study are interesting. BPUM recipients tended to have a lower level of education than college/university graduates. The tendency of SME owners with a junior high school education/equivalent and high school education/equivalent to obtain the BPUM was nearly 1.2 times that of highly educated ones. However, the chances of SME owners who were elementary school graduates or had no schooling to obtain the BPUM were not much different from those with a college/university education (this is not significant, as shown in Table 2). Table 2 shows that the percentage of the BPUM recipients with an elementary level of education is only 14%, while those with a college education level are approximately 16%.

Finally, the residence type is also a determining factor of BPUM access. SMEs in urban areas are 1.6 times more likely to receive the BPUM than those in rural areas. This is consistent with the previous explanation that the impact of Covid-19 is greater in urban areas.

The research findings show that BPUM tends to be allocated to beneficiaries with levels of education below the university level, who are male, who use the internet, and who live in urban areas. Unfortunately, BPUM is also distributed to beneficiaries who are KUR recipients and other social protection programs from the State Budget and Regional Revenues and Expenditures Budget or Special Autonomy Funds. This indicates that the same households receive several social protection programs simultaneously and further reveals that the data are

Table 2. The degree of significance and influence of research variables on BPUM access

Variable	Coefficient	Significance	Odds Ratio
KUR	0.084	0.070*	1.087
Local_aid	0.389	0.000***	1.476
Social_aid	0.310	0.000***	1.363
Location	0.457	0.000***	1.580
Sex	0.063	0.199	1.065
Age	−0.001	0.561	0.999
Education		0.000***	
Education (1)	0.051	0.419	1.053
Education (2)	0.200	0.003***	1.222
Education (3)	0.202	0.001***	1.224
Internet	0.193	0.000***	1.213
Constant	−2.393	0.000***	0.091

Note: This table is obtained based on a fit model, with a Hosmer and Lemeshow Test P-value of 0.017**
Description: *Significant at α = 10%, **significant at α = 5%, ***significant at α = 1%
Source: Susenas 2021, processed

not integrated, and the budget allocation is ineffective and inefficient.

CONCLUSION

The study results show that BPUM assistance distribution is inaccurate, and duplication occurs. This could be due to the beneficiaries' data not being integrated. Therefore, it is urgent to establish one complete and comprehensive SME database. Based on the integrated and complete data, the government can develop better-informed, targeted policies and avoid overlapping assistance. An integrated SME database will also reflect SMEs grouped by category, for example, by amount of capital, household categories, those that have never received capital assistance, those that have not received training, and those that have not utilized information technology.

In terms of aid distribution, a complete database would facilitate the government's distribution of various types of targeted assistance effectively. Thus, the principle of effective and efficient budget distribution would be implemented.

The following important finding is that there are indications of suboptimal socialization. This can be seen from the number of internet users who received the BPUM compared to those who were not. Therefore, the government must provide more intensive promotion by targeting those who do not have access to sufficient information and technology. This also applies to other types of assistance for SMEs.

This study has the limitation of using the household as the unit of analysis; the variable type of work was not included in the analysis due to unavailable data. Therefore, further studies are recommended that use a business approach and include the type of work to identify whether BPUM is distributed to civil servants, members of the National Army/National Police, local government-owned enterprises' or state-owned enterprises' employees, as required in the Regulation of the Minister of Cooperatives and SMEs.

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APPENDIX

Research Variables

Variable	Symbol	Category	Code
		Response Variables	
BPUM (BPUM Recipient)	Y	Households that own SMEs and receive BPUM	1
		Households that own SMEs and do not receive BPUM	0
		Explanatory Variables	
KUR (Acquisition of KUR)	X_1	There is a member of the household that obtains KUR	1
		No member of the household has obtained KUR	0*
Local_id (Obtain assistance from local government)	X_2	Obtain local government assistance	1
		Do not obtain local government assistance	0*
Social aid (Obtain PKH and or BPNT social assistance)	X_3	Obtain PKH and or BPNT social assistance	1
		Do not obtain PKH and or BPNT social assistance	0*
Location (Residence)	X_4	Rural areas	1
		Urban areas	0*
Sex (Gender of the owner of the SME)	X_5	Male	1
		Female	0*
Education (Level of Education of SME owners)	X_{61}	Elementary/unschooling	1
	X_{62}	Junior high school/equivalent	2
		High school/equivalent	3
	X_{63}	College/University	4*
Age (Age of SME owner)	X_7	Age of head of household	Numerical
Internet (internet access of SME owners)	X_8	Using the internet	1
		Not using the internet	0*

Investigating accountability of state subsidies for political parties

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ABSTRACT

Regulations stipulate that a political party must prepare financial reports to facilitate sound financial management and accountability of the state subsidies it receives. However, its accountability remains problematic, raising a question: How do the related policies deal with the accountability of state subsidies for political parties? This study aims to evaluate issues related to accountability in the policies governing the management of state subsidies for political parties. This study is normative legal research. Within a meta-analysis framework, critical analysis of the relevant policies in the form of laws and regulations and other reliable sources of information is carried out. The study finds that the policies provide rules to ensure eligible political parties' right to obtain state subsidies and employ audit and administrative sanctions to enhance state subsidy accountability. Nevertheless, the policies still overlook important issues related to vertical accountability of political parties and government, horizontal accountability of government, internal control mechanisms, supervision requirements, and formal and material responsibilities by relevant in-charge parties. Moreover, the running audit practices do not provide much value for improvement. This study provides policy-makers with a new perspective on relevant studies so that the government will consider the comprehensive management of state subsidies for political parties by relevant in-charge parties before elevating the value of the subsidies.

KEYWORDS:
Accountability; internal control; policy; state subsidies; political parties

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INTRODUCTION

Since the advent of democracy, political parties have been the marker and principal support for democracy (Stokes, 1999). Makara (2009) reveals that political parties are perceived as the heart of democracy and essential to developing a country's democratic climate. Therefore, to play their significant roles in politics and government, political parties need an impartial political playing arena, which is costly (Simandjuntak, 2021). Moreover, the ever-increasing resources required to run political parties' functions have made money more significant in politics. Accordingly, although a large amount of money arguably becomes the biggest threat to democracy, it becomes an indispensable part of a democracy. Thus, political parties should have access to funds.

In addition, Muhtadi (2019) stated that more than one-third of Indonesian voters in the 2019 election were exposed to buying and selling votes, placing Indonesia in the top three countries with the most money politics in the world. This high cost of politics has led to low political integrity, which still needs to be solved (Muhtadi, 2019). These conditions have confirmed the growing body of literature indicating critical issues regarding political finance, which have resulted in an increase in corrupt politicians and increased public distrust of political parties and the government (Hopkin, 2004; Simarmata, 2018; Syarif & Faisal, 2019; Ratnasari et al., 2022).

Consequently, recognizing the challenges money poses to politics, government participation should address the issue of the erosion of trust and prevent people's loss of interest in political life by providing public financial and nonfinancial support. Introducing state subsidies to political parties is considered one of the most fundamental developments corresponding to the government–political party relationship (Pierre et al., 2000) and a popular policy to support democracy (Supriyanto & Wulandari, 2012). In this case, the government's support for political parties is intended to strengthen political parties' effectiveness and freedom while seeking to settle issues of inequality, misconduct, and distrust in public institutions (OECD, 2016), in addition to incentivizing democratic participation as well (Reed et al., 2021).

In Indonesia, Law Number 2 of 2008 on Political Parties and its amendment has required that the government provide subsidies for national and local political parties. Therefore, establishing state subsidies for political parties has become one of the main sources of political parties' income (Reed et al., 2021). Although their share is relatively small compared to other political party funding sources, state subsidies allocated for political parties steadily increase over time, as shown in Table 1.

Table 1. Allocation of State Subsidies for Political Parties from State and Local Budget during 2019 –2021

State Budget			Local Budget		
2019	2020	2021	2019	2020	2021
IDR 121.92 B	IDR 123.03 B	IDR 126.37 B	IDR 522 B	IDR 539.58 B	IDR 648.28 B

Source: BPK RI (2019, 2020b, 2021)

Moreover, as the main pillar of democratic systems, transparent, democratic, and accountable governance is necessary for political parties to positively contribute to improving the quality of democratic life. Consequently, political parties must show that the state subsidies they receive have been spent per the rules; this requirement emerged since the state budget management is expected to be accountable, transparent, and fair, manifested through preparing financial reporting mechanisms. Furthermore, Law Number 15 of 2004 on the Audit of State Finance Management and Accountability has required audits to ensure that state finances have been managed efficiently, economically, effectively, transparently, and responsibly, in compliance with laws and regulations.

However, contrary to the increased allocation of state subsidies, repeated problems are always identified while auditing political parties' financial reports on utilizing state subsidies (Alkam, 2018; Aprimulki & Halim, 2021). The Audit Board (Badan Pemeriksa Keuangan, BPK) has identified common findings on the incompleteness and invalidity of evidence of transactions and the inappropriate proportion of the use of state subsidies (BPK RI, 2020a). In addition, the malfunctioning of political parties-related policies remains widespread, indicating that the political parties' accountability is weak and underperforming (Hopkin, 2004; Kholmi, 2013; Susanto, 2017; Simarmata, 2018; Sukma, 2021; Ratnasari et al., 2022). On the contrary, the procedures and mechanisms for monitoring political parties' accountability have been considered the lowest in policy improvement for years (Sousa, 2005). For these reasons, Chelimsky (2007) acknowledges that, although it is in the public interest, it is not easy to achieve accountability in such political circumstances.

For many years, the Government of Indonesia has tried to regulate the accountability of state subsidies for political parties. Several policies, ranging from law to ministerial regulations, have been established. A tool developed by Transparency International to encourage political party financial system reforms revealed that the ambiguity of the regulatory framework related to political parties has created room for interpretation and abuse in addition to gaps in implementing good financial governance (Wibowo et al., 2011). Yanuarti (2019) adds that poorly designed regulations have exacerbated political parties and their financial management conditions. In contrast, Slater in Rahmatunnisa (2018), has observed that Indonesia, like many other developing countries, has weak accountability, and Indonesian elites have actively strived to avoid accountability.

These conditions have attracted the public's attention because people presume that a healthy democracy requires accountability. Furthermore, the population grows under democracy, and thus, it becomes increasingly crucial to identify problems that hamper the accountability of the state subsidies received by the political parties. For this reason, the gaps and disagreement in the governance of state subsidies allocated for political parties in existing policies must be investigated.

Several studies on the accountability of state subsidies for political parties, such as Pinilih (2017), Juliestari (2018), Natasyah (2019), also Aprimulki and Halim (2021), mainly elaborat-

ed on the roles of political parties to increase their management's capacity to promote transparency and accountability of the state subsidies they receive. Slightly differently, Alkam (2018) applied the State Financial Audit Standard 2017 and the internal control integrated framework developed by the Committee of Sponsoring Organizations to portray and analyzed the phenomena. However, within those recurring debates, there is one recurring problem of interest, i.e., even though the cardinal principles and bedrock of public finance have been applied in the management of state subsidies for political parties, the audits of the political parties' financial reports that focus on utilizing state subsidies have failed to improve the accountability of the state subsidies, as indicated by repeated audit findings. Considering these conditions, an interesting question emerges: "Have the existing policies related to state subsidies for political parties considered the accountability of state subsidies allocated for political parties?"

This study differs from previous research in three respects. First, following Yang et al. (2015), who claim that in a policy related to governance, internal controls carried out by the relevant in-charge parties play an important role in supporting accountability, authors examine policies related to state subsidies for political parties from the internal control and roles of the relevant in-charge parties using the three lines model developed by the Institute of Internal Auditors. Second, authors enrich Alkam (2018) with a new analysis of the distribution of formal and material responsibilities of related parties in the governance of state subsidies for political parties. Third, authors identify gaps and disagreements in policies related to state subsidies for political parties, which affect the audit practices and the value created by the audits. Consequently, following up on the recommendation by the Indonesian Corruption Eradication Commission on the need to elevate the value of state subsidies for political parties, this study will help public policy-makers design and develop policies to build oversight mechanisms on utilizing state subsidies by political parties as intended in the National Strategy for Corruption Prevention.

Public Policy

Perception and literature defining public policy are very diverse. Kadji (2015) states that the essence of public policy lies in continuous intervention by the government for the benefit of society. Meanwhile, Cooper in Islamy (2017) defines public policy as the solution to public issues, which comprises problems (issues) and their alternative solutions. Furthermore, Stone in Islamy (2017) adds that there are five types of solutions, namely (1) inducements, i.e., positive or negative incentives; (2) rules, i.e., several rules to follow; (3) facts, i.e., factual information or data used to encourage community group to do things in a certain way; (4) rights, i.e., granting particular rights for community members; and (5) powers, i.e., power given to policy-makers to improve the quality of policies they make. There are various typologies of public policy. In the Indonesian context, Nugroho (2017) divided public policy into four: formal policy, convention, statements of public officials in public forums, and behavior of public officials. Nugroho (2017) added that formal policy includes legislations, laws, and regulations that drive, make dynamic, anticipate, and provide space for innovation.

State Subsidies for Political Parties

Article 34 Law Number 2 of 2011 established that a political party's financial sources encompass member contributions, private legal donations, and state subsidies. Van Biezen (2003) stated that state subsidies must be allocated for political parties based on specific measurement criteria and principles. In Indonesia, state subsidies for political parties are considered government financial assistance, equitably distributed in proportion to the votes obtained by qualifying political parties occupying parliament seats at the central and local level in the most recent legislative elections. As required, central and local governments annually allocate subsidies for political parties. The provisioning of these subsidies is the manifestation of government affairs in developing democracy in Indonesia. This also follows the state and local budget's philosophy, which is intended to facilitate the state's interests and activities to achieve the government's vision and mission, among others, to enforce a democratic climate (Sukma, 2021).

Agency Theory

According to agency theory, a relationship is defined as when the principal delegates work for the agent (Figure 1), and information asymmetry may be figured out (Ittonen, 2010). From the democratic perspective, the fundamental premise is that citizens are the principals, and governments are the agents that undertake tasks delegated by the principals (Smith & Bertozzi in Twinomurinzi & Ghartey-Tagoe, 2011). Consequently, citizens can obtain information on the government's operations and delivery; thus, it is important to measure whether the governments perform tasks as intended by the citizens.

Accountability

Lindberg (2009) stated that when the power to make a decision is transferred and possible information asymmetry exists, certain mechanisms to ensure the agent's accountability should be in place within a principal-agent relationship. Therefore, accountability entails the agent's
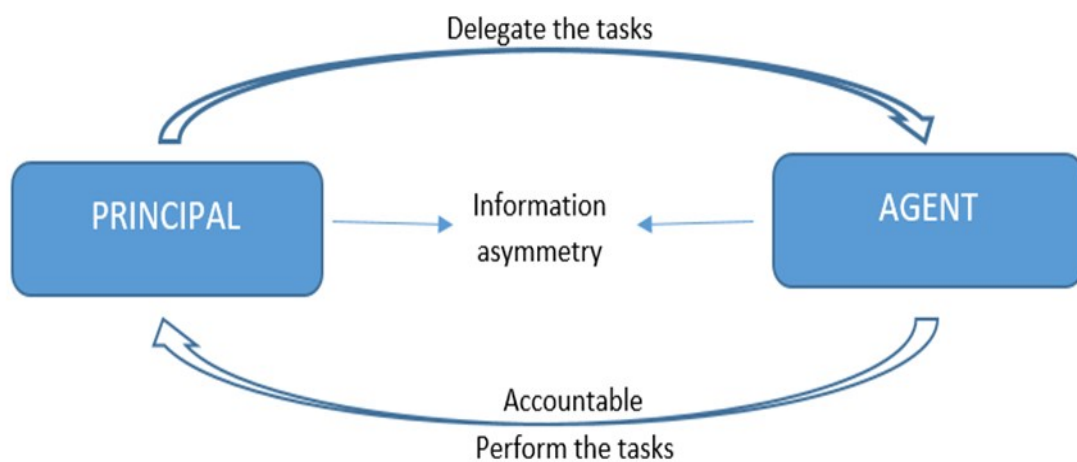
Figure 1. The Relationship between Principal and Agent
Source: Snippert et al.(2015)

responsibility to manage its resources and disclose activities related to utilizing the principal's resources (Mahmudi, 2010). Bovens (2007) defined accountability as the interconnection between an actor (such as a public institution or an agency) and a forum (such as a parliament or audit office), in which the actor must account for and justify its activities, the forum scrutinizes the clarification and justification, and the actor may face some consequences based on the scrutiny. Accordingly, Guerin et al. (2018) added that accountability should foster improvement and prevent repeated problems or failure. Lederman in Rahmatunnisa (2018) stated that accountability would reduce problems related to information asymmetry between citizens (the principal) and governments (agents), which, in turn, would lead to fewer corruption cases.

Bovens (2007) states that when accountability mechanisms enter the administrative area, it is known as administrative accountability. Administrative accountability is crucial for executive public agencies, involving independent and external administrative and financial supervision and control (Bovens, 2007). Furthermore, Cendon (1999) posited that administrative accountability comprised vertical and horizontal dimensions. The vertical dimension connects inferior administrative positions to the more superior ones and exercises a set of internal mechanisms or procedures of control and supervision. Meanwhile, the horizontal dimension associates individual administrators and public administration (agents) with the citizens (principal) as real users or subjects of the service and with external control and supervision organs created for this goal, such as audit agencies and oversight bodies. The characteristics of administrative accountability are presented in Table 2.

Furthermore, administrative accountability typically comprises regular financial and administrative examinations that executive public agencies carry out because it is required by specific laws and regulations (Bovens, 2007). One of the administrative requirements to allow government structure and/or system to run optimally is by requiring public institutions using public money to be transparent with their spending by providing periodic statements that can

Table 2. Characteristics of Administrative Accountability

Points	Characteristics
Fundamental working principle	Compliance with legal standards (laws, regulations, rules, procedures)
Internal accountability (accountable to whom)	Superior administrative/political authority Superior administrative organs
External accountability (accountable to whom)	External control and supervision organs Citizens Court
Subject matter	Procedures and forms followed by administrative activities
Criteria	Formal/legal criteria (to examine compliance)
Mechanisms	Internal control and supervision External control and supervision Administrative requirement Judicial strategy
Consequences	Revision of administrative policies Recognition or sanction for personnel involved Redress for citizens

Source: Cendon (1999)

then be scrutinized, which is required for accountability (Maphunye & Motubatse, 2019).

Internal Control

Public spending can also be delegated to entities/agencies other than the government. Sevilla (2005) noted that the entities/agencies receiving a delegation of public spending should be responsible for managing the spending, including designing and implementing a sufficient internal control system. These entities/agencies are also subject to government and external controls. However, Sevilla (2005), noting that challenges regarding accountability would emerge, suggested that the government should overcome the challenges by maintaining a sufficient level of control over the entities/agencies receiving the delegation as well as ensuring that the entities/agencies would be accountable to the parent ministry/government institution. However, the Institute of Internal Auditors (IIA) has prepared three lines model to revamp the three lines of defense in 2020, as seen in Figure 2. This model determines the tasks of numerous parties within an organization and their cooperation to achieve sound governance and risk management.

As illustrated in Figure 2, management serves the first- and second-line roles for achieving organizational goals. First-line roles comprise (1) leading and directing actions (including risk management) and deploying resources to achieve organizational goals, developing and maintaining adequate structures and processes for operational and risk management (including internal control) and (2) ensuring compliance with laws, regulations, and ethical values. In addition, management runs the second-line roles to supply supporting competence, monitoring, and support, challenging the risk management process. Management also provides inquiries and reports on the sufficiency and efficacy of risk management and internal controls. These second-line roles exercise sufficient independence from daily operations, although they are not as independent as the internal audit function in the third line.

Internal audit plays a third-line role in supporting these tasks and serves the governing
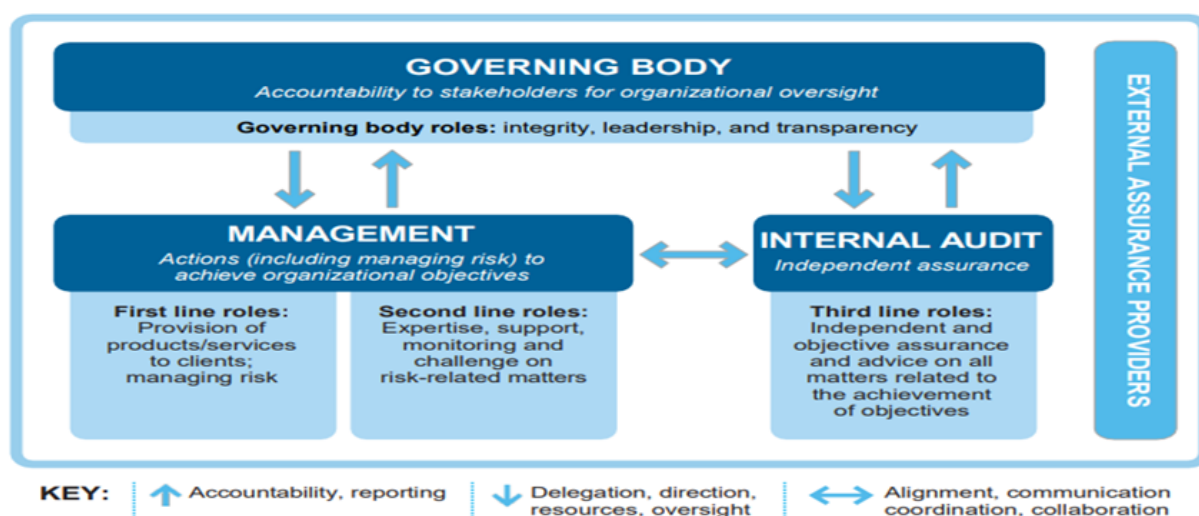
Figure 2. The IIA's Three Lines Model
Source: (IIA, 2020)

body with impartial advice and assurance on governance and risk management sufficiency and efficacy. Hadinata (2017) added that an internal audit's core function is to ensure that risk management activities have been running effectively to guarantee achieving organizational goals. That is, an internal audit maintains the accountability of risk management carried out by management. Meanwhile, external assurance providers are assigned to meet the expectations of legislative and regulatory provisions to safeguard stakeholder interests. Consequently, external assurance providers should not intervene in the internal control system but examine whether the internal control systems/procedures have been adequately designed and implemented. In this case, the third line and external audit provider ensure that the administration of public funding reflects the public interest (Wicaksono, 2015).

Audit and Three-party Relationship

Ittonen (2010) argued that control and auditing played significant roles in ensuring the accountability system's effectiveness. In this case, a country's Supreme Audit Institution (SAI), an independent audit agency, can carry out external control and be a reliable source of trusted and objective information (Berliner & Wehner, 2022). SAI can also bridge the gap between the public policies formulated by the government and their implementation by the delegated entities/agencies (Santiso, 2015). In addition, by relying on the internal control system designed and implemented by the entity, which is intended to ensure compliance with legal policies, SAI can improve the effectiveness of its audit (Wescott in Santiso, 2015). In this case, through an audit, SAI should ensure that the entity's internal controls, manuals, procedures, and policies are adequate, effective, and comply with stipulated requirements.

One important element of audit engagement in the public sector is the three-party relationship, which typically includes the auditors, the responsible party, and the intended users (INTOSAI, 2019b). The auditors have the responsibility to acquire appropriate and adequate audit evidence so that they can conclude to increase the intended user(s)' degree of confidence about the evaluation or measurement of a subject matter toward criteria. The responsible party refers to the executive branch of government, whether at the central or local level, and/or its underlying strata of public entities and officials which account for public fund management. The responsible party runs its authority under the legislature's control. Meanwhile, the intended user(s) are persons for whom the audit report is concerned. They can be parliament, government, and other parties with specific interests in the audit reports. The relationship among those three parties is illustrated in Figure 3.

RESEARCH METHOD

This normative legal research study uses a statutory and case approach. Normative legal research examines written laws from various aspects, including their philosophy, scope, material, consistency, articles, and legal language (Purwati, 2020). Furthermore, Ibrahim (2006) states that the statutory approach uses laws and legislation as the basis for conducting re-
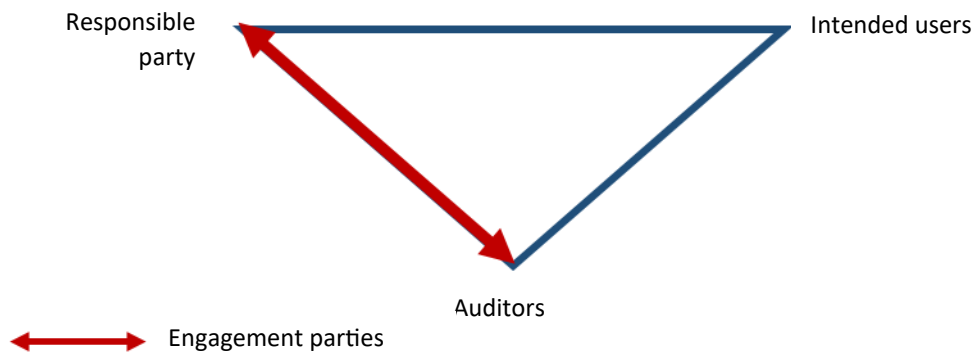
Figure 3. The Three-Party Relationship
Source: (BPK, 2017)

search. Meanwhile, the case approach is mainly applied by investigating accountability cases related to state subsidies for political parties.

According to Purwati (2020), normative legal research employs secondary data. Thus, this study includes secondary data comprising primary and secondary legal materials. Primary legal materials are laws and regulations that are authoritative. This study uses Law Number 17 of 2003, Law Number 1 of 2004, Law Number 15 of 2004, Law Number 2 of 2008, Law Number 2 of 2011, Government Regulation Number 60 of 2008, Government Regulation Number 5 of 2009, Government Regulation Number 83 of 2012, Government Regulation Number 1 of 2018, Minister of Home Affairs Regulation Number 36 of 2018, Minister of Home Affairs Regulation Number 78 of 2020, and Minister of Finance Regulation Number 228 of 2016 as primary legal materials. Secondary legal materials are related documents that support and strengthen primary legal materials. This study uses articles from reputable scientific journals, reports, books, and other pertinent sources relevant to the case.

Furthermore, Purwati (2020) added that normative legal research methods comprised setting the criteria, identifying norms and other relevant sources of literature, collecting norms and other relevant literature, organizing the collected norms and literature, also conducting analysis. Establishing criteria is important for reducing and narrowing the scope of the data. In this study, laws, regulations, and publications related to the accountability of state finance and state subsidies as well as internal controls, were the criteria for data selection. Once settled, related norms and literature were identified and collected. The primary legal materials were acquired from the BPK regulatory database and retrieved from the https:// peraturan.bpk.go.id/page. The secondary legal materials were obtained from the internet and a literature review. Having been collected, the data were organized in the framework and systematically analyzed. The meta-analysis technique was undertaken to analyze several norms, literature, and previous studies relevant to the research subject. Donthu et al. (2021) stated that meta-analysis could be employed when the pivotal analysis focused on the link of the reviewed documents while also trying to uncover gaps or disagreements among the available documents or resources. The interpretations are then presented in the narrative description to answer the questions about the accountability of the state subsidies for political parties.

RESULT AND DISCUSSION

Understanding Policies on State Subsidies for Political Parties

The Government of Indonesia has allocated subsidies for political parties since the enactment of Law Number 3 of 1975, which regulates political parties and Golongan Karya. However, political parties spending that fails to reflect their main functions, as well as issues related to political parties' lack of financial transparency and accountability, have urged the Government of Indonesia to re-control and re-manage these state subsidies through the reformulation and revision of pre-existing formal policies, particularly regulations (see Appendix 1). As stipulated in the available policies, state subsidies for political parties are prioritized for political education, including seminars, workshops, interactive dialogues, and other political party meeting activities related to their roles and functions. The subsidies can also be used for political party secretariat operations, including administration, power and services subscription, data and archive maintenance, also office equipment maintenance. Moreover, the Government Regulation Number 5 of 2009 and its amendments and the Minister of Home Affairs Regulation Number 36 of 2018 imply that state subsidies for political parties-related policies must comply with four requirements, namely 1) conformity of the bank account used to receive the state subsidies with the political party's official bank account, 2) accuracy of the amount of the state subsidies received and reported, 3) completeness and validity of disbursement transaction documents, and 4) conformity of the state subsidies utilization priority.

Appendix 1 shows that policies on state subsidies for political parties have undergone several changes, particularly the derivative provisions in government regulation and minister regulation level. The leading adjustments relate to the amount of state subsidies and their utilization priority. In this case, Government Regulation Number 1 of 2018 has changed the utilization of state subsidies from at least 60% for political education to be prioritized for political education. This unclear setting leads to public questioning the possibility of achieving the goals of political education for parties' cadres and Indonesia. To date, public distrust in political parties' cadres indicates the failure of political education goals.

The formal public policies on the state subsidies for political parties presented in Appendix 1 represent government intervention, particularly to encourage a democratic climate and create healthy democracy in Indonesia. In this case, to achieve the intended goals, the government offers three alternative solutions: inducement, rules, and rights. Law Number 2 of 2008, Government Regulation Number 5 of 2009, Government Regulation Number 1 of 2018, and Ministry of Home Affairs Regulation Number 36 of 2018 provide a negative incentive, i.e., administrative sanction, for political parties late to submit their report to BPK. Meanwhile, other than Ministry of Home Affairs Regulation Number 78 of 2020, the policies in Appendix 1 include rules on managing and accounting for utilizing state subsidies. Furthermore, Law Number 2 of 2008, Government Regulation Number 5 of 2009, Ministry of Home Affairs Regulation Number 36 of 2018, and Ministry of Home Affairs Regulation Number 78 of 2020

explain the rights of political parties regarding receiving state subsidies.

State subsidies for political parties reflect the philosophy that the government should maintain fairness in a democratic system and that political parties play significant roles in political life. On the contrary, Article 1 point 1 Law Number 17 of 2003 on the State Finance specifies the state's rights and obligations that are worth money, as well as each thing in the form of goods or money used as state property due to the implementation of those rights and obligations as state finance. Furthermore, Article 2 letter g Law Number 17 of 2003 stipulates that state finance encompasses state/local assets administered separately or by other parties in the form of money, goods, securities, receivables, and other rights that have monetary value, including separated assets in state/local owned companies. Thus, subsidies for political parties are included in state finance's scope and can be defined as public money managed by an independent party (i.e., a political party), which is used to support achieving the government's vision and mission regarding the enforcement of the Indonesian democratic system.

Considering the status of state subsidies for political parties, the principal–agent relationship takes place within the framework of the citizen–government relationship. Citizens have the right to receive information on how government agencies operate programs or policies and deliver related services to develop Indonesian democracy, particularly using state subsidies for political parties financed by the state. Meanwhile, the government performs tasks to develop Indonesian democracy as intended by the citizens; in this case, political parties and society are the target groups. However, many different perceptions come from lawmakers and regulators regarding political parties' position in the principal–agent relationship. This is because political parties are private organizations separated from the government, yet they compete in general elections to obtain and preserve power over it (Reed et al., 2021). Therefore, some see that political parties are part of the principal–agent relationship.

Gaps and Disagreements of Policy Content Regarding Accountability Between State Subsidies for Political Parties and State Finance Policy Framework

As state subsidies for political parties are within the scope of state finance, their governance and accountability are subject to the jurisdiction of three laws, namely Law Number 17 of 2003 on the State Finance, Law Number 1 of 2004 on the State Treasury, and Law Number 15 of 2004 on the Audit of State Finance Management and Accountability. Under these provisions, the management of state subsidies for political party rests with the responsible government agencies/local apparatuses, i.e., the Ministry of Home Affairs at the central level and/or the National Unity and Politics Agency at the local level. Meanwhile, the eligible political parties are beneficiaries of the state subsidies and, thus, must utilize the subsidies as the provisions intend.

Therefore, when referring to a three-party relationship, within the context of audits of political parties' financial reports on utilizing state subsidies, the audit engagement should entail BPK's auditors as the auditors, the executive branch of government both at the central or local

level, i.e., Minister of Home Affairs at the central level or Head of the National Unity and Politics Agency at the local level, as the responsible parties, as well as head of government and parliament as the intended users. However, under current practices, which are carried out based on the available policies on state subsidies for political parties, the responsible party is political parties, while the Minister of Home Affairs and/or Head of the National Unity and Politics Agency serve as intended users. This shows disagreement between existing policies on state subsidies for political parties with policies on state finance.

Moreover, dealing with vertical accountability, even though Article 14 paragraph (3) letter h Minister of Home Affairs Regulation Number 36 of 2018 has requested the Head of Political Parties to prepare a statement of responsibility in addition to Articles 30-31 Minister of Home Affairs Number 36 of 2008 which have requested political parties to formally and materially account for the state subsidies they receive by preparing financial reports focusing on utilizing state subsidies, there is no explicit explanation about to whom the Head of Political Parties should be accountable for utilizing state subsidies within the internal party as well as the political party's internal control and supervision mechanisms to account for. Furthermore, there is no single policy related to state subsidies for political parties that deal with whom the authorized parties in the Ministry of Home Affairs and National Unity and Politics Agency should be accountable for managing state subsidies for political parties within the government structure. However, the provisions on vertical accountability can be found in policies related to state finance, for example, Article 18 paragraph (2) letter a Law Number 1 of 2004. This shows a gap in the vertical accountability of state subsidies for political parties and policies on state finance. In addition, public institutions' internal control and supervision mechanisms are mostly defined in Government Regulation Number 60 of 2008.

There have also been several provisions regarding horizontal accountability, such as those found in Article 34A Law Number 2 of 2011, which deals with political parties' responsibility for preparing financial reports focusing on the utilization of state subsidies and BPK's responsibility to audit the report as well as Articles 13-14 Government Regulation Number 5 of 2009 which regulates political parties' responsibility to deliver the audited report to Government, Governor, Regent, or Mayor with regard to their authority. Nevertheless, no single policy on state subsidies for political parties regulates the government's horizontal accountability for managing state subsidies for political parties. Thus, there is a gap in horizontal accountability on the government's responsibility on this issue.

Furthermore, considering the Government of Indonesia's political culture, the appointed oversight agencies should be independent and have a clear mandate to provide independent assurance and enforce existing regulations. Law Number 15 of 2004 and Law Number 2 of 2008 (amended by Law Number 2 of 2011) establish that mandate and authority for BPK to audit state finances, including state subsidies for political parties. However, there is no single policy profile governing state subsidies for political parties that regulates the role of the Government Internal Supervisory Apparatus (Aparat Pengawas Internal Pemerintah, APIP) in

this oversight function, underscoring the gap in current policies on APIP roles and responsibilities for ensuring accountability of state subsidies for political parties.

In addition, although BPK has been required by the law to audit political parties' financial reports focusing on utilizing state subsidies, there are no imposed sanctions on the political parties' malfeasances or for their failure to fulfill their obligations to utilize state subsidies as intended. As seen in Appendix 1, the available policies only regulate the administrative sanction for political parties late in submitting their reports to BPK. Regardless of the audit results and conclusions, the government should provide subsidies to political parties as long as they have submitted the report to be audited on time. This shows that the government has not paid serious attention to accountability issues, as the audit is not a key instrument for improving the governance of state subsidies for political parties.

Moreover, the administrative sanction for political parties is biased and has multiple interpretations. As the available policies imply, BPK does not conduct an audit in the relevant year when a political party is late submitting its report. Thus, political parties will not be able to meet the requirement to request state subsidies. Consequently, as a penalty, political parties will lose their right to receive state subsidies in the relevant fiscal year. However, Article 16 paragraph (1) Government Regulation Number 1 of 2018 and Article 33 paragraph (1) Minister of Home Affairs Regulation Number 36 of 2018 states that the administrative sanction will be given to the political party in the relevant fiscal year until BPK audits the political party's report.

Furthermore, paragraph (2) of those policies add that the audit will be carried out the following year. Thus, political parties assume they are still eligible to receive the state subsidies allocated in the previous years by the Ministry of Home Affairs and/or National Unity and Politics Agency in the year they submit their report to BPK. Hence, they submit their reports in the following fiscal year to BPK to be audited and use the audited reports to meet the requirement to request state subsidies (BPK RI, 2020a). However, the National Unity and Politics Agency argues that state subsidies have become political parties' right that should be given for their functions. Accordingly, the National Unity and Politics Agency would still transfer the state subsidies to respective political parties even though they were late submitting their report to BPK (BPK RI, 2020a). Thus, the bias has made administrative sanctions have failed to become a key instrument for disciplining the political parties. In contrast, even though the EU has no standards for political financing, they have strict reporting requirements and technical means for reporting and disclosing the funding received by political parties (Reed et al., 2021).

After Distributing State Subsidies for Political Parties, what is the Ministry of Home Affairs and National Unity and Politics Agency's Responsibility?

According to Article 18 paragraph (2) letter a Law Number 1 of 2004 within the context of

the governance of state subsidies for political parties, the Ministry of Home Affairs and/or National Unity and Politics Agency has the authority to examine the material truth and the validity of state subsidies for political parties' disbursement documents. Furthermore, Article 18 paragraph (3) assumes the material truth lies in the government officials who sign/ratify any documents used as the basis of government expenditure. Government officials are also deemed responsible for any consequences arising from using the documents.

Furthermore, Article 54 Law Number 1 of 2004 regulates the formal and material responsibilities of the Budget User and Proxy of Budget User on the realization of budget policies that are within their jurisdiction. Accordingly, it can be said that the Ministry of Home Affairs and/or National Unity and Politics Agency should be formally and materially responsible for the comprehensive management of any state/local budget under their authority, including state subsidies for political parties. In other words, problems in the design, distribution, utilization, and accountability of state subsidies for political parties should be within the Ministry of Home Affairs and/or National Unity and Politics Agency's control since managing state subsidies for political parties and their related issues have been included in the Ministry of Home Affairs and/or National Unity and Politics Agency's authority.

However, under the current policies, the Ministry of Home Affairs and/or National Unity and Politics Agency only serves the administrative function. They pay no heed to the formal and material responsibilities to ensure the validity of how state subsidies for political parties are used. Existing policies do not cover the formal and material responsibilities that should be fulfilled by the Ministry of Home Affairs and/or National Unity and Politics Agency for state subsidies for political parties. Instead of regulating the formal and material responsibilities of the Ministry of Home Affairs and/or National Unity and Politics Agency, Article 14 paragraph (3) letter h as well as Article 30 paragraph (1) Minister of Home Affairs Regulation Number 36 of 2018 have even shifted the formal and material responsibilities to political parties. Nonetheless, this Minister of Home Affairs Regulation also does not provide a clear definition and further explanation of those formal and material responsibilities, and thus frequently neglected. In this case, setting down formal and material responsibilities only to political parties and ignoring the Ministry of Home Affairs and/or National Unity and Politics Agency's roles create a gap of control that no one in the government has the authority to detect any noncompliance of the utilization of state subsidies for political parties. Besides, the absence of a clear definition of the head of political parties' tasks to accomplish their formal and material responsibility may result in weak accountability.

Internal Control Issues in the Governance of State Subsidies for Political Parties

Preparing sufficient control structures is important for public spending; thus, each level of government should promote and develop its control system (Sevilla, 2005). In the context of preparing financial statements, Article 55 paragraph (4) jo. Article 56 paragraph (4) Law Number 1 of 2004 states that ministers/heads of local governments, as Budget User/Proxy of

Budget User, should provide a statement on the adequacy of the internal control system over the state/local budget management. This article also requires that in-charge parties employ financial accounting based on government accounting standards. Furthermore, Article 2 Government Regulation Number 60 of 2008 requires ministers/heads of institutions/heads of local governments to establish internal controls on government activities so that state finance management is carried out efficiently, effectively, and accountably. In other words, internal control is mandatory in all government-related activities. Accordingly, the government must ensure that state and local budgets under their control are managed and comply with applicable laws and regulations.

Considering the three lines model, in the framework of the governance of state subsidies for political parties, the Ministry of Home Affairs and/or National Unity and Politics Agency exercises management functions and serves first-line roles. APIP serves a third-line function, and BPK provides external assurance. No second-line role is available in the governance state subsidies for political parties. Only a few government entities have a second-line function, especially in local government governance.

As the first line, the Ministry of Home Affairs and/or National Unity and Politics Agency should provide sufficient resources to manage state subsidies for political parties, ensure the risk management of state subsidies for political parties, ensure the state subsidies for political parties meet their intended goals and comply with applicable laws and regulations, and design and implement internal control of the management of state subsidies for political parties. Furthermore, APIP, as the third-liner, provides objective assurance and advice regarding the sufficiency and efficacy of the governance of state subsidies for political parties, risk management, and internal control systems/procedures designed and implemented by the Ministry of Home Affairs and/or National Unity and Politics Agency. Thus, the Ministry of Home Affairs and/or National Unity and Politics Agency (serving as first-liners) and APIP (serving as third-liners) should ensure that (1) political parties use their state subsidies in compliance with applicable laws and regulations, (2) political parties have met the intended objectives of state subsidies for political parties-related policies, and (3) party officials have prepared financial reports on the utilization of state subsidies based on the requirements before the report is submitted to BPK to be audited.

The available policies reveal the absence of those issues. As mentioned, the Ministry of Home Affairs and/or National Unity and Politics Agency only play administrative roles. They did not control whether the state subsidies for political parties were used according to the intended design and goals or whether preparing the report complied with the stipulated regulations. Besides violating Law Number 1 of 2004, this malfeasance results in inadequate risk management, potentially leading to repeated problems in the management and governance of state subsidies for political parties. Table 3 shows that although fluctuating, modifications in the audit conclusions are found in almost 50% of the audited reports and repeat from year to year.

In contrast, because the Minister of Home Affairs Regulation Number 36 of 2018 has made the political party heads responsible for the governance of state subsidies for political parties under their jurisdiction, the Ministry of Home Affairs and/or National Unity and Politics Agency should be interested in ensuring that the political parties have adequate internal controls to ensure the subsidies are used in compliance with the applicable provisions. This should be viewed by the Ministry of Home Affairs and/or National Unity and Politics Agency as an additional control to ensure compliance instead of replacing the Ministry of Home Affairs and/or National Unity and Politics Agency's responsibility regarding internal control.

Furthermore, the responsibilities of the heads of political parties and the direct submission of political parties' financial reports on their utilization of state subsidies to BPK for an audit should not necessarily remove the government's and APIP's obligation to carry out control and supervision functions. The Ministry of Home Affairs and/or National Unity and Politics Agency and APIP still play important roles in ensuring compliance and governance of the state subsidies applied by political parties and related government entities. When the government and APIP run their roles in the first and third roles, they become BPK's counterparts in audit practices and restore the three-party relationship.

In comparison, the Minister of Finance Regulation Number 228 of 2016 on the Amendment of the Minister of Finance Regulation Number 254 of 2015 on Social Assistance Spending in Ministries/Institutions requires beneficiaries of government social assistance programs to prepare accountability reports. Article 40 states that the Budget User has the authority to establish general guidance on the distribution of social assistance programs, while the proxy of the Budget User has the authority to establish technical guidance on the management of social assistance programs. Moreover, this regulation also requires beneficiaries of social assistance programs to deliver accountability reports to the Commitment Making Officials, who are responsible for checking and examining those accountability reports' compliance with the technical guidance on social assistance spending and cooperation agreement. This mechanism reflects the best practices and is consistent with the three lines model, which, unfortunately, has been missing in the policies related to state subsidies for political parties.

Moreover, the applicable policies on state finance have implicitly required the Minister of

Table 3. Audit Conclusion at Central and Local Level During 2019–2021

Year	Number Audited Reports	Audit Conclusion							
		Central Level				Local Level			
		Comply	Comply with Exception	Not Comply	Disclaimer	Comply	Comply with Exception	Not Comply	Disclaimer
2019	4,925	10	-	-	-	2,610	1,964	148	193
2020	5,087	10	-	-	-	2,819	2,119	98	41
2021	4,980	8	1	-	-	3,109	1,743	69	50

Source: *BPK (2019), BPK (2020a), BPK (2021)*

Home Affairs and/or Head of the National Unity and Politics Agency to implement adequate internal control systems for managing state finances within their jurisdiction, including state subsidies for political parties. The sufficiency of this internal control should be examined by APIP, which serves the internal audit function, before any accountability reports are submitted to BPK. Unfortunately, these two important supervisory and control functions from the first and third lines are absent in managing state subsidies for political parties.

In contrast, as part of the audit standards, the auditors should understand the audited entity environment and the adequacy of internal controls to design and implement the audit effectively. Accordingly, the auditors should test the control design and examine its effectiveness to meet the control objectives (BPK RI, 2017). The absence of internal controls design and implementation makes the auditors unable to test the internal control systems/ procedures to determine whether the political parties' reports are prepared in compliance with the applicable laws and regulations. This arrangement put BPK at greater risk regarding compliance with utilizing state subsidies for political parties.

Problems Related to Direct Report Submission and Delay in the Value Creation of BPK's Audit

Article 34A Law Number 2 of 2011 mandates political parties to directly deliver their financial reports focusing on utilizing state subsidies to BPK to be audited within a given time as stipulated in the applicable regulations. After being audited, BPK delivers the audit reports to political parties respectively. Political parties, later, as regulated in the Minister of Home Affairs Regulation Number 36 of 2018, submit the audited version of the report to the government. Without considering the audit results, this audited report becomes one of many administrative requirements for applying state subsidies for political parties for the coming year.

This direct submission of the report from political parties to BPK happens due to misconduct in a three-party relationship. This condition may lead to two problems. First, the public may fail to understand that although being distributed to eligible political parties, government, both centrally and locally, is responsible for the money they delegate. Besides, the role of APIP and BPK will be biased in this issue due to the absence of policies on the role of APIP in the state subsidies for political parties' management cycle. Second, since the regulation has required political parties to deliver their financial reports focusing on utilizing state subsidies directly to BPK for an audit, the officials of some political parties often directly consult their problems when preparing the report to BPK's auditors (BPK RI, 2020a). The direct relationship between political parties to BPK and the absence of three lines roles at the operational level have consequently put BPK in the management function (i.e., to provide support and expertise on the relevant matters) and the internal audit function.

Compared to other government spending, the amount of state subsidies for political parties is quantitatively immaterial, when, in fact, Law Number 2 of 2008 and its amendment

has specifically required BPK to conduct an audit on the issue, making state subsidies for political parties qualitatively material. It means the government has emphasized state subsidies for political parties as an important aspect of developing a healthy democracy. However, this philosophy has yet to be reflected in the derivative policies. This, among others, can be seen in the available policies that only put audited reports as one of many administrative requirements that should be submitted when proposing state subsidies for political parties. Furthermore, the policies also neglect the audit results and provide no sanction for those who do not comply and have a disclaimer from BPK. The administrative sanctions are also frequently ignored because local governments have allocated state subsidies for political parties in their local budget (BPK RI, 2020a).

Notwithstanding the applicable regulations that require the BPK to audit political parties' financial reports focusing on utilizing state subsidies, abandoning the audit conclusion and results and the absence of consequences for noncompliance means nothing for improvement. Thus, the audits carried out annually have no improvement effect on political parties, as shown in the repeated audit findings during an audit assignment. In contrast, INTOSAI P-12 has stated that SAIs' existence is expected to provide value and benefit for the lives of citizens (INTOSAI, 2019a). Accordingly, the delay in creating value from the audits carried out by BPK contradicts INTOSAI P-12 expectations. A very different practice is shown in South Africa, when the Auditor General, at any time, can carry out audits on political parties' financial books, account records, and financial statements. Based on the audit results, the Auditor General of South Africa can provide recommendations for the South African General Election Commission to impose sanctions on political parties, such as fines, imprisonment, and the determination of government financial support (Surbakti, 2015).

CONCLUSION

The Indonesian government has paid serious attention to the role of political parties in supporting the growth of democracy. Accordingly, state subsidies are made for eligible political parties under the current laws and regulations. Policies have also been established for governing the management of political parties and the state subsidies they have received. However, several problems are found in those regulatory frameworks, particularly related to accountability of state subsidies for political parties.

First, there is no clear policy governing the vertical and horizontal accountabilities as well as distribution or segregation of duties regarding internal control and supervision mechanisms. Neither are there control and supervision mechanisms by the government and APIP to ensure that state subsidies for political parties have met the intended goals. Second, there is no formal or material responsibility from the Ministry of Home Affairs and/or National Unity and Politics Agency. Although the Minister of Home Affairs Regulation Number 36 of 2018 has required the heads of political parties to be responsible for the utilization of state subsidies for political parties, the government (i.e., Ministry of Home Affairs and/or National Uni-

ty and Politics Agency) should have risk management and internal controls to ensure that there are no inadequate processes, unexpected events, or control breakdowns in the management of state subsidies for political parties, in the Ministry of Home Affairs and/or National Unity and Politics Agency and in the political parties. Third, the policies mandating political parties to submit their reports to BPK for audit purposes directly have, in contrast, provided BPK with a greater risk. Fourth, the absence of clarity of roles of respective in-charge parties has led to ineffective operations for the Ministry of Home Affairs and/or National Unity and Politics Agency, political parties, and BPK. Fifth, since the audit results only serve as one of the requirements for political parties to obtain state subsidies in the forthcoming year, they have a minimal impact on improving the management of state subsidies for political parties.

However, good governance of state subsidies for political parties is undoubtedly possible. Consequently, considering the conditions mentioned above, government involvement in managing state subsidies for political parties should be improved through governance. Corrective actions for accountability and transparency should support these efforts. Revision of policy frameworks to accommodate the gaps affecting the management of state subsidies for political parties should be carried out. Additionally, employing proportionate, enforceable, and dissuasive sanctions and following up on audit results when BPK finds irregularities/noncompliance are also important for ensuing political parties' compliance.

Most importantly, the Indonesian government should institutionalize policies and systems that enable better transparency, accountability, and public scrutiny. In this case, the Ministry of Home Affairs and/or National Unity and Politics Agency should play roles to (1) ensure and evaluate whether the priority of state subsidies for political parties has been used for political education, (2) review the compliance/conformity of political parties' report with the applicable law and regulations, as well as (3) support political parties so that political parties can comply with the available provisions and regulations. Furthermore, by serving in first and second-line roles, the Ministry of Home Affairs and/or National Unity and Politics Agency can increase coaching, dialogue, and technical assistance regarding reporting systems and mechanisms. Disseminating and advocating the stipulated policies to political party officials can also be carried out periodically to provide parties with relevant knowledge and expertise. The government should also facilitate political parties' adherence to the available policies, regularly appraise monitoring and oversight systems and mechanisms, and ensure efficient, effective, and independent oversight functions.

Finally, a review of Article 34A Law Number 2 of 2011 can be carried out to put independent and accountable audit practices back in place. The review can include (1) the delivery of political parties' financial reports focusing on state subsidies (i.e., the report should be delivered to the Ministry of Home Affairs and/or National Unity and Politics Agency, not directly to BPK), (2) internal control systems/procedures by first, second, and third-line roles, (3) revocation of the clause stating that the audit reports only serve as an administrative requirement for disbursing state subsidies for political parties, and (4) BPK's independence to ar-

range the audit timeline and scope.

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APPENDICES

Appendix 1. Policy Profile of State Subsidies for Political Parties: Law

Policy Level	Details of Arrangement
Law Number 2 of 2008	
Article 12 letter k	The right of political parties to receive state subsidies
Article 13 letter i	Political parties' responsibility to submit financial reports focusing on utilizing state subsidies to the government after being audited by BPK
Article 34	State subsidies as one of the political parties' sources of funds Definition of state subsidies for political parties
Article 47	The Administrative sanction for political parties for being late to submit financial reports focusing on utilizing state subsidies
Law Number 2 of 2011	
Article 34A	- Political parties' responsibility to submit financial reports focusing on utilizing state subsidies to BPK to be audited - BPK's mandate to audit the report and deliver the audited report back to the respective political parties - Audit timeline for auditing the report

Appendix 2. Policy Profile of State Subsidies for Political Parties: Regulations

Policy Level	Details of Arrangement
Government Regulation Number 5 of 2009	- Provisioning of state subsidies for eligible political parties - Allocation of state subsidies for political parties - Submission and distribution of state subsidies for political parties - Utilization of state subsidies for political parties - Financial reports focusing on utilizing state subsidies - Administrative sanction for political parties for being late to submit financial reports focusing on utilizing state subsidies to be audited by BPK
Government Regulation Number 83 of 2012	- Policy change regarding the minimum percentage of utilization of state subsidies for political parties - Political parties' responsibility to submit financial reports focusing on utilizing state subsidies to BPK to be audited - Audit timeline for auditing the report - BPK's responsibility is to prepare a manual related to the report submission from the political parties to BPK and vice versa
Government Regulation Number 1 of 2018	- The changes in the allocation of state subsidies for political parties - The changes in the policy related to the priority of the utilization of state subsidies for political parties - The adjustment related to administrative sanction for political parties that are late to submit financial reports focusing on utilizing state subsidies (i.e., the administrative sanction is applied until BPK audits the report)
Minister of Home Affairs Regulation Number 36 of 2018	- Source of state subsidies for political parties - Procedures for calculating, budgeting, orderly administering the submission requests, distributing, and reporting the utilization of state subsidies for political parties accountably - Roles of Minister of Home Affairs, Directorate General of Politics and General Administration of Ministry of Home Affairs, Minister of Finance, head of local governments, political party leaders, political party administrators, as well as Team established by the Ministry of Home Affairs for verifying the completeness of administration requirements for requesting state subsidies for political parties - The roles of financial management officers at the local level as well as BPK in the governance of state subsidies for political parties - Administrative sanction for political parties for being late to submit financial reports focusing on utilizing state subsidies to be audited by BPK
Minister of Home Affairs Regulation Number 78 of 2020	The adjustment in the utilization of state subsidies for political parties, particularly those related to political education due to the COVID-19 pandemic. This regulation also allows political parties to provide medical supplies or equipment for political parties' members and communities.

Local government internal auditor stress and burnout: Supervisor support as a moderating variable

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ABSTRACT

This study aims to empirically examine the direct relationship between stress arousal and burnout and the moderating effect of supervisor support on the relationship between the two dimensions experienced by local government internal auditors. This study uses an online survey method with a questionnaire. The sample for this study was 155 local government internal auditors from 17 City/Regency Government Inspectorate Provinces from Southern Sumatra. Based on the data analysis using SEM-PLS, the results of this study indicate that stress arousal is positively related to emotional exhaustion and depersonalization but not to reduced personal accomplishment. The results of this study also indicate that supervisor support is able to moderate the relationship between stress arousal and burnout. Supervisor support can reduce the effects of stress arousal on emotional exhaustion and depersonalization experienced by local government internal auditors and strengthen the effects of stress on personal accomplishment. Theoretically, this study supports the conservation of resources theory, which shows that supervisor support is a resource that acts as an effective coping strategy in reducing the effects of stress arousal and preventing burnout. The results also provide insights for policymakers to develop interventions for communication and monitoring based on personal conditions to improve interpersonal relations between supervisors and subordinates.

KEYWORDS:
Stress arousal; supervisor support; internal auditor; local government

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INTRODUCTION

A previous study has shown that internal auditors experience burnout (Fogarty & Kalbers, 2006; Kalbers & Fogarty, 2005). The term burnout was first introduced by Freudenberger (1974) as a metaphor to describe the phenomenon he observed among volunteers who worked with him in alternative care settings (Janssen et al., 1999). The literature conceptualizes burnout as a negative psychological response to job demands and/or interpersonal stressors (Almer & Kaplan, 2002; Cordes & Dougherty, 1993). Most studies divide burnout into three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment (Cordes & Dougherty, 1993). Maslach (1993), as cited by Brouwers et al. (2001), defined burnout as a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that could occur among individuals who work with others in specific capacities. Emotional exhaustion refers to feeling excessive and depleted emotional resources (Janssen et al., 1999). Depersonalization refers to a negative, heartless, overly detached, and indifferent response to others (Janssen et al., 1999; Smith & Emerson, 2017). Reduced personal accomplishment refers to decreasing one's feelings about competence and achieving success at work (Janssen et al., 1999).

Previous studies have indicated that the burnout condition experienced by auditors has a negative effect on job outcomes. Alarcon (2011) conducted a meta-analysis to assess burnout, which showed that turnover intention was positively related to all burnout dimensions, while job satisfaction and organizational commitment were negatively related to burnout dimensions. Fogarty and Kalbers (2006) conducted a study on the negative impact of burnout on job outcomes for internal auditors. The results indicate that internal auditors who experience high emotional exhaustion and reduced personal accomplishment tend to have lower job satisfaction. Depersonalization and reduced personal accomplishment are, in turn, negatively related to affective commitment, and internal auditors who experience reduced personal accomplishment have lower job performance. Similarly, a study by Shbail et al. (2018) also showed that burnout among internal auditors could reduce job satisfaction.

Studies regarding burnout among internal auditors have focused more on the antecedents and consequences of burnout (Fogarty & Kalbers, 2006; Kalbers & Fogarty, 2005; Shbail et al., 2018). Most of the literature shows that stress is an antecedent of burnout (Fogarty et al., 2000; Mnif & Rebai, 2022; Shbail et al., 2018; Smith et al., 2017; Smith & Emerson, 2017). Smith et al. (2006) suggested that stress arousal may directly affect burnout. Girdano and Everly (1986), as cited by Smith et al. (2006), defined stress arousal as a reasonably predictable physiological reaction to a stimulus, for example, a work stressor, which, if prolonged, could exhaust or damage a person's system to the point of malfunction or illness. Numerous research studies have found that susceptibility to stress varies across individuals; more specifically, the environmental factors that cause excessive stress for one person may have little or no effect on another (Smith et al., 2006). This is because the individual must feel the stressor and

must first be felt as a threat to arouse stress (Lazarus & Folkman, 1984, as cited in Smith et al., 2006).

Theoretically, stress arousal and burnout are both a response to environmental stressors; however, stress arousal represents a direct response to the environmental stressors present before burnout, while burnout is a consequence of prolonged exposure to the same stimuli (Smith et al., 2006). Smith et al. (2006) tested the construct validity and discriminant of stress arousal and burnout using a sample of 148 auditors of the Association of International Certified Professional Accountants (AICPA) members. His results provide strong support for conceptualizing stress arousal and burnout as different constructs; thus, stress arousal may directly affect burnout. Smith and Emerson (2017) examined the relationship between stress arousal and burnout by using a sample of 258 auditors from seven public accounting firms in the United States. The results indicate that stress arousal was positively related to burnout. Smith et al. (2017) tested the relationship between stress arousal and emotional exhaustion, but the relationship between stress arousal and depersonalization also reduced personal accomplishment was not tested directly but was tested through emotional exhaustion mediation. Smith et al.'s (2017) study using a sample of 486 auditor members of the AICPA showed that stress arousal was positively related to emotional exhaustion, which mediated the relationship between stress arousal and depersonalization also reduced personal accomplishment.

Testing the direct relationship between stress arousal and burnout using the burnout aggregate measure or one of the burnout dimensions alone can limit the understanding of stress arousal's effect on each burnout dimension. Charoensukmongkol et al. (2016), Golembiewski (1989), also Maslach and Jackson (1981) found that burnout was a multidimensional construct. This study examines the relationship between stress arousal and the three burnout dimensions. Using a burnout measure in the form of a multifaceted construct, this study aims to determine whether stress arousal has a different effect on each burnout dimension to allow the use of nuanced coping strategies to mitigate burnout.

Intense and prolonged burnout conditions harm auditors' physical and psychological condition. A good coping mechanism is needed so that auditors avoid burnout. This study develops a research model on the relationship between stress arousal and burnout by integrating supervisor support as a form of coping strategy. The use of effective coping strategies will return individuals to physical and psychological balance (Smith et al., 2010). According to the Conservation of Resources theory, social support allows employees to complete their work tasks (Halbesleben, 2006). Different sources of social support relate work stress to various dimensions of burnout (Sochos et al., 2012), but the effect may differ in reducing burnout (Halbesleben & Buckley, 2004). Halbesleben and Buckley (2004) stated that social support helped employees deal with workplace stress. Social support is provided by supervisors, co-workers, family, and organizations. The supervisor's responsibility is to provide resources that can assist employees in carrying out their duties properly (Novriansa et al., 2020).

Charoensukmongkol et al. (2016) examined the role of supervisor support on burnout using

a sample of supervisors and employees from two universities in South Texas. This research shows that supervisor support harms all aspects of burnout. Employees who feel they receive good support from their superiors tend to report lower burnout (Charoensukmongkol et al., 2016). Furthermore, results from Huang et al. (2015), Li et al. (2020), and Shahzad et al. (2022) also show that supervisor support moderates the relationship between inter-role conflict and burnout. Bakker and Costa (2014) point out that employees vulnerable to a high burnout level need support and help from their supervisors, suggesting that supervisor support is an effective coping strategy for reducing burnout. This study aims to show that supervisor support will reduce the effects of stress arousal to prevent auditor burnout.

Supervisor support refers to employees' general beliefs regarding how much supervisors value employee contributions and is concerned for employee welfare (Kottke & Sharafinski, 1988; Liaw et al., 2010). It is the level at which managers or supervisors appreciate employees' contributions and care for their wellbeing (Toolib & Alwi, 2020). Griffin et al. (2001) define supervisor support as the extent to which direct supervisors encourage and support their employees. Supervisor support is a reservoir of resources that assist employees in dealing with role conflicts by offering social and psychological support (Zhang et al., 2020). Supervisor support typically includes showing concern and motivating employees, creating a structured work environment, and providing essential resources, feedback on employee work, opportunities for employee career advancement, also information and assistance to deal with work-related stress (Schulz et al., 2018; Rahim et al., 2020). Supervisors resolve employee complaints and help them obtain the necessary resources (Boz et al., 2009).

Previous studies on stress arousal, burnout, and supervisor support focus on external auditors in public accounting firms or internal auditors in private companies. This study examines this phenomenon on local government internal auditors. An indication of the possibility of burnout in local government internal auditors is the dual role of audit supervision and consulting roles. Novriansa and Riyanto (2016) found that the dual role of local government internal auditors can result in role stress. Most of the literature has shown that role stress conditions trigger burnout. This study strengthens the external validity of research on stress arousal, burnout, and supervisor support. This study aims to empirically test the direct relationship between stress arousal and burnout dimensions also examine the moderating effect of supervisor support on the relationship between stress arousal and burnout dimensions of public sector employees with a sample of local government internal auditors.

This study uses the conservation of resources (COR) theory to explain the burnout phenomenon. COR theory is based on the principle that individuals are motivated to protect their current resources (conservation) and acquire new resources (acquisitions) (Halbesleben et al., 2014). Resources are defined as objects (e.g., tools), personal characteristics (e.g., emotional stability), conditions (e.g., social support), or energies (e.g., money) that are valued by individuals or that serve as a means to attain objects, personal characteristics, conditions, or energy (Alarcon, 2011; Hobfoll, 1989). The two main principles in COR theory are (1) the advantage of

losing resources and (2) investing in resources (Halbesleben et al., 2014; Hobfoll, 2001). COR theory, first formulated to examine stress and traumatic events, has become the leading theory in the field of burnout (Halbesleben, 2006; Hobfoll, 2010). According to the COR model, burnout is a process in which the demands of ongoing work consistently consume resources at a rate faster than resources that can be replenished (Freedy & Hobfoll, 1994). Over time, the loss of resources reduces coping capacity and increases psychological distress (Freedy & Hobfoll, 1994). Alarcon (2011) also states that the fewer resources an individual has and the greater the demands, the more maladaptive coping will occur, resulting in increased burnout.

Smith et al. (2010) state that stress is part of a series of dynamic and complex interactions between individuals and the environment, where events must be assessed as stress before they can affect psychological wellbeing. Activating stress for excessive periods and/or intensity will lead to stress-related illness and dysfunction, which can manifest physically and psychologically (Smith et al., 2010). The COR model indicates that stress can be caused by one of three factors: a threat to resources, the actual loss of resources, or an insufficient return on additional resources after significant investment of resources (Halbesleben, 2006). In the work context, one of the three stress factors over time will cause employees to experience burnout (Halbesleben, 2006).

The literature has found that prolonged stress conditions lead to stress arousal before burnout. Smith et al. (1998), as cited by Smith et al. (2006), state that stress arousal represents a direct response to environmental stressors. Environmental stressors that are perceived as a threat will cause stress arousal (Smith et al., 2017). Lepine et al. (2005) and Smith et al. (2006) stated that the consequences of prolonged exposure to one or more environmental stressors would result in burnout. This indicates that stress arousal conditions over time will result in emotional exhaustion, depersonalization, and reduced personal accomplishment.

The dual role of audit supervision and consulting triggers job stress. This role conflict is one of the work stressors for the local government's internal auditors. The prolonged role conflict without the separation of roles, clarity of duties, and the intensity of the increased workload will trigger stress arousal on the local government's internal auditors. This occurs because these conditions can interfere with the attitude of independence, skepticism, and work professionalism in the local government's internal auditors, which are essential attitudes that an auditor must possess. Without a suitable coping strategy mechanism, stress arousal conditions left unaddressed too long will eventually result in emotional exhaustion, depersonalization, and reduced personal accomplishment.

Intensive and prolonged stress arousal makes local government internal auditors experience emotional exhaustion as they tend to feel overwhelmed and emotionally tired, especially when they face work burdens and demands that require significant time and energy. This will also lead local government internal auditors to lose control over important aspects of their work. They tend to distance themselves from their work and other people in the workplace, known as depersonalization. Furthermore, it can also make local government internal audi-

tors feel less confident about doing their job effectively. Feeling their efforts did not produce the expected results or were not recognized reducing the sense of personal accomplishment. Therefore, the first, second, and third hypotheses of this study are as follows:

H1: Stress arousal is positively related to emotional exhaustion.

H2: Stress arousal is positively related to depersonalization.

H3: Stress arousal is positively related to reduced personal accomplishment.

According to COR theory, people seek to acquire and maintain resources, and stress arises due to the threat of losing resources, either actual or expected gains in resources (Hobfoll, 2001; Mayo et al., 2012). Stressors threaten valuable employee resources such as status, position, self-esteem, and energy (Mayo et al., 2012). Hobfoll (1998), as cited by Mayo et al. (2012), state that social support is one of the most important resources in dealing with stressors because it can expand available resources and replace or strengthen other lacking resources. Supervisor support in the stress literature is a source of social support (Boz et al., 2009). Supervisors provide a variety of valuable resources, including attention, monetary support, and emotional support (Kalliath et al., 2020). Subordinates perceive their superiors as providing support after observing the behavior of their superiors who provide valuable resources (Kalliath et al., 2020). In other words, from the point of view of COR theory, supervisor support contributes to sense of self-positivity and security, which facilitates preserving valuable resources to prevent tension, despite the threats posed by job stressors (Hobfoll, 1989).

Supervisors play an important role in structuring the work environment and providing information and feedback to employees (Griffin et al., 2001). Rahim et al. (2020) state that supervisor support acts as an agent to communicate organizational goals and values to subordinates and evaluate their performance. Supervisors provide support by providing information, instrumental assistance (helping with difficult work tasks), and mentoring (Rahim et al., 2020). Research from the social and organizational support literature shows that the support of supervisors to subordinates leads to beneficial employee and organizational outcomes, such as job stress reduction (Shanock & Eisenberger, 2006). Kirmeyer and Dougherty (1988) state that supervisors can help their subordinates cope with stress in a potentially stressful environment in three ways: (a) keeping them task-oriented and focused on problem-solving rather than preoccupied with feelings and anxieties; (b) encouraging them to take specific actions aimed at reducing conflict effectively; and (c) convincing them to support their actions. Bakker and Costa (2014) also state that employees who receive support from their supervisor tend to not experience high burnout.

Supervisor support is a coping strategy to reduce the effects of stress arousal and prevent burnout of local government internal auditors. Supervisor support can reduce the effects of stress arousal, preventing emotional exhaustion. Supervisor support in the form of communication and information disclosure reduces role conflict and job ambiguity so that the local government internal auditors will feel less burdened and emotionally exhausted by work de-

mands. It can also reduce the effects of stress arousal so that depersonalization does not occur. Support in the form of mentoring or guiding subordinates and directing their performance will provide local government internal auditors valuable resources to deal with job demands so they do not experience depersonalization. Furthermore, it can reduce the negative effects of stress arousal on personal accomplishment. Local government internal auditors who receive greater support from supervisors tend to have better relationships with supervisors through more organizational and job information, better job directions, and higher objective performance ratings. This condition leads to a higher sense of personal achievement. Therefore, the fourth, fifth, and sixth hypotheses of this study are as follows:

H4: Supervisor support moderates the positive relationship between stress arousal and emotional exhaustion.

H5: Supervisor support moderates the positive relationship between stress arousal and depersonalization.

H6: Supervisor support moderates the positive relationship between stress arousal and reduced personal accomplishment.

RESEARCH METHOD

This study uses an online survey method with a questionnaire. The sample comprises local City/Regency Government Inspectorate auditors. The object of this study is the Inspectorate in Southern Sumatera, which consists of South Sumatera, Lampung, Bengkulu, and Bangka Belitung. The sampling technique was carried out using purposive sampling with judgment sampling. The sample criteria are local government internal auditors who have carried out audit assignments for at least one year. Researchers have tried to increase this study's response rate by contacting the Inspectorate's telephone number to ask about the availability and procedures that must be completed to conduct a study on their auditors. When the Inspectorate agreed to be a respondent, the authors sent a link to this research online questionnaire. Thus, there is confidence that those who filled out the research questionnaire are the right individuals, which reduces sampling bias.

A total of 155 local government internal auditors from 17 City/Regency Inspectorates in 4 provinces of Southern Sumatra, Indonesia were the respondents of this study. Most of the respondents in this study were over 36 years old (70.32%), male (49.68%) and female (50.32%), and had undergraduate degrees (71.61%) in accounting (23.87%). Most of the respondents in this study had work experience as auditors or examiners for 1–5 years (56.77%) with more than 15 audit assignments (81.94%).

Burnout is a negative psychological response to interpersonal stressors and comprises three separate dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment (Cordes & Dougherty, 1993). This study measures burnout using nine of the

24 item questions the Multidimensional Role-Specific Burnout instrument developed by Singh et al. (1994). Each question is measured using a 5-point Likert scale anchored by ("1" = "never" to "5" = "always").

Stress arousal is defined as a fairly predictable stimulation of the psycho–physiological (mind–body) system which, if prolonged, can tire or damage the system to the point of malfunction or disease (Girdano & Everly, 1986 as cited by Smith & Emerson, 2017). Stress arousal is measured with the Stress Arousal Scale 4 (SAS4) developed by Smith et al. (2012). SAS4 is measured using a 4-point Likert scale ("1" = "rarely or never" to "4" = "almost always").

Supervisor support is defined as the extent to which supervisors encourage and support employees in their work groups (Griffin et al., 2001). It is measured by replacing the term organization with the term supervisor in the Survey of Perceived Organizational Support (SPOS) developed by Eisenberger et al. (1986). Eight items from 36 items with high loading values were adopted from SPOS to measure supervisor support (Eisenberger et al., 2002). Each question was measured using a 5-point Likert scale ("1" = "strongly disagree" to "5" = "strongly agree"). This method was also used in research by Charoensukmongkol et al. (2016), Deconinck (2010), Eisenberger et al. (2002), and Khelil et al. (2018).

RESULT AND DISCUSSION

Based on the results of Structural Equation Modeling-Partial Least Square (SEM-PLS) with WarpPLS version 7.0, the loading values of several indicators of each construct in this study are above 0.60 with a p-value <0.001 and AVE value for all constructs above 0.50 as depicted in Appendix 1. Appendix 1 also shows that the burnout dimension construct indicators, emotional exhaustion (EE1, EE2, and EE3), depersonalization (DEP1, DEP2, and DEP3), and reduced personal accomplishment (RPA1, RPA2, and RPA3), have met the convergent validity criteria. All the stress arousal construct indicators of SA1, SA2, SA3, and SA4 also show they have met the convergent validity criteria. The supervisor support construct consists of six indicators, namely SS1, SS2, SS3, SS4, SS6, and SS8, while the remaining two indicators (SS5 and SS7) have loading values below 0.60. Table 1 shows that the correlation between latent variables with the square root value of AVE in the diagonal column and parentheses is greater than the correlation between constructs in the same column (above or below). These results indicate that all constructs in this research model have met the criteria for discriminant validity.

Table 1. Correlation among Latent Variables

	SA	EE	DEP	RPA	SS
Stress Arousal (SA)	(0.810)	0.463	0.372	0.011	−0.247
Emotional Exhaustion (EE)	0.463	(0.877)	0.586	−0.086	−0.415
Depersonalization (DEP)	0.372	0.586	(0.841)	−0.079	−0.365
Reduced Personal Accomplishment (RPA)	0.011	−0.086	−0.079	(0.831)	−0.271
Supervisor Support (SS)	−0.247	−0.415	−0.365	−0.271	(0.730)

Table 2. Internal Consistency Reliability

Construct	Cronbach's alpha	Composite reliability	Full collinearity VIF
Stress Arousal (SA)	0.825	0.884	1.324
Emotional Exhaustion (EE)	0.849	0.909	1.853
Depersonalization (DEP)	0.793	0.879	1.626
Reduced Personal Accomplishment (RPA)	0.775	0.870	1.208
Supervisor Support (SS)	0.823	0.872	1.507

Table 2 shows that all constructs in this research model have Cronbach's alpha and composite reliability values above 0.70 or in accordance with internal consistency reliability criteria. It can also be seen that the VIF value of full collinearity is below the limit value of 3.3, indicating that the construct does not have vertical or lateral multicollinearity problems. The results of the full collinearity test are significant when testing the interaction of independent and moderating variables using SEM-PLS (Sholihin & Ratmono, 2020).

The analysis results using SEM-PLS show that the structural model in this study has an APC of 0.233 with a p-value <0.001, an ARS value of 0.162 with a p-value of 0.010, an AVIF value of 1.062, and SRMR value of 0.127. The results of the significant APC and ARS values (p-value < 0.01), the AVIF value, which is smaller than 5, and the SRMR value equal to 0.1 show that the research model has met the Goodness of Fit criteria. In addition, this research model has a Tenenhaus GoF value of 0.343 and SPR of 1.00, indicating that the explanatory power of the model is in a fairly large category and this research model is free from Sympson's Paradox problems.

Figure 1 shows that the R-squared of emotional exhaustion, depersonalization, and reduced personal accomplishment construct is 0.24, 0.18, and 0.06, respectively. This indicates that the variation of change in the emotional exhaustion, depersonalization, and reduced personal accomplishment variables explained by stress arousal is 24%, 18%, and 6%, respectively. In
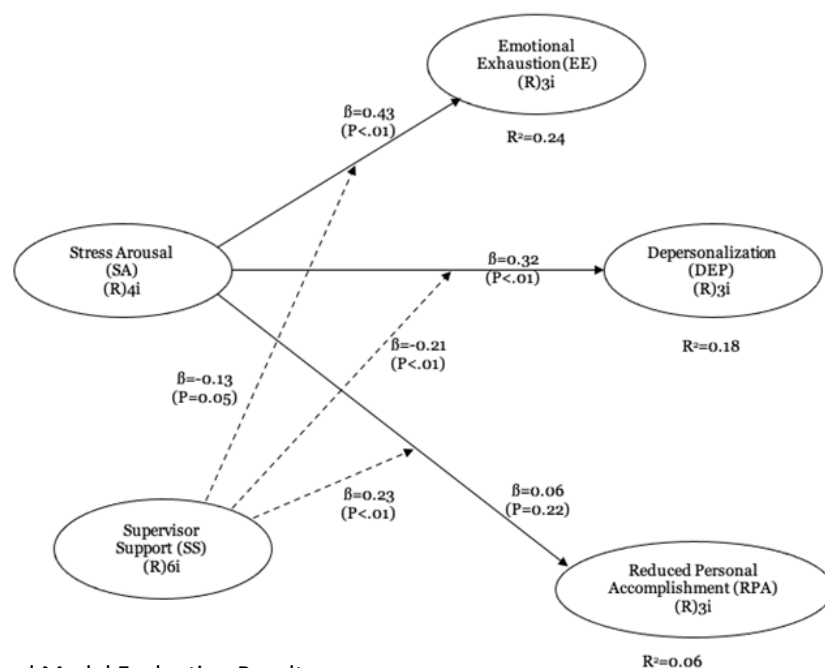
Figure 1. Structural Model Evaluation Results

Table 3. Result of path coefficient and p-value

	Stress Arousal (SA)	Supervisor Support (SS)*Stress Arousal (SA)
Emotional Exhaustion (EE)	0.434*	−0.132**
Depersonalization (DEP)	0.324*	−0.215*
Reduced Personal Accomplishment (RPA)	0.062	0.232*

level of significance 1% (p-value < 0.01)
**level of significance 5% (p-value < 0.05)

contrast, other variables outside of this research model account for the rest of the change.

The relationship between stress arousal with emotional exhaustion and depersonalization can be seen in Figure 1 and Table 3, with a path coefficient value of 0.434 and 0.324 and a significance value of p-value <0.01. These indicate that stress arousal is positively related to emotional exhaustion and depersonalization. Thus, H1 and H2 of this study are supported. The results of this study failed to find empirical evidence that stress arousal was positively related to reduced personal accomplishment. It shows that stress arousal is unrelated to reduced personal accomplishment (path coefficient value of 0.062 with p-value >0.05). Thus, H3 of this study is not supported.

The results of moderation analysis in Figure 1 and Table 3 show the SS*SA path coefficient value to EE is −0.132 with a significance value of p-value <0.05. These results indicate that supervisor support (SS) acts as a moderating variable in the relationship between stress arousal (SA) and emotional exhaustion (EE). The negative coefficient of the moderating variable and the positive relationship between stress arousal and emotional exhaustion indicate that supervisor support weakens the effects of stress arousal on emotional exhaustion. Thus, H4 in this study is supported.

The moderating effect of supervisor support in the relationship between stress arousal and emotional exhaustion can be seen in the plot diagram for the two sample groups: samples with low supervisor support levels (Low SS) and samples with high supervisor levels (High SS). Figure 2 shows a linear relationship between stress arousal and emotional exhaustion with supervisor support as a moderator for the two sample groups. It can be seen that the relationship between stress arousal and emotional exhaustion is stronger when the supervisor support level is low, and it is weaker when the supervisor support level is high. The blue dotted line plots the relationship between stress arousal and emotional exhaustion at low supervisor support levels. At a low supervisor level, stress arousal sharply reduces emotional exhaustion from 1.53 to −0.32. The black dotted line plots the relationship between stress arousal and emotional exhaustion at a high level of supervisor support. It can be seen that stress arousal increases emotional exhaustion slightly, but at point −0.2, it decreases emotional exhaustion. This means that supervisor support reduces the effect of stress arousal on emotional exhaustion to a greater extent at low supervisor support levels than at high levels.
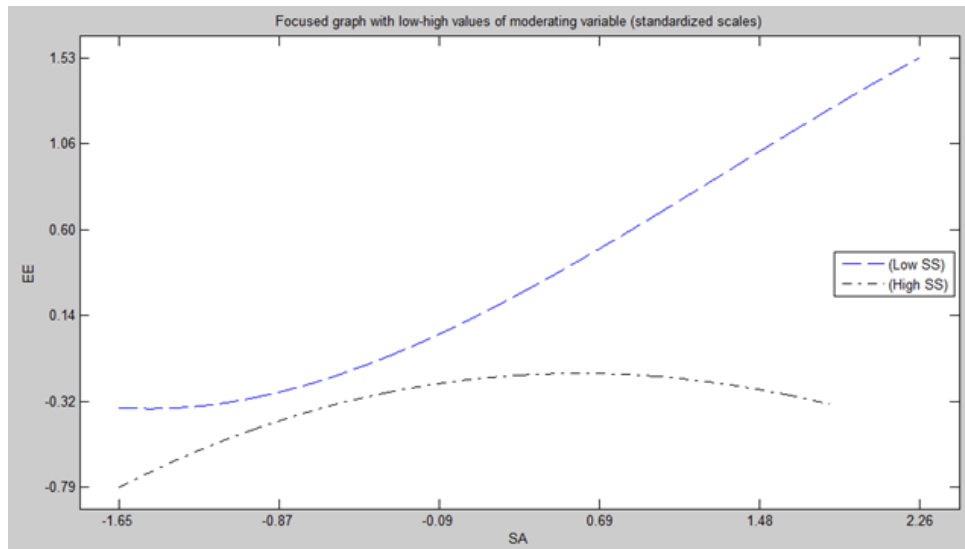
Figure 2. Moderating Effect of Supervisor Support on the Relationship between Stress Arousal and Emotional Exhaustion

Figure 1 and Table 3 show the SS *SA path coefficient value to DEP is −0.132 with a significance value of p-value <0.05. These results indicate that supervisor support can moderate the relationship between stress arousal and depersonalization (DEP). The path coefficient value of the moderating variable is negative, while the relationship between stress arousal and depersonalization is positive, which means that supervisor support weakens the effects of stress arousal on depersonalization. Thus, H5 is supported.

The moderating effect of supervisor support in the relationship between stress arousal and depersonalization can be seen in Figure 3. It shows that the linear relationship between stress arousal and depersonalization is stronger when the supervisor support level is low and weaker when the supervisor support level is high. The blue dotted line shows the low supervisor support level; stress arousal initially increases depersonalization to 0.84, but after that, there is a sharp downward trend in the effect of stress arousal on depersonalization to −0.5. The black

Figure 3. The Moderating Effect of Supervisor Support in the Relationship between Stress Arousal and Reduced Personal Accomplishment

dotted line shows the high supervisor support level, in which stress arousal initially increases depersonalization from –0.45 to –0.1, after which there is a trend of decreasing the effect of stress arousal on depersonalization to a point of –0.65. This means that supervisor support reduces the effect of stress arousal on depersonalization to a greater extent at low levels of support than at high levels.

Figure 1 and Table 3 also show the SS*SA path coefficient value against RPA is 0.232 with a significance value of p-value = 0.01. These results indicate that supervisor support moderates the relationship between stress arousal and reduced personal accomplishment (RPA). Thus, H6 is supported. However, the result of the moderating effect is not as predicted. The positive path coefficient value of the moderating variable and the positive relationship between stress arousal and reduced personal accomplishment show that supervisor support strengthens the effect of stress arousal on reduced personal accomplishment.

The moderating effect of supervisor support in the relationship between stress arousal and reduced personal accomplishment is shown in Figure 4, where the nonlinear relationship between both variables is stronger when supervisor support is low and weaker at high levels. The blue dotted line shows the low supervisor support level; stress arousal initially increases reduced personal accomplishment to 0.26 and is stable for a while, but then increases back to 0.72. The black dotted line shows the high supervisor support level, in which stress arousal initially decreases reduced personal accomplishment quite sharply from 0.05 to –0.43, after which there is an increasing trend of the effect of stress arousal on reduced personal accomplishment to –0.10. This means that supervisor support increases the effect of stress arousal on reduced personal accomplishment to a greater extent at low levels than at high levels.

The results indicate that stress arousal positively relates to emotional exhaustion and depersonalization but not to reduced personal accomplishment. The results are consistent with the results of Smith et al. (2017) that stress arousal is positively related to emotional exhaus-
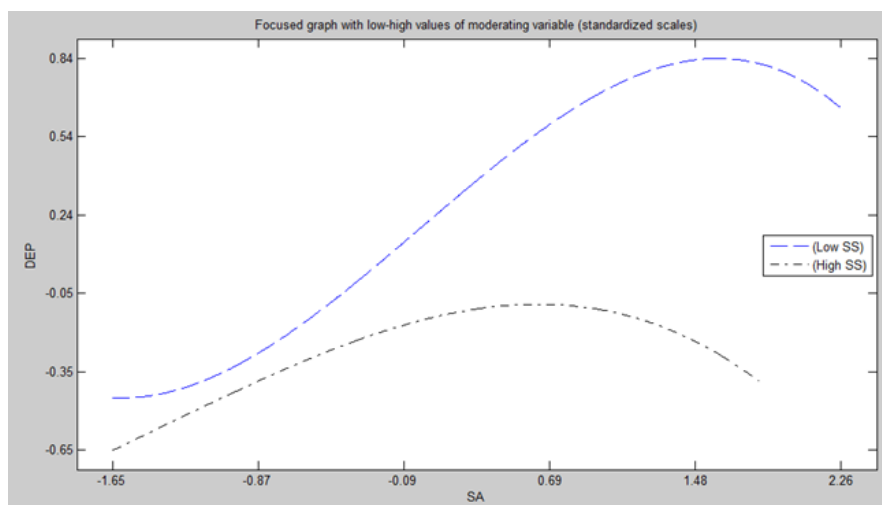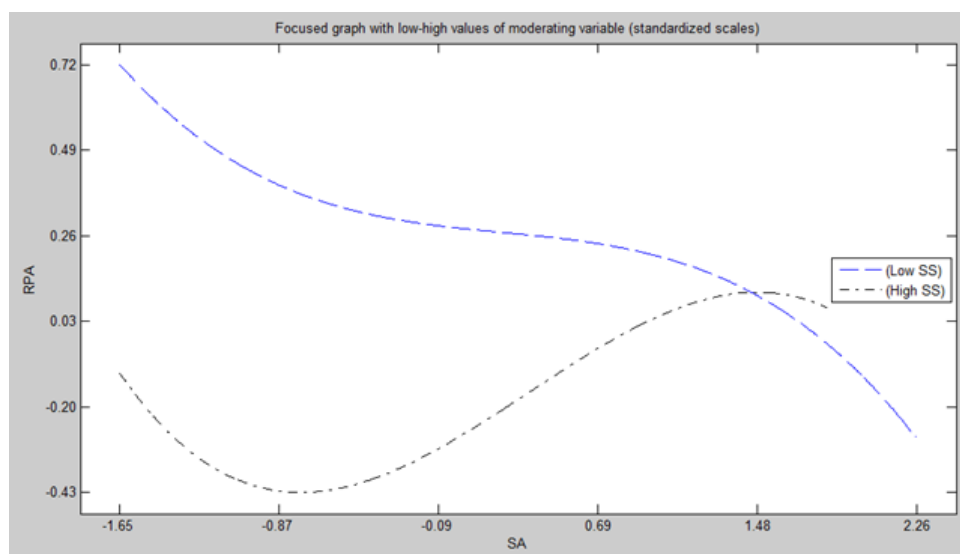

Figure 4. The Moderating Effect of Supervisor Support in the Relationship between Stress Arousal and Reduced Personal Accomplishment

tion. The results support the statement that job stressors must first be perceived as a threat to produce stress, which causes burnout (Smith et al., 2017; Smith & Emerson, 2017). The results also show that stress arousal and burnout are two different constructs, with stress arousal occurring before burnout (Smith et al., 2006). Intense and prolonged stress arousal will make local government internal auditors feel overwhelmed and emotionally tired when facing the burdens and demands of work. Stress arousal also results in local government internal auditors losing control over important aspects of their work such that they experience depersonalization.

The results of this study also indicate that supervisor support can moderate the relationship between stress arousal and emotional exhaustion, depersonalization, and reduced personal accomplishment. More specifically, it demonstrates that supervisor support felt by local government internal auditors can weaken or reduce the effects of stress arousal on emotional exhaustion and depersonalization. This result supports findings by Charoensukmongkol et al. (2016) that supervisor support helps reduce emotional exhaustion and depersonalization problems. COR theory states that people seek resources to recover from the loss of resources (Shahzad et al., 2022). Based on the COR theory, support from immediate superiors is a resource that will build the trust of local government internal auditors and assist them in replenishing lost resources due to stress arousal, thereby preventing them from experiencing burnout.

Halbesleben and Buckley (2004) state that supervisors are better positioned to provide instrumental support that helps deal with the stressors that lead to burnout. Audit work is done as a team, and supervisor support is important in the audit completion process. Supervisors can provide support in the form of providing information, instrumental assistance, and mentoring (Rahim et al., 2020). Local government internal auditors who experience stress arousal due to role conflicts and ambiguous tasks due to dual roles feel less burdened and tired with the demands of the audit process when supervisors develop good interpersonal relationships with them through good communication and information disclosure. Additionally, local government internal auditors who experience stress arousal feel they have the resources to work with the team and face job demands or complete the audit work well when supported emotionally by supervisors through mentoring and performance directions. That is, they do not feel depressed.

In contrast to what was expected, the results indicate that supervisor support exacerbates the effects of stress arousal on reduced personal accomplishment experienced by local government internal auditors because those whose sense of personal accomplishment has fallen due to intense and prolonged stress tend to be cynical toward their supervisors. They reject supervisor support as another type of work request, positively affecting reduced personal accomplishment. Local government internal auditors who experience less personal accomplishment feel that the stress is a response to environmental stressors (role conflict and task ambiguity) originating from the supervisor. Thus, when a supervisor, who is a source of stress, offers sup-

port, it may be considered insincere and can even trigger self-perceptions of poor performance (Blaine et al., 1995; Kaufmann & Beehr, 1986; Kickul & Posig, 2001; Mayo et al., 2012). Lazarus dan Folkman (1984), as cited in Choi et al. (2012) stated that social support is not always effective in reducing stress because some individuals may feel overwhelmed by the help of others. Social support may also negatively and positively affect burnout (Halbesleben & Buckley, 2004). Deelstra et al. (2003) explain that social support can potentially threaten employees' self-esteem if they feel they must consistently depend on others to deal with the causes of work-related stress.

CONCLUSION

The results of this study indicate that stress arousal is positively related to emotional exhaustion and depersonalization. This means that when local government internal auditors experience stress arousal conditions in response to job stressors, there is a high probability of experiencing emotional exhaustion and depersonalization. The study failed to find empirical evidence of a positive relationship between stress arousal and reduced personal accomplishment. Intense and prolonged stress arousals are not suitable for local government internal auditors because they can result in burnout. The results indicate that supervisor support can moderate the relationship between stress arousal and the three burnout dimensions and that local government internal auditors experience fewer effects of stress arousal on emotional exhaustion and depersonalization. Contrary to what was expected, the study found that supervisor support strengthens the impact of stress arousal on reduced personal accomplishment.

Theoretically, this study found that the COR theory explains burnout in the internal auditor profession, especially in the context of local government or public sector organizations. Supervisor support is a resource that can be used as an effective coping strategy to reduce the effects of stress arousal and prevent burnout among local government internal auditors. Furthermore, from a practical point of view, intense and prolonged stress arousal in local government internal auditors causes them to experience EE and depersonalization, especially when they face significant work during the busy season. Therefore, a good coping mechanism through supervisor support is needed. This study suggests that the City/Regency Government Inspectorate create policies or interventions to help local government internal auditors improve their interpersonal relationships with superiors to reduce the effects of stress on EE and depersonalization. In addition, the results show that supervisor support strengthens the effects of stress arousal on reduced personal accomplishment, suggesting that support needs to consider the personal conditions of each individual as responses to support will vary across employees.

This study has several limitations to be considered in further research. First, it examines the impact of stress arousal on each of the burnout dimensions and identifies supervisor support as a moderating variable or coping strategy to reduce the effects of stress on burnout

among local government internal auditors. This approach offers new insights, but it is difficult to compare the results of this study with the findings of previous empirical research. Therefore, this study is an initial attempt to explain the effects of stress arousal on emotional exhaustion, depersonalization, and reduced personal accomplishment and how efforts can be made to reduce these impacts. Second, the moderating effect of supervisor support on the relationship between stress arousal and emotional exhaustion and depersonalization shows a linear relationship, while the moderating effect of supervisor support on the relationship between stress arousal and reduced personal accomplishment has a nonlinear pattern. This indicates that the reverse buffering effect is a moderation effect provided by supervisor support. Therefore, further research is expected to consider the reverse buffering effect when using supervisor support as a moderating variable in the relationship between stress and burnout.

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APPENDIX

Convergent Validity

Construct	Item	Loading	P-value	AVE
Stress Arousal (SA)	SA1	0.779	<0.001	0.657
	SA2	0.847	<0.001	
	SA3	0.794	<0.001	
	SA4	0.821	<0.001	
Emotional Exhaustion (EE)	EE1	0.874	<0.001	0.769
	EE2	0.917	<0.001	
	EE3	0.838	<0.001	
Depersonalization (DEP)	DEP1	0.818	<0.001	0.707
	DEP2	0.853	<0.001	
	DEP3	0.852	<0.001	
Reduced Personal Accomplishment (RPA)	RPA1	0.805	<0.001	0.691
	RPA2	0.889	<0.001	
	RPA3	0.797	<0.001	
Supervisor Support (SS)	SS1	0.731	<0.001	0.532
	SS2	0.821	<0.001	
	SS3	0.732	<0.001	
	SS4	0.692	<0.001	
	SS6	0.681	<0.001	
	SS8	0.711	<0.001	
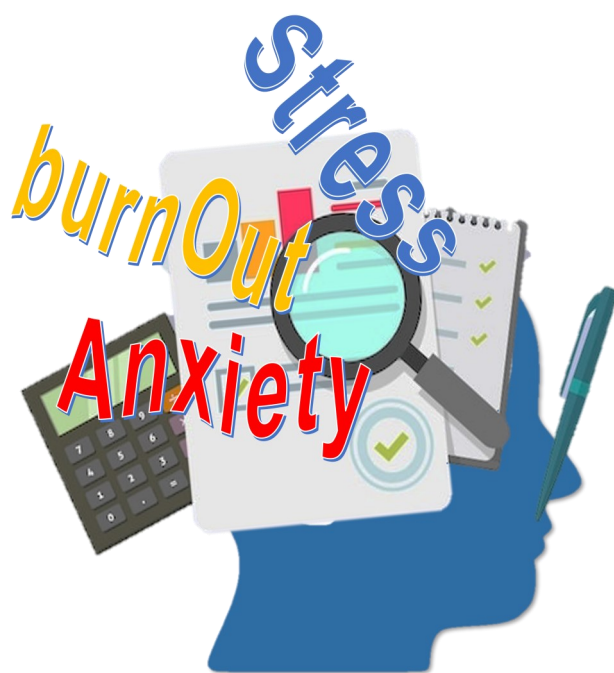
Does village fund audit affect village development? An empirical study of villages in Aceh Province

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ABSTRACT

It is well-known that additional cases of misappropriating village funds are reported yearly. Without adequate oversight and control, the fraud and corruption trends in village funds will continue to prevail and hinder village development. The increase of funds transferred to villages has failed to eliminate the number of underdeveloped villages in Indonesia, which is still 24.39% nationally and 36,15% in Aceh Province. This study examined whether the local government's audit of village funds positively affects village development as measured by the Village Development Index (IDM) value. The relationship between audits, the number of auditors, and audit fees on village development is examined using a quantitative approach and the regression method. A qualitative technique was also used to gain insights into the implementation of village fund audits. The study found a positive relationship between auditing and audit fees for IDM, while the number of auditors is unrelated to IDM. Compared to unaudited villages, audited villages have higher IDM scores. Despite having a good relationship, the implementation of the audit faced challenges, among others, the lack of legislation, the absence of auditing and accounting standards, the auditor's ambiguous authority, the scarcity of audit resources, and the local government's recklessness in performing their duties.

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INTRODUCTION

Undoubtedly, Law Number 6 of 2014 concerning Villages is one of the government initiatives to advance the economy from the periphery in line with the country's medium-term development plan (Rencana Pembangunan Jangka Menengah , RPJM). The government adopted this policy to address the economic growth rate gap in urban and rural areas. Development, according to Todaro and Smith (2011), "focuses not only on enhancing economic growth but also on the redistribution of growth outcomes." Villages that are formerly only objects of development are now granted the authority to manage their finances, which can derive from Village Original Income (Pendapatan Asli Desa, PADesa), APBN allocations which is Village Funds (Dana Desa, DD), a portion of regional taxes and levies, Village Fund Allocations (Alokasi Dana Desa, ADD)-which is part of the balancing funds received by the district/city, financial assistance from the local government budget (Anggaran Pendapatan Belanja Daerah, APBD), grants, and other legal village income. Can the villages' economic growth catch up with such extensive authority granted to villages?

Village development aims to meet basic needs, create infrastructure and facilities, also foster local economic growth with the sustainable use of the environment and natural resources to promote the welfare of rural communities and the quality of life as well as reduce poverty. It has been established that transferring money to villages has advantages for the community, including improving infrastructure and quality of life also the growth of local economies. However, improvements must be made to implement this program, such as enhancing institutional and human resources capability also improving oversight and accountability. The amount of money transferred to villages increases yearly, as depicted in Figure 1. However, the number of underdeveloped villages in Indonesia has not yet been able to be eliminated. The number of underdeveloped villages in 2021 remains unchanged at 24.39%. In addition, according to the records of Indonesia Corruption Watch, 676 village officials have been prosecuted ever since village funds were transferred to the village administration in 2015 up to 2020 (Guritno & Krisiandi, 2021). This number only includes cases that have gone through the court decision
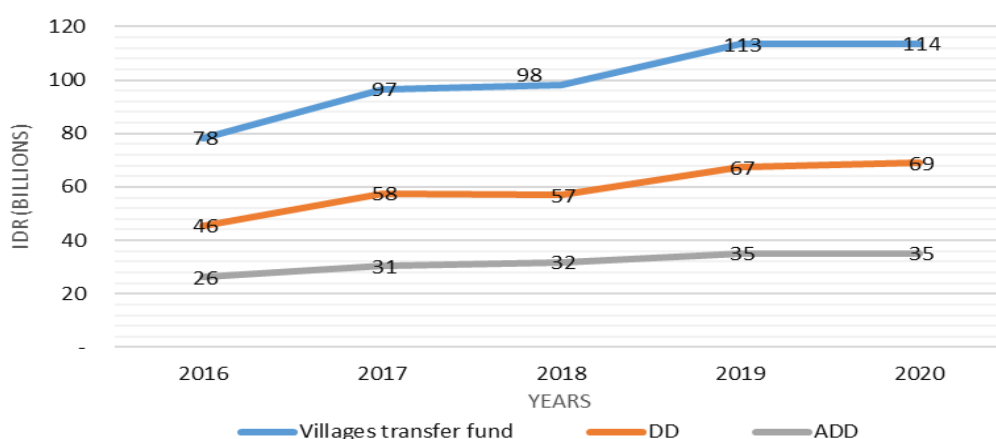
Figure 1. Villages Transfer Funds Growth
Source: Government Financial Report (processed)

process. Overall, misuse of village funds continues to remain.

Villages in Indonesia are classified as developing villages for the most part. According to the data for 2021, about 51.66% of villages are still classified as developing villages. The proportion of independent villages (4.44%) is still lower than villages considered very underdeveloped (6.58%). Up to 2021, there are 12,635 underdeveloped villages and 5,649 very underdeveloped villages. Even though statistics show that the number of independent and developed villages is increasing, the growth is still slow, given the rising number of village funds. Aceh Province, with a percentage of 36.14%, is one of the regions with a high number of villages that are still underdeveloped. Aceh Province is the third-largest province in Indonesia in terms of the number of villages, and all of its districts and cities have village administrations. The distribution of Village Development Index (Indeks Desa Membangun, IDM) data in Aceh Province is quite diverse. Aceh Province has 41 independent villages, 486 developed villages, 3,621 developing villages, 2,155 underdeveloped villages, and 193 very underdeveloped villages. Under these circumstances, Aceh's average IDM score still ranks 27th out of 33 provinces that received village funding. This suggests an issue with the management of village funds in Aceh Province.

In most developing nations, corruption remains a serious issue (Dye, 2007; Olken, 2007). According to Jeppesen (2019), corruption can harm government institutions, impede welfare distribution, and promote public distrust. Village fund corruption is still widespread, which is a sign of poor management of village funds. Various recognized corruption tactics are used in village fund management, including the fabrication of reports and projects also embezzlement (Srirejeki & Faturokhman, 2020). Monitoring of village funds management is still insufficient; therefore, the goal of the village funds program is not optimal (Anam, 2017).

Unlike the provincial, district, and city governments (Pemerintah Daerah, Pemda), which are still part of the government system run by the State Civil Apparatus (Aparatur Sipil Negara, ASN), the village government stands independently in the district/city area. The local government's financial management system is set up to reduce potential misuse of regional money and maintain regional financial accountability, including engaging an external auditor. Top-down supervision by officials such as the Inspectorate, Finance and Development Supervisory Agency (Badan Pengawasan Keuangan dan Pembangunan, BPKP), or the Audit Board of the Republic of Indonesia (Badan Pemeriksa Keuangan, BPK) effectively prevents and uncovers financial irregularities. However, this type of supervision is inefficiently applied to village supervision, given the large number of villages in Indonesia (Aprilia & Shauki, 2020).

According to regulations, supervision in the village involves many entities, starting from supervision at the village level by the Village Consultative Body (Badan Permusyawarahan Desa, BPD) and the community, supervision at the district/city and provincial levels by the regional Inspectorate, and supervision at the central level carried out by the Ministry of Home Affairs and BPKP. BPK, the state auditor, might audit the village funds' management. However, it has been challenging for BPK, BPKP, and the Ministry of Home Affairs to monitor the

use of village finances directly due to the extensive span of jurisdiction and scarce resources. Aprilia and Shauki (2020) also Istiqa and Nursadi (2019) discovered that supervision conducted by BPD and the village community could have been more optimal due to limited information and access to village reports and the village community's lack of understanding and awareness. Ultimately, the regional Inspectorate's oversight played a crucial part.

An essential tool in the monitoring of public finances is an audit. According to Arens et al. (2012), an audit is gathering and analyzing informational evidence to ascertain and report the degree of information compliance with specific predetermined criteria. According to INTOSAI (2019), it is a systematic method of objectively gathering and assessing evidence to assess whether the information or actual circumstances conform to established standards. Law number 15 of 2006 concerning BPK uses the term "examination" for the external auditor's audit activities, which means the process of identifying problems, analyzing, and evaluation, which is carried out independently, objectively, and professionally based on auditing standards to assess the truth, accuracy, credibility, and reliability of information regarding the management and responsibility of state finances.

According to INTOSAI (2019), public sector audits provide legislative or oversight bodies and the general public with unbiased information and assessments concerning the effectiveness of governmental programs, policies, and activities. Otalor and Eiya (2013) mention the main purpose of a public sector audit is to ensure that public funds have been used properly and effectively. As information asymmetry is very likely to occur while managing public finances, it is crucial to conduct an audit (Sitanala, 2019). The village government, which manages village funds, is undoubtedly better informed than the village's general community on how those funds are being spent. One of the objectives of the audit is to minimize the information gap between agents (government) and principals (community). Srirejeki and Faturokhman (2020) state that adequate supervision is needed to ensure the management of village funds. Thereby, the objectives of implementing the village fund program can be achieved.

The benefits of having an audit have been widely researched before. According to Hay and Cordery (2017) also Gans-Morse et al. (2018), audits provide direct benefits for stakeholders
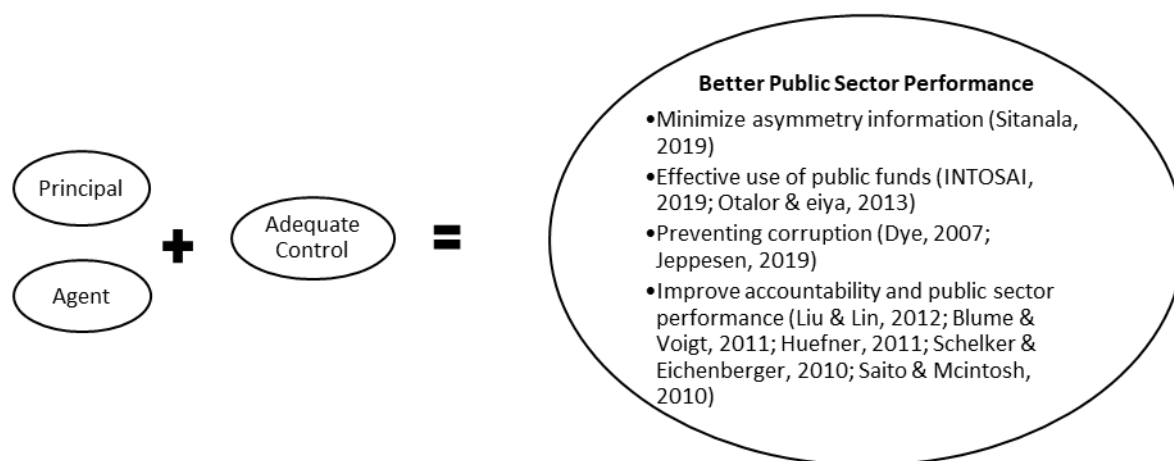
Figure 2. Theoretical Framework

and externalities that benefit society and are believed to be connected to more robust economic performance. According to Dye (2007), Otalor and Eiya (2013), Gustavson and Sundström (2018) also Jeppesen (2019), auditing plays a crucial part in preventing attempts towards corruption. According to Liu and Lin (2012) also Rosa and Morote (2016), government audits can improve accountability and reduce opportunities for abuse of power, fraud, and inefficiency, which can result in financial losses or ineffective use of resources. On the other hand, Saito and McIntosh (2010) found a positive relationship between auditing and improving school performance. From this theoretical framework, we can assume that village fund audits can improve village performance (H1).

Audit quality is important to ensure that audit positively affects village performance. Many factors determine audit quality. Giroux and Jones (2011) express that audit quality is related to the number of audit clients and the type of local government. Masood and Lodhi (2015) state that the availability of human resources, intellectual human resources, and financial resources are important factors to support audit quality. Zhao (2005) in Liu and Lin (2012) states that there are three determinants of audit quality, namely: technical factors (professional competence, number of auditors, and total audit time), independence factors (audit fees, auditor reputation, and audit organization design) and administrative factors.

Apart from these factors, Liu and Lin (2012) state that follow-up on audit recommendations is more important than the process of detecting fraud in the audit itself. Mugo (2014) and Nabulu (2015), who conducted research in Kenya, found that the success of monitoring was influenced by the education and training of monitoring personnel, the monitoring budget, and the monitoring timing. Thus, it can be concluded that many factors determine the success of public sector audit implementation. However, due to limited data, this study uses variables such as the presence or absence of audits, the number of auditors, and audit fees. Research on village funds has been done with an array of topics, such as corruption in village funds (Srirejeki & Faturokhman, 2020), the impact of village funds on dealing with stunting (Indra & Khoirunurrofik, 2022), poverty (Anam (2017); Fitriana (2020)), inequality between villages (Susanti, 2017), disaster management (Simanjuntak, 2020), the impact of village-owned enterprise (Badan Usaha Milik Desa, BUMDes) on the village economy (Puri & Khoirunurrofik, 2021). Monitoring village funds, particularly those primarily related to implementing audits carried out by the regional government for villages, has not received the much-needed academic attention. This study aims to determine whether the village's development has benefited from the audit that the local administration undertook. This study is also expected to provide references and points of view on how audit affects village performance. Practically, this study is expected to provide input to policymakers in order for them to evaluate village fund oversight activities through audit activities.

RESEARCH METHOD

An analytical framework was created to clarify the connection between the factors investi-

gated and village development. The Village Development Index released annually by the Ministry of Villages, Disadvantaged Regions, and Transmigration (Ministry of Villages), will measure village development. The Audit, the primary variable in this study, will interact with Village Funds (Dana Desa, DD) and Allocation of Village Funds (Alokasi Dana Desa, ADD) before being regressed using IDM along with the variable number of auditors and village fund audit fees. The number of DD, ADD, and educational levels of village leaders and BUMDes was utilized as a control variable to reduce bias.

In this study, both primary and secondary data were utilized. The Village Development Index, published by the Ministry of Health from 2018 to 2022, is an example of secondary data. Additional secondary data that can be accessed from the Ministry of Villages, Disadvantaged Regions, and Transmigration include information on the number of BUMDes and the educational level of village leaders. The primary data needed in this study is connected to village fund audit data, the number of auditors, the cost of village fund audit, DD, and ADD for 2018-2021. The unit of analysis in this study is 6,496 villages in Aceh Province from 2018 to 2021. Therefore, the total data to be processed is 25,984.

The dependent variable in this study is village development, which is taken from the village development indicator, namely the IDM. IDM is a composite index formed based on three indices: the social resilience index, the economic resilience index, and the environmental resilience index. IDM captures the development of village independence due to village fund support provided by the government. IDM was created by collaborating with the village to gather data and information based on the actual circumstances. Each indicator is given a score of $0 - 5$. The maximum score for the Social Resilience Index (Indeks Ketahanan Sosial, IKS) is 175. In contrast, for the Economic Resilience Index (Indeks Ketahanan Ekonomi, IKE), the maximum score is 60, and the Environmental Resilience Index (Indeks Ketahanan Lingkungan, IKL) has a maximum score of 15. Village status will be divided into independent, advanced, developing, underdeveloped, and very underdeveloped villages. Based on the IDM number, the village status is classified into the following: Independent village - IDM > 0.8155; Developed village - $0.7072 <$ IDM ≤ 0.8155; Developing village - $0.5989 <$ IDM ≤ 0.7072; Underdeveloped villag-
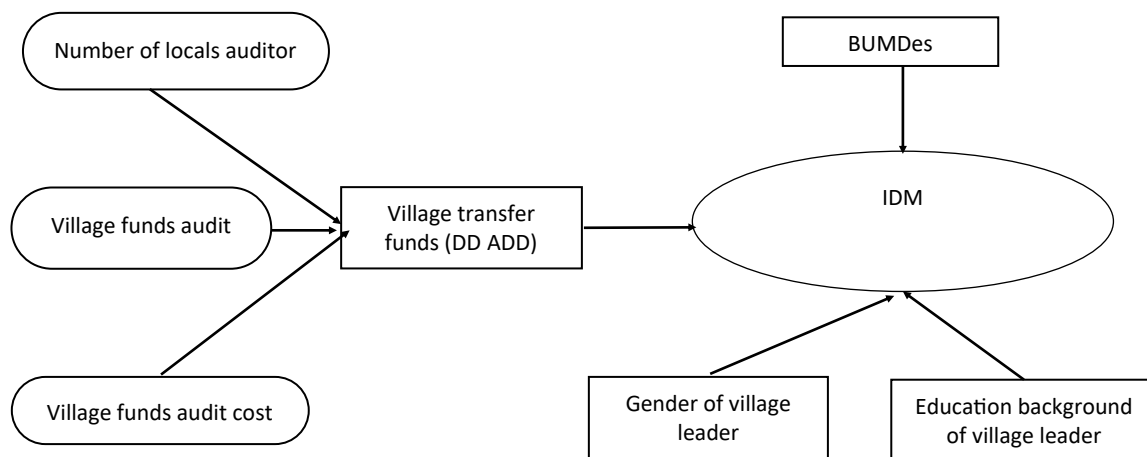
Figure 3. Analytical Framework

es - 0.4907 < IDM ≤ 0.5989; and very underdeveloped villages - IDM ≤ 0.4907.

A village fund audit serves as the study's main independent variable. Audit, according to the State Finance Law, is a process of identifying problems, analyzing and evaluating carried out independently, objectively, and professionally based on auditing standards to assess the truth, accuracy, credibility, and reliability of information regarding the management and responsibility of state finances. The regional auditor audits all revenues and expenses in the village regardless of the village's source of income. The audit is performed because the district/city administration receives a single report from the village government detailing all village revenues and expenses. The auditor uses this report as a reference while performing the audit. Therefore, the audit variable here is defined as an audit of transfer funds received by the village in the form of either DD or ADD. In this study, the audit variable is a dummy variable whereby if the village is audited, it will be given a value of 1; otherwise, the value will be 0.

Village audits are heavily reliant on the existing resources of local governments. According to Masood and Lodhi (2015), the availability of human, intellectual, and financial resources are crucial components to supporting audit quality. Giroux and Jones (2011) suggest that the quantity of auditees significantly impacts audit quality. According to Abdolmohammadi and Tucker (2002), a nation's prosperity is correlated with the number of auditors. According to Rainey and Steinbauer (1999) also Irwin et al. (1998), the number of auditors and available financial resources determine how effective an audit is. In general, various factors influence the implementation of public sector audits. However, only the quantity of auditors and audit fees will be examined in this study.

The number of auditors represents how many auditors the district/city Inspectorate has available. Personnel must obtain a certificate from the Ministry of Home Affairs or BPKP to become regional auditors. The village audit cost refers to the local government's budget allocated by the Inspectorate to conduct the village monitoring program. The amount of the audit budget may come from routine and special audits with the village as the target of oversight. All costs incurred by the Inspectorate to conduct audit villages can be included in this variable.

It is necessary to add a control variable to minimize the bias brought on by the link between the dependent and independent variables. This control variable can be used to identify the underlying causes of IDM. The number of DD, the allocation of ADD, the level of education of the village head, and the number of BUMDes serve as the study's control variables. This variable was chosen based on earlier research that showed a positive correlation between IDM and DD (Ekawati, 2022), the education level of village heads (Nadia, 2022), BUMdes (Puri & Khoirunurrofik, 2021), and gender (Pahlevi & Setiawan, 2017).

The village fund is a fund that is designated for villages and derives from the APBN. The district/city APBD is distributed to villages to fund local government operations, development initiatives, and community empowerment. Meanwhile, ADD serves to balance funds that dis-

tricts and cities receive in the district and municipal APBD following the deduction of the Special Allocation Fund (Dana Alokasi Khusus, DAK). In contrast to ADD, which is primarily put to use to fund village apparatus, DD is designed to run village programs. In this study, the variables DD and ADD stand alone to show their respective correlations to IDM due to the various goals of DD and ADD.

The amount of funds the government transfers to the village government is used in the DD and ADD values. It is presumed that every penny received was used during the current fiscal year. This assumption was established due to the difficulty in locating information on spending realization by a village. This presumption also applies to data on village spending by province, which shows that almost all of the village funds are used in the same fiscal year. According to this, villages in Aceh province will spend 93.18% of their revenue in 2019, 98.15% in 2020, and 97.45% in 2022. The variable BUMDes is the number of BUMDes registered into the system at the Ministry of Villages. The gender of the village head is coded in two groups where the female is coded 0, and the male is 1. Meanwhile, the village head's education is the number of years of formal education completed by the village head.

This study employs a quantitative technique along with econometric analysis. Panel data and regression using Ordinary Least Squares (OLS) are applied. Using panel data may detect and estimate impossible impacts or influences with cross-section or time series data. A qualitative method was used to explain the detailed findings of the econometric analysis. Interviews were conducted to gather pertinent data on the audit process used by the local government in villages. The following model was used to analyze the effect of audits on village development:

$$LIDM_{dw} = \beta_0 + \beta_1 Audit_{dw} + \beta_2 LocalAuditor_{kw} + \beta_3 AuditCost_{dw} + \beta_4 LDD_{dw} + \beta_5 LADD_{dw} + \beta_6 Gender_{dw} + \beta_7 EduKades_{dw} + \beta_8 BUMDes_{dw} + \varepsilon_{dw} \quad \text{................................. (1)}$$

RESULT AND DISCUSSION

Aceh province has the third largest number of villages in Indonesia. Aceh Province consists of 6,496 villages, which is only smaller in number compared to villages in Central Java and East Java Provinces. From the district/city perspective, North Aceh District (852 villages) has the most villages even though its area is not the largest in Aceh. Meanwhile, Sabang City (18 villages) has the fewest villages. Detailed information regarding village statistics in Aceh Province can be seen in Appendix 1.

According to Puri and Khoirunurrofik (2021), BUMDes can provide more significant benefits to the local economy than villages without village-owned enterprises. The number of BUMDes in Aceh Province in 2020 is 4,585, or 70.58% of the total village in Aceh. In Sabang City, all villages have BUMDes, compared to Pidie District, where only one-third of the villages have BUMDes. Further research discovered that only 2,965 (45.64%) BUMDes of 4,585 could generate income. This suggests that many BUMDes are still operating their businesses
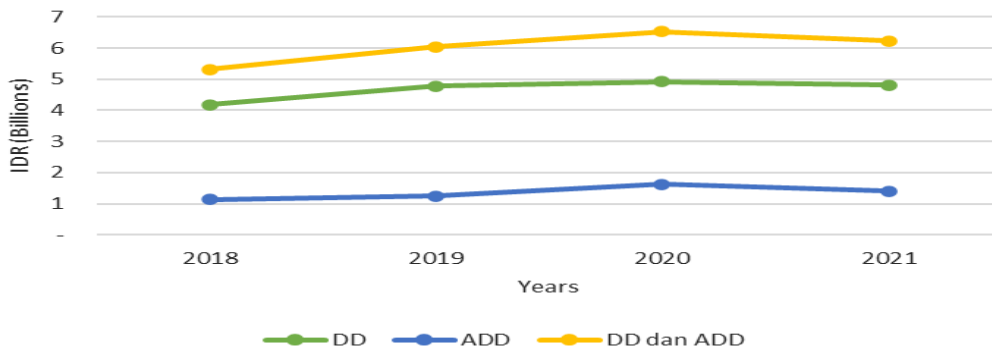
Figure 4. Growth of DD and ADD in Aceh Province

without proper procedures. During 2018–2021, local governments granted villages IDR 24.1 trillion through DD and ADD. The distribution of DD and ADD reached the amount of IDR 5.3 trillion in 2018 and IDR 6.5 trillion in 2021. The number of DD and ADD increased every year except for 2021 due to the impact of the pandemic. North Aceh District distributes the largest DD and ADD as it has many villages, while Sabang City distributes the smallest portion for its DD and ADD. The increase in transfers of funds to villages can be seen in Figure 4.

Most village leaders in Aceh Province are men, as presented in Appendix 2. Meanwhile, according to their education level, most village leaders have a senior high school or university degree. Nevertheless, some regional leaders did not complete their senior high school education. In Subulussalam City, 20% of the villages are still governed by village heads who have not attained their senior high school diplomas. The Development Village Index is an indicator issued by the Ministry of Villages for PDTT to measure development at the village level. Based on these indicators, villages are grouped into five categories: independent, developed, developing, underdeveloped, and very underdeveloped. The average IDM score for a village in Aceh Province in 2022 is 0.6483, classifying it as a developing village. This rank places Aceh in 26th position out of 33 Indonesian provinces and is still below the national average (0.6724). Aceh province's IDM score has improved. However, it is still below the national average. The national and Aceh province's IDM are contrasted, as depicted in Figure 5.

In addition to increasing the IDM value, the status of villages in Aceh has also experienced development. In 2018, there were only 13 independent and 4,183 underdeveloped and very underdeveloped villages. This number continues to change so that in 2022, independent vil-
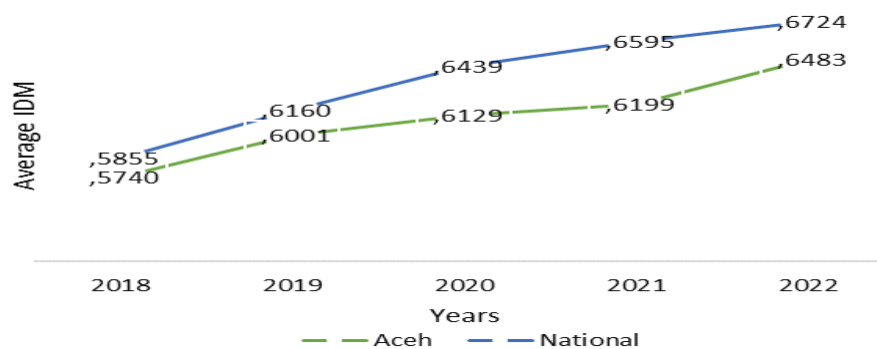
Figure 5. Growth of IDM in Aceh Province and National Level

lages will increase to 224 villages, and underdeveloped also very underdeveloped villages will decrease to 1,456. The increase in the number of independent and developed villages and the decrease in the number of underdeveloped and very underdeveloped villages indicates that there is development in the villages that aligns with the indicators set by the government. The increase in independent and developed villages aligns with the increased funds transferred to the villages. The changes are briefly presented in Table 1.

Even though the amount of DD and ADD distributed by the government did not increase in 2021, there is significant growth in the number of independent villages in 2022. The COVID-19 epidemic restricted the ability of local administrations to manage their money. The central government requires some of the village's funds to provide social assistance to needy people. This limitation on using village funds can increase IDM in Aceh Province. This unusual condition is attractive for further research to explore whether the central government's intervention in village finances positively impacted village development.

Article 27 of the Minister of Home Affairs Regulation Number 20 of 2018 concerning Village Financial Management states that local governments must supervise the distribution of village funds. The mayor or regent engages with the local government internal auditor known as the Government Internal Supervisory Apparatus (Aparatur Pengawas Internal Pemerintah, APIP) to oversee the execution of village financial management. This rule does not specify the requirement for an audit of village funds. As a result, each district/city has its interpretation of this regulation. Some regions perceive it enough for village funds to be monitored for distribution, while sampling sufficiently checks their accountability. This will undoubtedly raise the possibility of misappropriating local money in unaudited areas.

When monitoring the village government, the local government Inspectorate refers to it as an audit. The audit is always conducted as a post-audit, which means it is done after the village money has been spent. The audit of the village funds is based on the village's reporting on the utilization of the funds. The Inspectorate uses the term audit and audit practices to implement Article 27 of the Ministry of Home Affairs Regulation Number 20 of 2018. Technical regulations regarding the implementation of village funds audits do not yet exist. Only 33.42% of villages are audited on average by the local government Inspectorate. This suggests that the local government will need three years to audit all villages, assuming the same village

Table 1. Number of Villages in Aceh Province by their status (2018-2022)

| Year | IDM status | | | | | Total |
	Independent	Developed	Developing	Underdeveloped	Very Underdeveloped	
2018	13	161	2,138	3,623	560	6,495
2019	26	362	2,942	2,858	308	6,496
2020	32	397	3,458	2,404	205	6,496
2021	41	486	3,621	2,155	193	6,496
2022	224	787	4,027	1,379	77	6,494

is not audited within that time. This figure is very small, considering that almost 67% of village funds are not audited annually. The number of villages being audited is decreasing every year. In 2018, 1,958 villages (39.43%) were audited; in 2021, only 1,377 villages (29.88%) were audited. According to the Inspectorate, this occurred due to budget refocusing during the pandemic. As a result, the budget allocated to perform audits at the Inspectorate was reduced. Details of the number of villages audited by regional governments from 2018-2021 are presented in Appendix 3.

Based on the data, the average number of auditors in Aceh Province in 2018-2021 reached 420 people. If all auditors are empowered to audit all villages, then one auditor can audit 16 villages. The number of auditors at the local government is increasing yearly; cumulatively, in 2018, the number of auditors in service with the Aceh local government reached 336 people, which will increase to 521 people in 2021. The highest comparison of the number of villages and auditors is found in Pidie District, where one auditor is responsible for 57 villages, while the lowest is in Lhokseumawe City, where one auditor is responsible for two villages.

Despite a decline in the average number of villages being audited, the average number of auditors employed at the regional level increased. This can be seen from the number of auditors, which continues to increase from 336 in 2018 to 521 in 2021. The rise in auditor numbers also impacts comparing the number of auditors to the villages audited. The workload per auditor will decrease as the number of auditors increases. According to BPKP (2014), local governments must employ at least 40 auditors. The number of regional auditors in Aceh is still below this ideal figure. This minimum amount is issued before direct funds are transferred to the village. The value of IDM also increased concurrently with the growth in the number of auditors. This is consistent with a statement by Abdolmohammadi and Tucker (2002) that the number of auditors correlates with a nation's level of wealth.

In Aceh, local governments incurred an average audit cost of 3.96 million per village. The total budget allocated to audit 6,661 villages within four years amounts to 26.3 billion. When comparing the budgets needed for different districts/cities, South Aceh District requires the least amount of money, whereas Nagan Raya District requires the most. Appendix 4 shows how each regional government absorbed the audit budget. On average, local governments paid more in audit costs between 2018 and 2020 than less in 2021. This trend is not in line with the yearly increase in IDM. The cost per audit in 2018 required 3.25 million and raised to 4.07 million in 2021. The increase in the number of auditors is not proportional to the increase in the cost of audit, which indicates that the addition of the audit budget does not match the addition of auditors. Hence, the number of villages audited each year does not increase even though Masood and Lodhi (2015) also Zhao (2005) have emphasized the importance of financial support in implementing a quality audit.

Regression was performed using Ordinary Least Square (OLS). Variables are controlled by year and district/city code in preparing the regression formulation to avoid bias. The relationship between IDM and village funds may be observed in Figure 6, while Appendix 5 presents

the OLS result. Compared to unaudited villages, audited villages often have higher IDM. According to the simultaneous F test, the probability value is 0.000 or less than 0.05, as can be observed. Therefore, it can be concluded that IDM is influenced by audit, the number of auditors, cost of audit, DD, ADD, gender, village head's education, and the number of BUMDes. The regression results also reveal a determinant coefficient of 0.2746, indicating that the independent variable impacts IDM by a factor of 27.46. The rest of IDM is affected by another factor not investigated. This is interesting because IDM is not based on the variables examined in this study, but the impact on IDM is substantial.

Although all independent factors impact IDM, each independent variable impacts the dependent variable differently. The audit variable, which is the focus of this study, demonstrates a positive and statistically significant relationship with IDM. With a 99% confidence level, the audit link to IDM is significant and favorable from model 1 to model 5. The value of the audit and IDM relationship remains constant despite the inclusion of additional control variables. This demonstrates a significant connection between village growth and the audit carried out by the Inspectorate.

In terms of the finding that auditing provides a beneficial impact on village development, it is consistent with earlier research that also found this to be true (Hay & Cordery, (2017); Gans-Morse et al. (2018); Wei et al. (2019)). An audit can enhance the village government's performance and be valued as a monitoring tool. Funds managed by the village can become more transparent with an audit and ultimately be used to achieve community objectives. The existence of a positive relationship between the implementation of audits and village development can be used as a basis for the local government in Aceh to increase the number of villages audited so that the IDM score in their area increases.

The link between IDM and other factors, such as the number of auditors and audit fees, is different. Local governments still have a relatively modest number of auditors. A minimum of 40 auditors, as mandated by BPKP, needs to be met in any region in Aceh. The minimal number of auditors would affect the audit standard since, as Masood and Lodhi (2015) discovered,
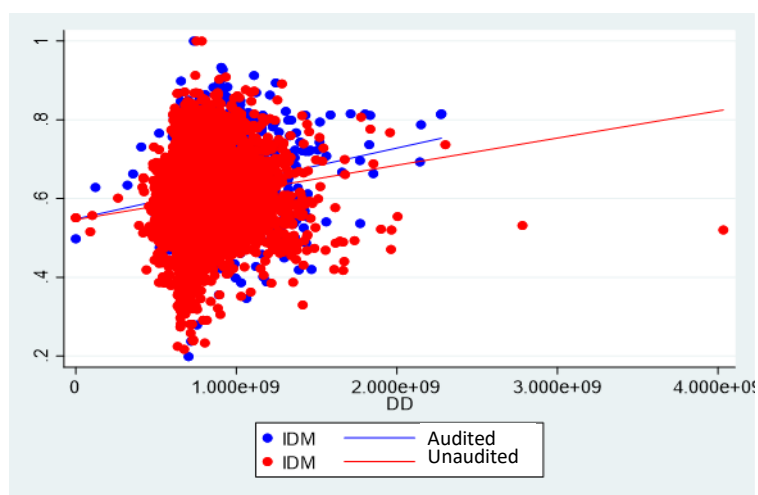
Figure 6. Scatter Plot Relation between IDM and Audited Villages/Unaudited Villages

there are not enough auditors in Pakistan to conduct audits. Audit fees, however, display a positive and robust relationship to IDM. This demonstrates that regions with larger audit expenditures earn higher IDM scores, which aligns with Mugo's (2014) and Nabulu's (2015) research that an adequate monitoring budget will determine monitoring success. The budget available for conducting audits is also related to audit quality (Masood & Lodhi, 2015).

The findings of this study reveal the negative association between DD and IDM compared to the research of Ekawati (2022) and Nadia (2022), which discovered a positive relationship between the two. The study that has been conducted, however, indicates that there is still a beneficial association between ADD and IDM. Even though there was a reduction in the amount of DD and ADD transferred to the village, the IDM value continued to increase. The difference in the direction of the relationship between DD and ADD towards IDM shows the ineffectiveness of using DD to encourage village development.

Control variables such as the educational background of the village head and the number of BUMDes owned by the village both have a positive and significant effect on IDM with a confidence level of 99%. This aligns with the research by Nadia (2022) also Puri and Khoirunurrofik (2021), who find that the higher the educational background level of the village head, the higher the IDM score. Similarly, increasing the number of BUMDes owned by a village might lead to a rise in IDM due to BUMDes' potential value as an economic engine for the community. The only factor that has no impact on IDM is gender. This might be the case as not many women rise to the position of the village leader, making the comparison pointless.

Even though there is a relationship between the implementation of inspections carried out by regional Inspectorates and village development, there are several challenges faced by regional Inspectorates in carrying out village inspections. These challenges are one of the reasons why not all villages are audited. Some challenges are village audit regulations, audit and accounting standards, inspectorate authority, number and capacity of auditors, budget, village government awareness, and IT support.

According to Aceh's local government inspectorate, the audit being conducted at the moment is based entirely on the Permendagri (regulation of the Ministry of Home Affairs) related to village funds management. These guidelines do not specify how village fund audits should be carried out, worsened by the lack of internal rules governing how the local authority should conduct the audit. Due to unclear laws regarding the requirement to audit village funds, only 33% of villages are audited annually. The absence of clear rules regarding the implementation of village fund audits raises several problems, including those related to the authority of the Inspectorate, audit standards, monitoring of follow-up audit findings, and handling of state losses from misuse of village funds. This aligns with Husnatarina's research (2020), which states that there are limited regulations in managing village funds, including the oversight element. Basically, it is BPK's responsibility to conduct an audit of the state's finances. Any village fund audit results conducted by the Inspectorate should be forwarded to BPK. The significance of BPK's involvement in reviewing village accountability reports is men-

tioned in Husnatarina's research (2020).

The audit results carried out by the Inspectorate certainly do not end with reporting. Therefore, it is important to regulate mechanisms related to the follow-up of audit findings. Liu and Lin (2012) state that following up on audit recommendations is more important than the process of detecting fraud in the audit itself. It is unclear how to handle state losses carried on by the misappropriation of local finances. While other regional governments return the money to the regional treasury, some regional governments restore the loss to the village. The government must strictly regulate this state loss.

The standards used by regional government inspectorates are based on BPKP supervision standards. The state financial audit standards prepared by the BPK should be used for audits related to state finances. BPKP supervision standards are carried out to monitor the implementation of government projects, not post audits as carried out by the inspectorate. Appropriate standards will, of course, impact the inspection management carried out later. Arens et al. (2012) have emphasized the importance of setting audit standards. In addition to problems with auditing standards, BPK (2022) notes that the absence of village government accounting standards is one of the vulnerabilities in village fund management. This is in line with Husnatarina (2020), who said that the absence of accounting standards is another barrier to accountability in the village. Accounting standards are crucial for village governments to use as a guide when managing their finances.

The district/city inspectorate embodies the monitoring function in the regions. The inspectorate is an extension of the regional head and is responsible for monitoring programs carried out by various Regional Apparatus Organizations (Organisasi Perangkat Daerah, OPD) and reports to the regional head. The independence element is a deciding factor for audit quality, according to Liu and Lin (2012). The inspectorate, whose position reports to the regional head, frequently has limited movement if it interferes with their interests. This also occurred during the auditing of village funds. Several Inspectorates acknowledged that they encountered constraints imposed by regional heads when selecting objects or conducting audits. The audit process is constrained not just by regional leaders but also by vertical agencies in the region. For instance, it will be challenging for the inspectorate to carry out its audit procedures if a vertical agency engages in operations involving villages.

The position of the inspectorate under the local government caused a polemic when the inspectorate conducted an audit of village funds. On the one hand, the village government is an independent governance structure; hence, the inspectorate's position becomes an external government party; on the other hand, the local government is the village's supervisor and advisor, which makes the inspectorate an internal government position. The district/city inspectorates expressed confusion over their position when performing village fund audits. The inspectorate's position needs to be established to support their audit activities.

The number of auditors within the regional governments is still insufficient based on the

statistics on the previously presented auditors. The number of auditors and the quality of the audit findings are directly correlated, according to Giroux and Jones (2011), who emphasize that audit quality is highly dependent on the number of auditees. Rainey and Steinbauer (1999), Masood and Lodhi (2015), also Irwin et al. (1998) agree that audit effectiveness depends on the number of auditors and financial resources. In addition to auditing villages, regional auditors are entrusted with assessing the region's schools, health services, and regional government agencies. Several inspectors complained about the lack of auditors, particularly given that not all auditors have technical expertise. The Inspectorate's auditors have not undergone specialized training in auditing local funds. Regardless, Mugo (2014) and Nabulu (2015) discover that the level of education and training of supervisory staff, the supervision budget, and the amount of time for supervision all affect supervision success.

Although the audit budget for 2018 through 2021 averaged above IDR 6 billion, the inspectorate still considered this amount insufficient. As explained by Irwin et al. (1998) also Masood and Lodhi (2015), financial resources are said to impact audit quality. The inspectorate's shoestring budget has impacted how much financial resources could be available for the village fund audit program. Due to this financial restriction, village fund audits are usually undertaken for several fiscal years. As a result of financial and human resources constraints, the inspectorate must be creative and innovative in developing its audit program.

Another obstacle in conducting audits is the lack of understanding of the village government's duties and responsibilities. The auditor occasionally has trouble carrying out the audit procedure since the village leader is unaware of their responsibilities. The same situation occurred with the Village Consultative Body or what is often referred to as BPD in the villages. More often than not, BPD carries out proper supervision. This finding aligns with Maria and Halim's research (2020), which reveal that the surveillance carried out by BPD is deemed ineffective as BPD is not fully aware of and does not recognize its duties and responsibilities.

Information technology (IT) support can help with financial and human resource constraints. However, there has not been enough IT support to conduct audit procedures up to this point. From this point forward, the only use of the IT support is for developing BPKP's webpage, which is used only to collect village accountability reports. The village leader can submit brief information on the expenditure of village finances using this page. Currently, the website does not have the accountability report's supporting documents. Thus, they cannot be used for an audit. The current page is only helpful in determining the village head's compliance level concerning filing reports on using local funds.

The district/city Inspectorate has tried to continue performing audits even though they encountered several challenges in relation to the audit's implementation. One of those challenges involves putting together several audit programs in one area. In addition, the inspectorate welcomes public complaints concerning instances of village finances being abused. Suppose there are indications that the village administration is engaged in illegal activity, which will lead to the loss of state funds. In that case, the inspectorate shall cooperate with law enforce-

ment officials to investigate further.

CONCLUSION

The results of this study indicate that the audit has a positive and significant effect on IDM. The result is in line with another research in the public sector, which finds a positive relation between audit and public sector performance. It proves that audits can be used as a tool for the government to reduce underdeveloped villages. In addition, other variables such as the cost of an audit, village funds, allocation of village funds, educational background of village heads, and the number of village-owned enterprises also significantly affect IDM. The implementation of audits conducted in villages is identified to have several weaknesses, including rules on audit liabilities, an absence of auditing and accounting standards, ambiguous authority of the inspectorate, a lack of budget support for audit implementation, a lack of village government understanding of supervision, and a lack of information technology support. To strengthen the performance of village fund audits, the government needs to take various actions, including strengthening village fund audit regulations, increasing local government support for audit resources, and utilizing information technology.

The government needs to create regulations that ensure proper monitoring of the funds managed by the villages. The position of the inspectorate should be explicitly stated in the established rules and regulations. Additionally, the government should develop accounting and auditing rules for village funds and address audit-related issues such as following up on audit findings and handling state losses due to misappropriation of village funds. Local governments should be aware of the availability of auditors to enhance the implementation of auditing in their region. The local government must strengthen auditing efforts to encourage good governance in village governments, bearing in mind that there are still so few auditors and budgetary support available for monitoring village funds.

Meanwhile, the government needs to create technology that promotes effective and efficient monitoring to meet the challenges in the current digital era and maintain existing resources. The budget and staffing requirements for conducting audits can be reduced through information technology. Support from IT also makes auditing easier by integrating all stakeholders.

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APPENDICES

Appendix 1. Village statistics of Aceh Province

District/city	Num. of village	Num. of BUMDes	BUMDes with omzet	DD and ADD 2018*	DD and ADD 2019*	DD and ADD 2020*	DD and ADD 2021*
South Aceh	260	258	193	246,872.53	271,327.80	272,507.12	267,947.13
Southeast Aceh	385	385	136	306,776.20	344,087.10	346,932.40	344,878.99
East Aceh	513	165	135	430,411.38	475,214.65	464,920.47	470,044.87
Central Aceh	295	285	188	259,961.03	285,532.42	304,667.30	303,828.37
West Aceh	321	311	201	279,550.85	311,386.84	304,733.31	307,990.80
Aceh Besar	604	236	211	467,728.73	471,419.12	593,833.56	601,263.40
Pidie	730	236	154	578,797.63	608,109.40	709,900.25	632,299.12
North Aceh	852	459	333	660,966.19	729,441.02	803,270.04	623,813.65
Simeulue	138	124	42	147,839.19	164,809.56	163,104.20	162,442.04
Aceh Singkil	116	112	74	137,369.14	154,543.91	150,715.81	148,744.03
Bireuen	609	439	273	496,196.55	537,717.73	597,386.67	536,927.37
Southwest Aceh	152	151	128	151,877.78	165,543.63	162,804.15	162,226.54
Gayo Lues	136	134	121	123,858.44	135,596.67	146,108.73	148,784.14
Aceh Jaya	172	170	99	161,300.10	179,234.44	178,477.77	175,262.06
Nagan Raya	222	221	87	-	228,623.71	242,780.07	225,108.10
Aceh Tamiang	213	196	158	212,460.31	236,743.16	236,463.56	251,899.44
Bener Meriah	232	230	186	203,458.18	228,391.11	242,238.96	245,121.12
Pidie Jaya	222	221	99	194,595.71	211,351.57	221,017.13	214,867.37
Banda Aceh City	90	45	27	122,901.59	135,109.36	128,952.03	130,077.06
Sabang City	18	18	13	35,900.29	51,789.49	60,487.78	60,907.42
Lhokseumawe City	68	65	48	-	-	99,535.39	105,843.98
Langsa City	66	64	25	98,632.18	106,973.69	104,867.88	104,873.82
Subulussalam City	82	60	34	-	-	-	-
Total	6,496	4,585	2,965	5,317,454.00	6,032,946.39	6,535,704.58	6,225,150.81

Appendix 2. Educational Background of Village Leader in Aceh Province

District/city	Gender of Villages Leader (%)		Education Background of Village Leader (%)	
	Male	Female	Graduate from senior high school or higher	Graduate less than senior high school
South Aceh	100	0	88.85	11.15
Southeast Aceh	91.54	8.46	95.84	4.16
East Aceh	98.84	1.16	88.69	11.31
Central Aceh	99.32	0.68	83.73	16.27
West Aceh	96.93	3.07	81.68	18.32
Aceh Besar	94.52	5.48	94.70	5.30
Pidie	99.73	0.27	93.56	6.44
North Aceh	95.19	4.81	89.08	10.92
Simeulue	95.74	4.26	96.38	3.62
Aceh Singkil	96.61	3.39	81.90	18.10
Bireuen	100	0	92.94	7.06
Southwest Aceh	100	0	90.79	9.21
Gayo Lues	100	0	84.56	15.44
Aceh Jaya	100	0	80.23	19.77
Nagan Raya	99.10	0.90	89.64	10.36
Aceh Tamiang	93.64	6.36	92.02	7.98
Bener Meriah	98.29	1.71	91.38	8.62
Pidie Jaya	99.10	0.90	98.65	1.35
Banda Aceh City	89.47	10.53	97.78	2.22
Sabang City	100	0	100.00	0.00
Lhokseumawe City	100	0	97.06	2.94
Langsa City	97.01	2.99	98.48	1.52
Subulussalam City	100	0	79.27	20.73

Appendix 3. Number of Audited Village per District/City (2018-2022)

District/city	Number of Villag-es	Number of Audited Village							
		2018	%	2019	%	2020	%	2021	%
South Aceh	260	260	100	260	100	3	1.15	73	28.08
Southeast Aceh	385	102	26.49	54	14.03	95	24.68	98	25.45
East Aceh	513	24	4.68	62	12.09	58	11.31	16	3.12
Central Aceh	295	67	22.71	61	20.68	11	3.73	14	4.75
West Aceh	321	36	11.21	36	11.21	57	17.76	68	21.18
Aceh Besar	604	326	53.97	309	51.16	455	75.33	351	58.11
Pidie	730	88	12.05	35	4.79	73	10.00	43	5.89
North Aceh	852	271	31.81	266	31.22	200	23.47	36	4.23
Simeulue	138	46	33.33	55	39.86	23	16.67	7	5.07
Aceh Singkil	116	45	38.79	18	15.52	11	9.48	29	25.00
Bireuen	609	124	20.36	65	10.67	31	5.09	11	1.81
Southwest Aceh	152	60	39.47	60	39.47	42	27.63	60	39.47
Gayo Lues	136	-	-	133	97.79	73	53.68	43	31.62
Aceh Jaya	172	172	100	53	30.81	57	33.14	63	36.63
Nagan Raya	222	-	-	12	5.41	18	8.11	39	17.57
Aceh Tamiang	213	205	96.24	188	88.26	81	38.03	116	54.46
Bener Meriah	232	34	14.66	55	23.71	80	34.48	161	69.40
Pidie Jaya	222	18	8.11	19	8.56	20	9.01	19	8.56
Banda Aceh City	90	55	61.11	42	46.67	36	40.00	43	47.78
Sabang City	18	9	50.00	12	66.67	15	83.33	10	55.56
Lhokseumawe City	68	-	-	-	-	68	100	68	100
Langsa City	66	16	24.24	11	16.67	13	19.70	9	13.64
Subulussalam City	82	-	-	-	-	-	-	-	-
Total	6,496	1,958	39.43	1,806	35.01	1,520	29.35	1,377	29.88

Appendix 4. Number of Local Auditors and Cost of Audit per District/City (2018-2022)

District/city	Number Village	Ave. Auditor 2018-2021	village/ Auditor	Auditor/Audit 2018	Auditor/Audit 2019	Auditor/Audit 2020	Auditor/Audit 2021	Num. audit-ed vlg 2018-2021	Audit cost / Village	Cost/Audit 2018	Cost/Audit 2019	Cost/Audit 2020	Cost/Audit 2021
South Aceh	260	25.50	10,20	0,07	0,08	10,33	0,44	596	1,62	1,10	1,56	1,41	3,66
Southeast Aceh	385	21.75	17,70	0,14	0,31	0,24	0,34	349	3,72	1,96	6,48	4,74	3,06
East Aceh	513	31.25	16,42	1,25	0,52	0,53	2,00	160	3,84	4,24	5,71	1,65	3,97
Central Aceh	295	18.75	15,73	0,24	0,30	1,82	1,50	153	8,00	6,87	6,96	12,51	14,34
West Aceh	321	13.00	24,69	0,22	0,36	0,23	0,26	197	8,76	3,33	11,22	12,10	7,52
Aceh Besar	604	30.75	19,64	0,08	0,08	0,07	0,11	1.441	3,24	3,66	3,70	2,89	2,89
Pidie	730	12.75	57,25	0,08	0,20	0,08	0,72	29	3,18	4,63	5,62	1,24	1,49
North Aceh	852	23.75	35,87	0,08	0,08	0,13	0,69	773	3,42	3,43	3,91	2,67	3,99
Simeulue	138	19.50	7,08	0,37	0,36	0,87	3,00	131	6,89	6,53	6,53	8,26	7,66
Aceh Singkil	116	23.75	4,88	0,38	1,44	2,36	0,90	103	8,76	7,23	13,01	6,60	9,32
Bireuen	609	18.75	32,48	0,13	0,25	0,55	2,36	231	4,38	2,84	5,86	6,90	5,82
Southwest Aceh	152	12.50	12,16	0,17	0,22	0,33	0,22	222	3,89	3,94	3,76	4,14	3,78
Gayo Lues	136	25.25	5,39		0,18	0,33	0,56	249	4,74		3,59	6,65	5,07
Aceh Jaya	172	7.50	22,93	0,03	0,11	0,12	0,17	345	3,75	2,49	4,71	4,54	5,63
Nagan Raya	222	8.00	27,75		0,67	0,44	0,21	69	14,49		12,50	13,89	15,38
Aceh Tamiang	213	17.00	12,53	0,08	0,07	0,21	0,17	590	2,58	1,30	3,02	6,46	1,42
Bener Meriah	232	27.00	8,59	0,53	0,45	0,34	0,24	330	2,12		3,18	2,35	2,09
Pidie Jaya	222	9.00	24,67	0,17	0,58	0,55	0,58	76	6,16	6,67	5,33	5,85	6,84
Banda Aceh City	90	23.25	3,87	0,45	0,55	0,64	0,51	176	7,68	7,08	8,69	9,48	5,94
Sabang City	18	7.75	2,32	0,78	0,58	0,60	0,80	46	5,61	5,83	3,95	5,53	7,53
Lhokseumawe City	68	35.00	1,94			0,51	0,51	136	3,39			3,11	3,66
Langsa City	66	27.75	2,38	1,81	2,55	2,08	3,00	49	10,99	12,64	11,52	13,27	4,11
Subulussalam City	82						-	-	-				-
Total	6,496	420.00	15.47	0,17	0,21	0,29	0,38	6,661	3,96	3,25	4,31	4,34	4,07

Appendix 5. Comparison of OLS models

	Model 1	Model 2	Model 3	Model 4	Model 5
Audit	0.000244**	0.000238**	0.000214**	0.000202**	0.000209**
	(0.000068)	(0.000069)	(0.000069)	(0.000069)	(0.000069)
LocalAuditor		-0.000167	-0.000088	-0.000099	-0.000105
		(0.000105)	(0.000106)	(0.000105)	(0.000106)
AuditCost		0.000013	0.000127	0.000113	0.000129*
		(0.000075)	(0.000077)	(0.000077)	(0.000077)
LDD			-0.034455**	-0.031573**	-0.031029**
			(0.006349)	(0.006299)	(0.006305)
LADD			0.023758**	0.021695**	0.022426**
			(0.003494)	(0.003471)	(0.003470)
Gender				-0.003195	-0.004164
				(0.006661)	(0.006644)
EduKades				0.091006**	0.091218**
				(0.004701)	(0.004690)
BUMDes					0.011811**
					(0.001690)
_cons	-0.561027**	-0.550248**	-0.405762**	-0.638490**	-0.667761**
	(0.004032)	(0.018195)	(0.082882)	(0.083723)	(0.083912)
N	25291	24923	24923	24911	24911
F	448.0924	414.3057	391.7971	382.0185	371.7244
r2	0.2574	0.2602	0.2621	0.2742	0.2755
r2_a	0.2567	0.2594	0.2612	0.2733	0.2746

Standard errors in parentheses
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

Unraveling the impact of social assistance and capital expenditure on poverty rates in Papua's Region

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ABSTRACT

The Indonesian government has made various efforts to reduce poverty, including through policies in government spending. The spending realized by the government is expected to be able to encourage an increase in people's welfare and reduce poverty. This study aims to analyze the effect of government spending, especially social assistance expenditure and five types of capital expenditure, on the poverty rate, using data at the regional/city level in the Papua province from 2011 to 2019. This study also uses other supporting variables, namely the Gini ratio, Gross per capita Regional Domestic Product (GRDP), school participation rate, and ratio of community health centers. The data used is secondary data obtained from Statistics, The Audit Board of The Republic of Indonesia (Badan Pemeriksa Keuangan, BPK), and the Ministry of Health. The data analysis technique used in this study is panel data regression analysis with a fixed effect model. The analysis showed that out of the six types of government expenditure studied, only capital expenditure for roads, networks, and irrigation significantly reduces the poverty rate.

KEYWORDS:
Poverty rate; social assistance expenditure; capital expenditure; fixed effect

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INTRODUCTION

Poverty is a major issue that many countries face today. The importance of poverty problems faced by the world is reflected in the commitment of countries in the world, making the goal to eliminate poverty, the first of 17 goals to be achieved in the Sustainable Development Goals. In Indonesia, handling the problem of poverty is also a major concern of the central and local governments as part of efforts to realize the government's objectives in the Preamble of the 1945 Constitution, which mandates the promotion of the general welfare and social justice for all Indonesian people.

Statistics Indonesia (Badan Pusat Statistik, BPS) data shows that Papua province has always has the highest poverty rate in Indonesia for many years compared to other regions (Figure 1). Analysis of areas with high poverty in 2018 by the Ministry of National Development Planning (Kementerian Perencanaan Pembangunan Nasional Republik Indonesia/ Badan Perencanaan Pembangunan Nasional, Bappenas) states factors that influence poverty in Papua, including accessibility which tends to be difficult due to the topographic conditions of the region. This hampers population mobility, distribution of goods, and provision of basic services to the community. Apart from that, low investment and productivity because most poor people work as farmers and fishermen who only fulfill their daily food needs are also the main poverty profile in Papua province.

Various efforts have been made to reduce poverty, including through government spending. Although, according to Anderson et al. (2018), there is no clear evidence that higher government spending has significantly reduced income poverty in low and middle-income countries, Anitasari and Soleh (2015) state that government spending is part of fiscal policy to prepare budget instruments to regulate the economy. All types of spending are expected to improve the economy and community welfare. Research by Liu et al. (2020) in Pakistan proves that government spending significantly affects poverty alleviation in rural Pakistan. These results align with the research results of Efrianti et al. (2018) also Silva and Sumarto (2015) in Indonesia.
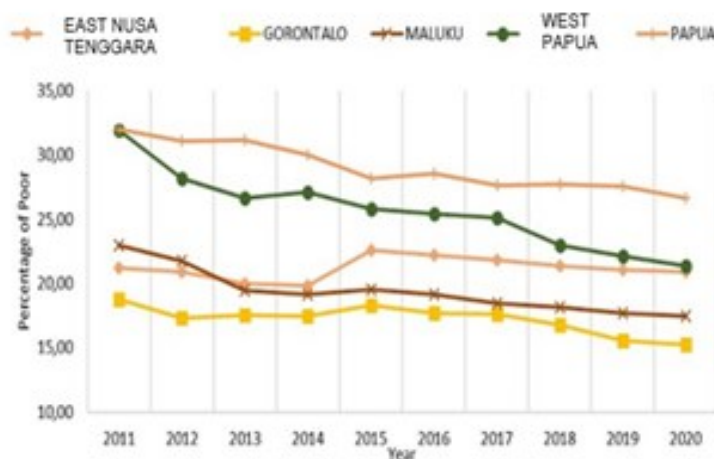

Figure 1. Poverty Rate (Percent) in 2011-2020
Source: BPS Provinsi Papua (2021)

Implementing regional autonomy gives regency/city governments broader rights and obligations to manage government affairs more independently. This condition allows local governments to be more active in dealing with poverty problems by planning, formulating, and implementing policies according to their respective needs. Local governments can integrate poverty alleviation efforts into regional development policies and activities, including through spending policies. The government needs to ensure that the expenditure allocation is appropriate to support poverty alleviation with optimal results, minimizing administrative and unproductive activities (Nursini & Tawakkal, 2019). The reallocation of government spending from less productive sectors, such as public administration, to other sectors, such as agriculture, energy, water, and health, leads to higher Gross Domestic Product (GDP) growth rates, thereby accelerating poverty alleviation (Sennoga & Matovu, 2013).

In a region, Gross Regional Domestic Product (GRDP) is a key indicator of the economic performance and overall wealth generation within a specific region. Higher GRDP implies increased economic activities, job opportunities, and income levels, which, in turn, can contribute to poverty reduction. The positive correlation between economic growth, as GRDP measures and poverty reduction is well-established in economic literature (Barro, 2000; Dollar & Kraay, 2002). As regions experience economic expansion, there is a likelihood of improvements in living standards, access to education, healthcare, and other essential services, ultimately leading to a decline in poverty rates (Bourguignon, 2004; Ravallion, 2001). However, it is important to note that the impact of GRDP on poverty is complex, influenced by various factors such as income inequality, government policies, and the effectiveness of social programs (Ravallion, 2005).

The types of local government spending in Indonesia closely related to poverty are social assistance and capital expenditure. Social assistance is government expenditure in the form of money, goods, and services provided selectively and not continuously to improve community welfare (Rarun et al., 2018). Social assistance spending can be handed over to individuals, families, and community groups with unstable economic conditions to meet minimum basic needs. Meanwhile, capital expenditure is aimed at acquiring fixed assets and other assets. The assets acquired are expected to provide benefits beyond one accounting period, such as capital expenditure to acquire land, buildings, and equipment. The allocation of capital expenditure for infrastructure is expected to facilitate public access to goods or services to encourage the creation of economic activities that are expected to increase economic growth. Government capital expenditure and economic growth together influence public welfare (Masnila et al., 2018).

Data on the realization of government spending in 2019 from the Directorate General of Regional Financial Balance (Direktorat Jenderal Perimbangan Keuangan, DJPK) of the Ministry of Finance showed that regencies/cities in Papua Province have a large proportion of social assistance and capital expenditure when compared to other regions in Indonesia as seen in Figure 2. Nevertheless, Papua province still has the highest poverty rate in Indonesia.
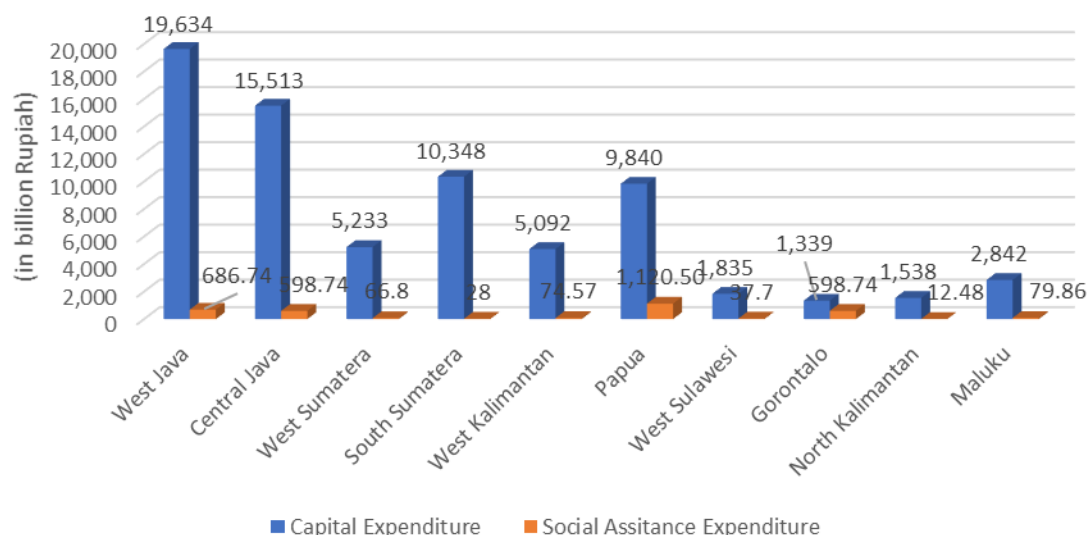
Figure 2. Social Assistance and Capital Expenditure in 2019
Source: DJPK (2020b)

According to Keynes' theory, one component of economic growth is government spending. Government spending is expected to create higher social welfare, including reducing public poverty. Several research studies showing that government spending influences poverty levels carried out by Silva and Sumarto (2015), who find that government spending in Indonesia significantly influenced poverty alleviation; Liu et al. (2020) that there is a negative and significant relationship between government spending with poverty levels in both the short and long term in Pakistan, also Efrianti et al. (2018) that economic growth, government expenditure, private investment, population, and unemployment have a significant effect on poverty in regencies/cities of South Sumatra Province. On the other hand, research on economic growth and poverty in 33 provinces in Indonesia by Sumiyarti (2022) and Sendouw et al. (2017) in Manado City shows contradictory results that the government capital expenditure effect is insignificant in reducing the poverty rate. Another research by Samsal and Samsal (2016) shows that all components of government spending studied have a negative coefficient on the poverty rate in India. However, only government spending on infrastructure has a significant effect on reducing poverty. This is aligned with research in Brazil by Marinho et al. (2017), which finds that government spending on infrastructure has a negative and significant effect on poverty.

Given the wide range of government spending components, more specific research is needed to determine which components significantly influence efforts to reduce poverty. Research results from Nigeria by Babatunde (2018) indicate that government spending on transport and communication, education, also health infrastructure significantly affects economic growth; spending on agriculture and natural resources infrastructure recorded a significant inverse effect on economic growth. Economic growth can be a catalyst for poverty reduction by creating employment opportunities and boosting incomes (Dollar & Kraay, 2002). More detailed research to determine which capital expenditures influence the poverty rate is still rare in Indonesia. One of the studies that focused on the influence of the type of government

capital expenditure on poverty was carried out by Krismaningtyas (2019), which used the Less Square-Structural Equation modeling (PLS-SEM) method to determine the influence of each type of capital expenditure on poverty in East Java. This study shows that capital expenditures for buildings and other expenditures negatively and significantly influence poverty. In contrast, capital expenditures on roads, irrigation, and networks positively influence poverty.

Wagle's (2016) research in 33 Asian countries also Silva and Sumarto (2015) in Indonesia conclude that government spending on social protection significantly affects poverty reduction and inequality. Sasmal and Sasmal research (2016) shows that although all types of government spending have a negative coefficient on poverty, only government spending on infrastructure significantly influences the poverty rate. Sumiyarti's research (2022) results show that social assistance expenditure positively and significantly influences poverty. Meanwhile, Sendouw et al. (2017) showed that spending on social assistance had a positive but insignificant effect on the poverty rate. Todaro and Smith (2014) mention that direct transfers or subsidies are very effective when those in need receive them. In addition, recipients also do not depend on the provision of assistance. However, they are instead motivated to build assets such as education, which is expected to prevent people from falling into poverty. The local governments need to ensure that social assistance spending is realized on target to encourage the achievement of its objectives in helping to alleviate poverty.

Considering various previous studies, this study was conducted to obtain empirical evidence regarding the influence of government spending on poverty levels in regencies/cities in Papua province. The study's results will likely provide information regarding the relationship between government spending, especially social assistance, and capital expenditure on poverty so that local governments can consider it in budgeting. This study builds the hypothesis that social assistance expenditure and each type of capital expenditure realized by the local government affect poverty reduction in Papua. This study differs from the previous research in using regencies/cities in Papua as the object and using more specific capital expenditure variables according to the classification of the type of capital expenditure used by the regency/city government in Indonesia. From several types of government spending, social assistance, and capital expenditure are selected as variables to be studied because both types of variables have a direct relationship with poverty compared to other types of government spending such as salary, official travel, office supplies, rental and others.

RESEARCH METHOD

This study uses quantitative methods with secondary data from BPS, BPK, and the Ministry of Health. The panel data covers all regencies in the Papua province (28 regencies and one city) for nine years from 2011 to 2019. Social assistance and capital expenditure are selected as variables to be studied. The capital expenditure includes land, equipment and machinery, buildings, roads, irrigation, and networks, as well as other capital expenditures. The control variables used in this study are the Gini ratio (describes the condition of societal inequality),

GRDP per capita, school enrollment rate, and the ratio of community health centers per 1000 population. These variables accommodate the multidimensional poverty concept that measures poverty in monetary terms and involves dimensions of health, education, and living standards (Bourguignon & Chakravarty, 2003). The standard of living is represented by per capita GRDP, the school enrollment rate represents education, and the ratio of health centers per 1000 population represents health. The annual poverty rate data released by BPS is from the implementation of the National Socioeconomic Survey (Survei Sosial Ekonomi Nasional, SUSENAS) in March, so this study uses the poverty rate of n+1 (the following year) to be compared with social assistance and capital expenditure, whose value is a cumulative realization up to December. The model used in this study is as follows:

$$PR_{ij} = \beta_0 + \beta_1 SA_{ij} + \beta_2 LE_{ij} + \beta_3 EME_{ij} + \beta_4 BE_{ij} + \beta_5 RIN_{ij} + \beta_6 OE_{ij} + \beta_7 GR_{ij} + \beta_8 GRDP_{ij} + \beta_9 SPR_{ij} + \beta_{10} HC_{ij} + u$$

$$\text{.................. (1)}$$

Whereas PR is poverty rate n+1, SA is social assistance expenditures, LE is land capital expenditures, EME is capital expenditures for equipment and machinery, BE is building capital expenditures, RIN is capital expenditures for roads, irrigation, and networks, OE is other capital expenditures, GR is Gini Ratio n+1, GRDP is per capita GRDP, SPR is school participation rate, and HC is ratio of health center per 1000 population. Table 1 summarizes the variables and indicators used in this study. The analysis techniques used in this study are descriptive analysis and panel data regression. The descriptive analysis aimed to obtain a picture of pov-

Table 1. Summary of variables

Variable	Indicators	Unit
Poverty rate	Percentage of the number of poor people in 28 regencies and one city in Papua in 2012-2020	Percent
Social assistance expenditures	Realization of social assistance expenditures in 28 regencies and one city in Papua in 2011-2019	Billion Rupiah
Land capital expenditures	Realization of land capital expenditures for 28 regencies and one city in Papua in 2011-2019	Billion Rupiah
Capital expenditures for equipment and machinery	Realization of capital expenditures for equipment and machinery in 28 regencies and one city in Papua in 2011-2019	Billion Rupiah
Building capital expenditures	Realization of building capital expenditures for 28 regencies and one city in Papua in 2011-2019	Billion Rupiah
Capital expenditures for roads, irrigation, and networks	Realization of capital expenditures for roads, irrigation, and networks of 28 regencies and one city in Papua in 2011-2019	Billion Rupiah
Other capital expenditures	Realization of other capital expenditures in 28 regencies and one city in Papua in 2011-2019	Billion Rupiah
Gini Ratio	Gini ratio in 28 regencies and one city in Papua in 2012-2020	-
Per capita GRDP	GRDP value divided by the total population of 28 regencies and one city in Papua in 2011-2019	Billion Rupiah
School participation rate	School enrollment rate in 28 regencies and one city in Papua in 2011-2019	Percent
Ratio of health centers per 1000 population	Number of health centers divided by population in 28 regencies and one city in Papua in 2011-2019	-

erty, the realization of social assistance and capital expenditures, and other supporting variables in regencies/cities in Papua. Table 2 summarizes the descriptive statistics of the variables used.

All variables consist of 261 observations. The poverty rate has an average value of 30.09 and a standard deviation of 9.81. The highest poverty rate in Deiyai regency in 2011 was 47.52, while the lowest was in Merauke regency in 2014 at 10.20. This value was much higher than the national poverty rate for that period, which was 9.41 to 12.49. The correlation of each dependent variable to the independent variable was an initial effort to detect the extent of the relationship between the independent and dependent variables. Table 2 shows that social assistance expenditures positively correlate (0.0783) with the poverty rate. This implies that the poverty rate increases as social assistance expenditures increase, although the correlation is relatively weak. Land capital expenditures, building capital expenditures, capital expenditures for roads, irrigation, and networks, per capita GRDP, school participation rate, and Gini Ratio show negative correlations with the poverty rate. This suggests that the poverty rate tends to decrease as these variables increase. The school participation rate, per capita GRDP, and Gini Ratio have relatively strong negative correlations. Capital expenditures for equipment and machinery, other capital expenditures, and the ratio of health centers per 1000 population have weak or no significant correlation with the poverty rate.

The regression analysis of panel data undergoes several stages. Initially, the optimal model (common effect, fixed effect, or random effect) is selected using the Breusch and Pagan Lagrange Multiplier test, the Hausman Test, and the Chow test. This study adopts a fixed effect model, guided by considerations such as the assumed correlation between the independent variables utilized and other variables not incorporated in the model, like geographical conditions. Wooldridge (2016) supports the preference for fixed effects when analyzing policies employing aggregated data. Once the best model is determined, a classic assumption test follows to ensure the absence of violations that might compromise the estimator's status as the best linear unbiased estimator. The tests cover multicollinearity, heteroskedasticity, and au-

Table 2. Descriptive Statistics

Variables	Mean	Std Dev	Min	Max	Correlation
Poverty rate	30.09	9.81	10.03	47.52	1.000
Social assistance expenditures	36.90	33.54	0.00	181.97	0.0783
Land capital expenditures	9.59	9.05	0.00	56.14	-0.2797*
Building capital expenditures	38.67	19.16	3.39	159.64	-0.2791*
Capital expenditures for equipment and machinery	101.21	53.14	9.01	289.32	0.1673
Capital expenditures for roads, irrigation, and networks	123.73	71.17	10.34	435.57	-0.2847*
Other capital expenditures	3.20	4.40	0	40.59	-0.0170
Gini Ratio	0.32	0.07	0.14	0.47	-0.4292*
Per capita GRDP	32.03	50.95	4.21	344.56	-0.4906*
School participation rate	71.27	19.28	9.85	96.75	-0.5953*
Ratio of health centers per 1000 population	0.16	0.10	0.04	0.47	-0.0501

tocorrelation. Subsequently, hypothesis testing is conducted to ascertain the influence of independent variables on dependent variables, both individually and collectively. The suite of hypothesis tests includes t-tests, F tests, and coefficient of determination tests.

RESULT AND DISCUSSION

The first stage of panel data regression is selecting the best model. The results of the Breusch and Pagan Lagrange Multiplier test, the Hausman test, and the Chow test suggest the best model. Furthermore, classical assumption testing is carried out to ensure that the model can produce the best linear unbiased estimator. The classical assumption test result is presented in Table 3. From the result, it can be inferred that the model does not have a multicollinearity problem because no value exceeds 0.8. The results of the Wald test and Wooldridge test (Table 4) show a value less than 0.05, indicating heteroscedasticity and autocorrelation problems in the model. To overcome this problem, a regression of the fixed effect model with the Driscoll-Kraay robust standard error is carried out so that the model can produce a consistent standard error for heteroskedasticity and autocorrelation problems. The estimation results using fixed effect regression with robust Driscoll-Kraay can be seen in Appendix 1.

Models 2 to 7 in Appendix 1 show regression results of government spending with variable controls on poverty rate. Based on the results of the regression, it can be seen that the government spending variables that significantly influence the poverty rate are road, irrigation, and network capital expenditures. This aligns with the results obtained from model 1, which shows regression results against all government spending variables. The coefficient of determination also shows that model 1 becomes the most reliable model to see the influence of government spending variables on the poverty rate. Model 1 shows that five variables significantly affect the poverty rate: road, irrigation, and network expenditure; Gini ratio; per capita GRDP;

Table 3. Classical Assumption Test: Multicollinearity Test Result

	SA	LE	EME	BE	RIN	OE	GR	GRDP	SPR
LE	-0.1096	1							
EME	0.0800	0.3581	1						
BE	0.1613	0.1853	0.3627	1					
RIN	0.1543	0.2728	0.4918	0.4687	1				
OE	-0.0834	0.0182	0.0107	0.0798	0.0572	1			
GR	-0.0875	0.026	0.1014	-0.2376	-0.0126	-0.1242	1		
GRDP	0.1363	0.3605	0.3749	0.2254	0.3513	0.0736	0.0942	1	
SPR	-0.1854	0.1741	0.1721	0.2984	0.1101	-0.0007	0.4074	0.3655	1
HC	-0.0228	-0.1447	-0.076	-0.2251	0.0922	0.2255	0.058	-0.0639	0.1306

Table 4. Classical Assumption Test: Heteroscedasticity and Autocorrelation

Test	Result	Conclusion
Wald	Prob>chi2 = 0.0211	heteroskedasticity
Wooldridge	Prob F = 0.0000	autocorrelation

school participation figures; and the ratio of health centers per 1000 population. The degree of significance of the influence of each independent variable on the dependent variable can be seen from the p-value with the t-test, while the direction of the relationship of the independent and dependent variables is seen from the positive or negative signs on the coefficients of each variable. The school participation rate has a significant effect on the confidence level of 99%, the Gini ratio and the ratio of health centers have a significant effect on the confidence level of 95%, while the capital expenditure on roads, irrigation, and networks as well as per capita GRDP have a significant effect on the confidence level of 90%.

The statistical F probability value shows a figure of 0.0000 or less than the value of α = 5%, then the decision taken is to reject H0, so it can be interpreted that with a confidence level of 95%, the independent variables used in the study together have a significant influence on the dependent variable. The coefficient of determination of 0.3700 indicated that all independent variables used in this study were able to explain the dependent variable by 37%, while the remaining 63% was explained by other variables that were not included in this study. The regression results show that of the six government expenditures studied, only road, irrigation, and network capital expenditures significantly affect the poverty rate. The variable coefficient of -0.0066 means that when all factors are held constant, an increase in capital expenditure for roads, irrigation, and networks, realized by the local government of 1 billion Rupiah, can reduce the poverty rate by 0.0066%. The results obtained from this study are in accordance with several previous studies, such as the research of Marinho et al. (2017), which shows that infrastructure development in Brazil plays an important role in reducing the poverty rate. Similarly, the results of Samsal and Samsal's research (2016) on 15 states in India show that countries with a high ratio of government spending on infrastructure development, such as roads, irrigation, and communications, have high per capita incomes while low poverty rates. The study also shows that although all types of government spending under study have a negative coefficient on the poverty rate, only government spending on infrastructure significantly affects the poverty rate.

Papua Province has an area that tends to have very limited accessibility because it has a large area with topography separated by mountains and valleys. An analysis of areas with high poverty conducted by Bappenas (2018) states that 63% of villages in the Papua region are located in valleys and mountain slopes. The average distance from the regency/city capital in Papua province to the provincial capital in Jayapura is approximately 367 km. Hard-to-reach areas such as Puncak, Puncak Jaya, Lanny Jaya, Intan Jaya, and Paniai regencies contribute to the relatively high poverty rate in the Papua region. Data from Bappenas (2018) also states that only 34% of roads in Papua can be passed by 4-wheeled vehicles or more. In addition, 77% of villages in Papua can be connected by land routes. However, only 29% of these roads have been built with asphalt, and only 32% of villages are traversed by public transport routes (lowest compared to other regions in Indonesia). These conditions restrict population mobility, distribution of goods and services, also the implementation and access of services to the

community, which impact efforts to equalize the results of development and economic growth.

Infrastructure development, such as the construction of roads, is expected to open the isolation of areas in Papua, encourage open access to goods and services, also attract private investment, which is expected to be able to leverage economic movement and break the existing cycle of poverty. Through Law Number 15 of 2017 concerning the state budget for the 2018 Fiscal Year, the central government's policies reflect the importance of providing infrastructure for the community: a minimum 25% transfer of General Allocation Funds and Revenue Sharing Funds obtained by local governments allocated for infrastructure development. Thus, it can accelerate the development of public and economic service facilities in order to increase job opportunities, reduce poverty, and reduce the gap in the provision of public services between regions.

In 2019, Papua became one of the provinces that has not been able to realize the fulfillment of mandatory spending provisions related to infrastructure set by the government (Sofi, 2017). The trend of capital expenditure and capital expenditure on network roads and irrigation realized by the local governments of regencies/cities in Papua has also decreased from year to year compared to the total expenditure. This condition shows that capital expenditure realized by the regency/city government in Papua tends to be low, so they still have the opportunity to increase their capital expenditures in order to meet the mandatory spending set by the central government. The increase in capital expenditure must also be balanced with a higher allocation for road, network, and irrigation capital expenditures that have empirically proven to be able to support poverty reduction efforts in the Papua region

Another variable that affects the poverty rate is the per capita GRDP. The per capita GRDP coefficient of -0.0519 indicates that an increase in per capita GRDP of 1 million Rupiah will reduce the poverty rate by 0.0519% (ceteris paribus). The per capita GRDP in this study represents the community's economic condition, which represents the community's income. The
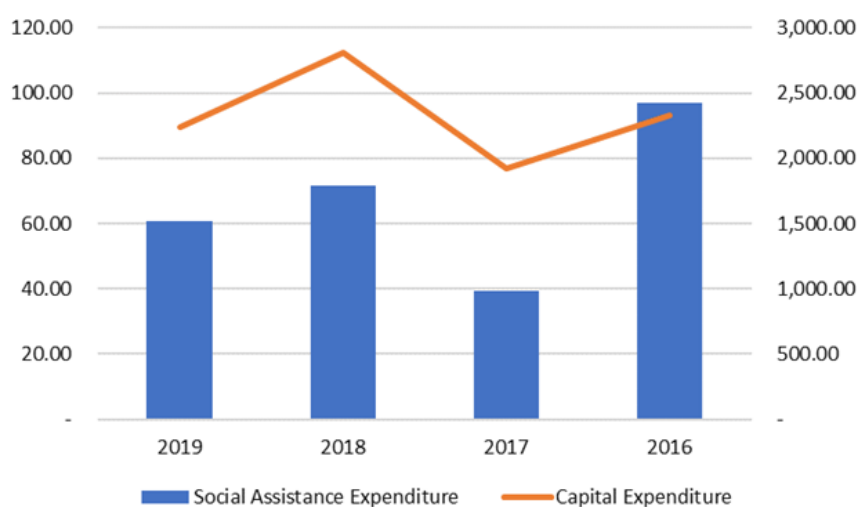

Figure 3. The Trend of Social Assistance and Capital Expenditure in the Papua Region (in billion Rupiah)
Source: DJPK (2017, 2018,2019, 2020a)

higher the income received by the community, the greater the opportunity for people to meet their living needs, thereby reducing the possibility of falling into poverty. Figure 4 shows that regencies/cities with high per capita GRDP levels, such as Mimika and Kota Jayapura, have relatively low poverty rates. On the contrary, regencies/cities with low per capita GRDP such as Supiori and Lanny Jaya have relatively high poverty rates.

The results of previous studies have proven a very close relationship between per capita GRDP and poverty, including the research of Marinho et al. (2017) in Brazil also Barros and Gupta (2017) in South Africa. Both studies conclude that GRDP per household negatively affects the poverty rate. Other research in Indonesia by Aji (2022) also proves that GRDP affects poverty in regencies/cities in Indonesia, although Qurrata and Ramadhani (2021) in their research concludes that GRDP does not have a partially significant effect on poverty in East Java, Indonesia.

Furthermore, the education and public health condition, which in this study is represented by the variable school participation rate and the ratio of health centers per 1000 population, also significantly affect the poverty rate in Papua. The variable coefficient of the school participation rate of -0.0737 indicates that if there is an increase in the school participation rate of 1% it will be able to reduce the poverty rate by 0.0737% (ceteris paribus), while the ratio coefficient of the health center per 1000 population of -7.5660 means that if the ratio of health center per 1000 population increases by 1%, then the poverty rate will decrease by 7.5660% (ceteris paribus). These results align with a study in Pakistan by Sheikh et al. (2020), which shows that households with higher education are less likely to fall into the cycle of poverty because education boosts the productivity of the poor and increases the opportunity to earn higher incomes.
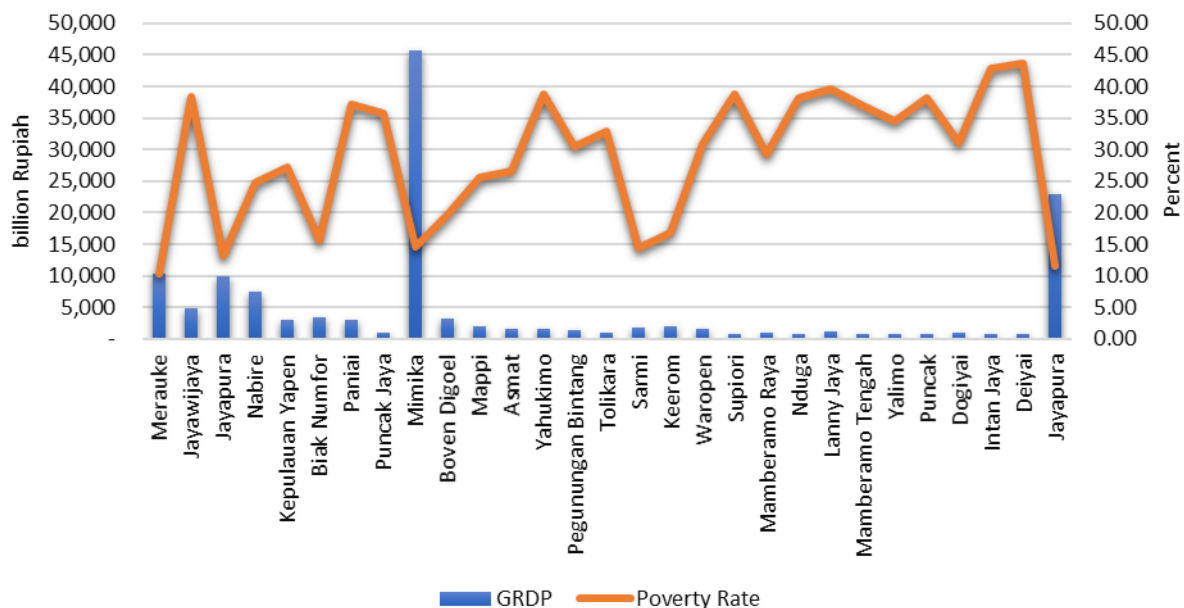

Figure 4. GRDP and Poverty Rate of Papua Region in 2019
Source: BPS Provinsi Papua (2020)

Silva and Sumanto (2015) emphasize the crucial role of good health and education conditions in significantly reducing poverty in Indonesia. Unfortunately, the Papua region faces substantial challenges compared to other Indonesian regions. Bappenas (2018) highlights vulnerability factors leading to easy impoverishment in eastern Indonesia, including Papua, education, and health disparities. The limited accessibility to secondary and higher education facilities, with many villages lacking such amenities, contributes to Papua's low enrollment rates (Figure 5), positioning the province as having the nation's lowest enrollment rates. Similarly, the scarcity of health facilities, with only 5% of villages having easy access, exacerbates the challenges faced by Papua's population. This situation underscores the urgent need for targeted interventions and increased investments in education and public health infrastructure to bridge the existing disparities and uplift Papua's socio-economic conditions.

Education plays a fundamental role in breaking the cycle of poverty by enhancing individuals' skills, employability, and income-earning potential (Psacharopoulos & Patrinos, 2018). Higher school enrollment rates and improved education quality contribute to human capital development, fostering economic growth and reducing poverty (World Bank, 2018). Additionally, an adequate number of public health centers positively correlate with poverty reduction by promoting community health and productivity. Accessible healthcare facilities contribute to a healthier workforce, reducing absenteeism and improving overall well-being, which, in turn, can alleviate poverty (Bloom et al., 2003).

The Gini ratio is a noteworthy variable influencing poverty levels in this study. Contrary to the anticipated positive relationship based on prior research, the robust Driscoll-Kraay analysis reveals a negative and significant effect of the Gini ratio on poverty at a 95% significance level. The unexpected negative coefficient of 8.35 suggests that an increase in the Gini ratio is associated with decreased poverty. This finding contradicts studies in Brazil (Marinho et al., 2017), Indonesia (Sihombing & Arsani, 2021), and South Africa (Barros & Gupta, 2017) that reported a positive and significant impact of the Gini ratio on poverty rates. However, another study in Indonesia by Afandi et al. (2017) found that the Gini ratio did not significantly affect poverty levels. Notably, the Gini ratio, serving as a proxy for inequality, showcases its relevance in predicting poverty outcomes in regencies/cities. The study underscores the complexity of poverty dynamics, where a more equitable income distribution may paradoxically lead to a higher poverty rate, especially in regions where income is concentrated around the poverty line.

Another finding from this study is that social assistance spending has a positive but insignificant effect on poverty rates. These results align with the research conducted by Sendouw et al. (2017) and Sumiyarti (2022). This illustrates that social assistance spending realized by local governments has yet to be able to support the goal of improving living standards, which is reflected in the reduction in poverty rates. Social assistance spending can support poverty alleviation if the implementation scheme is carried out well and on target so that program benefits can reach the target group. The findings of the BPK audit of the financial reports of

regency/city governments in Papua show that there are many problems related to the implementation of social assistance spending in regencies/cities in the Papua region, such as the absence of accountability reports for the realization of social assistance, the use of social assistance not being on target, the realization of social assistance exceeding the proposed value, and the provision of social assistance without going through a verification process (BPK RI, 2020). This condition causes the possibility of increasing inappropriate social assistance spending, which cannot support the main objective of providing social assistance to reduce poverty.

Types of capital expenditure that do not significantly influence poverty levels are land, equipment and machinery, building, also other capital expenditures. Capital expenditures for land, equipment, and machinery have negative coefficients, while capital expenditures for buildings and others have positive coefficients. This result is counterintuitive because literature related to government spending generally shows a relationship between government spending and poverty levels, where high government spending will encourage economic growth, which can ultimately reduce poverty rates. These results also differ from Krismaningtyas (2019) also Sasmal and Sasmal (2016). What is possible is that capital expenditure does not have a significant influence because it is not directly related to poverty. For example, purchasing land that generally cannot be used immediately because it must be processed or buildings added before it can be used. Building spending for the construction of government office buildings, for example, also does not have a direct impact on alleviating poverty.

CONCLUSION

Firstly, capital expenditures for roads, irrigation, and networks, per capita GRDP, school enrollment rates, and the ratio of health centers exhibit a statistically significant negative relationship with the poverty rate. Increased investments in infrastructure, higher economic output per capita, enhanced education, and public health conditions are associated with a reduction in poverty rates. Conversely, a decrease in the Gini ratio, indicating reduced inequality, is paradoxically linked to an increase in the poverty rate. The relationship between the Gini ratio and the poverty rate can be contradictory in countries where most of the population lives around the poverty line, so income redistribution can increase the number of poor people.

To enhance the effectiveness of government spending in alleviating poverty in Papua, it is recommended that local governments allocate a larger share of capital expenditure to proven poverty-reducing areas such as road, irrigation, and network infrastructure. Simultaneously, efforts should be directed toward optimizing social assistance expenditures to ensure they reach the intended targets.

Furthermore, regency/city governments also need to focus on encouraging improvements in the quality of education and public health, which have a significant impact on reducing poverty. Improving the quality of education and health can be achieved through increased ac-

cessibility by building roads and additional schools also health facilities. Lastly, there are limitations in this study, and the author suggests avenues for future research, such as incorporating more comprehensive variables, including social assistance and capital expenditures from higher levels of government over an extended timeframe.

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APPENDIX

Estimation results with robust Driscoll-Kraay

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Social assistance expenditure	0.0017	0.0016					
	-0.0016	-0.0026					
Land capital expenditures	-0.0098		-0.0162				
	-0.009		-0.0126				
Capital expenditures of machine tools	-0.0033			-0.0114			
	-0.0037			-0.008			
Building capital expenditures	0.0014				-0.0026		
	-0.0019				-0.0024		
Capital expenditure roads, irrigation networks	-0.00656*					-0.00667*	
	-0.0032					-0.0035	
Other capital expenditures	0.0262						0.0243
	-0.0343						-0.0344
Gini ratio	-8.351**	-7.770**	-7.788**	-7.912**	-7.726**	-8.425**	-7.534*
	-2.936	-3.267	-3.211	-3.212	-3.074	-2.722,00	-3.304,00
Per capita GRDP	-0.0519*	-0.0517	-0.0528	-0.0521	-0.0511	-0.0521*	-0.0516
	-0.0263	-0.0331	-0.0318	-0.0303	-0.0326	-0.0276	-0.0334
School participation	-0.0737***	-0.0869***	-0.0846***	-0.0836***	-0.0844***	-0.0729***	-0.0873***
	-0.0124	-0.0191	-0.0179	-0.0177	-0.0172	-0.0124	-0.0177
Health center per 1000 population	-7.566**	-6.864**	-7.021**	-6.800**	-6.855**	-7.141**	-7.186**
	-2.465	-2.942	-2.887	-2.752	-2.928	-2.362	-2.852
Constant	41.6100***	41.4500***	41.5600***	41.7600***	41.5600***	41.6000***	41.4300***
	-2.55	-2.869	-2.941	-2.986	-2.923	-2.459	-2.881
Observation	261	261	261	261	261	261	261
R-squared	0.37	0.3289	0.3323	0.3375	0.3308	0.3635	0.3312

The degree of significance is indicated by the sign (*). Sign (*) means significant at 10%, (**) means significant at 5%, and (***) means significant at 1%

Detecting the corruption pattern and measuring the corruption detection pace at the Indonesian village level

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ABSTRACT

Despite widespread reports of corruption in 74,961 village authorities in Indonesia, the government has yet to establish an effective mechanism to detect and prevent corruption at the village government level. Therefore, this study provides an overview of corruption in villages by perpetrator profile, village development, and corruption detection pace to identify the highest-risk authorities exposed to corruption and implement preventive measures. Supported by a qualitative descriptive strategy for interpreting the data, this study analyzed 186 villages whose governing bodies engaged in corruption and were prosecuted by law enforcement officials from 2015 to 2021. The result shows that Java is more focused than other regions on prosecuting corruption cases in rural areas. Moreover, corruption cases in Java and Sumatra regions concentrate on developing villages. Outside of these two regions, most corruption occurs in disadvantaged villages. Village corruption cases were detected on average 2.72 years after the onset of corruption. These findings address a gap in previous research by exploring the variation in losses resulting from village corruption cases across different regions. The study underscores the significance of implementing regulations that mandate regular audits and other detection policies customized to specific attributes, such as region, development level, perpetrator profiles, and fraudulent scheme trends.

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INTRODUCTION

Corruption is a type of fraud that significantly threatens the global public sector's development. As a developing country, Indonesia's Corruption Perception Index tends to stagnate between 2015 and 2021. According to Transparency International (2021), Indonesia has a Corruption Perception Index score of 38 and is ranked fifth among ASEAN countries. Moreover, Indonesia has a lower score than Singapore (85), Malaysia (48), Timor-Leste (41), and Vietnam (39). Furthermore, Indonesia's score decreased to 37 points in 2020, a decrease of 3 points compared to 2019, which was Indonesia's highest achievement with a score of 40 (2018 = 38, 2017 = 37, and 2016 = 37). Previous researchers analyzed this condition as (1) the inability of the state to simplify public services (Suyatmiko, 2021), (2) the occurrence of systemic/multisectoral corruption (Suyatmiko, 2021; Transparency International, 2020), (3) the absence of corruption prevention and detection policies (Transparency International, 2020), and (4) low public and expert perceptions regarding the implementation of corruption eradication policies (Susilo et al., 2019; Transparency International, 2020).

Any act of corruption will harm the state and society at any level of government/public sector. According to the Association of Certified Fraud Examiners (ACFE, 2022), out of 2,110 cases in 133 countries, all types of fraud, including corruption, caused a total loss of over USD 3.6 billion or IDR 55,839.6 trillion. In addition, according to the report, 23 of the 194 cases with a median loss value of USD 121,000 or IDR 1.8 billion in the Asia-Pacific region originated in Indonesia (11.86%). If the social costs of crime are considered rather than just calculated from the assets/money that are stolen, the impact of the losses will be significantly greater. The social costs of crime resulting from corruption include a) anticipatory costs against corruption (e.g., socialization and acquisition of information technology for detection purposes); b) costs due to corruption (e.g., total asset damage, absence of leadership, and environmental impacts); and c) costs of reaction to corruption (e.g., costs of investigation, deprivation, trial, and detention) (Brand & Price, 2000). Brand and Price (2000) were the first to make a comprehensive attempt to estimate the cost of crime in England and Wales, according to the Home Office of the United Kingdom (Heeks et al., 2018). The social costs of this crime will be higher if intangible costs, such as community distrust and low community participation in development, are considered (Chalfin, 2015; Cohen, 2020; Perry, 2021).

Corruption hinders the economic development of a country or region, but it depends on the parameters under consideration and the subject of study. This condition makes less developed countries/regions more susceptible to corruption than developed ones (Fiorino et al., 2012; Rose-Ackerman & Palifka, 2016; Yang et al., 2017). In contrast to the previous research, Prabowo and Cooper (2016), Prabowo et al. (2017), and Šumah (2018) asserted that corruption can occur in any country or region, regardless of its level of development. Šumah (2018) highlighted previous studies from various nations that distinguish corruption from its negative effects (e.g., development), distinct from identifying the cause and the consequences. Mean-

while, Prabowo et al. (2017) also Prabowo and Cooper (2016) focused on the corruption in Indonesia. Due to the impact of corruption losses on the development of countries and regions, we must measure and describe the patterns of impact, perpetrators, and corruption schemes (Yunan et al., 2023) and then adjust the type of policy intervention accordingly (Mugellini et al., 2021; Yunan et al., 2023).

Law enforcement is currently targeting corruption in village financial management more than in the central/local government financial sector, transportation sector, or education sector, with a total of 619 cases from 2016–2021 (Indonesia Corruption Watch, 2017, 2018a, 2018b, 2020, 2021, 2022). Any repressive enforcement by law enforcement officials results from preventive and detective efforts and the implementation of follow-up measures (Sutarsa, 2014). Meanwhile, the village lacks a policy or mechanism to detect corruption. Since the enactment of the Village Law, the Audit Board of Republic of Indonesia (Badan Pemeriksa Keuangan, BPK) has not formulated a policy for auditing the financial statements of villages on a periodic/annual basis (BPK RI Official, 2021). Without a standard and comprehensive detection policy (e.g., a related whistleblower policy), those who know about corruption cases will be reluctant to report it, making it difficult to disclose (Mechtenberg et al., 2020). For example, when village corruption cases in Cirebon were reported, the whistleblower became a suspect for three months and was only cleared after the Coordinating Ministry of Political and Security Affairs exercised its discretion (BBC News Indonesia, 2022). According to Ifititah Sari in BBC News Indonesia (2022), the whistleblower protection policy has not been comprehensive, and even the Criminal Procedure Code (Kitab Undang-Undang Hukum Acara Pidana, KUHAP) does not regulate this protection. Therefore, research and studies on corruption in villages are required as material to evaluate existing prevention and detection policies.

In Indonesia, there are corruption prevention and eradication policies, but they cannot reach villages, the smallest unit of government. The National Strategy for Corruption Prevention (NSCP) established by Presidential Decree Number 54 in 2018 is limited to regulating prevention aspects, excludes repressive aspects of detection and enforcement, and has no outcomes in its policy design (Prihatmanto et al., 2022). This condition affects the propensity of law enforcement officials (police and prosecutors) to prosecute corruption cases in rural areas versus other sectors. Without a standard policy of corruption detection and a repressive approach, every law enforcement institution prioritizes achieving its organizational performance goals, such as case resolution and corruption case investigation. Increasing village supervision capacity is indeed regulated in the NSCP. However, there are several obstacles, including the absence of supervision through the Village Financial Supervision System (Sistem Pengawasan Keuangan Desa, Siswaskeudes) application, despite its testing in 20 districts/cities, and the absence of standard guidelines for Internal Government Supervisory Officers in conducting audits and supervision (Sekretariat Nasional Pencegahan Korupsi, 2021). Due to the lack of support for standard audit methods and an electronic-based supervision system, 74,961 villages in Indonesia are still susceptible to corruption despite their limitations. In addition, the ten-

dency of law enforcement to investigate corruption cases in the lower sector as opposed to the elite/central level will impact public mistrust and prove the existence of the idiom "law enforcement sharp downwards but blunt upwards."

To detect corruption cases, the police and prosecutors, as the spearhead law enforcement in villages, need support from the community, the regional inspectorate, and BPK. Previous research has demonstrated the importance of public complaints and whistleblowing systems for detecting corruption (Mamahit, 2018; Pramudyastuti et al., 2021; Seza et al., 2020). Detecting corruption through audits will also increase public trust (Cordery & Hay, 2019; Leung et al., 2015; Saleh & Ratmono, 2017). The contribution of BPK to the detection of corruption in rural areas has not been extensively studied in the past. However, the existence of the BPK as the Supreme Audit Board is important to ensure the quality of implementing this corruption detection policy. Therefore, it is important that BPK's policies, such as the Fraud Control Plan (FCP), audit methods, how to calculate state financial losses, and the use of information technology (e.g., e-audit), be disseminated to villages and regional supervisory officials. An independent Supreme Audit Board is deemed capable of resources (human and other supporting infrastructure) and enforcing transparency while influencing the formulation or ex-ante of government policies (Cordery & Hay, 2019; Ferry & Ahrens, 2021; Leung et al., 2015), as well as formulating audit policies in regional government units (Ferry & Ahrens, 2021).

Implementing the corruption detection strategy as one of the FCP strategies, in addition to preventive and repressive strategies, will take considerable time because it involves all aspects of the nation (BPKP, 2007). Consequently, the community, the executive, the legislature, also internal and external auditors must comprehend and implement this detection strategy. According to BPKP (2007), detection policies can include whistleblower systems, mandatory reporting of certain financial transactions, reporting of personal wealth of holders of public offices and functions, participation in anti-corruption and anti-money laundering movements, use of national single identification numbers, and increasing the capacity of internal supervisors to detect corruption. Meanwhile, understanding corruption theory, observing the danger signs and corruption schemes (awareness), and employing methodologies designed to find corruption are more straightforward, systematic steps for detecting corruption (Suprajadi, 2009). Profiling of corruption actors is a component of the detection process because it provides policymakers (management or auditors) with red flags for evaluating critical points in their financial statement transactions. Profiling of red flags includes an introduction to the risks of positions and actors in the organization, gender, age, parties involved, number of parties involved, and schemes, as well as the application of model detection in pre-audit to detect corruption (Prita et al., 2020; Sinarto, 2018; Hakami et al., 2020).

According to the ACFE (2022) report, the timing of corruption will affect the number of losses. For a 6-month corruption period, the median value of the losses incurred is USD 47,000, whereas for a 7-to-12-month corruption period, the median value is USD 100,000. Moreover, for a period greater than five years, the median value is USD 800,000. In contrast

to the increase in losses following the corruption period, the highest number of corruption cases detected involved corruption periods of less than six months (33%). Meanwhile, cases with a corruption period of 3–4 years have the lowest frequency (4%). This condition raises issues regarding formulating a policy to detect corruption cases quickly before causing a significant loss. This type of research (which describes the impact and profiling of actors) is important for measuring the implementation of corruption prevention and eradication policies.

Corruption perpetrators are typically solitary, but collaborating with others will result in greater losses. According to the mid-value report classified by ACFE (2022), 42% of cases involving a single perpetrator result in a loss of USD 57,000, 20% of cases involving two perpetrators result in a loss of USD 145,000, and cases involving three or more perpetrators result in a loss of USD 219,000. Taqi et al. (2021) and Zakariya (2020) stated that village heads dominate corruption actors in villages; thus, holders of this position must be a priority/target of corruption prevention and detection policies. In this village, it would be worthwhile to investigate the role of the village head as a perpetrator of corruption, especially in terms of whether he or she acts alone or with others and how severe the losses are.

With the context described earlier, there is a paucity of literature describing the development patterns of villages affected by corruption and the rate at which law enforcement detects corruption cases in villages. Meanwhile, the success rate of audit or prevention policies will be difficult to determine without a measure of the rate of corruption detection in villages. Prior research highlighted the importance of audits in detecting corruption (Olken, 2007; Prabowo et al., 2017; Taqi et al., 2021). For instance, Olken (2007) was the first to explore the effect of auditing on implementing local government programs in Indonesia. Mugellini et al. (2021) and Yunan et al. (2023) determined the development level of countries/regions affected by corruption cases and even intervention patterns. However, the same approach is not applicable at the local government level. In addition, even though Taqi et al. (2021) and Zakariya (2020) have identified some corruption case schemes, the approach utilized has not identified the perpetrator's profile, the target of corruption, and the extent of the damage caused.

With this study, the development patterns of villages affected by corruption and the perpetrators' profiles can be described, as well as research gaps and the pace of corruption detection in villages. This study's issues are related to the following questions: (1) What is the level of development in villages affected by corruption? (2) What is the profile of village-level corruption perpetrators? Moreover, (3) How long do law enforcement officials detect corruption cases? By addressing those problems, this study is important for planning and prioritizing the intervention of anti-corruption policies in the village with the highest exposure to corruption risk. In light of Indonesia's large number of villages, a state auditor or other investigative agency could manage its resources more efficiently.

RESEARCH METHOD

This study employs a descriptive (qualitative) methodology. This method is suitable for exploring additional areas of the topic that have received less attention in prior research and for providing a more in-depth examination of the area that is difficult to control for the experiment (Nassaji, 2015). The secondary data is collected from Indonesian online media using the text mining method and classified manually or automatically using analytical software (Antons et al., 2020; Nirmala & Pushpa, 2012). This study categorizes corruption data in 186 villages reported in various online media during the period 2015–2021, according to search results on google.com for the keywords "corruption" and "village." The authors validates and verifies the data by conducting additional research on reputable media pages, such as detik.com, kompas.com, antaranews.com, and tribunnews.com. This study is also conducted to find information not obtained from a single page, such as information on the case scheme, the case's duration, and the addition of the investigated perpetrator. The results of previous studies are then incorporated after data analysis and visualization using Tableau software/tools and MS Excel. Graph visualization lets analysts recognize trends, locations, and patterns and identify the optimal relationship between variables (Murphy, 2013). By integrating the findings and perspectives of numerous empirical findings, the review literature can provide better results to research questions than a single study (Snyder, 2019).

After classifying the data on villages affected by corruption cases, the authors compared it with the level of village development as measured by the Village Development Index (Indeks Desa Membangun, IDM) secondary data of the Ministry of Villages and Development of Disadvantaged Regions and Transmigration. The present study uses IDM as a metric for measuring village development because it has data on 74,961 villages in Indonesia and is updated annually (Kementerian Desa Pembangunan Daerah Tertinggal dan Transmigrasi, 2017). This composite index measures the development of village independence based on three parameters: the social resilience index (social resilience index, IKS), the economic resilience index (Indeks Ketahanan Ekonomi, IKE), and the ecological/environmental resilience index (Indeks Ketahanan Ekologi, IKL). It measures the development of village autonomy (Kementerian Desa Pembangunan Daerah Tertinggal dan Transmigrasi, 2017). Moreover, the classification of village development is determined by the following intervals: (1) Very Disadvantaged Villages: IDM ≤ 0.4907; (2) Disadvantaged Villages: 0.4907 < IDM ≤ 0.5989; (3) Developing Villages: 0.5989 < IDM ≤ 0.7072; (4) Advanced Village: 0.7072 < IDM ≤ 0.8155; and (5) Independent Village: IDM > 0.8155. This classification aims to determine the nature and scope of government program interventions intended to improve village development. This index has been used to assess the impact of village fund transfer policies (Dewi & Arif, 2021), the quality of village facilities and infrastructure (Prasetya et al., 2020), village potential resources (Sukarno, 2020), and the formulation of environmental-based transfer policies (Mecca et al., 2021).
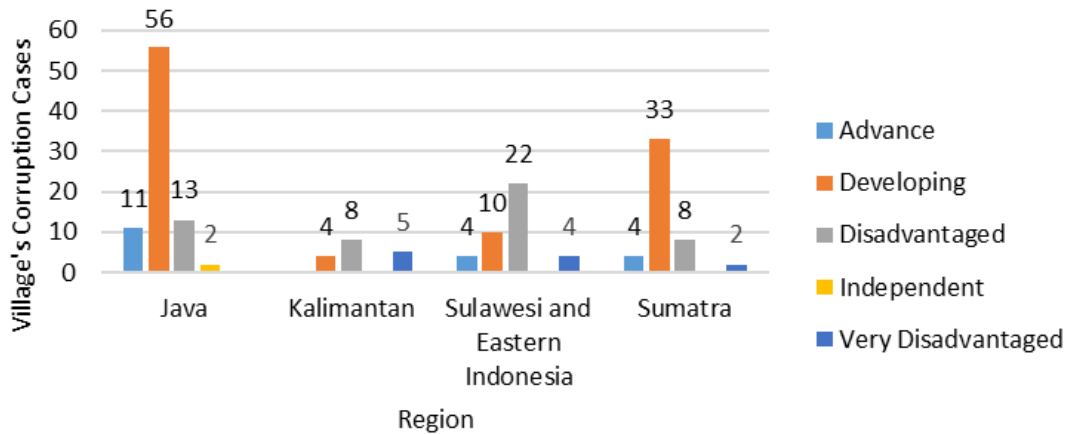
Figure 1. Distribution of the Number of Villages Affected by Corruption Cases in Indonesia, 2015–2021

RESULT AND DISCUSSION

Villages Development Affected by Corruption Cases

Research results show that of 186 villages, 56 villages (30.11%) with a developing status on Java were the most affected by corruption cases. After Java, Sumatra is in second place, with the number of developing villages at 33 or 17.74%. Different conditions occur in the Sulawesi and Kalimantan regions, where types of underdeveloped villages are affected by corruption cases. Figure 1 depicts the distribution of the number of villages affected by corruption cases in Indonesia from 2015 to 2021.

There is a tendency for villages with a higher level of development to have a greater value of losses. The distribution of loss value in villages with developing status on the island of Java ranges from IDR 0 to IDR 500 million; advanced villages, between IDR 0 and IDR 650 million; and independent villages, between IDR 800 million and IDR 2 billion. The distribution of loss value per case for villages with a disadvantaged status ranges between IDR 0 and IDR 1 billion. According to Figure 2, the village with the highest loss from corruption cases, total-
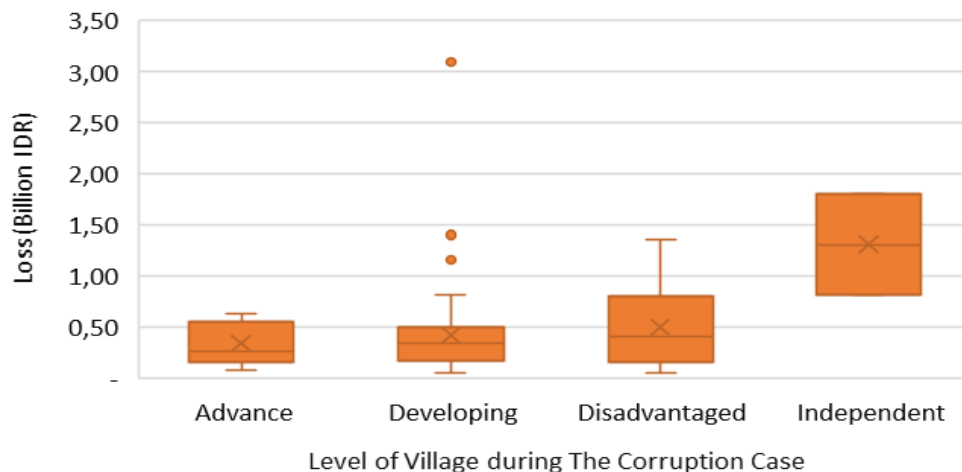

Figure 2. Distribution of Loss per Village Corruption Case in the Java Region
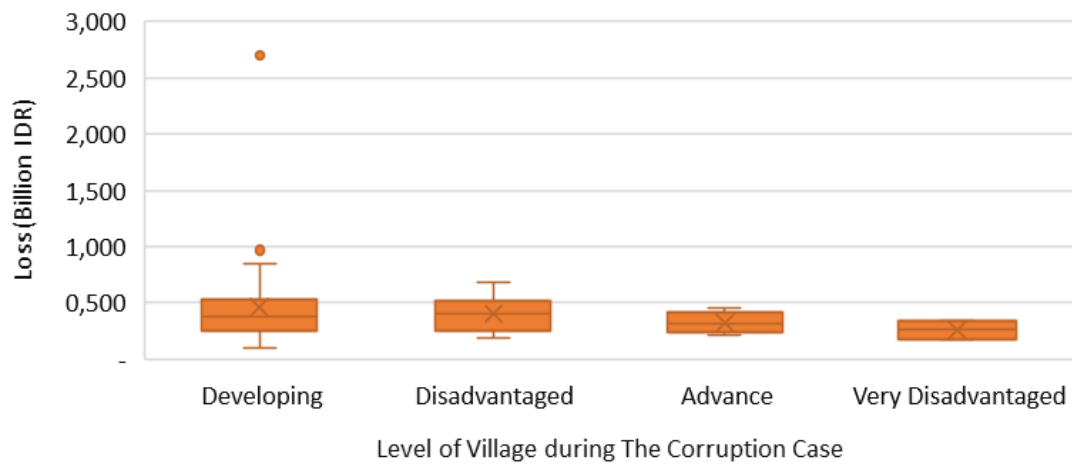
Figure 3. Distribution of Loss per Village Corruption Case in the Sumatra Region

ing IDR 3.1 billion, is outside the distribution of developing villages. The distribution of village losses in Sumatra is more significant than in other regions, ranging between IDR 0 and IDR 800 million. Similar to the pattern on the island of Java, the village in Sumatra with the highest loss (IDR 2.7 billion) falls outside the distribution of other developing villages' losses, as depicted in Figure 3.

In Kalimantan, Sulawesi, and Eastern Indonesia, disadvantaged and very disadvantaged villages dominate the distribution of village losses per case. As seen in Figure 4, the village with the greatest loss in the region (IDR 1.7 billion) is not included in the distribution of other disadvantaged villages. On the islands of Java and Sumatra, corruption cases tend to target villages that have escaped their disadvantaged status. Sumatra's pattern is comparable to Kalimantan, Sulawesi, and Eastern Indonesia, where the loss in disadvantaged villages is greater. The Villages Case in the Region of Java and Sumatra corruption pattern is pertinent to the research of Prabowo et al. (2017) also Prabowo and Cooper (2016). Those patterns contrast with those observed in Kalimantan, Sulawesi, and Eastern Indonesia, which are consistent

Figure 4. Distribution of Loss per Village Corruption Case in Kalimantan, Sulawesi, and Eastern Indonesia Region

Figure 5. Number of Corruption Cases by Involvement of Village Heads per Region
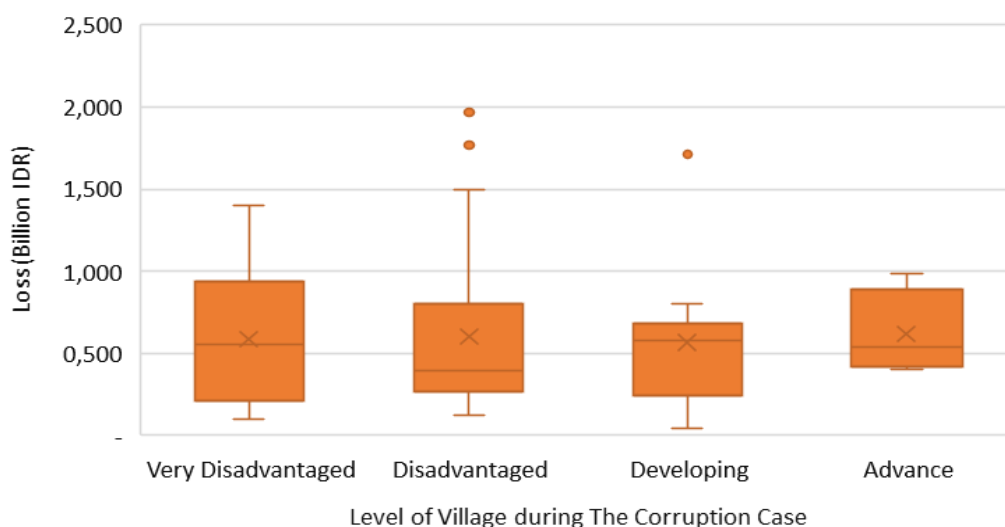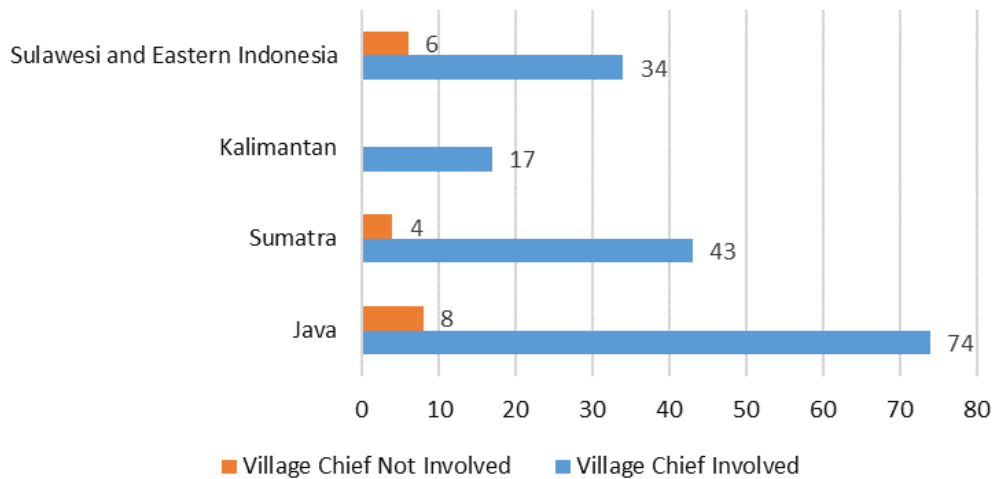
with studies conducted by Fiorino et al. (2012), Rose-Ackerman and Palifka (2016), also Yang et al. (2017).

Although patterns of corruption in villages can be identified, the determination of policy targets, such as the research of Mugellini et al. (2021) and Yunan et al. (2023), necessitates additional research into factors such as human development and infrastructure support. The disparity in village corruption tendencies between Java and outside of Java shows the same pattern as the disparity in the human development index between the two regions. In the case of Java, villages with infrastructure and a higher human development index do not guarantee the absence of corruption. Corruption perpetrators in these developing villages could infiltrate and manipulate internal control systems that had been strengthened by greater capacities (than villages outside Java). Meanwhile, corruption actors in disadvantaged villages outside of Java with a lower quality of human development and minimal infrastructure support than the island of Java require less effort to manipulate the existing internal control system. Because this study's design does not focus on the relationship between corruption and the human development index or infrastructure support, this topic requires further investigation.

Profiling Corruption Perpetrators, the Loss, and Corrupted Targets

The results showed that the perpetrators of corruption in 186 villages were all village government officials and 90.32% involved village chiefs. The remaining 9.68% involved the village treasurer in every instance. In this study, the two village government officials tended to work alone or did not involve other perpetrators. Namely, in 122 cases, the village head involved up to 104 people and the village treasurer up to 18 people. The involvement of village chiefs in corruption cases is the dominant number in each region, as depicted in Figure 5.

The distribution of losses as a function of the number of corruption perpetrators is dominated by one person (65.59%), followed by two people (5.38%), and then three people (5.38%). The highest loss value investigated tends to increase from IDR 50 million for one
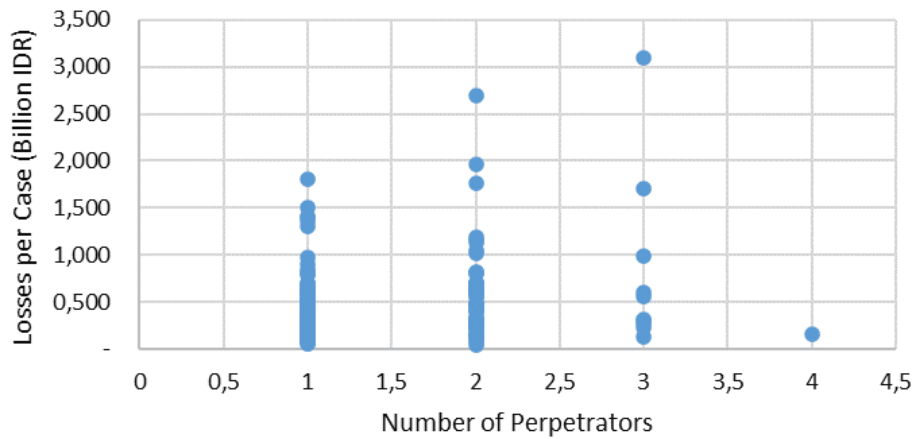
Figure 6. Distribution of Loss Value per Number of Corruption Perpetrators in the Village

person to IDR 3.1 billion for three perpetrators (see Figure 6). The Village Secretary, Members of the Activity Management Team, Heads of Village Consultative Bodies, Contractors, and Members of the Local Parliament are also involved. The tendency to crack down on cases involving a single perpetrator and circumstances in which the increase in the value of losses is directly proportional to the increase in the number of perpetrators is consistent with the ACFE's (2022) findings. Different conditions are demonstrated in the case of the perpetrator of four murders, but the loss is estimated to be less than IDR 100 million. This condition is a subject that requires additional study.

Furthermore, corruption in villages affected the most expenditures, specifically 175 cases, as seen in Figure 7. The scheme may involve fraud in preparing financial statements, theft of money, spending for personal gain, and falsifying proof of transaction, including creating bills without transactions or being fictitious. In up to five cases, the next target is revenue; in up to three cases, it combines revenue and expenditure. Illegal fees and falsification of proof of transactions/receipts are examples of corruption schemes involving the revenue component. Moreover, rare instances of corruption involve assets in up to two instances and financing/investing in one.

Figure 7. Financial Statement Account Targeted in Village Corruption Case

The distribution of corruption cases on the island of Java tends to target a greater variety of financial statement components than in other regions. This condition shows the need to increase the ability of financial managers in villages, members of the Village Consultative Body, and the Government Internal Supervisory Apparatus (Aparat Pengawasan Intern Pemerintah, AP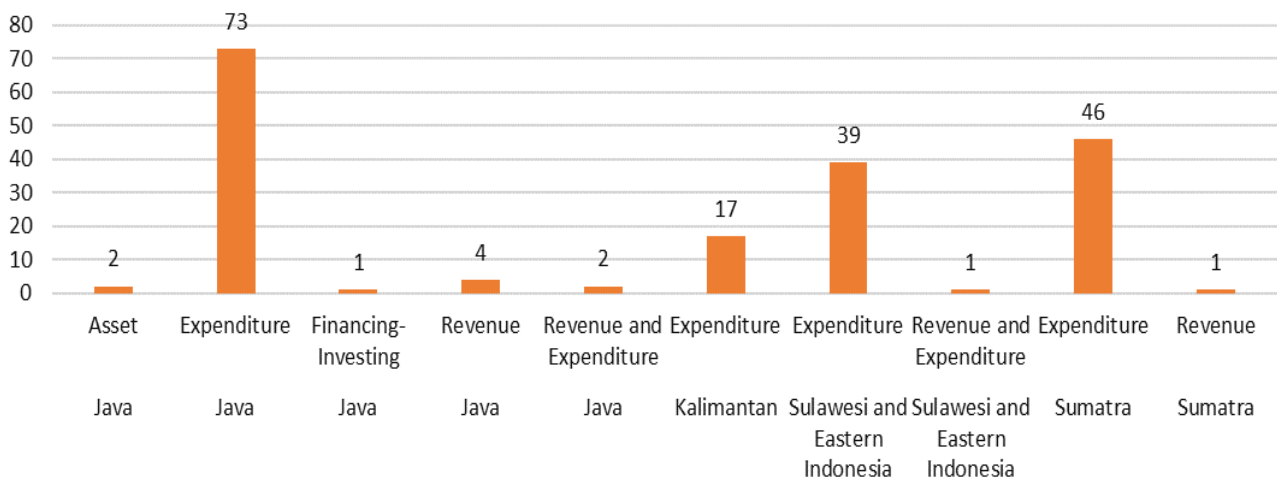IP) on the island of Java to detect corruption schemes in all financial statement components. However, this does not imply that the corruption scheme does not exist in other regions and therefore does not require study. As the primary target of corruption actors in each region, expenditure accounts must take precedence when selecting samples for review, audit, or investigation.

Although incomplete in profiling corruption perpetrators in villages, this study presents the impact of corruption per village and region that Taqi et al. (2021) and Zakariya (2020) cannot describe. Additional information on the number of corruption perpetrators per case and account targets in the financial statements enriches the discussion of prior research. It can be utilized as a guide by each auditor or law enforcement agency in planning detection policies (in the form of audits or investigations). The incomplete description of the perpetrators' profile in this study is that the motive, age, and gender of corruption perpetrators in the village have not been presented, as researched by Hakami et al. (2020), Prita et al. (2020), and Sinarto (2018). Due to the limited information obtained from secondary data, this condition cannot be discussed in the present study.

In terms of developing corruption prevention policies in rural areas, profiling actors is also important. Law enforcement agencies (police, prosecutors, and Corruption Eradication Commission) must engage in anti-corruption activities, such as socialization and seminars, to demonstrate their support for the lower levels of society. This activity also necessitates a substantial budget to reach all Indonesian villages (74,961 villages). By understanding the pattern of corruption cases, implementers can prioritize villages with particular characteristics as the locus of socialization activities.

Measuring the Pace of Village Corruption Detection Compare from the Early Period of a Case

Before measuring the detection pace, the author attempted to analyze the period during which each region's perpetrators committed corruption. This helps determine the effectiveness of preventive measures (e.g., the socialization of anti-corruption policies) and detection measures (e.g., audits and investigations). The average time for perpetrators committing corruption in 186 villages was 1.76 years. There are two regions with below-average corruption periods: the islands of Java (1.59 years) and Kalimantan (1.71 years). Meanwhile, Sumatra, Sulawesi, and Eastern Indonesia have an average case duration of 1.79 and 2.13 years, respectively. The authors grouped by region to determine the maximum impact of corruption case losses per corruption period. From this grouping, it was determined that village corruption perpetrators on Java Island caused the largest loss of IDR 3.1 billion within two years (see Fig-
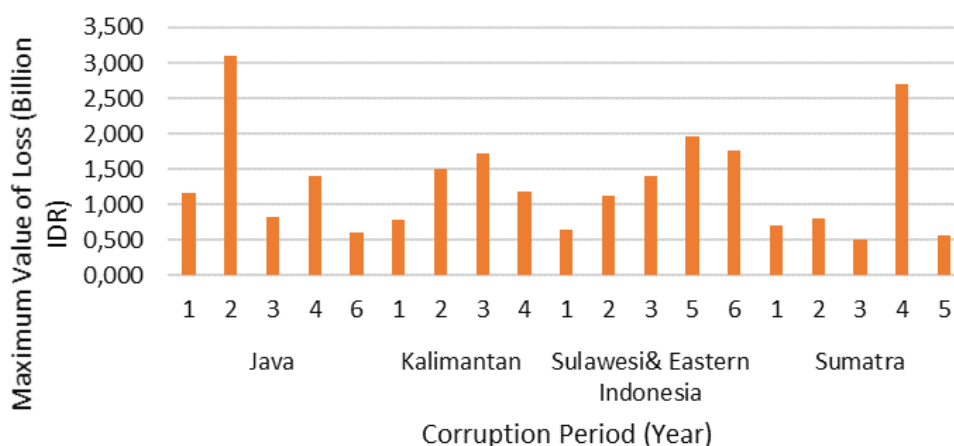
Figure 8. Period of Corruption (per Year) by Region

ure 8). Over four years, the Sumatra region sustained the greatest loss amount, totaling IDR 2.7 billion. Meanwhile, the Kalimantan region's corruption costs a maximum of IDR 1.7 billion over three years. Finally, Sulawesi and Eastern Indonesia have a maximum loss value of IDR 1.9 billion and a duration of 5 years. This condition necessitates a swift detection policy so that losses do not increase in value.

In this study, the pace of corruption detection was calculated as the difference between the investigation's start date and the corruption period's beginning year (assumption January 1, 20XX). This time difference is at least zero (0) (the year of the occurrence of corruption coincides with the year of the investigation), the longest is seven years, the middle value is three years, and the average value is 2.72 years (national) in 186 corruption cases.

The average delay in detecting corruption in Java was 2.43 years lower than the national average and lower than the region surrounding Java (an average of 2.93 years). This condition shows the disparity between the rate of investigation detection by law enforcement officials on the island of Java and outside the island of Java. Another issue that needs to be addressed is the tendency of delays in the detection of corruption continues to increase from year to year, both nationally, on the island of Java, and beyond Java Island, as illustrated in the Appendices.

Comparing the period of corruption with the delay in detection, this study determined that the pattern of case enforcement on the island of Java includes the successful restriction of the distribution of corruption periods between 1–2 years (delay in detection in 1–3 years). As illustrated in Figure 9, even though the distribution of the corruption period for the island of Sumatra is identical to that of the island of Java (1–2 years), the distribution of detection delays is typically longer, ranging between 2 and 4 years from the onset of corruption. The distribution of delays in detecting corruption in Sulawesi and Eastern Indonesia is comparable to that of Sumatra (2–4 years), but the distribution of corruption periods is higher (1–3 years). The Kalimantan region resembles that of Sulawesi and Eastern Indonesia in many ways.
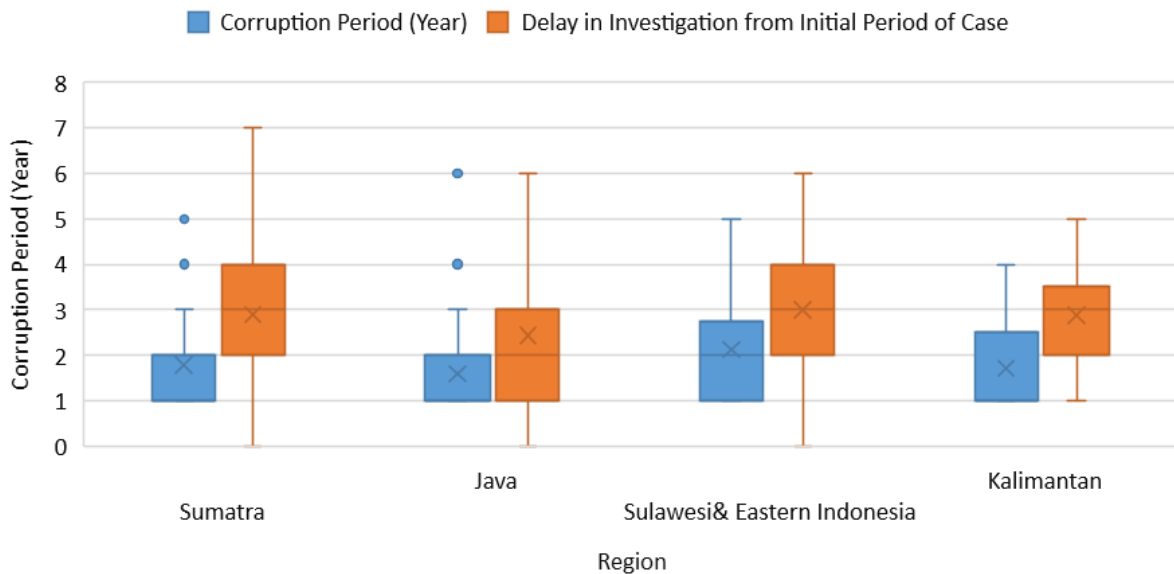
Figure 9. Comparison of the Corruption Period with the Investigation Delay Period per Case

The pattern of the corruption period and the pace of detection of village corruption cases in this study can be used to describe, on a smaller scale, the occurrence of corruption as studied by ACFE (2022), Mugellini et al. (2021), and Yunan et al. (2023). This detection pattern is important as a guide for auditors and law enforcement to evaluate the capacity of their human resources or infrastructure in each region. The greatest need is for the distribution of qualified investigators and auditors outside of Java. According to ACFE (2022), if the detection time interval is longer than the corruption period, it will be more difficult to disclose corruption cases because the perpetrator will have more time to conceal evidence of the crime.

The study's description of the delay in detection demonstrates the inefficiency of law enforcement investigations. However, the author is aware that investigators (whether police or prosecutors) require a minimum of two preliminary pieces of evidence (KUHAP) to conduct an investigation. This evidence may consist of witness testimony, expert testimony, letters, instructions, and the defendant's testimony. Meanwhile, the sufficiency of evidence includes the completeness of preliminary evidence to support the investigators' identification of suspects. This condition may be the reason why investigators take so long to initiate their investigations. However, this study was not intended to describe the investigation process and underlying factors. Therefore, authors further highlight the ability of parties outside the investigator as early whistleblowers in corruption cases. According to prior research, the initial detection of corruption is facilitated by the whistleblower system, management review, and audit report.

With this description, if there is a delay in detecting corruption in the village, the parties that must be evaluated are the effectiveness of the whistleblower system, the level of management vigilance, and the auditor's speed in detecting the audit program. As the smallest government unit in Indonesia, villages must have the same capacity for detecting corruption as

other government units. By understanding the impact of village corruption, the government, as a policymaker, must develop policies that support areas of detection by the whistleblower system, management vigilance, and audit policies.

Currently, the government's auditing efforts are limited to compliance audits conducted by the District/City Inspectorate. To evaluate budget execution and the prevention of corruption, a financial audit that generates opinions is required. Financial statement audits can measure and present information between reporting periods (fiscal years) to make decision-making materials more comprehensive. Auditing and its types are important, but it warrants further study.

CONCLUSION

Java is more focused than other regions on prosecuting corruption cases in rural areas. Corruption in Java and Sumatra tends to target villages with a developing status. However, in Kalimantan, Sulawesi, and Eastern Indonesia, it focuses more on disadvantaged villages. There is a tendency for the impact of losses to increase in proportion to the degree of village development on Java Island. The distribution of impact losses is uniform for villages on the island of Sumatra, but there are variations among villages with developing status.

Meanwhile, in Kalimantan, Sulawesi, and Eastern Indonesia, villages with disadvantaged and very disadvantaged status suffered the greatest loss, followed by advanced and developing status. The pattern of village corruption in Java is consistent with previous studies (Prabowo et al., 2017; Prabowo & Cooper, 2016; Yunan et al., 2023). The corruption pattern in Kalimantan, Sulawesi, and Eastern Indonesia is consistent with the results of Fiorino et al. (2012), Rose-Ackerman and Palifka (2016), also Yang et al. (2017). In Indonesia, village corruption prevention policies require a tool or mechanism to measure and detect their impact early. This is because most corruption perpetrators are the highest village leaders (village heads), followed by the highest financial function holders (treasurers), and the majority are lone corrupt actors. However, if the increase of corrupt actors increases by two to three people, there is a tendency for the losses to increase as well. This is in accordance with the ACFE (2022) report and Cohen (2020) and differs from the results of Taqi et al. (2021) and Zakariya (2020), who only focused on the role of the village head.

Another factor supporting the need for prompt detection is the delay in enforcement by law enforcement officials (investigations). The average delay in enforcement in this study was 2.72 years. This number is reduced for the Java region and increased for regions outside of Java. This condition shows that rural communities, village officials, and internal government supervisors outside Java require a more sophisticated detection strategy. If this detection is late, the amount of loss incurred will increase. In addition to the detection strategy, the Financial Audit Agency must develop regular audit/inspection policies for villages, increase APIP capacity, and implement information systems. This is due to the increasing prevalence of corruption

targets on Java Island, which are not limited to expenditure schemes. Moreover, regular audits/checks are important because they can reduce the likelihood of corruption (Mugellini et al., 2021; Olken, 2007). Although it is possible to detect corruption based on public information (whistleblower), the increase in participation against the backdrop of kinship is corruption (Olken, 2007), and the public requires law enforcement to be fast and accurate with investigative audit procedures and then continued investigations (Dewi et al., 2021; Taylor, 2018).

BPK and internal auditors can use the results of this study to develop policies for routine village financial audits. This study can also be used to determine the targets and locations of villages to receive detection policy interventions and/or audit/supervision sampling tests conducted by the APIP. This study suggests the importance of determining regular audits or other detection policies for villages with certain attributes (i.e., regions, development, trend of perpetrators profile, and trend of fraud scheme). This study has not been able to provide a comprehensive profile of corruption perpetrators in villages as Hakami et al. (2020), Prita et al. (2020), also Sinarto (2018) because it does not describe variables like age, gender, detection model, and most importantly, the motive for committing the crime. This motive is important for the prevention approach to corruption, as greed-driven corruption is undoubtedly distinct from economic factors (ACFE, 2022; Prita et al., 2020; Sinarto, 2018). In addition, the scope of this study can be examined more broadly by incorporating variables such as human development quality and infrastructure support. Including these variables to evaluate all aspects of the government's detection and auditing policies is important.

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APPENDICES

Appendix 1. Delay in Detection of Corruption Cases from 186 Villages in Indonesia
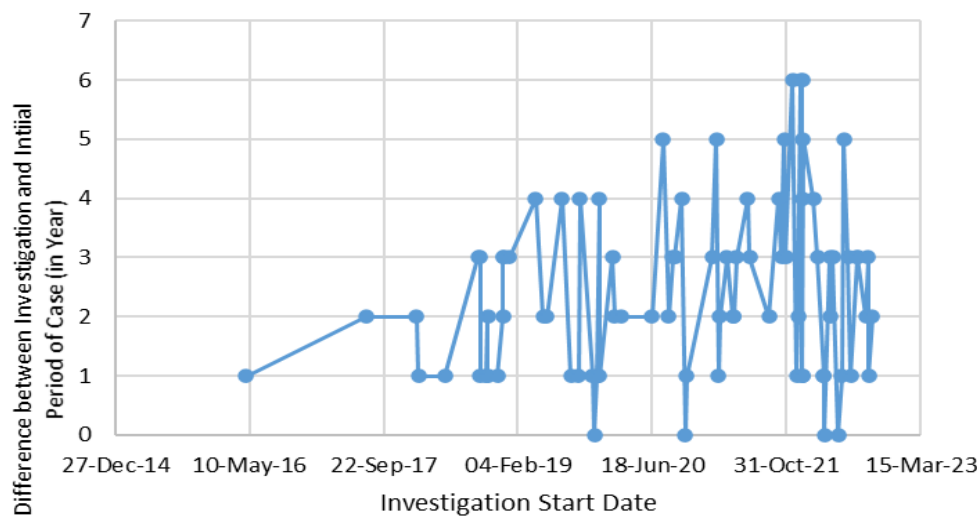
Appendix 2. Delay in Detection of Village Corruption Cases in Java
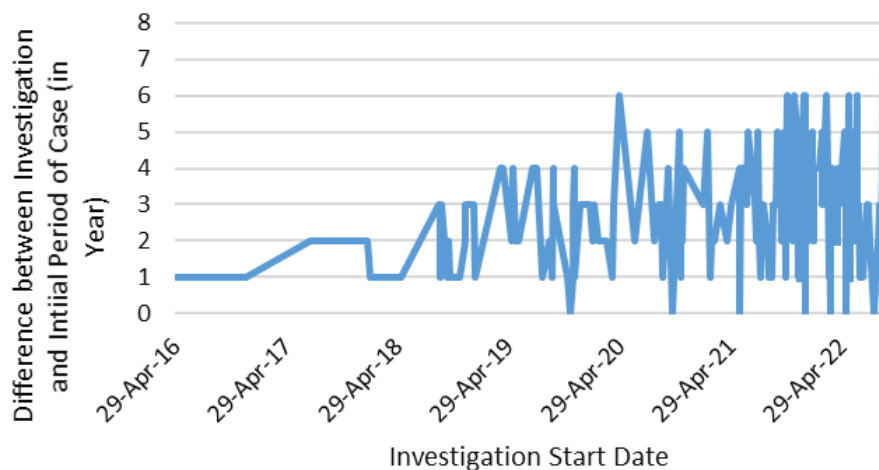
Appendix 3. Delay in Detection of Village Corruption Cases Outside of Java Region
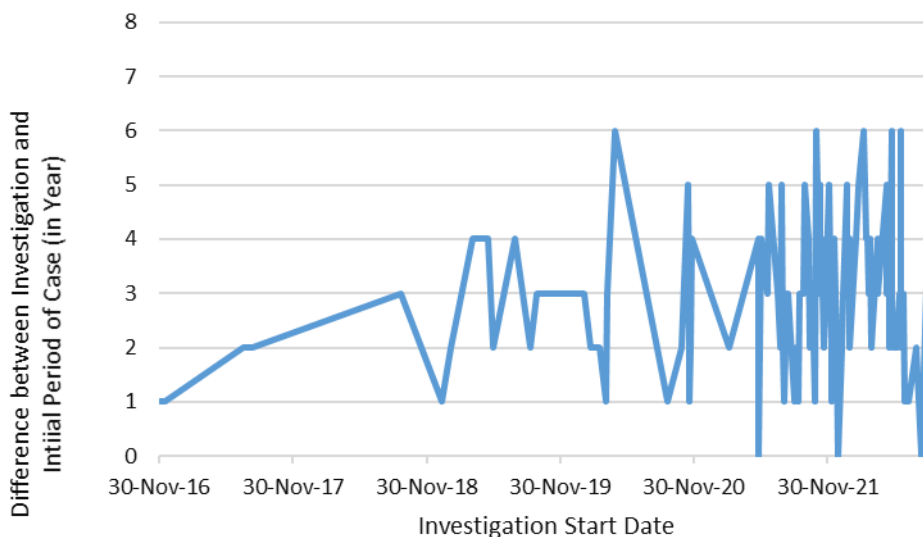
An experiment on bribery, tenure duration, and punishment severity in the Indonesian public finance context

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ABSTRACT

Against the backdrop of increasing concern over corruption, this study delves into a laboratory experiment investigating the intricate dynamics of bribery concerning the duration of official tenures and the efficacy of punitive measures. Experimental methods prove pivotal in unraveling the complexities inherent in corrupt behaviors. The study unfolds a compelling pattern, shedding light on the interplay between public officials and civilians, particularly emphasizing the impact of officials' tenure duration on bribery. It brings forth a crucial correlation between familiarity with officials and a heightened likelihood of bribery, with extended tenures amplifying this susceptibility. The concept of "fixed pairing" accentuates the role of prolonged official incumbency in influencing bribery tendencies. Additionally, introducing punitive measures with financial repercussions proves effective in curbing bribery incidents and associated givebacks, particularly when applied to bribe recipients, suggesting heightened stakes public officials face. The study demonstrates the potential of dual treatments involving random pairings and punitive approaches to reduce the magnitude of bribes and givebacks. This study underscores the necessity of curtailing prolonged official tenures to mitigate bribery tendencies, offering insights into enhanced governance and ethical conduct through strategic rotational shifts and robust penalties. These comprehensive findings contribute valuable perspectives to addressing corruption and enhancing ethical standards within public institutions.

KEYWORDS:
Corruption; public officials long-tenure; bribery; lab experiment

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INTRODUCTION

The issue of long-tenured public officials has become a pressing concern in Indonesia, presenting a double-edged sword. On the one hand, long tenures enable officials to gain valuable experience to help them carry out their duties more effectively. However, it also increases the risk of corruption, exploitation, and abuse of power. Recently, village heads in Indonesia have sought to extend their tenure to an unprecedented nine years, which has met with significant resistance despite gaining approval. Experts have highlighted the link between extended tenures and corruption (Senjaya, 2023). Vice President of the People's Consultative Assembly Republic of Indonesia, Prof. Dr. H. Sjarifuddin Hasan, emphasizes the necessity of limiting the duration of power, as longer tenures often foster authoritarian environments (Sekretariat Jenderal MPR RI, 2023).

A striking illustration of the potential pitfalls associated with prolonged tenures in public service emerges from the tenure of the head of public health service in Lampung Province, whose tenure extended an impressive 14 years (BBC News Indonesia, 2023). Her case stands out prominently due to the perception of excessive assets and wealth accumulation, which appears incongruent with the typical profile of a civil servant. While it is essential to note that there is no concrete evidence of corruption in her case, it serves as a compelling exemplar of how lengthy tenures can foster skepticism among the general populace and raise concerns about the susceptibility of individuals in positions of authority to corruption.

In the current research landscape, corruption studies predominantly employ traditional methods such as surveys. These methods lean heavily on respondent self-reports and perceptions about corruption, capturing a broad spectrum of corruption perceptions. However, their breadth sometimes sacrifices the depth and clarity needed to understand the intricate mechanisms of corruption. Furthermore, they often grapple with challenges like discerning clear causal relationships and navigating corruption's secretive, illegal, and multidimensional nature. This results in potential misalignments between empirical findings and theoretical concepts, leading to research design challenges and inferential errors (Delios et al., 2023). One of the main research questions in this study area aims to explore two crucial aspects of bribery. The first aspect is understanding how an individual's duration of tenure in a position can impact their likelihood of engaging in bribery. For example, does a prolonged tenure increase the chances of involvement in bribery? The second aspect is to study the impact of the severity of punishment for bribery offenses on these tendencies. Are individuals deterred more effectively by stricter punishments, regardless of how long they have held their position?

The desired future state envisions a shift towards laboratory experiments as the primary tool for in-depth corruption studies. With controlled environments, these experiments can isolate variables, offering more precise insights into these causal factors and the intricate determinants of corruption. However, this transition faces hurdles. There is the pressing challenge of the methodology gap, where the move from broad, perception-based methods to controlled

experiments is significant. Additionally, there is the need to balance the breadth of traditional methods with the depth of experimental ones and the resource-intensive nature of setting up laboratory experiments (Banerjee et al., 2023).

This study strives to bridge existing gaps and overcome challenges in corruption research by proposing an innovative approach. The aim is to enhance our comprehension of corruption, offering a more effective exploration of the intricacies inherent in corruption studies while illuminating the nuanced dynamics underlying the phenomenon, meticulously investigating the psychological and systemic factors contributing to the increased likelihood of corruption in specific circumstances. Furthermore, this study delves into the potential efficacy of severe punitive measures to deter and counteract corrupt tendencies, examining the feasibility and ethical implications of implementing stringent consequences for those guilty of corruption. By examining various aspects, a comprehensive understanding of the challenges and potential solutions associated with prolonged tenure and corruption in the public service could be provided. This study serves as an alternative to those of studies using secondary data and/or qualitative approaches since they may find it difficult to collect the data; some data are classified and sensitive to share.

Setting-Up the Context

Indonesia has grappled with a persistent and substantial corruption challenge since gaining independence. Corruption is still a serious problem in most Indonesian government organizations, even after 20 years of comprehensive reformation (Mietzner, 2015). Bureaucratic and political corruption are highly institutionalized in Indonesia (Suhardiman & Mollinga, 2017). In addition, Indonesia has a long history of patronage, patrimonialism, and strong local culture influence on its socio-economic life (Mietzner, 2015). As a response, the Indonesian government is undergoing a reformation project to eradicate corruption (Wihantoro et al., 2015).

Despite the transition to democracy and shifts in the political landscape over the years, the corruption index score assigned to Indonesia by Transparency International has exhibited only marginal fluctuations. Notably, a noteworthy trend emerges when examining the correlation between corruption perception and the level of democracy in the country. It becomes apparent that a nuanced relationship exists between establishing a robust democracy characterized by non-authoritarian governance and the public's perception of corruption. This intricate connection between democracy and the perception of corruption is underscored by empirical evidence, as illustrated in the graphical representation provided in Figure 1. The data depicted in this graph reveals the intriguing interplay between these two vital indices, shedding light on the complex dynamics at play within Indonesia's sociopolitical landscape. By exploring this relationship in greater detail, we can gain valuable insights into Indonesia's challenges as it seeks to address and combat corruption in its evolving democratic framework.

Corruption and bribery pose significant challenges that have plagued governments for decades, necessitating concerted efforts to address their pervasive impact on society. In response,
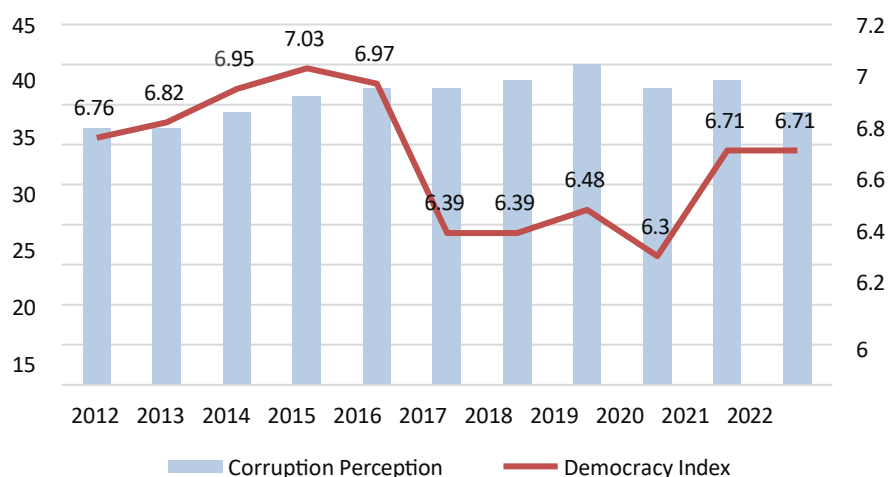
Figure 1. Indonesia Corruption Perception and Democracy Index 2012-2022
Source: Transparency International (2022), The Economist Intelligence Unit (2021, 2022)

the Indonesian government has undertaken various measures, including classifying corruption as an extraordinary crime and establishing the Corruption Eradication Commission (Komisi Pemberantasan Korupsi, KPK) as a dedicated institution in 2004. Moreover, ongoing bureaucratic reforms have been implemented to combat corruption effectively. However, despite over a decade of diligent work by the KPK, these endeavors have not yielded substantial results. Transparency International's Corruption Perception Index (CPI) consistently ranks Indonesia lower, indicating a persistent lack of progress in changing public perceptions towards corruption within the country.

The number of cases successfully solved and disclosed by the KPK reveals two significant aspects. Firstly, it demonstrates the commendable efficacy of monitoring and enforcing corruption laws. Secondly, it sheds light on the evolving nature of corruption and bribery cases, which are becoming increasingly sophisticated and challenging to detect. Consequently, these two factors culminate in a singular conclusion: corruption and bribery persist as major issues in developing countries such as Indonesia. Consequently, addressing this pervasive problem necessitates an exceptional level of understanding and an innovative approach from the government to implement well-suited solutions.

Corruption

Corruption is a concept that is difficult to define, known as 'an elusive phenomenon' that is discussed in many disciplines (Jancsics, 2014). The most popular definition of *corruption* is an abuse of power for individual benefit. This definition has become popular as many transnational organizations promote their anti-corruption strategy based on this definition (Murphy & Albu, 2018). The views explaining how and why corruption occurs are divided into three major perspectives: the mainstream view, which sees corruption as a rational decision of individual actors facilitated by the structural elements of social life. A more alternative view sees corruption as an embedded feature of social interaction. The term "corruption" encompasses a

broad concept that can give rise to diverse interpretations. It can be regarded as a financial crime often associated with fraudulent activities. The definition of corruption itself can vary across contexts. In the case of Indonesia, Law Number 20 of 2001 concerning Eradication of Corruption defines *corruption* as the act of enriching oneself, another individual, or a corporation at the expense of state finances or the country's economy. However, it is important to note that this definition has a limited scope, focusing solely on corruption within the government sector and the confines of Indonesian law.

A micro-level perspective views corruption as an action for utility maximization. Corrupt actors are assumed to be rational, calculative, and considering costs and benefits. This perspective also models corruption as a problem of principles and agency. Primarily, attention is given to agents as corrupt actors for their benefit. As a result, deterring corruption requires tight monitoring and accountability (Roberts, 2009) and improving incentive and punishment mechanisms (Rose-Ackerman, 1986). A more detailed discussion brings to the issue of the scope of corruption among agents. A question arises whether corruption is only an individual problem or an organization's problem (bad apple vs bad barrel theory). Bad apples tend to see the corrupt actor as just one of the good actors with a corrupt disposition, while a bad barrel assumes a good actor can be corrupt due to the influence of bad situations within the organization (Nekovee & Pinto, 2019). Jancsics (2014) argues that corruption as a principle-agency problem assumes that all employees are potential bad apples and will be in a bad situation. However, this view cannot explain a situation when the principal is also involved in corruption. In this case, Persson et al. (2013) also Rothstein and Varraich (2017) have a similar argument for promoting corruption not as a principle-agency problem but as a collective action.

While definitions may differ across jurisdictions, corruption generally exhibits certain shared characteristics worldwide. For instance, it often involves attempts to conceal corrupt activities and can lead to detrimental consequences for society. According to ACFE (2014), corruption is classified as one of the three financial crimes and fraud, alongside the misappropriation of assets in financial statements. Law Number 20 of 2001 in Indonesia outlines seven specific forms of corruption: state asset corruption, bribery, embezzlement in office, extortion, cheating, conflict of interest in procurement, and gratuities. Among these categories, bribery has emerged as the most prevalent form of corruption, as evidenced by the KPK's extensive focus on bribery cases from 2004 to 2015 (ACCH, 2015). During this period, the KPK handled 192 bribery cases, underscoring its widespread occurrence in Indonesia and relative ease of execution.

Consequently, bribery has become deeply entrenched within the culture, posing significant challenges in combatting this pervasive form of corruption, thereby exacerbating its perilous impact compared to other corruption types. Mazar and Aggarwal's (2011) research revealed a noteworthy correlation between the level of collectivism or individualism within a nation's culture and the likelihood of offering bribes to international business partners. Moreover, this correlation was influenced by individuals' sense of responsibility for their actions. The find-

ings suggest that collectivism fosters bribery due to a diminished perception of personal responsibility for one's actions.

Bribery

Bribery, as defined by Law Number 20 of 2001, involves accepting something or a promise with the knowledge or reasonable suspicion that it is intended to influence one's tasks in opposition to one's authority or obligations related to the public interest. While this definition shares similarities with the concept of gratification, there are distinct differences, particularly in the nature of the provision (Kusumasari, 2011). Gratification encompasses a broader sense of provision, whereas bribery involves explicitly the intention to influence the policies or decisions of public officials. Several key aspects must be considered to comprehend bribery: (1) Bribery involves two parties: the giver and the recipient; (2) It can occur in two directions, initiated either by the giver voluntarily or at the request of the recipient; (3) Bribery can be seen as the exchange of influence akin to a transaction; and (4) There are expectations of benefit for both the giver and the recipient, leading to an optimization of their respective interests.

Bribery in Indonesia falls under the broader buying and selling influence category and is intricately intertwined with bureaucratic systems. The prevalence of bribery is often influenced by the duration of an individual's tenure within the bureaucracy. Coviello and Gagliarducci (2017) find that increased political tenure is associated with "worse" procurement outcomes. Furthermore, Garcia-Vega and Herce (2011) discover that the time individuals hold a position reduces the influence of public capital expansion on GDP growth. Their findings indicate that tenure has an adverse effect on GDP growth by diminishing the productivity of public capital. Transparency International Indonesia (2013) reveals that four out of ten people in Indonesia have resorted to bribery, with approximately 71% of these cases involving the "facilitation payment" to expedite services. This study further highlights that bribery commonly occurs when seeking public services from institutions such as the police department, courts, civil registration offices, and licensing bodies. Consequently, bribery is a clear manifestation of corruption that demands urgent eradication.

Addressing bribery as a form of corruption necessitates a comprehensive, multidimensional approach involving multiple stakeholders. Efforts to combat bribery can be broadly categorized into three types: preventive measures, detective actions, and reactive interventions (Sutherland et al., 1992). For instance, establishing robust internal control systems is preventive, while implementing a whistleblowing system is a detective tool. In contrast, reactive actions come into play after corruption has been identified, typically through investigations conducted by bodies such as KPK. Among these approaches, preventive action assumes paramount importance. By prioritizing preventive measures, the costs incurred in averting corruption can be significantly lower than the expenses associated with post-corruption recovery.

Nonetheless, the research on bribery prevention as a proactive measure remains neglected and deserves a more comprehensive examination. Employing the web application

app.dimensions.ai, the authors embarked on a meticulous analysis that spanned across diverse academic disciplines, including but not limited to economics, law, and sociology. The results unveiled a yearly production of roughly 4,000 research papers on bribery prevention.

However, it is worth noting that this figure displayed a noticeable decline post-2018, as seen in Figure 2. When the investigation is focused on economics, it is clear there has been a tremendous decline in output, with only 198 articles produced annually globally. When compared across the broader spectrum, these differences highlight the relatively little attention paid to this important economic issue. For a more nuanced perspective, it is important to exclude 2018, when there is a huge spike in research output related to bribery prevention, with nearly 1,000 articles contributing to the overall research. Excluding 2018, the annual average shrinks even further to 110 papers globally, highlighting the need for intensive research in this important area, especially in economics. This underlines the importance of investigating why 2018 saw a surge in research output, as this could provide valuable insight into strategies to stimulate further scientific engagement in bribery prevention in subsequent years.

Exploring the factors that drive individuals to engage in bribery presents a fascinating avenue for analysis. Abbink et al. (2002) mention three key factors that are believed to shape the individual's decision-making process in bribery: individual factors, such as the influence of authority; situational factors, including peer pressure; and social factors, such as the prevailing culture of bribery. Furthermore, a robust punitive framework that threatens both the briber and recipient is crucial in deterring bribery. Punishment serves as a moderating factor in curbing instances of bribery. Emphasizing the significance of comprehensive research and implementing stringent penalties is paramount in strengthening preventive measures against bribery. Abbink et al. (2002) have given valuable insights into the intricate world of corruption, with a particular focus on bribery. Their work underscores three fundamental aspects: firstly, the concept of "reciprocity" (Gneezy et al., 2019). Reciprocity suggests a "social tie" or connection between the one offering a bribe and the one accepting it (Schram et al., 2022). Second, they emphasize how bribery has a detrimental impact on the well-being of our society. Finally, they emphasize the significance of the fear of legal consequences and punishment
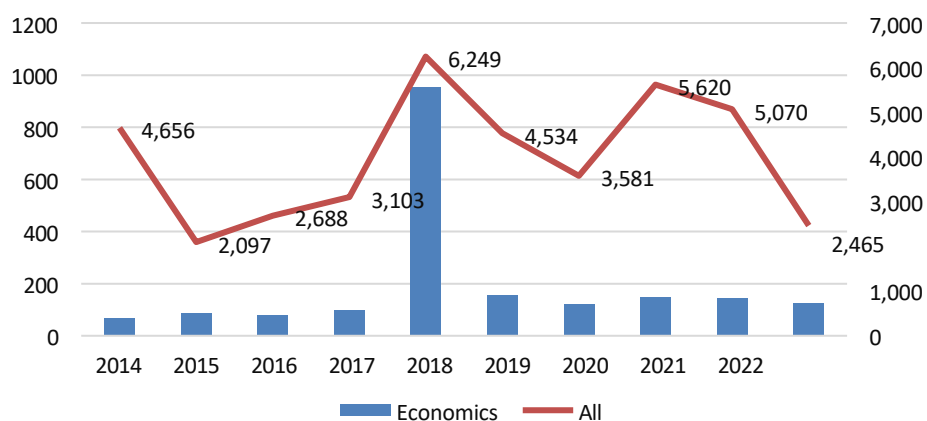

Figure 2. Published Paper on Bribery Prevention 2014-2023

in deterring corrupt practices.

This study primarily builds upon the foundational insights of Abbink et al. (2002), striving to understand how these three pivotal elements impact the prevalence of bribery. It is akin to using their work as a stepping stone to paint a more detailed and comprehensive picture of the world of bribery and corruption. In doing so, this study also examines the factors that affect the incidence of bribery through a laboratory experiment.

Social and cultural relations play an important role in seeing corruption at large. Schram et al. (2022) studied the concepts of "conformism" and "contagion." Contagion highlights how corruption spreads when society observes others engaging in corrupt activities. On the other hand, conformism shows that corruption decreases when individuals are exposed to honest behavior in their social environment. Similarly, Banerjee's (2016) research introduces the interesting "moral costs" notion. This term refers to a scenario in which fewer individuals, both in the role of bribers and bribe takers, participate in corrupt activities when they know the ethical costs associated with bribery (Gneezy et al., 2019).

Another significant factor influencing bribery and corruption is the level of wages received by employees, as highlighted in van Veldhuizen (2013). The study demonstrates that an increase in the wages of public officials can substantially diminish their susceptibility to corruption (Vendhuizen, 2013). For instance, low-wage public officials are shown to accept an average of 91% of bribes, whereas their higher-wage counterparts accept only 38%. Nevertheless, the authors chose not to pursue this line of inquiry due to our intention to create a laboratory experiment setting that closely mirrors real-world situations, particularly those involving government officials in Indonesia. In reality, granting higher wages to government officials is often infeasible due to budget constraints. Additionally, our consideration extends to the observation that even within ministries, such as the Directorate General of Taxes at the Ministry of Finance, higher wages do not necessarily lead to the expected reduction in corruption levels. This complex interplay of factors underscores the multifaceted nature of addressing corruption issues.

Much like wages, transparency is often considered a key factor influencing corrupt behavior, such as bribery. Adam and Fazekas (2021) suggest that information and communication technology has the potential to make governments more transparent, accountable, and less prone to corruption. These findings align with the results of a field experiment conducted in India, which demonstrates that higher levels of transparency are indeed linked to improved government efficiency and a reduced incidence of bribery (Peisakhin, 2012). However, there is a limitation when it comes to incorporating transparency into our own model and methodology. As previous research has shown, the nature of transparency is better analyzed through field experiments or quasi-natural experiments using survey data. Laboratory experiments may not adequately capture the real-world dynamics of transparency's impact on corruption.

Power

Power, as defined in this study, encompasses the ability to determine the magnitude of bribes, extending beyond structural positions within an organization. An individual is considered powerful if they possess bargaining power in stipulating the amount paid by the bribe giver. Keltner et al. (2003) also propose that power can exist independently of status and vice versa, but a clear distinction between formal and informal authority is essential. Moskowitz (1994; 2004) highlights the role of power in social relationships, focusing on an individual's intentions and actions, such as dominance (Winter, 1988) and influence (Keltner et al., 2003). According to Keltner et al. (2003), power is an individual's capacity to modify others' behavior by providing or withholding resources or imposing punishment. In the context of bribery, these resources and punishment may include economic opportunities or material gains.

Power is regarded as a significant factor contributing to unethical behavior. The greater the power an individual possesses, the stronger the inclination to seek bribes. Power serves as a catalyst for bribery from the recipient's side. However, the relationship between power and bribery behavior is complex and remains relatively understudied. Despite the popular saying by Lord Acton, "Power corrupts, and absolute power corrupts absolutely," although not directly linked to bribery, power does influence personal decision-making. For instance, Georgesen and Harris (1998) find that as individual power increases, their comparative assessment of performance declines while self-assessment tends to rise. Some allegations suggest that being under authority can also influence susceptibility to bribery. Corruption, in its myriad forms, has often been intrinsically linked with power. Historically, the accumulation of power in the hands of a few has frequently led to the misuse of authority, where the powerful prioritize personal gain over the public good. The dynamics of this relationship are complex. At the same time, power provides the means and opportunities for corrupt activities; the lure of more power and the accompanying privileges often fuels corruption in the first place. This cyclic nature of power and corruption has been a persistent challenge for societies, making it a central theme in disciplines ranging from literature to political science.

Robinson and Seim (2018) highlight an intriguing finding: government officials often make strategic choices regarding when to engage in corruption. Strikingly, they tend to disproportionately target individuals who lack political connections or hold a lower socio-economic status, essentially those without significant influence or power. This suggests that corruption often preys on the politically powerless. Moreover, Lagunes (2021) adds to this understanding by arguing that corruption vulnerabilities are particularly prevalent in situations where government officials have control over the distribution of goods and the imposition of costs. Consider government-issued goods such as building permits, state contracts, and government identification (National ID). These items, under the control of the state, often become fertile ground for corrupt practices and bribery. Similarly, instances like traffic tickets and tax liabilities, where government officials wield authority over citizens, can also be breeding grounds for corruption. In essence, these scenarios reflect the potential for corruption when those in pow-

er have control over the allocation of resources and the imposition of obligations on the less powerful.

Furthermore, as power structures evolve with changing societal and political landscapes, the manifestations of corruption adapt accordingly. In modern democracies, for instance, corruption might be lobbying, campaign financing ambiguities, or bureaucratic red tape. It may be overtly in autocratic regimes, such as embezzlement, nepotism, or brazen electoral fraud. Regardless of its form, the interplay between power and corruption serves as a reminder of the constant vigilance required to maintain checks and balances in any governance system.

Punishment

The fear of facing punishment plays a crucial role in deterring corruption. Hegarty and Sims (1978) has underlined the significance of punishment as a deterrent for engaging in corrupt activities. Basu et al. (2016) have demonstrated that when the expected penalties for corruption are high, the occurrence of bribery tends to disappear. However, it's noteworthy that as these penalties increase, the size of bribes also tends to rise. Additionally, Mahmud and Rezvi (2022) find that in Bangladesh, asymmetric punishment, where the recipient of the bribe is penalized while the bribe is not, is more effective in reducing bribery than symmetric punishment, where both parties face consequences. Engel et al. (2016) define asymmetric punishment as a scenario where the government punishes the bribe recipient but not the briber. On the other end of the spectrum, Basu (2011) has even suggested that bribers should be completely immune from punishment. Despite numerous studies favoring asymmetric punishment, it's important to note that this study has opted for symmetric punishment to align with the real-world situation in Indonesia closely. In Indonesia, as in our study, the briber and the bribee are punished for corrupt practices. Therefore, our research focuses exclusively on symmetric punishment to better reflect the prevailing dynamics in this context.

Another theory supporting the idea that penalties can reduce the intention to engage in bribery is the Theory of Planned Behavior. According to this theory, individuals are more likely to engage in actions with positive consequences, while negative consequences (such as penalties) tend to decrease their intentions (Ajzen, 1985). The primary driving force behind actions is anticipating rewards rather than fearing punishment (Deci et al., 1999). In similar narratives, Banuri and Eckel (2015) study the effect of a crackdown on bribery. They find that the simulated crackdown shows no substantial difference from the behavior before in the USA and Pakistan. This suggests that short-term crackdowns can influence short and immediate behavior, contingent upon the prevailing corruption norms in the country. However, the most critical finding is that such crackdowns are ineffective in the long term, as corrupt behavior reverts to pre-crackdown levels. Castro (2021) obtains similar findings, indicating that corruption can persist even when the monitoring agent hides the observed bribe exchange. Nonetheless, their research also highlights that a significant bribery cost and the presence of monitoring agents have a modest deterrent effect on corrupt behaviors. Moreover, the nature of the

punishment can also influence bribery behavior, with varying degrees of deterrence from low to high on a continuum. This study posits that punishment is a moderating variable among three independent factors: power, motivation, and culture.

RESEARCH METHOD

This study is based on a positivist approach, using experimental methods as the backbone to understand the research topic in depth. Positivism is founded on the conviction that genuine knowledge emerges primarily from observable and measurable events. This perspective emphasizes a steadfast trust in objective reality that can be comprehended via empirical observation and logical reasoning. In harmony with the principles of positivism, the experimental method offers a structured framework. It allows researchers to manipulate specific variables to deduce their impact on a particular outcome, thereby establishing a cause-and-effect relationship. Experimental research on corruption often centers around examining scenarios of illicit transactions. Many of these studies simulate situations where an individual sways an authority figure through financial inducements to provide certain advantages (Abbink, 2006). This approach is not novel; previous scholarly works, such as those by Campos-Vazquez and Mejia (2016) also Guerra and Zhuravleva (2021), have successfully adopted the positivist paradigm, underscoring its efficacy and robustness in academic research.

Building on the findings of Abbink et al. (2002), this study replicates the experimental conditions to examine the impact of three main characteristics on bribery, as mentioned before, which consist of reciprocity between the briber and the bribed, the negative impact on social welfare, and the presence of punitive measures enforced by law enforcement agencies. Employing behavioral economics, this study investigates several factors previously identified as determinants of bribery.

Barr et al. (2009) highlight that akin to public officials, service providers demonstrate improved performance when they are selected as monitors by the service recipients and when the transparency of their actions is heightened. However, their study indicates a paucity of robust evidence linking augmented compensation to enhanced performance among service providers. Consequently, increasing the payment of government officials acting as service providers may not warrant immediate consideration. As a result, variations in basic payment are not part of this experimental design.

The experimental study involved 32 participants, all of whom were students chosen for their combination of analytical skills, critical thinking, and effective communication skills. Each participant engaged in ten game rounds, with the investigation centering on two distinct treatments: reciprocity and penalty. The experimental design of this research involves two roles, one as a potential briber and the other as a potential bribe recipient, engaging in interactions within the realm of public service provision. Player one (P1) represents the civilian seeking public service, while player two (P2) embodies the public official. P1 can choose to pay

the public service fee alone or include a bribe. P2, the public official, can either accept or reject the amount offered by P1. Any sum transferred by P1 is tripled. If P2 declines the bribe, no bribery occurs. In the event P2 accepts the bribe, a "give back" takes place, where P2 must return a portion of the money to P1. This return can either match the exact value of the public service or exceed it. If P2 returns more money than the public service value, it signifies "reciprocation" of the bribe, while returning the exact value denotes being an "opportunist." The game's progression is visualized through the game tree in Figure 3.

In the first treatment, reciprocity is the central theme with the aim of exploring the dynamics between P1 and P2, and their influence on the occurrence of bribery. In the real world, instances of bribery are often more prevalent when potential bribe-givers and potential bribe-takers share a mutual acquaintance. Moreover, the extended tenure of a public official frequently corresponds with stronger ties to potential bribe-givers. This scenario was replicated within our experiment through deliberate variations in player assignments. The steadfast nature of a public official's tenure was mimicked by employing a fixed pairing ("Paired") throughout the entire duration of the game. Conversely, the absence of such a tenure was mirrored by adopting a random pairing approach that changed every round ("Random").

The second treatment revolved around the concept of punishment, a recognized deterrent against bribery. The experimental framework incorporated punishment in the form of a random audit, with a 25% likelihood of occurrence. When a player subjected to an audit was found to have engaged in bribery, their entire payoff was nullified, a condition termed "Sudden Death" or "SD." The experiment purposefully intertwines these treatments to explore their combined effects. The amalgamated treatments took shape as follows; "Paired NonSD" means fixed pairing without punishment, "Paired SD" means fixed pairing with punishment, "Random NonSD" means random pairing without punishment, and "Random SD" means Random pairing with punishment.
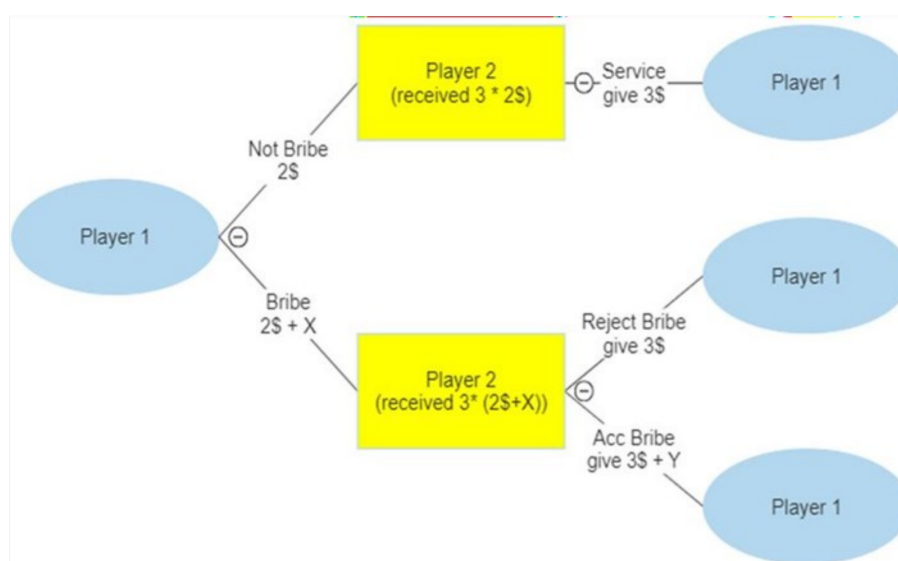
Figure 3. Game Tree Design with Payoff and Decision
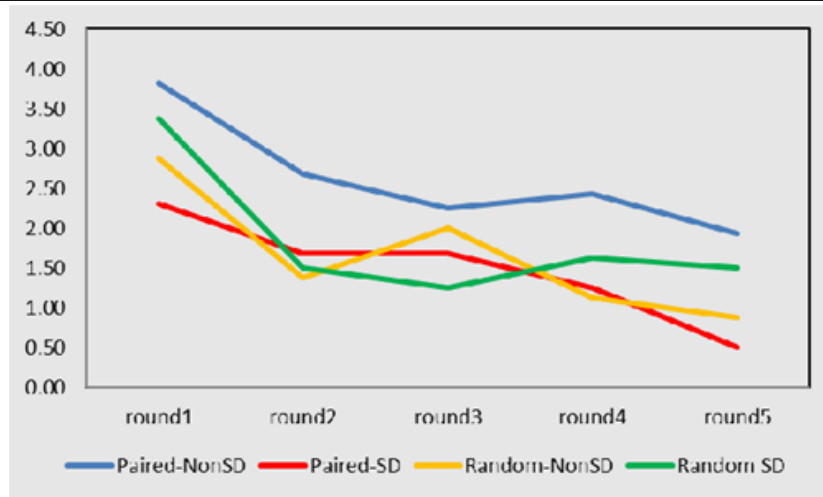
Figure 4. Amounts of Bribes and Give Back for Round 1 to 5

RESULT AND DISCUSSION

This analysis serves as a key tool for comprehending the optimal behavior exhibited by the players. The outcomes gleaned from this analysis provide a foundational platform for delving deeper into the intricacies of bribery but also aid in pinpointing the factors that influence optimal behavior. Furthermore, it enhances our understanding of the contextual nuances where such behavior is relevant. The experimental data, showcasing the amounts of bribes and "give back" in the conducted experiments, is visually represented in Figures 4 and 5 for reference.

The figures indicate that the Paired NonSD treatment exhibits the highest bribe amounts and givebacks. This outcome is reasonably anticipated, as the absence of punishment risk within the Paired NonSD treatment gives individuals a sense of security. Additionally, this treatment maintains fixed partner arrangements, fostering a conducive environment for developing trust between participants, therefore inducing reciprocity. In contrast, the Paired SD treatment records the lowest average bribe and giveback values. This observation implies that the fear of potential consequences discourages individuals from bribery. To ascertain the sta-
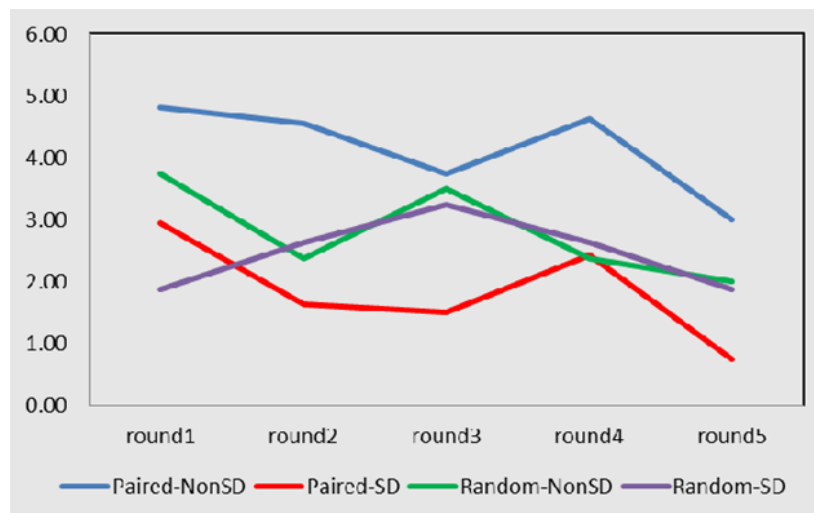
Figure 5. Amount of Bribes and Give Back for Round 6 to 10

Table 1. Average Difference Test for Bribe

Treatment	Mean	Std. Deviation	Diff	Significant
Paired NonSD	2.625	2.94	0.97	YES
Random NonSD	1.65	2.359		
Paired NonSD	2.625	2.94	1.13	YES
Paired SD	1.488	0.263		
Paired NonSD	2.625	2.94	0.77	NO
Random SD	1.85	2.537		
Paired SD	1.488	2.349	-0.16	NO
Random NonSD	1.65	2.359		
Random NonSD	1.65	2.359	-0.2	NO
Random SD	1.85	2.537		
Paired SD	1.488	2.349	-0.36	NO
Random SD	1.85	2.537		

tistical significance of these disparities across treatments, we conducted average difference mean tests for both bribe amounts and givebacks among participants subjected to various treatment combinations. The comprehensive outcomes of these average difference tests are presented in Tables 1 and 2.

Paired Non-SD vs Random Non-SD

The results of the analysis using two different means tests reveal important variations in the amount of bribes (denoted as "Bribe") across the two treatment conditions under investigation. Specifically, when examining decision-making in paired settings without the imposition of punishment (referred to as "Paired Non-SD"), the average bribe demonstrates a statistically significant escalation compared to decision-making in randomly paired circumstances (designated as "Random Non-SD"). The observed increase is substantial, amounting to 0.975 units of currency, outperforming the 8 units of available bribery funds. It is crucial to note this

Table 2. Average Difference Test for Giveback

Treatment	Mean	Std. Deviation	Diff	Significant
Paired NonSD	4.15	4.789	1.35	NO
Random NonSD	2.8	3.156		
Paired NonSD	4.15	4.789	2.35	YES
Paired SD	1.8	2.839		
Paired NonSD	4.15	4.789	1.7	YES
Random SD	2.45	1.28		
Paired SD	1.8	2.839	-1	YES
Random NonSD	1.65	2.359		
Random NonSD	1.65	2.359	0.35	YES
Random SD	2.45	1.28		
Paired SD	1.8	2.839	-0.65	NO
Random SD	2.45	1.28		

statistically significant disparity, which underscores the influence of the decision-making context on bribery behavior. However, a nuanced perspective emerges when delving into the giveback values associated with the two treatments (Non-Paired Random SD and Non-SD). Despite the noteworthy 1,350-unit currency advantage favoring giveback values emanating from pairwise treatment decisions over those from randomly paired treatments, these observed differences do not attain statistical significance. This nuanced insight prompts further exploration into the intricate dynamics at play, shedding light on the complex interplay between decision-making contexts and their impact on bribery-related behaviors within the experimental framework.

Paired Non-SD vs. Paired SD

A significant disparity emerges upon a thorough examination of mean test comparisons in two treatment scenarios: "Paired Non-SD" (paired setups without punishment) and "Paired Non-SD" (fixed penalties). Statistically significant differences are evident in both bribe and giveback considerations. The results consistently indicate that the Paired Non-SD treatment exhibits significantly higher values for bribes and givebacks than its paired counterpart. The observed discrepancies are substantial, with bribe values differing by 1,135 units and giveback values by 2.35 units. These findings underscore the profound impact of punishment dynamics on decision-making within paired settings, offering nuanced insights into how variations in treatment conditions can yield distinct behavioral outcomes. A deeper exploration into the underlying mechanisms fueling these differences holds the potential to enhance our understanding of the intricate interplay between punishment, decision-making, and consequential behaviors in experimental contexts.

Paired Non-SD vs. Random SD

Significant and compelling disparities come to light upon a comprehensive examination of the decision-making dynamics associated with two distinct treatments: paired setups without penalties (designated as "Paired Non-SD") and randomly paired setups featuring penalties (referred to as "Random SD"). These distinctions are particularly pronounced in the context of giveback considerations, adding depth to our understanding of the nuanced interplay between treatment conditions and decision-making outcomes. Within bribe values, the first treatment (Paired Non-SD) exhibits a notable distinction, amounting to 0.775 units. Although this difference is noteworthy, it falls short of reaching statistical significance. In sharp contrast, the disparities in giveback values between the two treatments are substantial and statistically significant, with the first treatment surpassing the second (Random SD) by a margin of 1.7 units. This significant difference underscores the unique impact of penalty imposition on decision-making outcomes, emphasizing the crucial role of giveback considerations in unraveling the complexity of behavioral responses in experimental settings. Delving into the underlying mechanisms driving these differences holds promise for a deeper comprehension of the intricate dynamics in decision-making processes influenced by varying treatment conditions.

Paired SD vs. Random Non-SD

The treatments under scrutiny involve paired decisions with penalties for bribery (referred to as "Paired SD") and randomly paired decisions without penalties (designated as "Random Non-SD"). Surprisingly, the two treatments showed no statistically significant differences when considering bribery values. However, examining giveback values uncovered clear and noteworthy distinctions with robust statistical significance. In particular, the first treatment (Paired SD) exhibited a significantly higher average giveback value than the second treatment (Random SD), with a marked difference of 1 unit. This finding underscores the importance of considering not only the act of bribery but also the subsequent behavior of returning funds, revealing a nuanced aspect of decision-making dynamics within experimental settings. The observed discrepancy in giveback values prompts further exploration into the underlying mechanisms that drive such divergent outcomes, offering a more comprehensive understanding of the impact of penalties and randomization on decision-making behaviors.

Random Non-SD vs. Random SD

Surprisingly, the statistical outcomes did not point to any significant differences in the average bribe between the two treatments, suggesting a lack of substantial distinction in bribery amounts. This finding underscores the need to delve deeper into the nuances of decision-making processes within these treatments, where bribery alone may not capture the observed behavioral variations. In contrast, the average giveback difference test results present a compelling narrative of statistically significant disparities. Notably, the first treatment (Random Non-SD) stands out with a significantly higher average giveback value, surpassing the second treatment (Random SD) by a margin of 0.35 units. This pronounced difference in giveback values adds a layer of complexity to our understanding of decision-making dynamics, hinting at the multifaceted nature of responses within experimental settings. Exploring the underlying factors driving these observed distinctions promises to offer valuable insights into the interplay between randomization, penalties, and subsequent behaviors in decision-making processes.

Paired SD vs. Random SD

The outcomes of the mean difference tests conducted on the two treatment scenarios, specifically involving paired decisions with penalties (referred to as "paired SD") and decision-making in randomly paired settings with penalties (designated as "random SD"), indicate the absence of statistically significant differences. This observation suggests that the identified sentence pairs within these treatments do not exhibit significant variations in terms of mean differences. However, a deeper exploration of the decision-making dynamics within these treatments may provide a more nuanced understanding of the observed outcomes, shedding light on the intricacies of how penalties influence paired and randomly paired decision scenarios.

The main findings of the test result have revealed pivotal patterns within various treatments, yielding valuable insights into the dynamics between public officials and public interactions. The first implication is a discernible link between familiarity with public officials and an increased propensity for bribery. Officials with extended tenures display a heightened susceptibility to bribery, leading to outcomes that surpass their counterparts undergoing frequent rotations. This trend is underscored by higher mean values observed in treated groups, regardless of whether penalties are applied, compared to instances of random treatment. This study's "fixed pairing" concept pertains to prolonged official incumbency.

Second, introducing punitive measures that carry financial consequences demonstrates the potential to curb bribery incidents and associated givebacks. This notion is reinforced by comparing average values in the SD treatment, where both bribe and giveback mean values notably decrease compared to treatments lacking SD. Nevertheless, the study suggests that punitive measures are particularly effective when applied to bribe recipients. This discrepancy is likely due to the higher stakes faced by public officials, heightening their vulnerability compared to bribe givers.

Lastly, a combination of dual treatments involving random pairings and punitive approaches (SD) showcases the ability to mitigate the magnitudes of bribes and givebacks. For public officials, a strategic blend of rotational shifts and robust penalties emerges as a practical strategy to counteract bribery once an official's complicity is established. The findings highlight the importance of avoiding extended tenures for public officials, as demonstrated by the reduction in bribery occurrences through randomized decision-making pairings. The imposition of penalties and decisive actions, as demonstrated by sudden death scenarios, serves to reduce bribery tendencies for both parties involved significantly.

CONCLUSION

The main objective of this study is to investigate the effect of tenure duration and punishment on bribery using a laboratory experiment. This should be a distinctive alternative since corruption behavior might be difficult to observe using secondary data or when one faces a prominent constraint in qualitative analysis. In conclusion, this study underscores the need to curtail prolonged official tenures to mitigate bribery tendencies. The insights gained through rotational shifts and effective penalties shed light on the intricate interplay between officials and public interactions, offering pathways for improved governance and ethical conduct.

In public finance research, understanding the motivations and behaviors of individual government officials is paramount. Bribery, often perceived as a systemic issue, has roots in individual choices and motivations. This study begins by assuming that bribery arises primarily from the briber's own volition. However, we must critically examine the unique financial pressures and ethical dilemmas faced by individual government officials. Insufficient remuneration, the allure of supplementary income, or even personal financial hardships can some-

times drive these officials to solicit bribes, compromising the sanctity of public financial institutions.

Future studies should delve deeper into these individual motivations, potentially exploring the impact of officials' personal financial literacy, ethical training, and compensation packages on their susceptibility to bribery. By understanding these nuances, policy recommendations can be tailored to address the root causes of corruption at the individual level. Another facet worth investigating revolves around the individual consequences faced by government officials caught in bribery acts. Presently, our study administers punishments discreetly, focusing only on the individual in question. In the real world of public governance, the repercussions for a corrupt official extend beyond mere punishment. Their professional reputation, career trajectory, and even personal relationships might be affected. Public knowledge of an official's malpractices can serve as a deterrent for others in similar positions. Hence, future experiments could factor in these wider societal perceptions and their influence on the decisions of individual government officials suspected of engaging in bribery.

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Follow-up implementations on audit results in the local government of Banten Province

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ABSTRACT

Follow-up on implementing the recommendations based on the BPK audit result in the Banten Provincial Government has not been effective due to the completion time of the follow-up not being up to standard and the audited entity having difficulty carrying out the follow-up. This study aims to determine the effectiveness and challenges in implementing the policy of completing follow-up on the results of the BPK audit in the Banten Provincial Government. This study uses a descriptive qualitative approach and primary data collection techniques (observation and interviews) with informants purposively selected from BPK and local government. The technique used for data analysis is interactive models. Results show that the policy has not covered all target groups and has no impact on direct improvement changes. Decision-making has not supported the sustainability of completing follow-up audit results. The Inspectorate's mediation effectiveness is hindered by limited personnel and budget resources. Based on the implementation environment, actors have not been fully involved in monitoring the follow-up progress, and leaders do not have the commitment and assertiveness to encourage follow-up on audit results. The potential implication of this study suggests that the BPK should consider reformulating technical policies to ensure the effective and measurable completion of follow-up recommendations on audit results.

KEYWORDS:
Implementation; follow-up of recommendations; audit results

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INTRODUCTION

Law Number 17 of 2003 on State Finance states that state finances must be managed orderly, compliant with laws and regulations, efficiently, economically, effectively, transparent, and responsibly with due regard to a sense of justice and propriety. State finances must follow sound general principles, results-oriented accountability, professionalism, proportionality, and openness and be audited by an independent and free examining body to reflect best practices in state financial management.

Based on the Law of the Republic of Indonesia Number 15 of 2006, the Audit Board of the Republic of Indonesia (Badan Pemeriksa Keuangan, BPK) has the duty to examine the management and responsibility of state finances carried out by the central government, local governments, and other state institutions. The results of the audit conducted by BPK must be submitted to the parliament, council, and regional council in accordance with their authority. The results of BPK's audit of the management of state finances issued opinions and recommendations on the findings of the audit of financial entities. The recommendations must be followed up by government agencies to improve the accountability of financial management in the following year. Based on the BPK Chairman's Regulation Number 2 of 2017 concerning Monitoring the Follow-Up on the Implementation of Audit Results of the Audit Board, every recommendation issued by BPK must be followed up by government entities with a predetermined period of 60 (sixty) days after the audit report (Laporan Hasil Pemeriksaan, LHP) is received.

BPK also conducts monitoring activities on the follow-up of audit recommendations implemented by the audited entity during the period per semester or every six months in one fiscal year. The results of this monitoring are outlined in the Summary of Semester Audit Reports (Ikhtisar Hasil Pemeriksaan Semester, IHPS) document. In the first semester of 2022, BPK compiled IHPS and monitored the follow-up of audit recommendations for the first semester of 2005–2022. From the monitoring results, many recommendations were still inappropriate, had not been followed up, and could not be followed up in several ministries, institutions, local governments, state-owned enterprises, regional-owned enterprises, and other bodies, as shown in Figure 1. Figure 1 shows that approximately 21.6% of recommendations from 2005 to the first semester of 2022 have not been followed up with various factors. This case contradicts the time limit based on the BPK Chairman's Regulation Number 2 of 2017.

In addition to monitoring the follow-up of BPK audit recommendations in the central government, particularly ministries/institutions/state-owned enterprises and other agencies, BPK also monitors the implementation of follow-up of audit recommendations (Tindak Lanjut Rekomendasi Hasil Pemeriksaan, TLRHP) in local governments, provincial local governments and regency/city local governments throughout Indonesia, particularly the Banten Provincial Government. Based on data obtained from BPK, the results of the follow-up of audit recommendations (TLRHP) on local governments in Indonesia from 2020 to 2021 are obtained, as depicted in Figure 2.
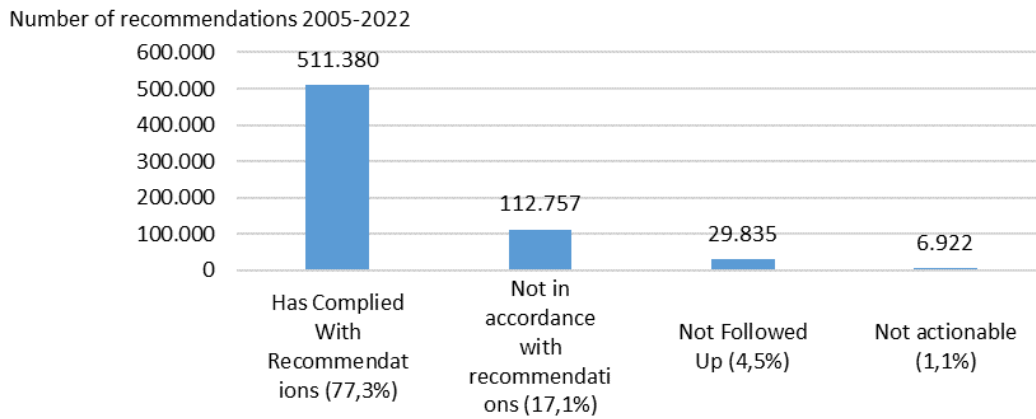
Figure 1. Monitoring Results of Follow-up of Audit Recommendations (TLRHP) on LHP Issued for the Period 2005 −2022 Semester 1 According to the Number of Recommendations at Ministries/Institutions/Local Governments/SOEs/BUMD and Other Agencies
Source: BPK (2022)

Figure 2 shows that most of the recommendations from the BPK audit results from 2020 to 2022 have not been completed by 50%, with uncompleted recommendations amounting to 5.1 trillion. The number and value of recommendations that have not been resolved are quite large. Therefore, most local governments still find completing the recommendations of the audit results conducted by BPK difficult.

Based on the condition of monitoring the follow-up of the BPK audit recommendations in the Banten Provincial Government, several problems of discrepancies still exist in its implementation. For instance, follow-up completion time is not in accordance with predetermined time standards, the audited entity has difficulty in implementing follow-up recommendations on the audit results, the results of follow-up reviews often vary and are always repeated to review the same findings, the review of follow-up results exceeds the predetermined time period, and access on the implementation and monitoring of follow-up recommendations on audit results through the information system is limited. Based on these problems, this study aims to determine the effectiveness and challenges in implementing the policy of completing follow-up on the results of the BPK audit in the Banten Provincial Government.
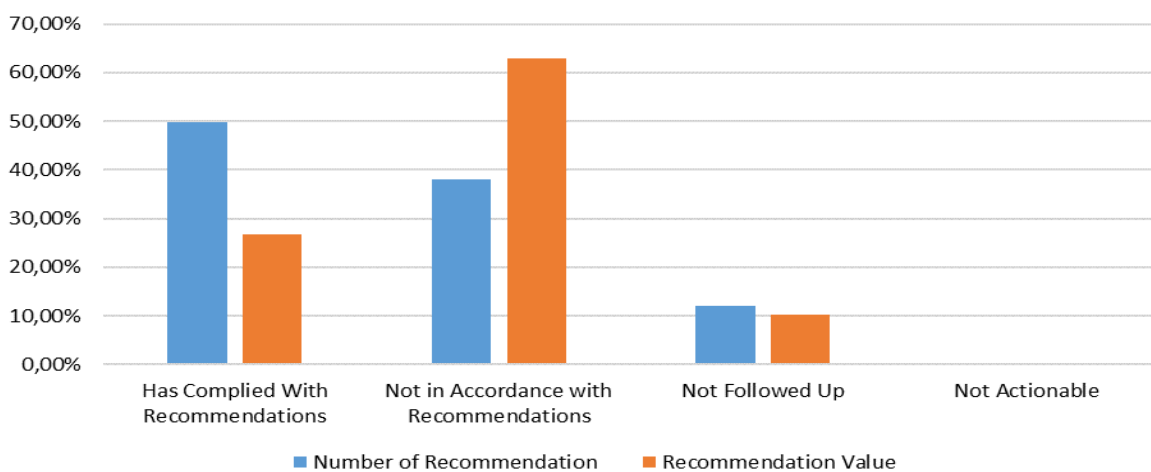
Figure 2. Results of Monitoring of TLRHP Implementation by Entities from Semester 1 of 2022 for LHP Issued in 2020 to Semester 1 of 2022 in Local Governments
Source: BPK (2022)

The implementation of policies for the follow-up of BPK audit recommendations has not been researched and studied by experts. Several previous studies discussed the completion of the follow-up of the LHP BPK, which is different from the present study. The difference between the present study and previous ones lies in the context of the discussion. In previous studies Pongoliu et al. (2017) and Essing (2017), the context of the discussion only analyzes and identifies obstacles that hinder the completion of follow-up recommendations on the results of the BPK audit. They did not broadly connect and discuss the process of implementing the policy for completing follow-up on audit results. Their results are limited to only discussing the identification of obstacles to the completion of follow-up. In addition, Essing (2017) only studied how the implementation of follow-up on the results of the BPK audit in Talaud Regency was not associated based on a policy point of view.

Pongoliu et al.'s (2017) study aimed to analyze the obstacles faced by the Gorontalo Province SKPD and the efforts of the Gorontalo Provincial Government to accelerate the completion of the follow-up to the BPK audit results. They used a qualitative method with a case study approach, focusing on the Gorontalo Provincial Government. They found the obstacles faced by SKPD in following up the BPK audit results: (1) lack of organizational commitment; (2) weak internal control system; (3) parties related to the findings have died/retired/ unknown address; (4) employee rotation; and (5) disagreement over the audit results.

Further research was conducted by Essing (2017) in his writing entitled "Analysis of the Implementation of Follow-up to BPK Audit Results on Local Government Financial Reports in the Talaud Islands Regency." The completion of the follow-up has increased although it is very small. The existing percentage is above average but has not reached the minimum standard of BPK. Follow-up completion time is not effectively implemented. The research is qualitative and based on case studies. The results showed adequate quality of the technical team's human resources. However, obstacles still exist for the technical team: (1) lack of understanding of how to follow up the recommendations of the audit results; (2) the number of personnel involved in the implementation of the follow-up is still insufficient; (3) the follow-up process has not been fully carried out based on the procedures contained in the standard operating procedures for follow-up of BPK audit results. In addition, the standard operating procedures that have been made have not been published to the team.

This research framework is prepared based on a theoretical framework to connect concepts and propositions to explain social phenomena using certain assumptions and logic. The theoretical framework in this study is structured with a grand theory in the form of public administration theory. Meanwhile, public policy theory is a middle-range theory that links grand theory and applied theory. As a grand theory, public administration is closely related to public policy. White (1995) stated that public administration consists of all those operations aiming to fulfill and enforce public policy. Public administration has a great role in policy formulation, implementation, and evaluation (Gordon & Young, 1997). Public policy theory is defined as a series of integrated actions the government takes to achieve common goals and is not limited

to lawmaking alone (Cochran, 2011). This series of integrated actions taken by the government can be in the form of doing something or even not doing anything (Dye, 2017) to solve problems that arise in society, such as economic, educational, health, and social problems (Dunn, 2004). Meanwhile, Dye (2017) explained policy implementation as one of a series of policy processes. The problem to be solved is first identified, and an agenda for how the problem will be solved is set. Then, policies prepared by government officials and interested parties are formulated. After this, the policy is ratified by the government and implemented by the government or government-appointed institutions. This study uses Grindle's theory of policy implementation (Grindle, 1980). The success of policy implementation is influenced by two main variables, namely, policy content and implementation context (Grindle, 1980). Therefore, the government should examine whether the policy can negatively affect the community to prevent conflicts that harm the community (Mandala et al., 2016).

From the authors' perspective, the relationship between the theory discussed and this study explains how a follow-up to the BPK audit recommendations is a form of public administration activity based on a policy. These activities are implemented in the completion of follow-up recommendations on the results of the audit. The framework in this study based on a grand theory is public administration with a connecting theory, that is, the theory of public policy and its implementation theory. Implementing the policy of resolving follow-up recommendations on the results of the BPK audit is carried out administratively and requires intervention in the bureaucracy's interests.

RESEARCH METHOD

This study uses a qualitative approach, which seeks to find and know the implementation of the policy for completing follow-up recommendations on the results of the BPK audit at the Banten Provincial Government. Qualitative research is focused on revealing in-depth information related to the implementation of follow-up recommendations on the BPK audit results in the Banten Provincial Government. The Banten Provincial Government was chosen by the authors as the location of this study, considering that it has problems completing the follow-up recommendation on the BPK audit results. This study was carried out from March 2022 to February 2023.

Primary data are obtained directly from the field, namely, from the BPK and the Banten Provincial Government, particularly the Banten Provincial Inspectorate, either through direct observation or asking questions to several sources, namely, the BPK team, inspectorate follow-up officers, head of the inspectorate monitoring subdivision, secretary of the inspectorate, follow-up officers at several Regional Apparatus Organizations. The authors obtained the primary data through observations and interviews with parties about the issues discussed using a list of pre-prepared questions related to implementing the follow-up completion policy developed during the interview. Observations and interviews were carried out simultaneously for three months. Meanwhile, secondary data are obtained from library materials. Secondary data

used by authors are laws and regulations, implementation guidelines, literature, articles, newspapers, the internet, and those related to the research topic.

A purposive technique was applied during the selection of informants in this study, considering that the authors took sources from several people who were considered to have appropriate and relevant information about the research problem. The informants in data collection are the Inspector of Banten Province, the head of the BPK representative of Banten Province, and the secretary of the Inspectorate of Banten Province as key informants, namely informants who know the main information, local apparatus within the Banten Provincial Government that has high-risk management in budget management, BPK audit team, and BPK follow-up completion team as additional informants (secondary informants).

The authors use data triangulation techniques to test the validity of information. The data triangulation used in this study is technical, time, and source triangulation. Triangulation of techniques is testing the credibility of data on the same source with different techniques, such as data obtained from observations rechecked with interviews. Time triangulation is obtaining data from the same source at different times. Triangulation of sources is testing the credibility of data by checking the data obtained from various data sources and informants, such as the results of interviews. The data analysis technique used in this study is the interactive data analysis technique approach, with data condensation, data presentation, and conclusion drawing as components (Miles et al., 2014).

RESULT AND DISCUSSION

A policy has clear objectives as a form of policy value orientation. Policy implementation objectives are formulated into action programs and specific projects designed and financed. The program is implemented following the plan. Policy or program implementation is largely influenced by policy content and implementation context. The overall policy implementation is evaluated by measuring program outcomes based on policy objectives. Program outcomes are seen through their impact on the intended targets, individuals, groups, and communities. The output of policy implementation is change and the acceptance of change by the target group. Hence, in this study, the implementation of the policy of completing the follow-up on the BPK audit recommendations in the Banten Provincial Government is influenced by the policy content and implementation context, and the program outcomes are measured based on the objectives of the BPK TLRHP settlement policy.

Content of Policy

Target group interests

The policy for completing the follow-up on BPK audit recommendations is contained in the BPK Chairman's Regulation Number 2 of 2017 concerning monitoring the implementation of the follow-up of audit results of the BPK. Policy implementation is influenced by policy con-

tent, where the content of the policy is structured by the interests of the target group. The implementation of the policy of monitoring the completion of follow-up on BPK's audit results cannot be separated from the interests of target groups, such as BPK, the inspectorate, and other entities with the same goals and objectives. The implementation of the regulation of the chairman of BPK Number 2 of 2017 is not elaborated and derived more specifically from the technical completion of the follow-up of audit recommendations into a policy in the regions. According to several representatives of the audit entities or several local apparatus organizations (Organisasi Perangkat Daerah, OPD) in the Banten Provincial Government, they regret that there is no regional head regulation that regulates in detail and technically the mechanism for completing the follow-up on the audit recommendations. Hence, many audit entities experience difficulty and feel confused in completing the follow-up on the BPK audit recommendations. This case is reinforced by the results of an interview with one of the representatives of the audited entity handling the follow-up of the Banten Provincial Health Office:

> *"We as the audited entity, find it quite difficult to complete the recommendations, especially those that are administrative in nature, and the completion of previous recommendations that have not yet been resolved. We need derivative rules from BPK Regulations that must be prepared technically by the regional head, such as the Banten Governor Regulation"* (interview, May 4, 2022).

The target group's interests must clearly be included and represented in the policy content. In addition, a cross-OPD communication forum needs to be established to accommodate various kinds of complaints and difficulties of OPDs to complete follow-up recommendations. A cross-OPD communication forum is established to accommodate the interests of target groups because each audited entity has different obstacles. In the coordination forum, each OPD can report on the completion of the follow-up, that is, the difficulties and the progress made. The coordination forum will be greatly effective if each OPD and work unit reports the progress and obstacles experienced in completing the follow-up (Budaya & Sugiri, 2019).

Type of benefit

Policy content is influenced by the type of benefits from the objectives of the implemented program. The policy's benefits can be observed where the policy has been implemented. The success of a policy can be felt and observed by many groups utilizing the policy. This result is in accordance with Grindle's opinion (Grindle, 1980) that, in a policy, the benefits the target group will receive later must be explained. Therefore, in preparing policies, large outputs and impacts that all groups can feel should be considered.

Based on the condition of monitoring the follow-up on BPK I audit recommendations in the Banten Provincial Government, BPK Head Regulation Number 2 of 2017 has a positive impact. The existence of this policy provides guidelines and control policies on how to implement the completion of the follow-up on audit recommendations. The policy is implemented and used as a reference for the Banten Provincial Government, particularly for each audited entity where the audit results must be followed up in accordance with predetermined provi-

sions.

In general, the benefits of the policy of monitoring the implementation of follow-up recommendations on the BPK audit results for the Banten Provincial Government provide improvements in local financial governance, reduce local losses, and foster compliance with the implementation of laws and regulations. The benefits of the policy of completing the follow-up on the BPK audit recommendations can be felt. However, in its implementation, the audited entity is still not optimal in completing several recommendations for the results of the existing audit. Hence, the time for completing the follow-up on the audit recommendations is not in accordance with what has been determined. This case is reinforced by a statement from the BPK representative of Banten Province from one of the junior auditors stating:

> *"the local governments get solutions to problems faced in carrying out regional financial management and responsibilities, such as improvements in presenting financial reports, improvements in the implementation of physical work on roads, networks and irrigation and financial governance of (Badan Layanan Umum Daerah, BLUD)/Regional Companies/Regional Banks. So that in the future, the local government does not make the same mistakes and is more obedient to the provisions of laws and regulations"* (interview, June 8, 2022).

Based on the results of the interview with the secretary of the Inspectorate of Banten Province:

> *"It is necessary to establish and formulate technical governor regulations governing the procedures for completing follow-up recommendations on the results of the audit so that they can be more fundamentally utilized by each audited entity because so far there are still several OPDs that find it difficult to make efforts to resolve follow-up recommendations on the results of the audit"* (interview, May 18, 2022).

The findings in terms of the utilization of audit results by OPDs in this study are in line with (Hasanah, 2016), who stated that the results of the inspection carried out by the inspectorate had not been fully utilized as feedback to improve OPD performance.

Degree of change desired

How much change is intended or achieved through an implementation should be measured to have a clear scale. The commitment of the audited entity to follow up on the recommendations of the audit results is realized in an action plan. The audited entity must prepare an action plan for completing the follow-up to the recommendations prepared as a measure of time and action plans to complete the follow-up to the audit results. Based on the Banten Provincial Government situation, each audited OPD has certainly compiled an action plan for every audit result. However, in practice, the action plan that is compiled sometimes does not match the time and follow-up done.

Although the BPK audit aims to provide changes in financial management in a great direction, there are still BPK audits that produce repeated findings. To achieve the goals and objectives of the desired changes, the supporting factors to achieve the degree of change should be

necessary to strengthen, namely, the commitment and active response from audited entity officials, authors, and BPK officials. This case is based on the results of an interview with one of the senior auditors, who stated that the active response from audited entity officials, the response from BPK officials or auditors, and the cooperation between BPK officials and authorized audited entity officials to complete the BPK TLRHP (interview, June 8, 2022).

Location of decision-making

Decision-making in a policy plays an important role in policy implementation, the success of policy implementation is influenced by the accuracy of the decision making (Dholakia & Bagozzi, 2002). The policy of completing the follow-up on the BPK audit recommendations must be supported by the right decisions so that the decisions taken do not become new problems.

Based on the observations made by authors, the decision-making of each actor, such as BPK, inspectorate, and audit entities, in conducting follow-up has sometimes not been carried out properly and fundamentally. Differences often exist in perceptions of the review of the implementation of the completion of follow-up to existing recommendations by the BPK or inspectorate. These differences cause discrepancies in follow-up data among BPK, inspectorate, and audited entities. The audited entity considers that the recommendation has been followed up, but the BPK decision considers otherwise, and vice versa. One of the audited entity representatives from the Banten Province Public Works and Spatial Planning Office stated:

> *"Sometimes the results of recommendations have not provided a clear picture in terms of follow-up recommendations that must be done. There are often differences in perceptions of the audit results due to different field conditions, calculations, and methods and techniques so that the follow-up results cannot be accepted"* (interview, May 24, 2022).

Another problem is that the audited entity does not pay close attention to the recommendations of the BPK audit report, causing the follow-up to not be in accordance with the recommendations, rejected, or wrong. Hence, the decision to complete the follow-up of the audit recommendations needs to be supported by identifying problems and looking for alternatives to solve the follow-up appropriately.

Internal communication in OPD needs to be built to determine decisions in accelerating the completion of follow-up on BPK audit recommendations. The completion of follow-up on audit results (Tindak Lanjut Hasil Pemeriksaan, TLHP) by OPD can only be carried out properly if the communication media is presented clearly, completely, accurately, and objectively and can be easily understood (Harinurhady et al., 2017).

Program implementer

The program implementers influence the success of the policy implementation process, whether the policy has involved its implementer in detail. The program implementer is the driving force, and a rule regulates the movement. The policy of completing the follow-up on

the BPK audit recommendations needs to be supported by detailed program implementers who know the obligations that must be carried out, thereby supporting the program is running.

In the local government of Banten Province, the government's internal supervisory apparatus (Aparat Pengawas Intern Pemerintah, APIP), or inspectorate has not been able to effectively mediate in supporting the completion of the follow-up on BPK audit recommendations. This condition is indicated by restrictions on access for OPDs to the BPK follow-up completion information system (Sistem Pemantauan Tindak Lanjut, SIPTL), so that OPDs cannot directly monitor the progress of follow-up on SIPTL. In addition, the implementation of the completion of the follow-up submitted by the OPD to APIP is not updated, resulting in unchanged follow-up data. Moreover, the submission and recording of follow-up results carried out by the BPK and the Inspectorate of Banten Province is not carried out on an ongoing basis. Hence, there are often failures and disagreements in the results of follow-up recommendations made and provided by the audited entity. This condition is caused by changes in personnel who do not necessarily submit follow-up records of audit results on an ongoing basis.

The replacement of follow-up monitoring personnel in the scope of BPK, the Inspectorate of Banten Province, and the audit entity causes disconnection of information and history of previous follow-up results that have been recorded. As an institution obliged to follow up on the findings of various auditors and as the leader of APIP, the inspectorate must know the remaining findings that have not been completed. From an interview with one of the entities of the Banten Provincial Education and Culture Office:

> *"the implementation of monitoring follow-up on the results of the BPK audit sometimes found information that was not complete and not updated, due to separate monitoring officers and inspection teams, plus BPK officers who often experienced transfers or employee mutations so that existing information did not continue which caused differences in data on the results of the previous follow-up" (interview, May 24, 2022).*

Problems should be identified, action plans must be developed, and activities must be controlled to determine completion targets. The inspector must have commitment and assertiveness in completing the follow-up. Moreover, as an internal government supervisory agency that ideally becomes a good barometer in efforts to complete the follow-up, the inspector must be able to mobilize and inspire all available resources to achieve the acceleration of follow-up completion (Nahor et al., 2021).

Resources involved

The involvement of resources in policy implementation is very important and is a supporting factor for successful policy implementation. The successful implementation of the policy of completing the follow-up on the BPK audit recommendations is influenced by the quality and quantity of resources, whether in the availability of personnel, facilities infrastructure, and budget. To complete the follow-up on the BPK audit recommendations, supporting per-

sonnel resources in quantity and quality should be available for the Inspectorate of Banten Province and in the OPD as the audit entity. In terms of quantity, the number of human resources available for the Inspectorate of Banten Province in 2021 was 137 civil servants. Table 1 presents the number and composition of Banten Province Inspectorate employees by status and class.

When viewed from the composition of employees in functional positions, only 62% is filled when compared with the personnel requirements for the functional position of auditor. In supervisor of the implementation of local government affairs (Pengawas Penyelenggaraan Urusan Pemerintahan di Daerah, P2UPD) functional positions, only 48% are filled compared to the personnel needs. For the functional position of Audiwan, only 33% is filled when compared with the personnel requirements. Hence, the fulfillment of the number of employees in functional positions, compared with the needs of the tasks and functions of supervision, is still very limited. However, these conditions show that effectiveness and efficiency through human resources can be met without reducing organizational performance in carrying out supervisory activities (Inspektorat, 2022).

The inspectorate, as APIP, plays a role in assisting the BPK's duties in synchronizing and facilitating the BPK's completion of follow-up recommendations on audit results to all entities within the Banten Provincial Government. Based on the existing conditions, the available inspectorate apparatus to support the completion of follow-up results of the BPK audit is lacking. Problems with the availability of human resources in the context of implementing the completion of BPK's TLRHP also occur in each audited entity as an officer compiling financial reports and follow-up audit results.

Based on interviews with several OPDs in several entities of the Banten Provincial Government, the preparers of follow-up recommendations on BPK findings were still limited to approximately 1 (one) or 2 (two) implementing staff with competencies other than accounting backgrounds. Regarding qualifications for 96 functional staff of the Inspectorate of Banten Province, all of them are Jabatan Fungsional Auditor/Functional Auditor Position certified with a bachelor's degree and master's degree education levels.

In terms of quality, the inspectorate's human resource qualifications already include good skills and competencies. However, the qualifications of human resources for follow-up officers

Table 1. The Recapitulation of the Number of Employees of the Inspectorate of Banten Province

Employment status	Total
Structural position	9
Auditor functional position	66
PPUPD functional position	27
Audiwan functional position	3
Other positions	30
Total	135

Source: Inspektorat (2022)

in each audited entity need to be improved in terms of competence and professionalism to understand the information in the LHP and complete the recommendations in the LHP.

Facilities and infrastructure resources at the inspectorate and the audit entities are adequate to support the completion of the follow-up on the BPK audit recommendations. However, the budget has not been the focus of fulfillment for each audit entity, so the budget for follow-up on audit recommendations is still considered too small in each audit entity. Follow-up work on the results of the BPK audit is an ongoing administrative work that requires sufficient costs. For example, in the Banten Province Public Works and Spatial Planning Office, an agency with a total 2021 budget of IDR 2,265,115,773,644 only allocates a budget of IDR 8,000,000 for BPK and APIP follow-up completion activities (DPUPR, 2021). The amount of budget allocation is not comparable to the available agency budget, considering that the Public Works and Spatial Planning Office has a high-risk management level.

Resource engagement focuses not only on budget, human resources, and infrastructure but also on other resources. The other resources in question are regulatory resources that can be used to urge specific improvements and the resources of related agencies that can be involved to urge certain actions. Therefore, optimizing regulatory resources is necessary to urge certain improvements so that the quality of follow-up completion can be on target and beneficial (Haryati et al., 2020).

Implementation Environment

Power, interests, and strategies of the actors involved

Clear authority in implementing the completion of follow-up recommendations of BPK audit results is divided based on their respective authorities. BPK has the authority to monitor the follow-up results, the inspectorate as APIP has the authority to facilitate the completion of the follow-up on BPK audit results, and the audit entity has the authority to perform or follow-up the recommendations of the audit results in accordance with applicable regulations. The community, legislature, and leadership play a role as supervisors and monitor the implementation of the completion of the follow-up results of the audit. However, not all actors have been effectively involved in monitoring the completion of the follow-up of BPK's audit recommendations.

Strategies in policy implementation have been monitored by the inspectorate and the BPK representative of Banten Province periodically once per semester. Then, the results of monitoring the audited entity are used as an IHPS report. In addition, another strategy is the commitment of the leadership of each audited entity to make an integrity pact on the completion of follow-up audit results and increase the improvement of the implementation of the Internal Control System (Sistem Pengendalian Internal, SPI) in each OPD. This can certainly support the achievement of successful policy implementation in terms of the power, interests, and strategies of the actors involved.

To resolve TLHP by OPD, the OPD has followed up on suggestions or recommendations from the auditor in a way different from those given in the LHP. Then, the auditor must assess the effectiveness of the completion of the follow-up completion analysis carried out. The auditor does not have to force the recommendations to be followed up but must be able to accept other greatly effective steps (AAIPI, 2013). Until now, these interests have not been accommodated in the completion of the follow-up.

Characteristics of institutions and rulers

The attitude shown by the Banten Provincial Government, particularly by the inspectorate, is evidenced by the efforts of facilitators and monitoring commitments that have been carried out regularly. Monitoring is carried out internally involving the inspectorate and several audit OPDs to ensure progress in implementing follow-up recommendations on the results of the BPK audit.

The inspectorate assists, but the obstacles are in the audit OPD. Many inhibiting factors are behind the difficulty of OPD completing the follow-up to the audit recommendations. The existing condition is that the commitment of the leadership of the regional head and the head of the OPD is still not focused on monitoring the follow-up on the BPK audit recommendations. In addition, the leadership is still greatly focused on the implementation of existing daily activity programs with less attention to the obligations of the problems of previous work findings that have not been resolved.

The assertiveness of the regional head and the head of the OPD is still not optimal to encourage the implementation of follow-up completion. The problem with the leadership and APIP institutions' character in responding to the completion of BPK findings is the lack of assertiveness and weak supervision. This case is evidenced by the fact that many recommendations have not been followed up from 2005 to 2022, as shown in Table 2. This study's results align with those (Arini, 2014), who explained the need for support in terms of commitment, leadership, motivation, and communication of managers in all lines of implementation of SPI's LHP follow-up in the form of written policies. Moreover, all managers must coordinate follow-up efforts, and the implementation of LHP follow-up by SPI should be evaluated and monitored.

Compliance and responsiveness

The compliance of the implementing actors is needed to support the implementation of the follow-up policy recommendations for the results of the audit to run well. According to Grindle (1980), the response of implementers is needed to assess the implementation of a policy. If these obstacles can be quickly overcome properly, the policy will run well again and also experience progress toward a great direction (Grindle, 1980). The inspectorate and the audit OPD must be responsible and commit to complete what has been recommended by BPK. The conditions that occurred show that the Banten Provincial Government does not have a high

Table 2. Recapitulation of Follow-up Monitoring Results of Audit Recommendations on Banten Provincial Government IHPS Year 2021

| Period | Recommendations Total | Follow-up monitoring status | | | | | | | |
| | | Has complied with recommendations | | Not in accordance with recommendations | | Not followed up | | Not actionable | |
		Total	%	Total	%	Total	%	Total	%
2012	111	84	75.70	9	8.10	18	16.20	0	
2013	122	109	89.30	9	7.40	4	3.30	0	
2014	195	150	76.90	38	19.50	7	3.60	0	
2015	154	138	89.60	16	10.40			0	
2016	120	112	93.30	8	6.70			0	
2017	53	47	88.70	6	11.30			0	
2018	14	12	85.70	1	7.10	1	7.10	0	
2019	45	36	80.00	4	8.90	5	11.10	0	
2020	87	64	73.60	22	25.30	1	1,10	0	
2021	98	47	48.00	9	9.20	42	42.90	0	
Total	999	799		122		78		0	

Source: BPK (2022)

level of compliance with the provisions to complete follow-up recommendations on the results of the BPK audit. Some previous recommendations have not been followed up, as shown in Table 2.

From the Summary of Semester Audit Reports document conducted by BPK from 2005 to 2021, several recommendations were not completed by the Banten Provincial Government. Hence, the Banten Provincial Government has not been compliant in completing follow-up recommendations owing to the low commitment of the audited entity and other complicated problems. Follow-up of BPK supervisory reports is very important because the success or failure of supervision of local government administration depends on the level of compliance of local governments in implementing recommendations from the audit results of government supervision officials (Harinurhady et al., 2017). A period of 17 years is not a short time. Based on the regulations determined, a maximum time limit in completing the follow-up of BPK audit results must be fulfilled.

In addition, it is coupled with the low response from the audit OPD to complete the previous follow-up recommendations owing to factors such as OPD restructuring, rotation of positions, retirement or death of the person in charge of the audit results, natural disasters, bankruptcy of third parties, effects of legal cases, and other problems that add to the complexity of completing the follow-up recommendations of the previous audit results to be completed.

CONCLUSION

The implementation of the policy for completing the follow-up on BPK audit recommendations in the Banten Provincial Government, when viewed from the perspective of the success of policy implementation, according to Grindle (1980), is still ineffective in implementing the completion of the follow-up. One of them is from the content of the policy, where the content of the policy does not entirely cover the interests of the target group. In addition, the type of benefits of the policies that have been prepared has not been able to significantly impact financial governance in each OPD. Furthermore, several OPDs still find it difficult to make efforts to resolve follow-up recommendations on the results of the audit, and similar findings are still often repeated. The degree of change has not been achieved directly and quickly, requiring a measurable and consistent action plan. Decision-making still does not support the sustainability of the completion of follow-up to the results of the audit. Moreover, differences often exist in perceptions of the review of the implementation of the completion of follow-up to existing recommendations by BPK or the inspectorate. This case causes discrepancies in follow-up data among BPK, inspectorate, and audit entities. As program implementers, the inspectorate has been unable to effectively mediate in supporting the completion of follow-up recommendations on BPK audit results. The reasons are the resource factors in the form of limited availability of APIP personnel and follow-up personnel in each OPD and a limited budget for completing follow-up recommendations on BPK audit results. These problems are a challenge for policymakers to carry out what has been regulated and compiled in a policy related to the implementation of follow-up on the results of the BPK audit.

Furthermore, from the aspect of the implementation environment, when viewed based on the power, interests, and strategies of the actors involved from several existing actors, not all have been effectively involved in monitoring the completion of follow-up on the BPK audit recommendations. The characteristics of the ruling institution, in this case, the regional head and the head of the local apparatus, still do not have the commitment and assertiveness to encourage the completion of the follow-up. The lack of assertiveness and weak supervision are problems with the character of leaders and APIP institutions in responding to the completion of BPK findings. In addition to OPD's weak compliance and responsiveness in accelerating the completion of the follow-up on the BPK audit recommendations, some recommendations have not yet been followed up. The potential implication of this study is that the BPK can reformulate technical policies related to the completion of follow-up recommendations on audit results effectively and measurably.

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Conflict of interests
in declaring state/regional loss of tax income
in Indonesia

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ABSTRACT

Empirical and juridical gaps exist in fulfilling the element of loss in state/regional (of income) as referred to in the law in Indonesia. This study aims to address two existing issues. First, to point out the illegal practices by DJP in declaring losses to state/regional (of income) in Indonesia's taxation field. Second, to suggest or offer a legal concept regarding the competent agency's constitutional authority in declaring losses to the state/regional (of income) in Indonesia's taxation field. Two conclusions are drawn based on a normative legal study using the theory of checks and balances. First, the calculation of losses on state/regional (of income) in the field of taxation does not comply with the mandate of the constitution, namely independent, accountable, and transparent because there are no applicable tax laws and regulations to regulate procedures and experts who calculate losses on state/regional (of income) areas in the field of taxation in Indonesia. Second, because losses to the state/regional (income) in the field of taxation are part of state finances, and to align with the principle of checks and balances, the constitutional authority of the competent agency in declaring it is The Audit Board of the Republic of Indonesia (BPK). Therefore, referring to BPK's authority to declare losses in state/regional (income) in Indonesian taxation is recommended.

KEYWORDS:
Constitutional authority; conflict of interests; state/regional loss; tax income

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INTRODUCTION

Losses to state/regional (of income) on taxation are an important component in examining preliminary evidence and investigating criminal acts in the taxation field in Indonesia, including both state and regional taxes (Sinaga, 2018). An agency with the authority to declare whether there is a loss in state/regional (of income) on taxation is necessary because several empirical, legal, and philosophical gaps exist, which can result in many problems. On the practical side, issues with losses to the state (of income) on taxation have arisen in court decisions, particularly in the case of criminal tax investigations. Several decisions in criminal cases relating to losses to state income are as follows.

a) Palembang District Court Decision Number 394/Pid.sus/2015/PN Plg dated 15 December 2015 and reinforced by the rejection of the cassation request submitted by the Prosecutor/Public Prosecutor at the Palembang District Prosecutor's Office in accordance with the Supreme Court Cassation Decision Number 1109 K/PID.SUS/2016, dated 14 December 2016, has acquitted the defendant from the indictment and the claim for loss of state income of IDR 99.39 billion. According to one of the considerations, the Expert in Calculating Losses on State Income, who works for the Directorate General of Taxes (Direktorat Jenderal Pajak, DJP), cannot explain how and how much the state loses as a result of the Defendant's actions.

b) The decision of the Corruption Crime Court at the Central Jakarta District Court Number 54/PID.SUS/TPK/2013/PN.JKT.PST, which decided that 2 (two) tax investigators were legally and convincingly proven guilty of committing a criminal act of corruption jointly and continuously to have received bribes (in the amount of IDR 3.25 billion related to the findings of PT DI's initial evidence examination received at the end of March 2013, USD 120 thousand associated with PT NRC's initial evidence examination, USD 50 thousand for the settlement of the PT GDJ case, and SGD 600 thousand from PT TMSM in connection with the investigation of a tax crime case at PT TMSM).

c) PT Pekanbaru appeal decision Number 19/PID.SUS/2015/PT.PBR, which has amended the Pekanbaru District Court decision Number 229/Pid.Sus/2014/PN.Pbr dated 20 November 2015 from the initial loss in state income of IDR 1.1 billion to IDR 5.59 billion (Sinaga & Hermawan, 2020).

Several facts in these court decisions emphasize the need for the law to provide certainty and independence in calculating losses on state income. The calculation of losses on state income that experts must carry out must be free from any form of conflict of interest which hinders transparency, accountability, responsibility, independence, and justice for all stakeholders related to the handling of criminal cases in the field of taxation that cause losses to state income (Pramana & Hermawan, 2022b). While DJP conducts investigations and calculates losses on state incomes, there are no checks and balances between DJP and institutions with supremacy over state financial supervision. This violation of the principle of conflict of interest

will provoke opportunities for bribery between taxpayers and unscrupulous tax officials in handling criminal acts in the field of taxation. Apart from several court decisions regarding the amount of state losses and bribery cases of tax investigators, there are other empirical gaps related to the number of case files that have been sentenced and the amount of losses on state income. Table 1 presents the number of sentenced case files and the amount of on-state income losses calculated by DJP's internal experts. The data were obtained from preliminary evidence examinations and criminal investigations in the field of taxation in 2016-2020.

Several legal problems also exist in the case of agencies authorized to conduct inspections and or audits of state finances, including in the field of taxation in Indonesia. Although Supreme Court Circular Letter Number 4 of 2016 was issued concerning the Enforcement of the Formulation of the Results of the 2016 Supreme Court Plenary Chamber Meeting as a Guideline for the Implementation of Duties for the Court, as well as the mandate of the 1945 Constitution of the Republic of Indonesia (Undang-Undang Dasar 1945, UUD 1945). Article 23E paragraph (1) UUD 1945 stated that to examine the management and responsibility for state finances, a free and independent Audit Board was held, which was then formulated further in Law Number 15 of 2006 concerning the Audit Board of the Republic of Indonesia (Badan Pemeriksa Keuangan, BPK). Article 10, paragraph (1) of BPK Law states that BPK assesses and/or determines the amount of state losses resulting from unlawful acts, whether intentional or negligent, committed by treasurers, state/local-owned enterprises managers, and other institutions or bodies that manage state finances. In practice, the calculation of losses on state income is still done by the DJP's Expert in calculating losses on state income. At the same time, Civil Servant Investigators (Penyidik Pegawai Negeri Sipil, PPNS) within the DJP have the authority to conduct preliminary evidence examinations and criminal investigations in the field of taxation, as stipulated in Article 43A and Article 44 of Law Number 6 of 1983 concerning General Provisions and Tax Procedures, which has been amended several times, most recently by Law Number 7 of 2021 concerning Harmonization of Tax Regulations (Undang-Undang Ketentuan Umum dan Tata Cara Perpajakan, UU KUP/KUP Law).

Research conducted by Paeh (2017) concluded that the BPK and the Finance and Development Supervisory Agency (Badan Pengawasan Keuangan dan Pembangunan, BPKP) assessed/determined whether financial losses occurred in acts of corruption based on Law concerning BPK and Presidential Decrees concerning Position, Duties, Functions, Authorities, Organiza-

Table 1. Case Files with Sentence and Losses to the State, Income Year 2016–2020

Year	Sentenced case files	Losses amount on State Income (billion Rupiah)
2020	91	670.71
2019	88	1,105.47
2018	57	1,727.0
2017	24	1,341.5
2016	39	780

Source: Annual Report of 2016–2020, Directorate General of Taxes (2016, 2017, 2018, 2019, 2020)

tional Structure, and Work Procedures of Non-Departmental Government Institutions. BPKP calculates state losses case-by-case (Paeh, 2017). Sumarto and Rahadian's study concluded that BPK's Investigative auditor significantly carried out its responsibility in detecting irregularities/fraud in calculating state losses by applying the policeman theory. The theory emphasizes the auditor's responsibility to see and find fraud, performing audit steps under the fraud theory approach and referring to the criteria according to the applicable laws and regulations. The auditors also provide expert testimony in court, following the Daubert Test, which states that the technique or method presented by the expert in court must have been tested scientifically by other experts so that the error rate in applying the method can be estimated adequately (Sumarto & Rahadian, 2020). However, the study conducted by Paeh, Sumarto, and Rahadian only examined the extent of the BPK's authority in calculating state financial losses in criminal acts of corruption.

Based on the empirical and juridical discrepancies that still occur, it can be drawn that there is a philosophical discrepancy related to the agency authorized to declare losses to the state/region (of income). This discrepancy is based on fairness and legal certainty for individuals or entities against which preliminary evidence examinations or criminal investigations in the field of taxation are carried out and against institutions carrying out relevant law enforcement. One of them is reflected in the suspect's/defendant's right to propose Witnesses and/or Experts who can relieve him, as guaranteed in Law Number 6 of 1981 concerning the Criminal Procedure Code (Kitab Undang-Undang Hukum Acara Pidana, KUHAP), and the lack of a lex specialist who provides legal certainty regarding differences in viewpoints understanding of regulations governing state income losses (Sinaga, 2018).

The empirical, legal, and philosophical discrepancies in declaring or declaring losses to the state (of income) in the field of taxation must be addressed immediately by developing a legal concept of the competent agency's constitutional authority. The legal concept is intended to cognitively, morally, and pragmatically legitimize (Sinaga, 2022a) an entity to act responsibly on society's expectations or demands (Pramana & Hermawan, 2022a) and avoid the negative consequences of the emergence of legal conflicts and inconsistencies in calculating losses on state incomes (Alam & Sinaga, 2022). As a result, this study aims to address two existing issues. First, to point out the illegal practices by DJP in declaring losses to state/regional (of income) in Indonesia's taxation field. Second, to suggest or offer a legal concept regarding the competent agency's constitutional authority in declaring losses to the state/regional (of income) in Indonesia's taxation field.

Both of the problem statements are novelty compared to the normative juridical study conducted by Sinaga (2018) and Arimuladi (2022) in terms of experts related to losses on state income in the field of taxation, as well as studies conducted by Paeh (2017) also Sumarto and Rahadian (2020) in terms of BPK's authority in recommending whether there are losses of state finances. Sinaga (2018) concluded that in calculating the element of loss (on income) to the state in criminal taxation regulations, experts on tax regulations and experts in calculating

losses on state incomes were appointed by the Minister of Finance. They are formed in a Task Force of Expertise with opinions reinforced as a report made by expert competency standards. The reports describe offenses, evidence, transactions in recording/bookkeeping, and/or facts that are mutually compatible, easily traceable, and appropriate to be included in reports and/or work papers of the Task Force of Expertise (Sinaga, 2018).

Meanwhile, Arimuladi (2022) concludes that for an expert who gives information on a tax crime to be competent, independent, and objective in providing information and opinions, it is necessary to regulate experts such as those who calculate state income losses, experts in regulations, taxation experts, criminal experts, state finance experts, forensics, and information technology experts. All of these require cross-agency ad hoc teams consisting of tax examiners, BPK auditors, BPKP auditors, and Public Accounting Firm auditors (Arimuladi, 2022). However, the studies have not reviewed the applicable laws and regulations on the constitutional authority of agencies authorized to calculate losses on state incomes in the event of criminal taxation acts (central and regional taxes). This study suggests an ideal legal concept for any authorized agency in Indonesia with constitutional authority to declare losses to the state/regional (income) in the field of taxation.

RESEARCH METHOD

This study employs a normative juridical method with a qualitative approach by mapping the applicable laws and regulations, including rules, government regulations, ministerial regulations, and so on, also conducting content analysis. Secondary data sources in the form of literature study the form of data collection obtained from books, scientific works, and expert opinions that are competent and relevant to the problem to be studied (Thahir, 2022). Primary legal materials have binding power; secondary legal materials are closely related and can assist and analyze primary legal materials, while tertiary legal materials provide information about primary and secondary legal materials (Arimuladi & Arif, 2022). In this study, the statutory approach involves several applicable laws and regulations, a conceptual approach if there are no legal rules to answer the existing problem formulation so that the concept must be constructed as a reference, and an analytical approach in the form of conceptual knowledge of the meanings contained in the terms used in laws and regulations must be taken (Wirawan et al., 2022).

RESULT AND DISCUSSION

Prevailing Law of Preliminary Evidence Audit and Investigation in Taxation Field in Indonesia

The examination of preliminary evidence and investigation of criminal acts in the field of taxation are regulated in the KUP Law and Law Number 1 of 2022 concerning Financial Rela-

tions between the Central Government and Regional Governments (Undang-Undang Hubungan Keuangan antara Pemerintah Pusat dan Pemerintah Daerah, UU HKPD/HKPD Law). Article 43 A paragraph (1) of the KUP Law stipulates that preliminary evidence examination is based on information, data, reports, and complaints. The definition of preliminary evidence, according to Article 1 point 26 of the KUP Law, is circumstances, actions, and/or evidence in the form of statements, writings, or objects that may provide indications that there is a strong allegation that a criminal act is being committed or has been committed by anyone that could cause losses to state income. Conducting criminal investigations in taxation, as specified in Article 1 number 31 of the KUP Law, is a series of actions carried out by investigators to search for and collect evidence that makes clear the criminal acts in the field of taxation that occurred and found the suspect.

Articles 181 and 183 of the HKPD Law regulate criminal provisions in regional taxes and levies. The formulation of Article 181 paragraph (1) of the HKPD Law strictly stipulates that taxpayer who fail to fulfill their tax obligations, as referred to in Article 5 paragraph (5) of the HKPD Law, causing losses to regional finances, face imprisonment for a maximum of one year or a maximum fine of two times the amount of tax payable that is not paid or underpaid (Barus, 2022a). Meanwhile, the formulation of Article 181 paragraph (2) of the HKPD Law states that taxpayers who intentionally fail to fulfill their tax obligations, as referred to in Article 5 paragraph (5) of the HKPD Law, causing harm to regional finances, face imprisonment for up to two years or a fine of four times the amount of unpaid or underpaid tax.

The definitions of preliminary evidence examination and investigation of criminal acts in the field of taxation, both central tax and regional tax, imply that the actions against which preliminary evidence examination and investigation of criminal acts in the field of taxation are illegal. That is, the handling is not subject to tax administration sanctions, as opposed to a tax audit, which is a series of activities to collect and process documents, evidence, books, and records of taxpayers reported to the Tax Office (Hermawan, 2022) in the context of testing tax compliance or other purposes. These law enforcement actions are carried out by law enforcers in different fields of taxation, where tax examiners carry out tax audits. In contrast, preliminary evidence examinations and criminal investigations in the field of taxation are carried out by PPNS within the DJP.

Overview and Critical Opinion on Losses to State/Regional Income

According to Law Number 28 of 2007, taxes are compulsory contributions to the state owed by individuals or entity that is coercive based on the law, without receiving direct compensation, and is used for state needs for the greatest prosperity of the people. Article 1 point 2 of the KUP Law and Article 1 point 24 of the HKPD Law define taxpayers as individuals or entities, including taxpayers, tax withholders, and tax collectors, who have tax rights and obligations by the provisions of the tax laws and regulations. The constitutional rights of taxpayers are seen as having an interest in Article 51 of Law Number 24 of 2003 concerning the Consti-

tutional Court as last amended by Law Number 7 of 2020 (Barus, 2022b).

As one of the state/regional incomes, tax cannot be separated from the meaning that must be seen, where it must be remembered that audits of the management and responsibility of state finances are only carried out by BPK as regulated in Article 2 paragraph (2) of Law Number 15 of 2004 concerning The State Financial Management and Accountability Audit. However, the absence of a definition and regulation of loss to (of income) of the state/region in its lex specialist is one of the critical points between central/regional taxes and Article 51 Law Number 7 of 2020 concerning the Constitutional Court in terms of examination of preliminary evidence and criminal investigations in the field of taxation.

The element of income loss is formulated in the KUP Law, Law Number 12 of 1985 concerning Land and Building Tax as amended by Law Number 12 of 1994 (Undang-Undang Pajak Bumi dan Bangunan, UU PBB), and Law Number 10 of 2020 concerning Stamp Duty (Undang-Undang Bea Materai, UU BM/BM Law), and the HKPD Law. In terms of criminal acts in the field of taxation that can cause losses to state income and/or losses to the state, formulated in the Articles 38, 39, 39A, and 43 paragraph (1) of the KUP Law and/or Articles 24 and 25 of the PBB Law, and/or Articles 24, 25, and 26 of the BM Law (Rajagukguk & Kuntonegoro, 2022). Then, there are Articles 181 and 183 of the HKPD Law. This requires PPNS in the Tax Environment and Regional PPNS to interpret it in other related laws; in this case, BPK Law, Law Number 1 of 2004 concerning the State Treasury, Law Number 31 of 1999 concerning the Eradication of Corruption (Undang-Undang Pemberantasan Tindak Pidana Korupsi, UU PTPK), and the Constitutional Court Decision Number 003/PUU-IV/2006 dated 24 July 2006.

Article 1 point 15 of BPK Law and Article 1 point 22 Law Number 1 of 2004 concerning State Treasury define state/regional losses as a lack of money, securities, and goods, a real and certain amount due to an unlawful act either intentionally or negligently. The phrase "state financial losses" is defined in the elucidation of Article 32 paragraph (1) of the PTPK Law as state losses whose amount can be calculated based on the authorized agency's or public accountant's findings. The Constitutional Court Decision Number 003/PUU-IV/2006 states that the relationship between the words "can" and "harm the state's finances" is illustrated in two extreme relationships, namely those that harm the state or are likely to cause harm, in which particular, and concrete circumstances surrounding the events that occurred must be considered by experts in state finance, state economy, as well as experts in analyzing the relationships.

Furthermore, for state revenues, the Minister of Finance can ask the Attorney General to stop investigations into criminal acts in the field of taxation. The investigation of criminal acts in the field of taxation is terminated after the taxpayer or suspect has paid off the loss of state income referred to in Articles 38, 39, and 39A of the KUP Law, as well as administrative sanctions in the form of fines intended in Article 44B of the KUP Law (Bolifaar, 2022). Suppose a criminal case in the field of taxation has been transferred to the court; the defendant may be

considered not to be prosecuted if he can pay off the loss in state income plus administrative sanctions as stipulated in Article 44B of the KUP Law (Santoso & Sinaga, 2022). The procedure for requesting the termination of criminal investigations in the field of taxation for the benefit of state income is governed by Regulation of the Minister of Finance (Peraturan Menteri Keuangan, PMK) Number 55/PMK.03/2016 concerning Procedures for Requests for Termination of Investigation of Criminal Acts in the Field of Taxation for the Benefit of State Income, as last amended by PMK Number 18/PMK.03/2021 concerning Implementation of Law Number 11 of 2020 concerning Job Creation in the Field of Income Tax, Value Added Tax, and Sales Tax on Luxury Goods, as well as General Provisions and Tax Procedures. Then, according to Article 5 Number 55/PMK.03/2016, the amount of taxes that are not paid, underpaid, or should not be returned and administrative sanctions are calculated based on the minutes of expert examination during the investigation.

However, follow-up and procedures regarding experts and institutions authorized to estimate losses on state/regional income have yet to be regulated in a lex-specialist manner. Even though, as stipulated in Article 44 paragraph (1) of the KUP Law, PPNS must carry out criminal investigations in the field of taxation within the DJP environment, while certain appointed employees of the DJP who have certification and have undergone expert training, calculating losses on state income. As a result of the fact that the tax investigation and the expert in calculating losses on state income are from the same institution, the expert's independence in calculating losses on state income has the potential to violate the following matters.

a) Ignoring constitutional mandates and several applicable financial laws and remembering that the institution's authority to declare losses on state/regional income rests with The Audit Board of Republic of Indonesia.

b) Ignoring experts' independence and competence. Independence is important for specific jobs, particularly judges and academics, whose legitimacy depends on job members' thoughts to carry out their work impartially, without exception to experts (Gendron, 2006). Independence and objectivity are the most essential things in auditing and expert practice because the auditor's or expert's opinion is considered credible as long as it is impartial to their employer (Gendron, 2006). It is also credible if it does not have a conflict of interest that could become a risk for the expert or the auditor, such as relationships as colleagues, relationships in terms of a hierarchy of positions and ranks, and financial/income relationships in the same agency (Richard, 2006). Thus, knowing how to be "independent" is the key to becoming a competent expert (Richard, 2006), ignoring the accountability that public institutions must own. The accountability weakening in an institution means decreased responsibility in acting related to assets, entities, procedures, or processes within the institution (Pramugar & Sinaga, 2022). So that institutions are encouraged to ensure their survival in a way that may not follow the public agenda (Wellman, 2006). The accountability system must be understood by institutions authorized to declare losses on state income, primarily as an institutional reporting sys-

tem oriented toward public policy and reaching the general public (Wellman, 2006).

c) Ignoring the nature of an Expert, namely, being objective-idealist, considering competence, and refusing to provide information if the questions are i) asked outside of expertise or competence; ii) ensnaring and/or with selected answers; iii) asked outside the prominent cases handled; and iv) leading to the provision of information on facts or events of criminal acts experienced, seen, and heard by themselves, and/or from other people. This is referred to in Article 11, Article 16, and Article 17 of the BPK Regulation Number 3 of 2010 concerning Procedures for Providing Expert Testimony (sufficient to consider even though the regulation has been revoked). An objectivist-idealist expert is defined by their efforts to seek the truth objectively and on fundamental principles of knowledge that apply absolutely and generally (Hermawan & Barus, 2022). An objectivist-idealist expert will guide their every statement based on decisions and actions based on objective norms, not subjective or arbitrary, so that with every step based on objective norms, the enforcement of justice through their testimony can no longer be haggled (Sinaga, 2022b).

Theoretical Framework for Competent Agencies in Stating State Losses (of Income) in Indonesia

The amount of taxes that are not paid, underpaid, or should not be returned, as well as administrative sanctions in the investigation of criminal acts in the field of taxation, must be calculated based on the minutes of expert examination. The expert who has been appointed must be competent, independent, and objective in providing information and opinions and, at the same time, be able to put it in the form of a report which must describe the details of the transaction and can be understood by interested parties (Sinaga, 2018). It is necessary to understand within the context of the checks and balances principle, as evidenced by the involvement of more than one branch of power in dealing with a single problem (Fuady, 2009). This principle must be implemented in a legal state that adheres to the division of powers, including Indonesia, keeping in mind that one of the goals of the amendment to the 1945 Constitution of the Republic of Indonesia is to create power that is not based solely on one state institution (Wardhani, 2019).

Several arguments exist about the urgency of checks and balances between state institutions. Wardhani (2019) emphasizes the importance of checks and balances between state institutions so that the accumulation of power or superiority of authority is minimized and state institutions can supervise each other's performance. Checks and balances, according to Holcombe (2018), mean that one branch of government cannot act unilaterally without the approval of the other and that different branches of government must be designed in such a way that, even if they have competing interests, they must reach an agreement to take collective action. According to Padovano, Sgarra, and Fiorino (2003), the system of checks and balances is a conflict of interests between the two policy-making bodies that should exist to generate in

each of them the incentive to check the other from abusing power. Checks and balances are not just a separation of powers but also a provision of special authority between institutions (McCormack, 2018).

Meanwhile, Gelev (2011) criticizes the judiciary, which often avoids its role as a check and balance of executive power. Hence, the court must adopt preventive measures to manage the consequences of legal norms that are violated into preventive justice (Gelev, 2011). Furthermore, Benvenisti and Downs (2009) describe a map of checks and balances in the global era of interdependence and rapid growth as an endless struggle to govern and control domestic government to maintain clarity and effectiveness by prioritizing coordination and coalitions across intergovernmental boundaries.

The existence of several understandings of checks and balances confirms that the division of power must be in the form of authority. The authority of a designated agency must be seen as a variant of power that is close to politics and law so that authority cannot be separated from the ability to get other people to do something on a legal basis or a mandate obtained from a power of attorney (Alam & Ode, 2022). A tax investigator, for example, can investigate criminal acts in the field of taxation because they have the authority granted by the applicable tax law, in this case, Article 44 paragraph (2) of the KUP Law, which regulates the authority of tax investigators.

Appropriately calculating losses on state/regional income, including from the tax sector, requires a different distribution of authority from the authority to carry out tax investigations to not give rise to powers that tend to be too strong in one institution. There is mutual control between authority holders and the implementation or enforcement of the law based on constitutional principles, and the objectives of managing and supervising state finances do not deviate (Kamela, et al., 2022; Fuady, 2009). Suppose a state institution is the holder of authority because the law has given the authorized agency a positive form (Barus, 2022a), and the institution abuses its authority by not carrying out its authority in accordance with the existing regulatory mandate. In that case, the institution will be burdened with responsibility or legal consequences (Alam & Ode, 2022).

Agency to Declare Losses to the State (of Income) in the Tax Sector in Indonesia

There are several problems in calculating losses to state/regional (of income) in taxation, especially in terms of fulfilling the formal and material requirements (Irawan, 2022), considering that losses to state/regional (of income) in the field of taxation contain illegal acts. These actions violate the law and morals, decency, and prudence (Sinaga et al., 2019). It is necessary to be aware of pressure factors, rationalization, and relationships that contain conflicts of interest (Simanjuntak et al., 2020). These issues must be addressed to reduce disputes in calculating elements of loss (of income) to the state/region, to ensure competency standards for calculating losses on state/regional income, and to ensure the legality of experts in calculating state/regional losses (of income).

In dealing with these existing problems, an agency is independent, transparent, accountable, and free from conflict of interest. The mentioned agency also needed to avoid and prevent opportunities for collusion, corruption, and nepotism between taxpayers and tax officers in producing a loss calculation on (of income) country/region (Sarwini, 2014). It is necessary to analyze the agency in question from the perspective of the agency with the constitutional authority and the agency with inspection and audit authority.

The constitutional authority regulates institutional relationships that mutually control, balance, and minimize the occurrence of disputes between state institutions (Kosariza & Yarni, 2020). In this case, the Constitutional Court examines and rules constitutional authority disputes between state institutions (Kosariza & Yarni, 2020). According to Article 2 paragraph (1) of the Constitutional Court Regulation Number 08/PMK/2006 concerning Procedure Guidelines in Disputes of Constitutional Authority of State Institutions, state institutions that can become applicants or respondents in cases of disputes over the constitutional authority of state institutions are the People's Representative Council (DPR), Regional Representatives (DPD), People's Consultative Assembly (MPR), President, BPK, Regional Government (Pemerintah Daerah, Pemda), or other state institutions whose powers are granted by the 1945 Constitution. The disputed forces are those granted or determined by the 1945 Constitution of the Republic of Indonesia, except for the Supreme Court, which cannot be a party, either as the applicant or the respondent, in a dispute over the technical authority of the judiciary (judicial), as referred to in Article 2 paragraph (3) of the Constitutional Court Regulation Number 08/PMK/2006. Then, based on the considerations of Constitutional Court Decision Number 62/PUU-XI/2013 and Constitutional Court Decision Number 59/PUU-XVI/2018, it is emphasized that The Audit Board of Republic of Indonesia has the authority to examine all legal subjects as long as there is management of state finances, either directly, or indirectly, especially if there are allegations of misuse of state finances (Wicaksono, 2022).

In terms of its relation to losses to state/regional income, Supreme Court Circular Letter Number 4 of 2016 confirms that BPK is the only agency with constitutional authority to declare whether there is a loss to state finances, while other agencies, such as BPKP/Inspectorate/Regional Apparatus Work Units are authorized to carry out inspections and audits of state financial management but are not authorized to declare or declare state financial losses. The Supreme Court Circular Letter has implemented the concept of constitutional interpretation by applying general principles consistent with the interpretation of the law and the role of the Constitution in the legal system (Stawecki, 2012). It embodies the idea that the Constitution is the highest law that must be obeyed by the people and the instruments and equipment (Budiardjo, 2008).

Concerning losses to state/regional income, the Supreme Court Circular Letter Number 4 of 2016 and Article 2 paragraph (1) of the Constitutional Court Regulation Number 08/PMK/2006 confirm that BPK has the constitutional authority to declare whether there has been a loss to state finances. Furthermore, Article 13 of Law Number 15 of 2004 emphasizes

that BPK can conduct investigative examinations to uncover indications of state/regional loss-
es and/or criminal elements. The audit carried out by BPK must be based on a process of
problem identification, analysis, and evaluation, which is carried out independently, objec-
tively, and professionally based on auditing standards to assess the truth, accuracy, credibility,
and reliability of information regarding the management and responsibility of state finances.

BPK has constitutional authority to conduct audits with a special-purpose (PDTT), finan-
cial, and performance audits. PDTT is a special-purpose audit that includes other aspects of
finance and investigative audits outside financial and performance audits. The purpose of
PDTT in the form of a financial compliance audit is to determine whether the main things be-
ing examined are in accordance (compliant) with the provisions of laws and regulations (BPK
RI, 2017). In contrast, PDTT in investigative audit is typically conducted to uncover indica-
tions of state/regional losses and/or criminal elements. Article 3 of the BPK Regulation Num-
ber 1 of 2020 concerning Investigative Audit, Calculation of State/Regional Losses, and Provi-
sion of Expert Information regulates that BPK conducts investigative audits freely and inde-
pendently to uncover indications of state/regional losses and/or criminal elements within the
scope of state financial management and responsibility. Then, in providing expert testimony
in the judicial process regarding state/regional losses, BPK will do so based on the Audit Re-
ports for calculating State/Regional Losses or based on other methodologies and knowledge
related to investigative examination and calculation of state/regional losses at the investiga-
tive and/or trial stages as referred to in the BPK Regulation Number 1 of 2020.

Furthermore, Article 1 numbers 8 of the BPK Regulation Number 1 of 2020 confirms that
investigative audits are carried out in response to requests from authorized institutions,
namely the Corruption Eradication Commission, Attorney General's Office, National Police,
and other agencies authorized to conduct investigations and/or investigations related to crim-
inal acts. Audit Results are the result of a process of assessing the truth, suitability, accuracy,
credibility, and reliability of data/information regarding the management and responsibility
of state finances, which is carried out independently, objectively, and professionally based on
audit standards outlined in the Audit Results report as BPK decision. Indeed, there are obsta-
cles to BPK as an expert in calculating losses on state/regional income, as Article 34 para-
graph (1) of the KUP Law states that every official is prohibited from informing other parties
of everything that is known or notified to him by a taxpayer in the context of his position or
work to carry out the provisions of the tax laws and regulations.

These constraints also apply to experts calculating losses on state/regional income derived
from tax examiners, per Article 34 of the KUP Law. However, officials and experts acting as
witnesses or expert witnesses in court proceedings, or officials and/or experts designated by
the Minister of Finance to provide information to officials of state institutions or government
agencies authorized to carry out examinations in the field of state finances, are exempt from
tax secrecy under Article 34 paragraph (2a) of the KUP Law. BPK has constitutional authority
as an expert in calculating state/regional income losses. In contrast, in the case of tax secrecy,

BPK should obtain an appointment as such an expert from the Minister of Finance, keeping in mind that each request for an expert from BPK must be based on a request from the competent authority to conduct inquiry and/or investigation related to criminal acts, including illegal acts in the field of taxation.

Several explanations confirm that one must prioritize fulfilling formal and material requirements in calculating losses on state/regional income. The formal requirements that must be met are including (i) there must be different authorities in calculating tax shortfalls subject to administrative and criminal sanctions; (ii) loss to the state/regional (of income) is part of the criminal law, so the principle of legality applies, including in the procedural law; (iii) regulations govern expert procedures and calculating losses in (income) countries/regions; (iv) experts and institutions for calculating losses in (of income) of the state/region must be independent, objective, professional, and free from conflict of interest, and (v) experts and institutions that calculate losses in (of income) of the state/region should differ from the agencies that enforce the law. The material requirements that must be met by those authorized to declare losses to the state (of income) are calculating losses on state/regional (of income) must be based on investigative audit standards to assess the information's truth, accuracy, credibility, and reliability; based on problem identification, analysis, and evaluation; stated in a report; based on evaluating unlawful acts in state finances carried out independently, objectively, and professionally.

Given that the KUP Law cannot be applied mechanically and to reduce the discretion of the DJP's PPNS in the form of decision-making based on the opinion of state administration officials (Atmosudirdjo, 1986), this study employs extensive (broad) interpretation based on Article 23E paragraph (1), The BPK Law, the State Finance Law, Criminal Procedure Code, Treasury Law, and Elucidation of Article 32 paragraph (1) of the PTPK Law. This study affirms the constitutional authority of the agency authorized to declare losses to (of income) the state is BPK. Extensive interpretation is sufficient, considering that Moeljatno (2008) has emphasized that this interpretation adheres to existing rules. Thus, experts in calculating losses on the state (of income) in the field of taxation from DJP employees do not have a legal basis in a lex specialist order and exist only because of the justification of Article 34 paragraph (1) of the KUP Law. They are not based on Article 23E paragraph (1), BPK Law, the State Finance Law, the Criminal Procedure Code, or Treasury Law, bearing in mind that the state's (of income) accounting expert will testify in court where the Supreme Court Circular Letter Number 4 of 2016 has regulated that BPK is the agency authorized to declare losses to state finances, while other agencies, such as BPKP, Inspectorate, including DJP are only agencies that carry out inspections or audits.

Specifically in terms of determining the expert for calculating losses on state/regional income, the tax criminal law meets the criteria as a systematic *lex specialist* because the address is particular, namely the taxpayer and tax officer; it can be interpreted that the investigation of criminal acts in the field of taxation is the authority of PPNS in the environment DJP

(Hiariej, 2021). According to Hiariej, the existence of the principle of *lex specialist derogate legi generali* is a legal principle that determines the application stage, precisely the stage of application of criminal legislation that has been violated against concrete events (*ius operatum*) through the law enforcement process (Agustina, 2015). As a result, it is only sometimes the case that the expert in calculating losses on state/regional income is carried out by tax examiners, given that tax investigators and tax examiners work for the same institution, namely the DJP.

CONCLUSION

This study produces two conclusions. First, the calculation of losses on state/regional (of income) in the field of taxation does not comply with the constitution's mandate, namely independent, accountable, and transparent. It is because there are no applicable tax laws and regulations to regulate procedures and experts who calculate losses on state/regional (of income) areas in the field of taxation in Indonesia, except for justification from Article 34 paragraph (1) of the KUP Law, which regulates tax secrecy. The appointment of experts to calculate losses on state income in handling tax crimes violates the principle of conflict of interest, referring to the independence, non-accountability, and non-transparency of the appointment of the experts, which will provoke opportunities for bribery. Their statement is one of the pieces of evidence in court that cannot be objected to or appealed by the tax administration. Therefore, a mechanism for appointing an expert that fulfills the principle of checks and balances is necessary. Second, according to the mandate of the 1945 Constitution of the Republic of Indonesia, the State Finance Law, BPK Law, the Treasury Law, the PTPK Law, and the Supreme Court Circular Number 4 of 2016 confirms that the authorized institution declares state/regional financial losses in the event of an unlawful act (whether intentionally or unintentionally) is BPK. Losses to the state/region (of income) in the field of taxation are also part of state finance, resulting in BPK being the competent agency in declaring it.

It is necessary to prevent conflicts of interest that can result in unprofessionalism in declaring losses to the state/regional (income) in the field of taxation in Indonesia by establishing a Supreme Court Regulation that orders judges to decide, as well as a General Prosecutor's Regulation that orders attorneys to prosecute, confirming the authority of the BPK in declaring losses to the state/regional (income) in the field of taxation. This is also consistent with Supreme Court Circular Letter Number 4 of 2016, which confirms that the BPK is authorized to declare state/regional financial losses in the event of an unlawful act (intentional or unintentional). In that case, it is hoped that there will be rules regarding procedures and experts for calculating losses on state/regional (of income) that are expected to meet the formal and material requirements to fill the legal vacuum if the competent authority declares losses on state/regional income areas contained in the KUP Law and the HKPD Law.

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The development of knowledge management implementation at the Financial and Development Supervisory Agency (BPKP)

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ABSTRACT

The Financial and Development Supervisory Agency (BPKP), a pivotal public sector entity tasked with internal audit functions, recognizes the paramount importance of effectively managing auditors' experience and expertise. This study aims to delineate the Knowledge Management (KM) implementation stages within BPKP, a topic scarcely explored in Indonesian public-sector research. This study uses an abductive approach with a case study method by explaining a series of events over time with theory-based analysis. The results showed that the KM implementation in BPKP was carried out in four stages: preparation at the local level by conducting change management, work culture development, and initial research; implementation at the local level; implementation at the national level with a focus on the development of process, human, and technology aspects; and national development focuses on laying the groundwork for KM culture. There are KM implementation steps carried out by BPKP but not explained in the theory proposition: change management and developing a work culture that supports KM processes, initial research, benchmarking, and KM implementation regulations. BPKP needs to assess the maturity level of KM to determine the focus areas that need to be improved. This study contributes conceptually to KM frameworks tailored for public sector entities.

KEYWORDS:
Knowledge management; implementation stage; public sector; auditors

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INTRODUCTION

Knowledge is recognized as an organizational strategic resource beyond traditional resources, and various perspectives suggest that the ability to leverage knowledge in organizations is a source of competitive advantage (Nonaka et al., 2000). According to Joshi et al. (2016), public-sector organizations still lag behind the business sector in exploring the benefits of knowledge management (KM). The Financial and Development Supervisory Agency (Badan Pengawasan Keuangan dan Pembangunan, BPKP) is a public sector entity whose main task and functions is providing assurance and consulting services to stakeholders based on Presidential Regulation Number 192 of 2014. BPKP, whose main tasks and functions are based on knowledge, considers KM very important in supporting the achievement of performance targets.

The audit field must determine how to manage knowledge when setting engagement goals and objectives because it requires a deep understanding of the unit being audited (Mai & Nguyen, 2022). The need for expertise essential for supervisory activities spans diverse scientific backgrounds. This need for diversity intensifies with the growing complexity of the challenges encountered. Variances in educational background, experience, and individual expertise within the team collectively expedite the execution of necessary procedures for each assignment (Rahmasari, 2015). Ma'ayan and Carmeli (2015) attest to the role of internal auditors in the learning process by looking for ways that information and practices in one unit can benefit other areas of the organization to improve efficiency and effectiveness.

The experience and expertise auditors gain through best practices hold immense value for the organization, as they are acquired informally, beyond traditional education and training channels. However, auditors are characterized by high mobility, evident in frequent rotations, mutations, and promotions across different fields and work units throughout Indonesia. This extensive mobility pattern may lead to the loss of valuable knowledge and experience embedded in individuals during transitions. Setiarso (2007) underscores that 42% of organizational knowledge resides in the minds of employees. Considering this, the knowledge retained by each auditor needs an appropriate platform and medium for effective communication. Establishing such a mechanism is crucial to preserving knowledge, fostering its growth, and stimulating the generation of new ideas.

KM emerges as a strategic solution to address prevalent challenges by systematically aggregating and storing dispersed knowledge, facilitating accessibility for authorized users. The essence of KM lies in making knowledge readily available at all times (Ali, 2017), thereby fostering the transfer of knowledge acquired through formal education and training. KM extends beyond managing explicit knowledge derived from formal documents, including supervision reports, regulations, legal frameworks, Self-training Programs (PPM), training materials, seminars, workshops, and postgraduate research outcomes. It emphasizes the management of tacit knowledge, encapsulating the unique expertise and experiential insights accumulated by

employees during their work tenure. Tacit knowledge is unique because it is not written down in publications, journals, or other scientific research results, and it is difficult to share because it resides within employees' minds. It has not been systematically managed or documented, making KM instrumental in capturing and preserving this valuable tacit knowledge (Nonaka & Takeuchi, 1995). Organizations can bridge the gap between explicit and tacit knowledge through effective KM practices, promoting a comprehensive knowledge-sharing culture (Dalkir, 2017).

This study is situated in BPKP, considering that few ministries, agencies, or local governments in Indonesia have successfully implemented KM. BPKP stands out as an organization that has embraced the KM concept extensively, integrating it into business processes and focusing on enhancing human resource quality. Over time, since its establishment, BPKP has exhibited a proactive commitment to KM practices, evident in initiatives like intensified knowledge sharing through platforms like the Lotus Notes forum and the implementation of PPM. BPKP received the Dunamis Award in the Most Admire Knowledge Enterprise Activity in 2008 as a public sector institution that is able to transform its knowledge into daily business activities. This study aims to determine the implementation stages of KM development in BPKP, as no previous research specifically discusses the stages of KM implementation in a public sector organization. Topics related to KM implementation in Indonesian public sector organizations are still limited to readiness. The results of this study are expected to provide an overview to public sector organizations and stakeholders about the stages of KM implementation so that it is useful in mitigating the risks and obstacles that will be faced. Pradana et al. (2015) assessed the readiness level of KMS implementation at the Scientific Documentation and Information Center (PDII) of the Indonesian Institute of Sciences (LIPI) based on the concepts of people and organizational structure. Other research on the readiness level of KM implementation in the public sector has been conducted, including Fitriadi (2016), Mukhlasin and Budi (2017), also Hariyanto (2018). Meanwhile, Mitrovic et al. (2018) researched the existence of KM in Serbian local governments to identify and analyze the processes and infrastructure that support KM practices. Other research by Baporikar (2017) developed a comprehensive understanding of KM implementation in the public sector and provided case studies of Indian public sector organizations adopting KM.

Knowledge is generally categorized into two types: tacit knowledge and explicit knowledge (Nonaka & Takeuchi, 1995). According to Becerra-Fernandez and Sabherwal (2010), tacit knowledge resides in the head and is inherent in a person, including insight, intuition, experience, and expertise. This knowledge becomes contextual information or explicit knowledge after being communicated to others through the learning process in the form of writing. The purpose of KM is to manage this knowledge so that the right information is obtained and disseminated to the right people at the right time to help individuals share experiences and expertise to increase team productivity (Deloitte, 2015). Nonaka and Takeuchi (1995) explain that KM is a management tool for managing knowledge assets to increase the capacity of the organization to work more effectively. Effective implementation of KM can increase the

productivity and efficiency of services, innovation capabilities, competency development, decision-making, and sensitivity to change (Riley, 2005).

According to Godbout (2000), three main components make KM are (1) People play an important role in KM, so the main aspect that needs to be developed is competence and ensuring that individuals understand their role in carrying out the KM process; (2) Process, which includes stages in KM starting from identifying the knowledge needed by the organization (knowledge discovery), activities to capture the required knowledge (knowledge capture), selecting managed knowledge, storing selected knowledge, and sharing knowledge (knowledge sharing) so that it can be used at any time by employees (knowledge application); (3) Technology, tools that aid the flow of information and knowledge in the organization's KM process. The technology built in the form of an integrated system for storing and managing knowledge so that it can be accessed is called a knowledge management system (KMS). Nonaka and Takeuchi (1995) state that implementing KM is to build a culture of communication in business processes to support information exchange. KM is embedded in the organization's work culture (Leidner et al., 2006). Quink (2008) explains the relationship between organizational culture and KM in an indirect pattern, but it is interrelated with the relationship between KM and organizational performance, in which there is a KM process. An effective organizational culture is a prerequisite for KM development.

Bureaucratic reform in Presidential Regulation Number 81 of 2010 emphasizes the importance of implementing clean government and good governance as a necessary principle to provide excellent service to the community. In the context of good governance, KM is an important system for developing knowledge workers (Riley, 2005; Muluk, 2008). The issuance of Minister of State Apparatus Empowerment and Bureaucratic Reform (MenPAN-RB) Regulation Number 14 of 2011 encourages the application of KM to help improve organizational performance, which aligns with the objectives of implementing bureaucratic reform. Previous research by Al-Ahbabi et al. (2019) found a positive and significant correlation between KM and public sector organizational performance.

Meanwhile, Tiwana (2002) describes the stages of KM development in the 10-Step Knowledge Management Roadmap, which is divided into four stages to design and develop KM, namely: (1) infrastructure evaluation; (2) KMS analysis, design, and development; (3) deployment; and (4) evaluation. The ten steps in KM design and development, according to Tiwana (2002) depicted in Appendix. The KM implementation process involves ten key steps. Step 1 focuses on analyzing existing infrastructure to identify gaps and enhance components essential for KM. Step 2 aligns KM with the business strategy, connecting organizational plans at the strategic level with technical system development. Step 3 involves designing the KM infrastructure, selecting and integrating components like Web or Lotus Notes, considering cost and added value. Step 4 consists of auditing existing knowledge assets and systems to understand the organization's current knowledge landscape. Step 5 is about designing the KM team, identifying key stakeholders, and sources of expertise. Step 6 entails creating the KM blue-

print, outlining the plan for gradual improvement. Step 7 involves developing the KMS, converting the organization's internet network into a collaborative and integrated platform. Step 8 includes testing and deploying using the RDI methodology, ensuring user needs are met through staged implementation and analysis. Step 9 emphasizes managing change, culture, and reward structure, requiring cultural shifts and employee buy-in. Step 10 focuses on performance evaluation after KMS implementation to gauge improvements.

RESEARCH METHOD

This study uses a qualitative, abductive approach. Abductive is an approach carried out on unique cases where pre-existing theories are not necessarily the same as events and facts in the field, which can modify the theory. A case study method based on the formulation in Yin (2018) was used to identify the stages of development of KM implementation in one of Indonesia's public sector organizations, which was studied holistically, not just on certain aspects. At the data collection stage, a research grid containing a description of the indicators of the stages of KM implementation developed from the theoretical propositions according to Tiwana (2002) was prepared as a guide in collecting data and information in the field. The research location is at the Surveillance Research and Development Center (Puslitbangwas) BPKP, which acts as the unit in charge of KM at BPKP based on Head Decree Number 331 of 2019. The time period studied is limited to 2008-2021. Data collection methods for primary data were obtained through in-depth interviews with BPKP resource persons. The list of interview activities is presented in Table 1. The results of the interviews were developed to gain a deeper understanding by conducting observations to observe the facts about the stages of the development of KM implementation in BPKP. The list of field observations is presented in Table 2.

Secondary data used are report documents, internal regulations, and policies arranged in the form of categorization according to the field that supports the development of KM from 2008 to 2021. The collected data was analyzed abductively by comparing all findings to theoretical propositions to describe and modify them more easily. The development stages of KM implementation in BPKP from 2008 to 2021 were analyzed using a time series (periodization) to see their development over time. A triangulation of sources and time was used to corrobo-

Table 1. List of Interview Activity

Topic	Inter-viewee	Background	Time
KM Roadmap and early stages of implementation	RH	Coordinator of Supervisory Development and Innovation Puslitbangwas as Head of the BPKP KMS Management Team	August 5, 2022 at 15.45 WIB
KM management and development	MTR	Sub-Coordinator of Development, Innovation, and Knowledge Management Puslitbangwas	August 8, 2022 at 19. 45 WIB
KM practice	IJH	Auditor at the Deputy for Investigation	August 12, 2022 at 15.50 WIB
KM practice	SM	Auditor at the Supervisory Information Center (Pusinfowas)	August 15, 2022 at 13.20 WIB
Change management and KM	PH	Auditor at Puslitbangwas	October 11, 2022 at 07.40 WIB

Table 2. List of Field Observation

Activity	Detail	Observation Time
Grand Tour	Discuss with potential resource persons about KM practices that have been running and identify employees who know the history of KM development in BPKP	January 22, 2022
Observation of Infrastructure and environment that support the implementation of KM in BPKP	See the location of the Library Café (LC) and other places that encourage knowledge sharing activities Participated in one of the sharing session activities in the LC	October 14, 2022
Observation of KMS development	Exploration of KMS websites and applications developed by BPKP	November 22, 2022

rate the truth of the data so that the findings generated from this research could be guaranteed validity and reliability.

RESULT AND DISCUSSION

Implementing KM in BPKP is urgent because auditors' work always requires them to improve their knowledge and competence to support supervisory tasks across disciplines. This is in line with Government Internal Audit Standards (AAIPI, 2014), which state that auditors are required to improve competence through continuing professional education as part of continuous learning. BPKP's broad scope of functions requires auditors to absorb existing knowledge quickly when there is a transfer of fields or work units. The results of the data analysis can be formulated in four stages of the development of KM implementation at BPKP. The stages that occurred in the 2008-2021 timeframe consist of four stages: Local Preparation, Local Implementation, National Implementation, and National Development Stages.

Stage 1 Local Preparation 2008-2014

This stage includes preparations for implementing KM, which is driven by changes in the organization's business processes due to the influence of the external environment. BPKP experienced a strategic change in the role of internal auditors, which was initially only audit-oriented but was developed to improve auditee business processes through consulting services. The diversification of the main activities of supervision requires changes in the organizational and employee paradigms. The dynamics of BPKP due to changes in the strategic environment were triggered by the issuance of Government Regulation (Peraturan Pemerintah, PP) Number 60 of 2008, Presidential Regulation (Peraturan Presiden, Perpres) Number 192 of 2014, and Presidential Instruction (Instruksi Presiden) Number 9 of 2014. BPKP, as the internal auditor, is expected to be able to provide an early warning system and oversee the process of achieving the objectives of strategic development programs. BPKP implemented KM to transform it into a learning and knowledge-based organization to achieve these objectives. Programs and activities implemented in Stage 1 include culture development, change management, and conducting KM-related research.

Culture development

BPKP, in response to dynamic environmental conditions, has undertaken a strategic transformation from a static bureaucracy to an entrepreneurial organization, aiming to meet stakeholder demands. This transformation involves the development of a work culture, fostering positive attitudes and behaviors in line with BPKP's core values, encapsulated in the acronym PIONIR: Professional, Integrity, Orientation to Users, Conscience and Common Sense, Independence, and Responsibility (BPKP, 2010). Organizational values, known as the "5 AS" (hard work, smart work, thorough work, sincere work, and work full of integrity) (BPKP, 2011), further emphasize the commitment to excellence.

This cultivation of work culture aligns with BPKP's transformation into an organization prioritizing preventive aspects, providing consulting services, and partnering with various entities. Over a five-year period (2010-2014), BPKP implemented six programs spearheaded by role models among Echelon 1 officials (BPKP, 2011). These programs targeted the improvement of morals and ethics, enhancement of togetherness and welfare, increased effectiveness of policies and inspirational leadership, establishment of responsive and anticipatory organizations, and enhancement of organizational transparency. Integral to this transformation is the emphasis on developing a knowledge-based organization with effective work culture elements such as the PPM and knowledge-sharing through Lotus Notes, which play key roles in supporting KM initiatives at BPKP.

Change management

BPKP defines the core of bureaucratic reform as a change in mindset and governance. There are three important agendas implemented by BPKP: bureaucratic reform, SPIP, and work culture. Substantially, the three influence one another, necessitating a collaborative and integrated work mechanism to effect change in bureaucratic conditions to achieve good and clean government. All areas of change that are the objectives of bureaucratic reform are related to the elements of SPIP in PP 60 of 2008, which, in their application, are integrated and become an integral part of the activities of government agencies. One of the agendas for bureaucratic reform is change management through structuring the mindset and work culture of the apparatus in order to produce a bureaucracy that has integrity and high performance. The bureaucratic system makes employees only focus on rule-based work, so they sometimes ignore innovation.

The main obstacle is changing the culture in the bureaucracy. Change must begin with preparing human resources to accept change because, in essence, humans are the subject and object of change and have a resistant nature to change. Change management efforts in the KM process at BPKP include (1) creating a culture that recognizes the importance of data, information, and knowledge in carrying out tasks effectively; (2) facilitating access to the data, information, and knowledge required to carry out tasks; (3) providing flexibility to carry out tasks based on knowledge; (4) providing opportunities to apply new knowledge gained from education or training in the workplace; and (5) encouraging employees to apply their

knowledge, skills, and experience in providing audit justifications and making quick decisions (BPKP, 2016). Further, BPKP faces obstacles in implementing changes caused by internal and external factors. Internal barriers are related to human resources, human resource management, work mechanisms, the philosophy of change, resources, and infrastructure. The external barriers are that stakeholders do not understand the changing role of BPKP, and local government internal supervisory apparatuses (Aparat pengawasan Intern Pemerintah, APIP) still ask for BPKP assistance to carry out supervision because adequate capabilities do not support it.

Conducting KM-related research

This initiative aimed to offer an initial overview of the effective implementation of KM within BPKP, aligning with three crucial agendas: bureaucratic reform, SPIP, and work culture. Puslitbangwas researched three main topics: 1) managing KM-based risk, 2) KM in work culture, and 3) creating KM implementation design. The initial research on KM in 2008, led by Puslitbangwas, concentrated on risk management with a KM perspective. The objective was to generate discourse on effectively managing knowledge-based risks, ultimately minimizing and mitigating potential risks.

The second study, driven by the issuance of MenPAN-RB regulation Number 14 of 2011, sought to develop an instrument for measuring the relationship between KM and work culture. This study aimed to provide insights into how KM practices relate to and influence the prevailing work culture. In 2012, the third study took a sample of five work units to portray the landscape of KM and organizational culture at BPKP. This comprehensive examination aimed to understand the practical implications of KM implementation within different work units, contributing to a more nuanced understanding of KM's organizational impact.

Stage 2 Local Implementation in 2015

The implementation of local-level KM in the Puslitbangwas work unit began in early 2015, focusing on the three initial steps of Tiwana's theory (2002): infrastructure analysis, aligning KM with business strategy, and KM infrastructure design. Factors that encourage Puslitbangwas to implement KM include changes in the internal environment and the issuance of Presidential Regulation Number 192 of 2014, which repositions the duties, functions, and roles of BPKP. Changes in the internal environment include the movement of "hot spots" from meeting rooms to informal discussion spaces such as canteens and coffee shops where employees discuss supervisory assignments.

Puslitbangwas tried to capture this momentum by first formulating the purpose of building KM and then aligning it with BPKP's business processes according to Presidential Regulation 192 of 2014. The purpose of building KM is to provide a source of knowledge that can be accessed at any time, is relevant, and is able to encourage innovation. As a BPKP work unit tasked with conducting research and development in the field of supervision, much

knowledge has been created from these activities. Knowledge created during the research process can be stored and managed in the KMS to become best practice. KM development at Puslitbangwas consists of seven processes: identifying, capturing, selecting, storing, disseminating, applying, and creating knowledge. Puslitbangwas conducted benchmarking with Anecdote to see the best practices of KM implementation and identify lessons learned that can be applied in BPKP. Based on the analysis and mapping of problems in the current system, observation results, and benchmarking that have been done, Puslitbangwas proposes activities and services that must be provided in the system design, including functional and non-functional specifications. The second semester of 2015 entered the second phase of Tiwana's theory (2002), namely the analysis, design, and development of KMS, as well as the third phase, namely deployment, which became the foundation for programmers in building web-based applications because the initial design of KMS was built using a LAN network so that it was difficult to access from outside the office when employees were on duty in the field. The focus of management is not only on written knowledge but also on knowledge inherent in employees, such as experience and expertise. Activities carried out during stage 2 include evaluating KM infrastructure and building the KMS application.

Evaluation of KM infrastructure

Assessment of the KM infrastructure involves the following key components:

1. Analysis of available infrastructure: Puslitbangwas possesses various technological infrastructures that can be developed into a KMS. These include LAN and WAN computer networks, network bandwidth, remote access and connectivity, intranet, internet, video conferencing, decision support systems, computer platforms, groupware, mobile computing solutions, skills database, document management system (DMS), project management tools, and software licenses.

2. Alignment of KM with business strategy: This step focuses on aligning KM with Puslitbangwas's business strategy. It involves aligning with the organization's vision and mission, identifying knowledge needs for research and development, creating a knowledge map, utilizing Tiwana's personalization and exploration approach in KM development, and identifying the influence of knowledge gaps on business strategy.

3. KM infrastructure design: Successful KM implementation relies on the effective use of available infrastructure. Puslitbangwas follows the third step of Tiwana's theory by identifying internal and external resources to be integrated, selecting technology components for finding, creating, collecting, and implementing knowledge, and determining the appropriate platform.

4. Benchmarking to anecdote: Lessons learned from KM implementation at Anecdote are applied at Puslitbangwas. This includes incorporating an internal search engine, utilizing feedback for continuous KMS development, establishing a community of practice, using a weblog for externalizing tacit knowledge, and implementing a knowledge categorization

system based on subject matter.

5. Proposed system infrastructure: Based on the analysis, mapping of current system problems, observations, and benchmarking, Puslitbangwas proposes the inclusion of specific activities and services in the KMS design, encompassing both functional and non-functional specifications.

Building the KMS application

Puslitbangwas has established an internal programming team dedicated to constructing and enhancing the KMS application. The KMS infrastructure is integrated into the BPKP WAN network. While building and developing KMS within its work units, Puslitbangwas initiated several key activities. Firstly, a knowledge wealth audit was conducted to identify organizational knowledge as an initial assessment of knowledge assets. The results of the audit of knowledge wealth at Puslitbangwas are (1) The organization is a government agency; (2) The organization's core business is a service provider; (3) Employee roles are divided into structural, specific functional, and general functional job classes; (4) Knowledge is mostly explicit; (5) Problem-solving is done directly by the team in the field during the assignment or through a tiered review process; and (6) The level of need to carry out the digitization process is driven by the variety of high-service products.

Secondly, the KM team was designed and implemented, aligning with the fifth step of Tiwana's (2002) theory. A cross-functional internal team was organized to spearhead KM initiatives to address the absence of a dedicated IT or knowledge management department within Puslitbangwas. Third, System Analysis is the Basis for Building a KM Framework. Puslitbangwas uses The Unified Modeling Language (UML) modeling to carry out the sixth step of Tiwana's (2002); the activities include activity diagrams, use case diagrams, class diagrams, interface design, and sequence diagrams. Fourth, KMS Design. The seventh step of Tiwana's theory (2002), namely developing the KMS, is done by designing the system so that it is ready to be implemented based on the results of the analysis carried out in the previous stage. Puslitbangwas carried out this process by making a design in the form of:

1. Architecture Design. The web-based KMS developed by Puslitbangwas uses a three-tier architecture. The main reason for using this architecture is that if the KMS database continues to grow, adjustments in data storage techniques can be made without affecting computer clients.

2. Sitemap Design. This design provides ease of use and efficiency in the knowledge search process by utilizing a list of user requirements and specifications. The results of the analysis conducted by Puslitbangwas show that all classes in the interface automatically become one page in this diagram.

3. Interface Design. An interface was developed based on the sitemap design that had been

made to provide convenience for KMS users. The KMS interface consists of a) the login form design, (b) the main page design, and (c) the KM officer design.

4. User Page Design. Employees have access to view book and article knowledge, post explicit and tacit knowledge, search for knowledge, and provide feedback in the comments field.

5. Design the staffing officer page. Design forms to generate reports and edit employee data.

6. KM Activity Report Page Design. A system for printing KM activity reports that provide knowledge storage and user activity information.

Fifth, Measurement and Evaluation. Puslitbangwas implemented the tenth step of Tiwana's theory (2002) by formulating an assessment plan for KM implementation at the local level, serving as an initial evaluation of the established system. This process consists of the KM measurement with metrics, measuring the main objectives within four distinct categories—awareness, behavior, output, and outcomes—using specific metrics; and system analysis and design testing. The testing activity is carried out by comparing the system design with the pre-determined requirements to ensure alignment and effectiveness. The evaluation stage of Puslitbangwas' local-level KM implementation has not been carried out because the KMS application that is being developed is then escalated to the BPKP level.

Stage 3 National Implementation 2016-2019

In 2016, a pivotal moment unfolded in BPKP's KM implementation when the initially internal KMS application, developed by Puslitbangwas, transitioned to the BPKP level under the directive of the then BPKP Head. Given the brief supervision days faced by BPKP auditors in the field, ranging from five to seven working days, a source of knowledge about the assignment is needed, one of which is through KM. Puslitbangwas crafted a roadmap for KMS development within BPKP from 2017 to 2019. The challenge surfaced during stage 3 regarding the management responsibility of the KMS post-escalation. In Stage 3, activities included determining the direction of KMS development, conducting a KMS prototype trial, evaluating the KM escalation process, creating the Knowledge Management Information System (KMIS) application, benchmarking for Telkom, inaugurating KMS Ambassadors, establishing an informal discussion space, creating KM management policies and procedures, and founding a Corporate University for Government Internal Audit (GIA Corpu).

1. Determining the Direction of KMS Development in BPKP

The vision of the KMS in BPKP is to facilitate reliable knowledge management, foster innovation, and position BPKP as a world-class internal auditor and trusted advisor to the Government of Indonesia. The envisioned KMS is expected to deliver accessible knowledge tailored to assignment needs, promote innovation, offer unrestricted access, and cover a wide spectrum. This vision aligns with BPKP's broader vision of becoming a world-class internal auditor, empowering employees to enhance their competence and knowledge. The mission derived from this vision focuses on providing accessible knowledge, connecting knowledge

owners and seekers, encouraging innovation in internal audit and supporting processes, and expediting the expertise development of employees.

The three crucial elements in KM development for BPKP are people, process, and technology. A primary challenge faced in KM development is the reluctance of employees to document gained knowledge and experiences due to time constraints and varying sharing capacities. Despite a natural culture of knowledge sharing through activities like PPM and informal discussions, BPKP encounters difficulty in encouraging employees to write, a demanding activity that not everyone is inclined to undertake. To manage the human aspect, BPKP undertakes initiatives such as building awareness of KM's importance, fostering trust for knowledge sharing, establishing KM role models, and instituting a reward and recognition system for KM participation.

The process element includes the stages in KM, starting from identifying the knowledge needed by the organization, activities to capture the required knowledge, selecting knowledge to be managed, storing the selected knowledge, sharing knowledge so that it can be accessed by employees, applying knowledge, and creating new knowledge. The focus of developing technological aspects to support the KM process at BPKP is on three things: the right people, the right information, and the right tool. The developed technology should connect people with the right sources, filter information, and ensure authorization according to established rules. The developed technology serves as the right medium for employees to obtain information, contributing to the overall success of KM initiatives.

2. KMS Prototype Trial

Leveraging prototypes represents BPKP's strategy to mitigate risks and identify development opportunities. The prototype trial of the web-based KMS application took place at Puslitbangwas and several designated work units, including Pusbin JFA, Pusdiklatwas, the HR Bureau, Pusinfowas, and BPKP Representatives in Lampung, West Java, and Yogyakarta Provinces.

3. Evaluation of the KM Escalation Process

Puslitbangwas conducted an evaluation to see the extent of KM development in BPKP according to the roadmap that has been prepared. This evaluation focuses on three key aspects of KM development: people, process, and technology. The results of this evaluation provide input for the establishment of BPKP Head Regulation on KM Implementation Guidelines, the establishment of formal KM institutions attached to the duties and functions of the organization, as well as developing KM role models. BPKP's KM development strategy focuses on business process efficiency in supporting service, providing information, and gaining knowledge about audit results, evaluation, assistance, technical guidance, revenue optimization, review, calculation of state financial losses, expert testimony, and other audit activities.

4. Creating the KMIS App

BPKP has received funding from loan financing 2927-INO State Accountability Revitalization Project Knowledge Management System-2 (STAR KMS-2) through the Asian Development Bank (ADB). As part of the project's initiatives, the Knowledge Management Information System (KMIS) serves as a platform for information related to knowledge management in public sector accountability. Developed by the STAR Working Group Team, the KMIS application is designed to aid STAR student alumni in enhancing the competence of APIPs and financial managers. KMIS is a conduit for knowledge transfer in state financial management and internal audit.

5. Benchmarking

This activity is carried out periodically to see the best practices of KM implementation in other organizations and identify lessons learned that can be applied in BPKP. The benchmarking process for "Stage 2 Implementation at Local Level" was conducted at Anecdote, followed by this stage of KM implementation at Telkom company. Telkom is a strategic partner of BPKP in developing KM. This is demonstrated by BPKP inviting experts from Telkom to share their experiences in developing KM in the KMS Ambassador forum.

6. Inaugurating KMS Ambassadors

Advancing people's development is achieved through the strategic utilization of KMS Ambassadors. Comprising selected employees from diverse work units across Indonesia, these ambassadors play a crucial frontline role in the ongoing development of KM within BPKP. Their primary responsibility involves capturing the tacit knowledge embedded within the workforce of their respective units and transforming it into valuable organizational knowledge.

7. Creating an Informal Discussion Space

Knowledge sharing practices at BPKP have been carried out through joint prayer activities, coffee mornings, and PPM. These activities should be more organized to encourage KM by optimizing available knowledge spaces such as libraries. In 2018, BPKP created an informal discussion space called Library Café (LC) to create a pleasant atmosphere for knowledge sharing by combining the functions of a library and a coffee shop with the concept of a knowledge café. LC is included in the Top 45 Public Service Innovations in 2020, organized by the Ministry of PAN and RB. This innovation originated from the anxiety of the BPKP KM Team Leader about managing KMS as a knowledge-sharing medium that employees still underutilized. Based on KMS visitor data in July 2018, the percentage is only 3% of the total BPKP employees. LC is an activity routinely carried out to foster a culture of knowledge sharing in BPKP, capture it, and store it in KMS. LC is packaged with the concept of an informal and fun interactive discussion that is expected to be a glue between generations, eliminate silos, and create organizational social capital. Sharing sessions involve internal and external expertise and community of practices sharing their experiences and

expertise. This is useful to provide insight for participants through discussions for problem-solving in assignments and to serve as a means of informal briefing from the leadership. LC is expected to embody the spirit of the massively developed knowledge-sharing and management process among BPKP representatives.

8. Create KM Management Policies and Procedures

As a form of leadership commitment to the importance of KM, the Head of BPKP issued Decree No. KEP-331/K/LB/2019 concerning Guidelines for Implementing Knowledge Management in the Context of Improving Supervisory Innovation in the BPKP. The provision of a regulatory framework for KM governance is needed so that there is a legal basis and guidelines for implementing KM for all work units and employees within BPKP. The Chief Decree explains the three main components of KM in BPKP: people, processes, and technology. Important aspects regulated in BPKP Head Decree Number 331 of 2019 include KM Institutional structure, KM model and architecture, and KM cycle.

9. Create a Corporate University for Government Internal Audit

BPKP issued Head Decree No. Kep-205/K/DL/2019 on the Development of HR Learning Systems in the BPKP Environment, which states that KM is part of the foundation of managing the Government Internal Audit Corporate University, or GIA Corpu. This shows that BPKP realizes the importance of KM as a medium for managing internal audit knowledge. The GIA Corpu framework is a learning management system that includes foundations, pillars, units, and learning storefronts. KM is one of the pillars of learning focus, and it entails a structured and systematic effort in developing knowledge owned to aid in decision-making and improve organizational performance. The development of Corpus is anticipated to drive continuous learning within the organization.

Stage 4 National Development 2020-2021

BPKP acknowledges the evolving landscape marked by uncertainty, technological advancements, and heightened stakeholder demands. In response, BPKP has adjusted its methodology, processes, and approach to prioritize crucial issues. Embracing agile internal auditing and a data-driven approach aligning with the Supervisory Priority Agenda (Agenda Prioritas Pengawasan, APP) strategy, BPKP focuses on stakeholders and data awareness for a streamlined audit process. This reflects the third phase of Tiwana's (2002) theory—deployment. KMS is expected to provide information and initial knowledge for auditors for a flexible planning process according to priorities. Activities carried out at this stage include business process and standard operational procedures improvement, KM development, building the Data Analysis and Visualization (ADVIS) App and establishing the Community of Data Analytics (CoDA), also periodic benchmarking.

1. Business Process and SOP Improvement

BPKP updates business processes and SOPs based on BPKP Regulation Number 2 of 2021

concerning BPKP business process maps and BPKP Regulation Number 3 of 2021 concerning guidelines for preparing standard procedures for implementing activities within BPKP. In this activity, an ISO 9001:2015 assessment was also carried out by TUV NORD, a company that has a wide range of certification scheme services. The auditor provided the results as good practice with a digitization system in the form of a KMS application as a knowledge portal at BPKP (BPKP, 2021c).

2. KM Development in Support of the Supervisory Priority Agenda

KMS development is directed to support APP 2022 as a form of KM alignment with BPKP's business strategy through regulations on governance with related parties, data integration, and further application development. Knowledge management to improve supervisory innovation is carried out through KMS integration plans with the Learning Management System (LMS) and the Integrated Talent Management System (ITMS).

3. Building the ADVIS App and Establishing the CoDA Community

BPKP is expected to provide the president with immediate insight and foresight into national-scale problems and strategic issues. On the other hand, the way the audit team works in collecting data related to supervisory objectives still uses the old way of doing things and is not data-driven. On this basis, Puslitbangwas developed KMS that supports data-driven internal auditing so that BPKP can create knowledge conclusions based on available data more quickly. Puslitbangwas realizes that collecting, analyzing, and disseminating data through visualization requires an application, so ADVIS, which is a sub-application of the KMS, was developed to facilitate the capitalization of data into knowledge. The development of this application is based on the data awareness campaign and treating it as an asset in supporting the APP. This has encouraged Puslitbangwas to form a CoP called CoDa.

4. Periodic Benchmarking

Benchmarking was carried out to obtain additional information about KM implementation practices in other organizations and then determine the best practices that were successfully implemented. This activity has been carried out periodically since stages 2 and 3. In stage 4, the KM implementation benchmarking process was carried out in two public sector organizations: the Bank Indonesia Institute and the BPJS Employment Institute. This activity is carried out by exchanging KM practices that have been running, sharing about the obstacle faced, and looking for lesson learned that can applied in BPKP.

Cross-Stage Review

The progression from the local preparation stage to the national development stage has a number of drivers that have led to the transition from one stage to the next. The four stages have different focuses and challenges in the implementation process but are interrelated.

The transition from stage 1 to stage 2

The transition from the Local Preparation Stage to the Local Implementation Stage encountered delays due to other priority agendas such as SPIP and bureaucratic reform. The catalyst for this transition was the issuance of PP 60 in 2008, altering BPKP's authority and business processes, along with Presidential Regulation 192 and Presidential Instruction 9 in 2014, enhancing BPKP's strategic role. This prompted BPKP to undertake change management in organizational systems, mechanisms, mindset, and work culture, incorporating a knowledge-based approach as part of bureaucratic reform. To achieve this, BPKP established a role model in the work culture and implemented KM to improve the quality of knowledge.

The issuance of the Minister of PAN and RB Regulation Number 14 of 2011 further encouraged BPKP to implement KM in supporting supervisory business processes. Puslitbangwas began implementing KM within the organization's internal scope in 2015. Puslitbangwas conducted benchmarking with anecdote to see best practices in KM implementation and identify lessons learned that can be applied. Puslitbangwas possessed adequate technology infrastructure, including LAN/WAN networks, internet, remote access, video conferencing, groupware, and DMS, supporting KM implementation. Initial stages lacked specific budget allocations for KM activities, but with a dedicated working team and internal programmers, Puslitbangwas overcame this hurdle to kickstart KM implementation.

The transition from stage 2 to stage 3

The Head of BPKP conducted a thorough review of the KMS application developed by Puslitbangwas, directing the system's escalation to the national level. BPKP's KM implementation begins with fostering organizational commitment, particularly among leaders, through a strategic policy outlined in the roadmap. This approach encompasses the three key aspects of KM—processes, people, and technology—leveraging the role of research and development. The organization continues its efforts to construct the system and enhance employee awareness.

BPKP has human resources with adequate competence, both knowledge from education and experience gained during duty, that can contribute to enriching the KMS repository. BPKP also has many CoPs and expert employees who can be sources of organizational knowledge. Because the majority of BPKP employees are functional auditor officials, the barriers between individuals are reduced, and interactions are more fluid in order to share knowledge and experience. The website-based KMS application can be accessed and utilized by employees in all BPKP work units. BPKP relies on the Internal Programmer Team for the KMS application deployment process.

The transition from stage 3 to stage 4

The transition from Stage 3 to Stage 4 is propelled by BPKP's evolution as a government internal auditor, adopting an advisory role and embracing an agile internal audit approach, necessitating a shift towards a data-driven supervisory process. Another crucial factor driving

this transition is the observed apathy among employees regarding the use of the KMS to support supervisory tasks. Evidently, the KMS website has only garnered contributions from 221 individuals, representing approximately 3.92% of BPKP employees, primarily from Puslitbangwas employees, the designated unit for knowledge management within BPKP. While ongoing developments in the KMS application persist, the primary challenge lies not in technological infrastructure but in the human dimension, specifically in fostering a culture of knowledge sharing. This entails encouraging employees to articulate and disseminate knowledge in their minds, thereby contributing to the shared knowledge repository through the KMS.

One of the obstacles that causes employees to be less aware of KM is their workload and busyness in carrying out supervisory duties. Another underlying problem is that the role of the person in charge of managing the work unit's supervisory knowledge, namely the Head of Representation, has not been understood. The head of the work unit is the business process owner in BPKP and knows the organization's knowledge needs. System development has been built through the policy of making KMS and LMS the pillars of the formation of GIA Corpu. BPKP established the Principal Secretary as the Chief Knowledge Officer (CKO) and created a regulatory by issuing Chief Decree Number 331 of 2019 as a guideline for implementing KM practices in improving supervisory innovation and clarifying the parties' roles. BPKP also inaugurated the KMS Ambassador, the work unit's knowledge management frontline.

Comparison of Stages of Proposition Development with Findings

The theoretical propositions formulated at the beginning of the research as theoretical capital before going to the field contain a summary of the theory or concept of the stages of development of KM implementation in the organization. The propositions were then compared with the empirical findings in the field, resulting in improvements or modifications to the initial theory/concept. The results of comparing propositions with field findings are illustrated in Figure 1.

Based on Tiwana's (2002) proposition, ten steps are suggested for implementing KM in organizations in the four stages of KM implementation. Field findings show that BPKP has implemented nine of the ten steps tailored to organizational characteristics, infrastructure availability, and needs. The results of the analysis presented in Figure 1 show that the initial three stages of the theoretical proposition are part of Stage 2 of the empirical implementation of KM at the local level in the Puslitbangwas work unit as a pilot project. Stage 3 in the proposition, namely the deployment process based on field findings, is carried out continuously in Stages 2, 3, and 4. Stage 4 of the proposition, namely performance evaluation, is not carried out because an appropriate formulation has not been found to measure the level of KM maturity or assess the success of KM implementation in relation to the performance of public sector organizations. The comparison of activities carried out by BPKP in implementing KM
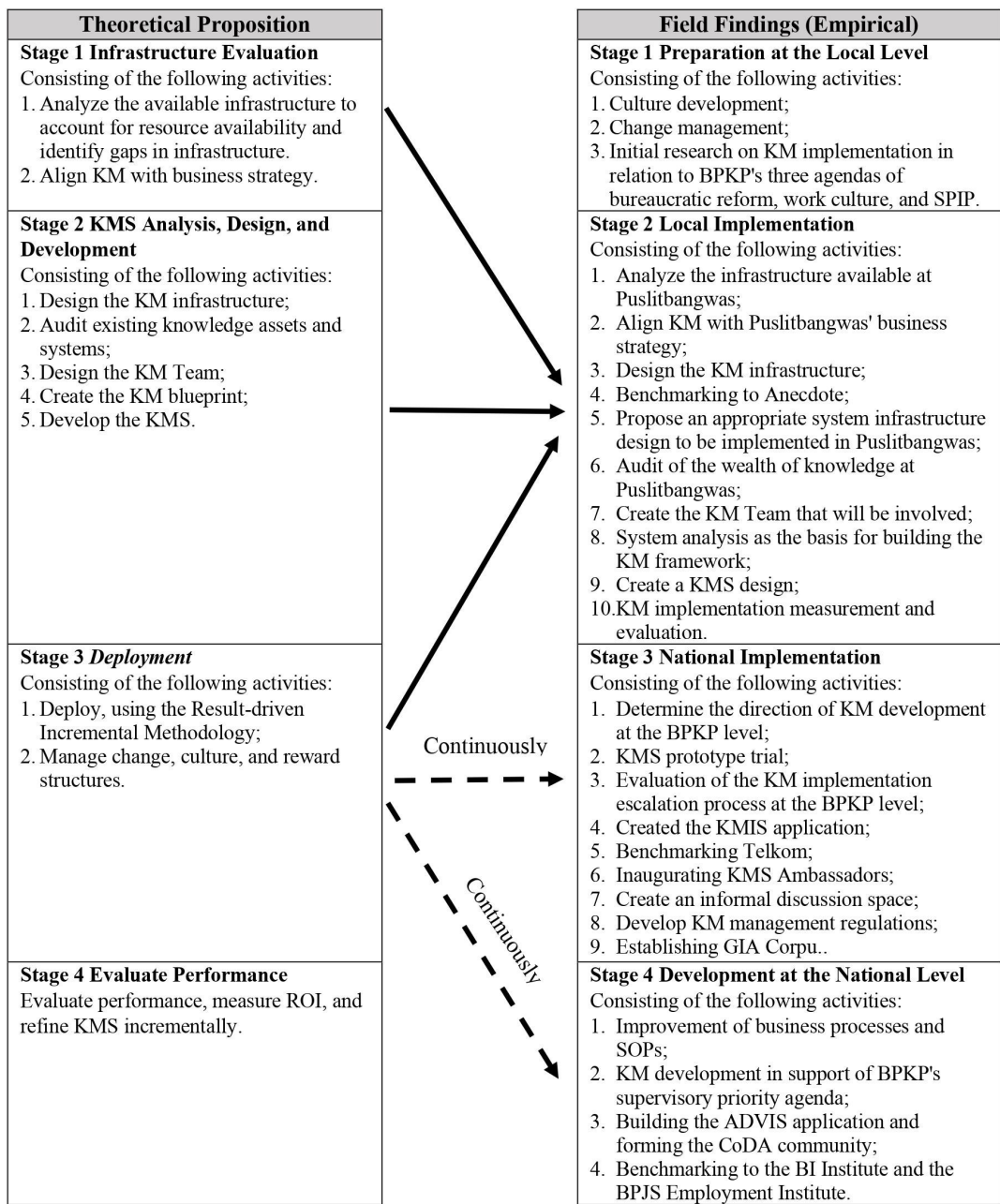
Theoretical Proposition	Field Findings (Empirical)
Stage 1 Infrastructure Evaluation Consisting of the following activities: 1. Analyze the available infrastructure to account for resource availability and identify gaps in infrastructure. 2. Align KM with business strategy.	**Stage 1 Preparation at the Local Level** Consisting of the following activities: 1. Culture development; 2. Change management; 3. Initial research on KM implementation in relation to BPKP's three agendas of bureaucratic reform, work culture, and SPIP.
Stage 2 KMS Analysis, Design, and Development Consisting of the following activities: 1. Design the KM infrastructure; 2. Audit existing knowledge assets and systems; 3. Design the KM Team; 4. Create the KM blueprint; 5. Develop the KMS.	**Stage 2 Local Implementation** Consisting of the following activities: 1. Analyze the infrastructure available at Puslitbangwas; 2. Align KM with Puslitbangwas' business strategy; 3. Design the KM infrastructure; 4. Benchmarking to Anecdote; 5. Propose an appropriate system infrastructure design to be implemented in Puslitbangwas; 6. Audit of the wealth of knowledge at Puslitbangwas; 7. Create the KM Team that will be involved; 8. System analysis as the basis for building the KM framework; 9. Create a KMS design; 10. KM implementation measurement and evaluation.
Stage 3 *Deployment* Consisting of the following activities: 1. Deploy, using the Result-driven Incremental Methodology; 2. Manage change, culture, and reward structures.	**Stage 3 National Implementation** Consisting of the following activities: 1. Determine the direction of KM development at the BPKP level; 2. KMS prototype trial; 3. Evaluation of the KM implementation escalation process at the BPKP level; 4. Created the KMIS application; 5. Benchmarking Telkom; 6. Inaugurating KMS Ambassadors; 7. Create an informal discussion space; 8. Develop KM management regulations; 9. Establishing GIA Corpu..
Stage 4 Evaluate Performance Evaluate performance, measure ROI, and refine KMS incrementally.	**Stage 4 Development at the National Level** Consisting of the following activities: 1. Improvement of business processes and SOPs; 2. KM development in support of BPKP's supervisory priority agenda; 3. Building the ADVIS application and forming the CoDA community; 4. Benchmarking to the BI Institute and the BPJS Employment Institute.

Figure 1. Comparison of Proposition Stages with Field Findings

with the proposition is presented in Table 3.

Table 3 shows there are KM implementation steps taken by BPKP that are not explained in the theoretical propositions, according to Tiwana (2002). This result can provide a conceptual contribution to modifying the theory of KM implementation, especially in public sector organizations. These steps include change management and the development of a work culture that supports KM processes, initial research on KM to guide the implementation phase, benchmarking, and developing KM implementation regulations. BPKP has CoP and expert employees as knowledge sources integrated into the supervisory business process. LC acts as a means for employees to interact and share case experiences and best practices in

Table 3. Comparison of KM Implementation Steps in Proposition with Field Findings

Steps in Proposition	Activity Field Findings
Analysis the existing infrastructure	An examination of the infrastructure available in Puslitbangwas
Align KM and business strategy	Align KM with Puslitbangwas business strategy of Puslitbangwas
Design the KM infrastructure	Design the KM infrastructure
	Propose an appropriate system infrastructure design for Puslitbangwas
Audit existing knowledge assets and systems	Audit of knowledge wealth in Puslitbangwas
Design the KM Team	Designing the KM Team involved
Create a KM blueprint	System analysis as the basis for building the KM framework
Develop the KMS	Create a KMS development design
	Design measurement and evaluation of KM implementation
Deploy, using the Result-driven Incremental Methodology	Determine the direction of KM development at the BPKP level
	KMS prototype trial
	Evaluation of the KM implementation escalation process at the BPKP level
Manage change, culture. and reward structures	Creating the KMIS application
	Inaugurating KMS Ambassadors
	Create an informal discussion space
	Establishing GIA Corpu
	Business process and SOP improvement
	KM development in support of BPKP's supervisory priority agenda
	Create the ADVIS application and the CoDA community
Evaluate Performance	--- not yet implemented ---

supervisory tasks. LC is a program to support the KM process by redesigning the library into a comfortable space for employees to share knowledge and document it in KMS. LC becomes a means for sharing knowledge to develop into an organizational culture. KM development supports APP in achieving BPKP's vision and mission through collaboration policies, data integration, and application development.

There has never been an assessment of the maturity level of KM in BPKP to determine the focus areas that need improvement. In addition, BPKP needs a policy to include employee activeness in KMS as a Key Performance Indicator (KPI) and increase the role of KMS Ambassadors as knowledge brokers in charge of collecting knowledge in the work unit. This research has limitations that allow further research to be carried out. First, the case study is only at BPKP, one of the public sector organizations in Indonesia that has duties and functions as an internal government auditor. Second, it only uses Tiwana's theory in describing and comparing the stages of KM implementation.

CONCLUSION

The KM implementation phase at BPKP is a long and holistic process consisting of four stages of development from 2008-2021. The results show that the initial three stages of the theoretical proposition are part of Stage 2 of the empirical implementation of KM at the local level as a pilot project. Stage 3 in the proposition, namely the deployment process based on field findings, is carried out continuously in Stages 2, 3, and 4. These stages occur in a structured manner because there are events that encourage movement between stages related to

the implementation of three interrelated concepts: technology utilization, cultural change, and the process of managing individual and organizational knowledge. KM development focuses on three aspects: process, people, and technology.

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APPENDIX

Ten Step KM Roadmap
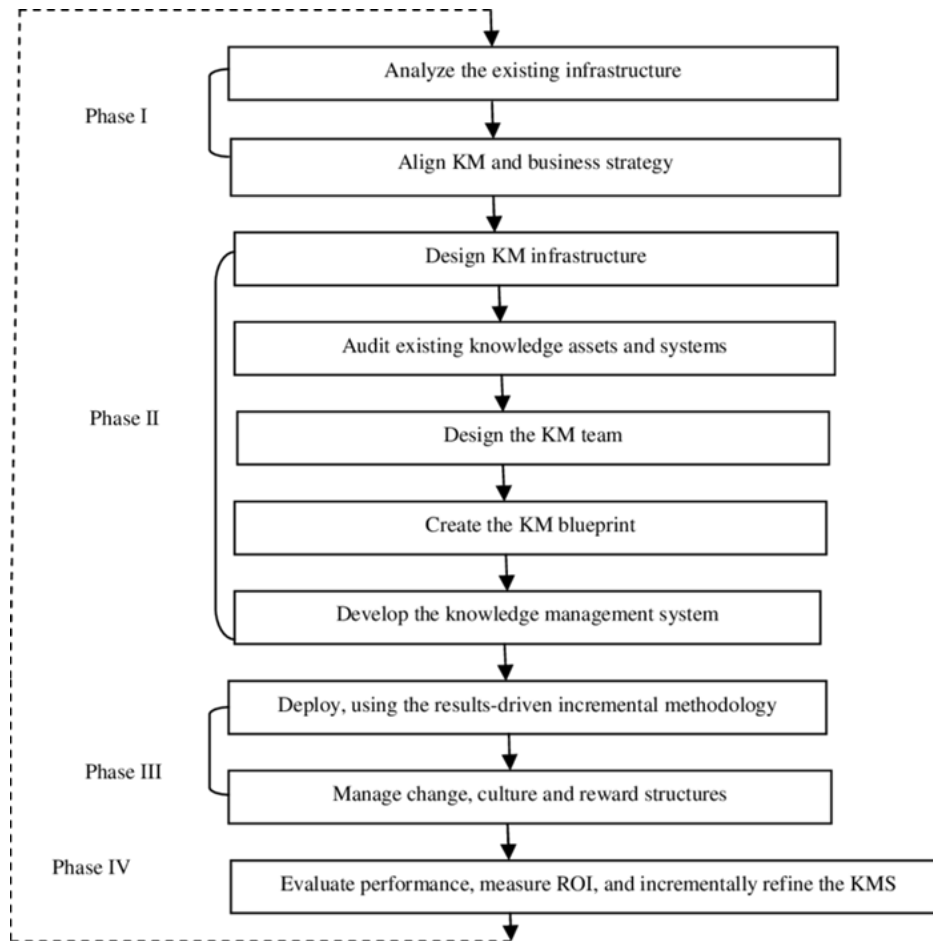
Source: Tiwana (2002)

Knowledge Management Phase

Development
at The National Level

National
Implementation

Local
Implementation

Preparation at
The Local
Level
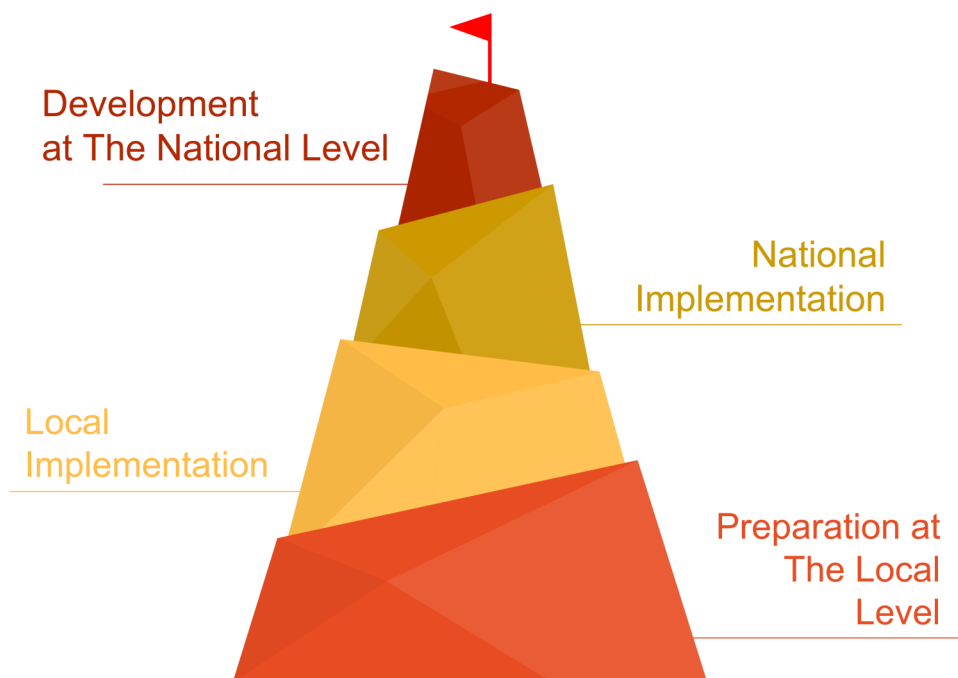
AUTHOR GUIDELINES

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This journal's broad scope provides a platform to publish research related to state finance in public sector 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.

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3. The article should be submitted online via the journal website (jurnal.bpk.go.id).

4. The article should be between 6000 and 8000 words. The allowable length of the manuscript is at the editor's discretion; however, manuscripts with a length of less than or exceeding the specified word count may be returned to the author(s) for revision before the manuscript is considered by the editors. The word count excludes tables, figures, and references.

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, Sentence Case, 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 (,). The corresponding author should be marked with an asterisk (*).

   - 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, 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 ±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 7th Edition referencing style and the formatting guide as follows:

a. 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).

b. 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).

c. If there are 3-5 authors, 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

   Matthew, J. (2011). *The art of childhood and adolescence: The constuction of meaning.* Falmer Press.

3) Two authors

   Hendriksen E. S., & Van Breda, M. F. (2002). *Accounting theory.* 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* (5thed.). Cengage Learning.

5) Six or more authors

   List the first six authors,… and ended the last author **without** "&".

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

b. E-book

   Jonick, C. (2017). *Principles of financial accounting.* University of North Georgia Press. https://www.e-booksdirectory.com/details.php?ebook=12161.

c. Books published by organizations or institutions

   Ikatan Akuntan Indonesia. (2011). *Standar profesional akuntan publik.* 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. https://doi.org/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.

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 utak 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*. 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*. http://www.academicworld.com/referencing-not-plagiarism.html.

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PUBLISHING WITH JTAKEN:
STEP BY STEP

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

User Registration

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

Figure 1. JTAKEN Home Page for Registration

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

Figure 2. Author Registration Form Page

Article Submission

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

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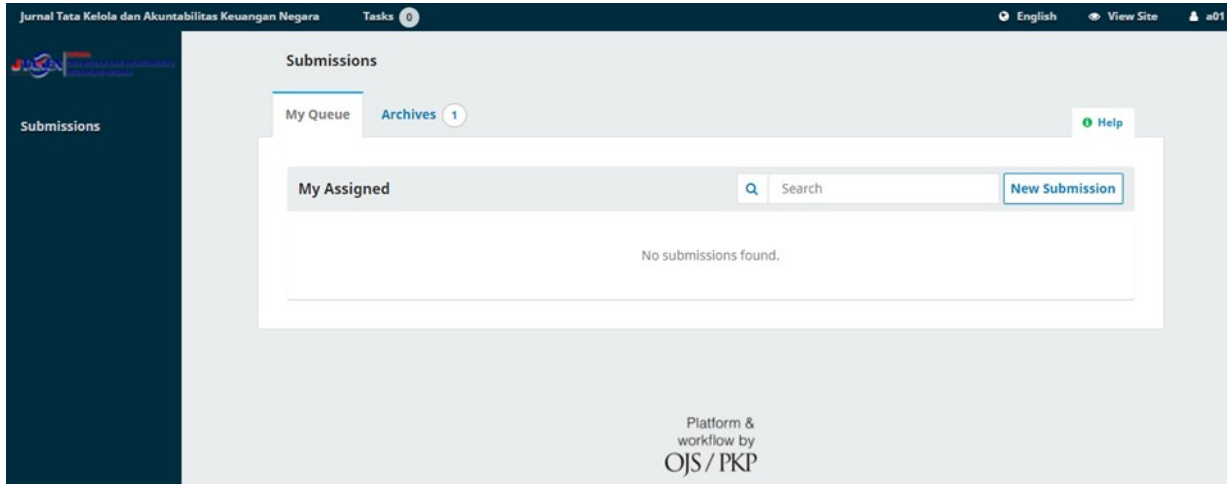
Figure 1. Create New Submission

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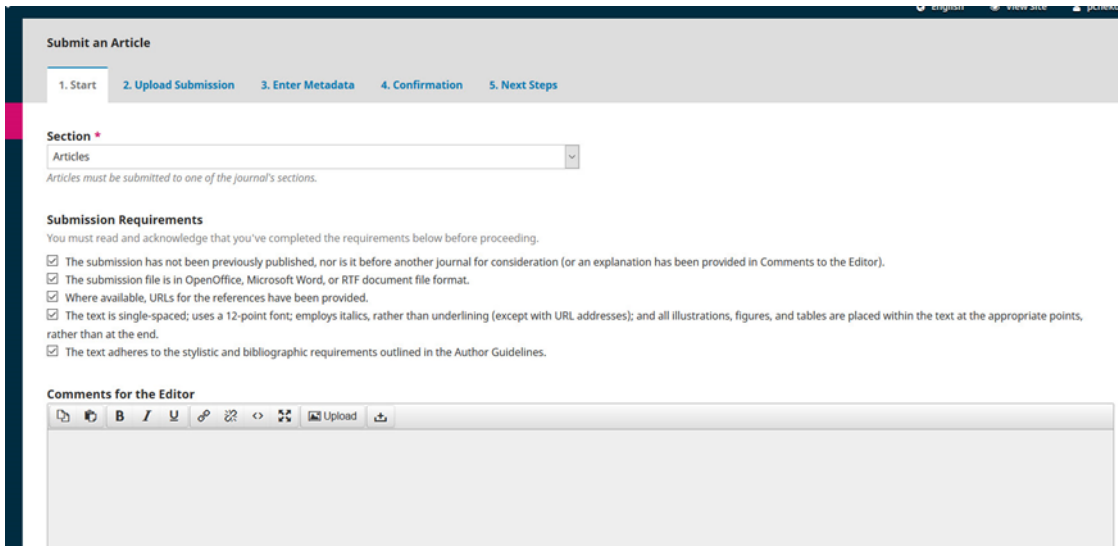
Figure 2. Step 1 Submit an Article

c. On Step 2, a window will open allowing you to upload your submission file. First, you MUST select an Article Component. This lets the system know whether the file is the body of the article, an image, a data set, etc. This must be selected before your file will upload. Once you've made that selection, you can then upload your first file.
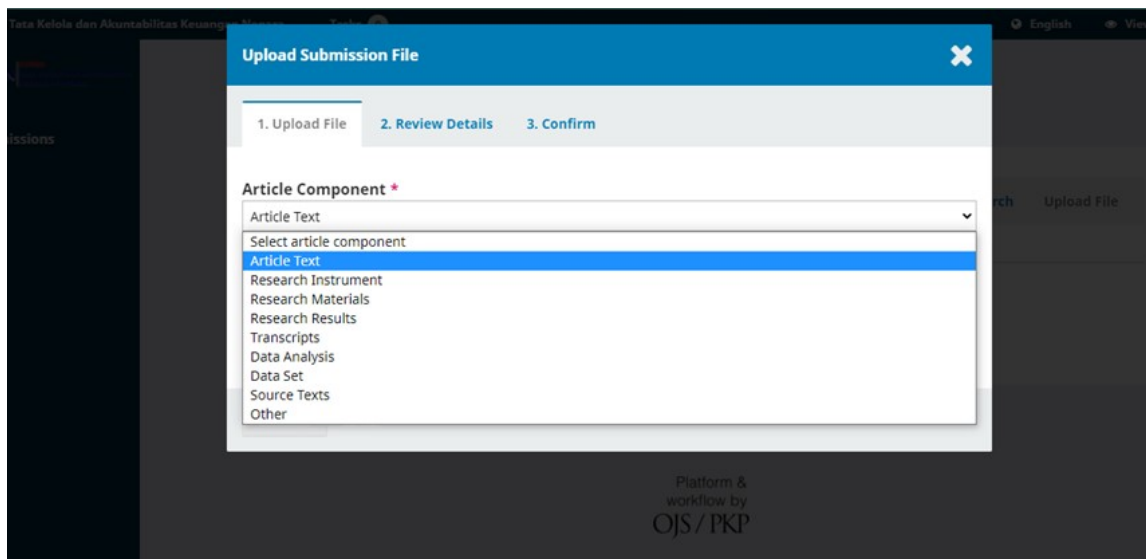
Figure 3. "Uploading the Submission" Page (1)

d. It is important to note that you can only upload one file at a time. Additional files can be uploaded later in the process. Typically, this first file will be the body of your article. Hit the Continue button once the file uploads.
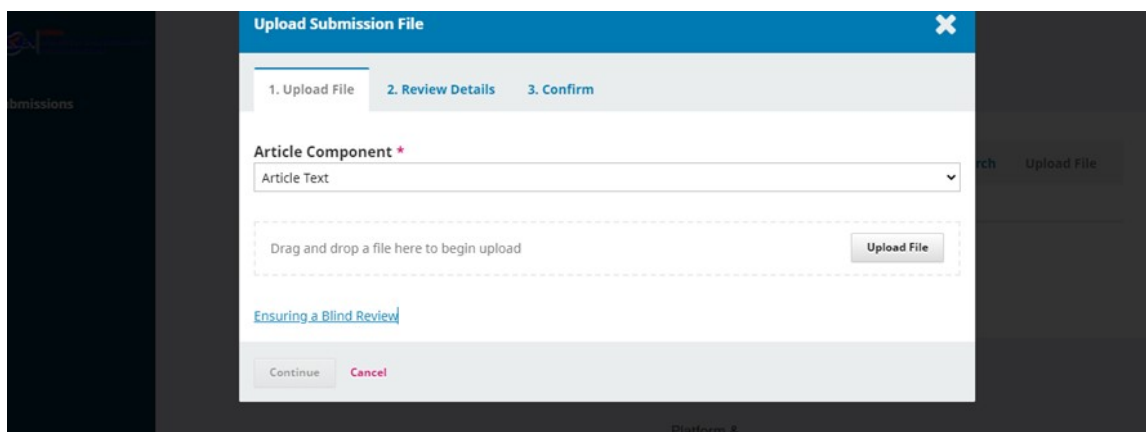
Figure 4. "Uploading the Submission" Page (2)

e. After uploading the file, you will be asked to review the name of the file. Use the Edit link to make any changes. Click the Continue button. Next, you have the option to repeat the process to upload additional files (e.g., a data set or an image). Once you have finished uploading all of your files, click Complete; this will close the upload window.
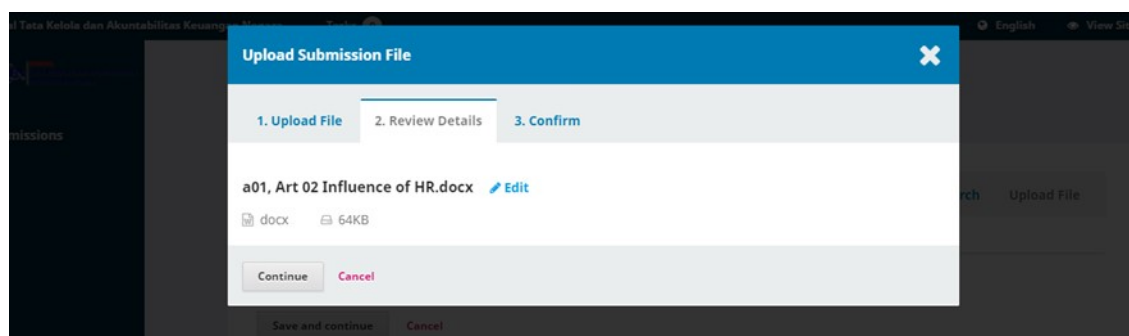
Figure 5. "Starting the Submission" page (3)
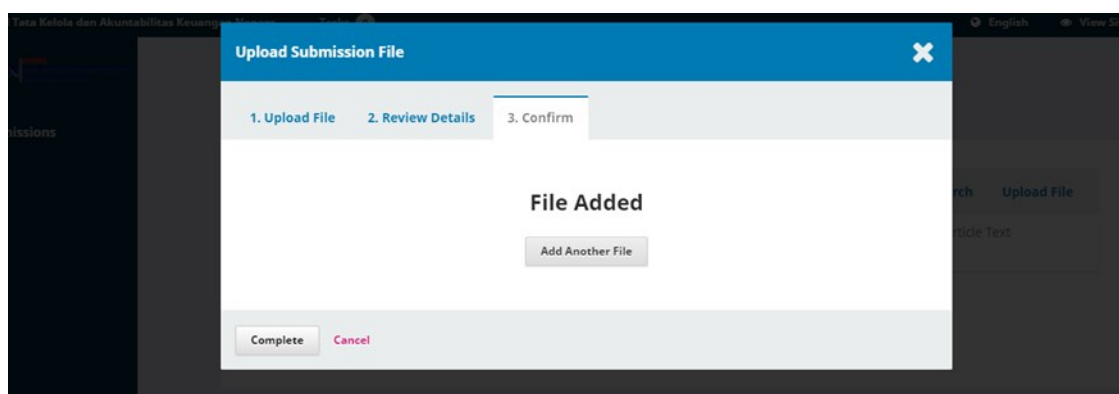
Figure 6. Uploading the Submission (4)

f.   You will be brought back to the Submit an Article screen where you will see the files you've upload-ed. If you need to make changes, expand the blue arrow to the left of your file and make any chang-es using the Edit link. Click 'Save and Continue' to move to Step 3.
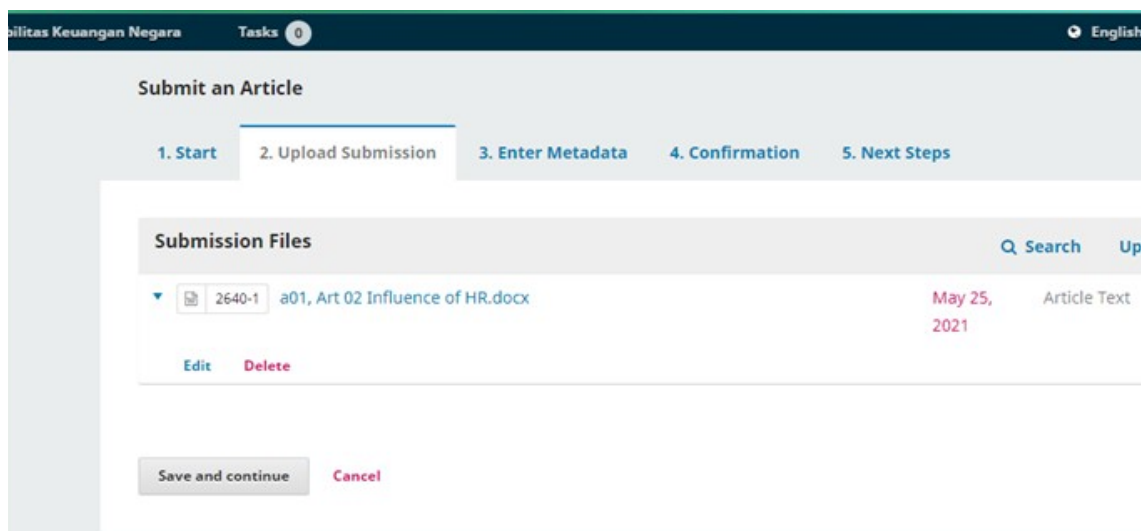
Figure 7. Uploading the submission (5)

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 Con-tributors link. This will open a new window with fields to enter their information. Click Save and Continue to move forward.
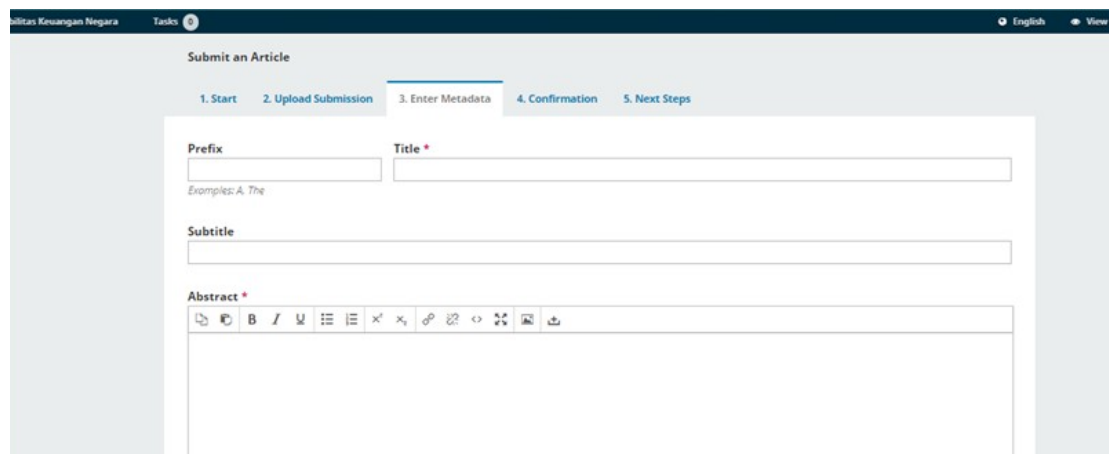
Figure 8. Enter Metadata

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

Figure 9. Finish Submission

i. Step 5—Your submission is now complete! The editor has been notified of your submission. At this point, you can follow the links to Review this submission, Create a new submission, or Return to your dashboard.
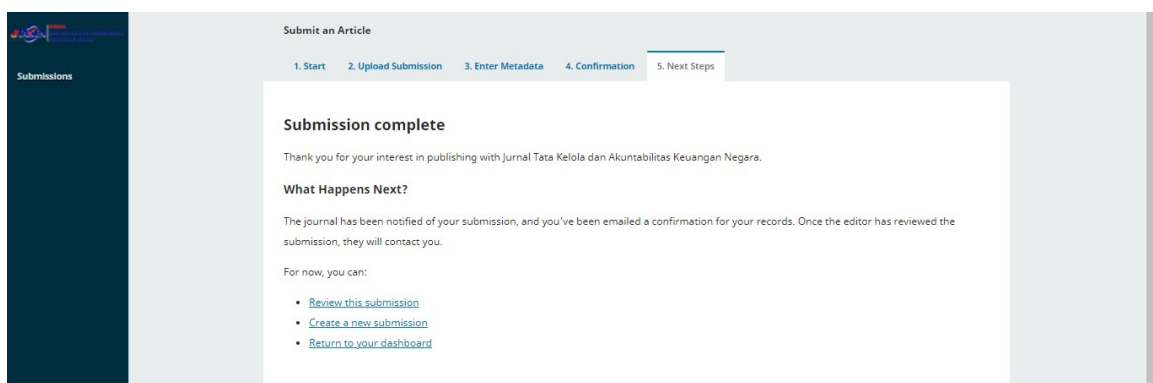
Figure 10. Submission Complete

j. Here is your submission in your Dashboard. You can see that it is currently in the Submission stage. Over the coming days, it will move into the Review stage, and if accepted, into the Copyediting and Production stages before being published.
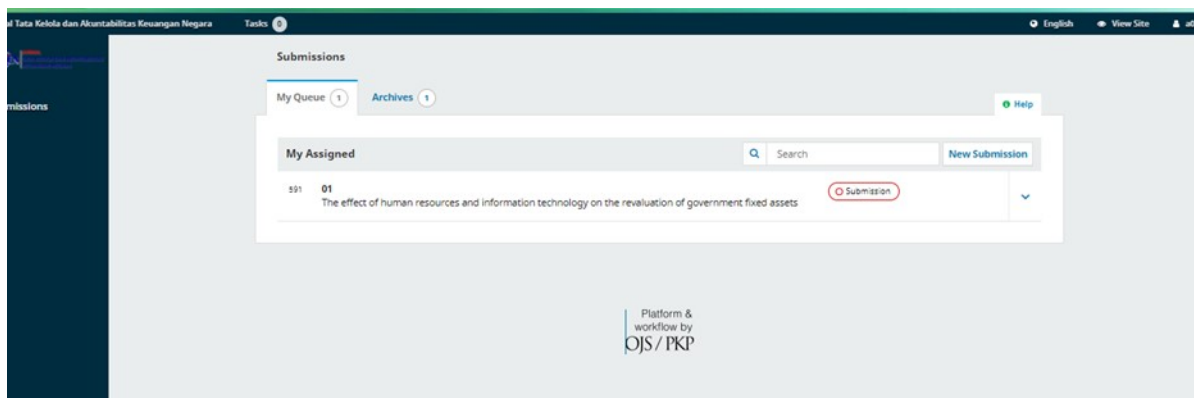
Figure 11. Monitoring Submission

Review Stage

a. Once the review process has completed, you will be notified via email by the editor of their decision. After receiving the email, login to your dashboard. Select the Review link next to your submission to view the decision so that you can see the decision (revisions requested) and a link to the editor's notification.
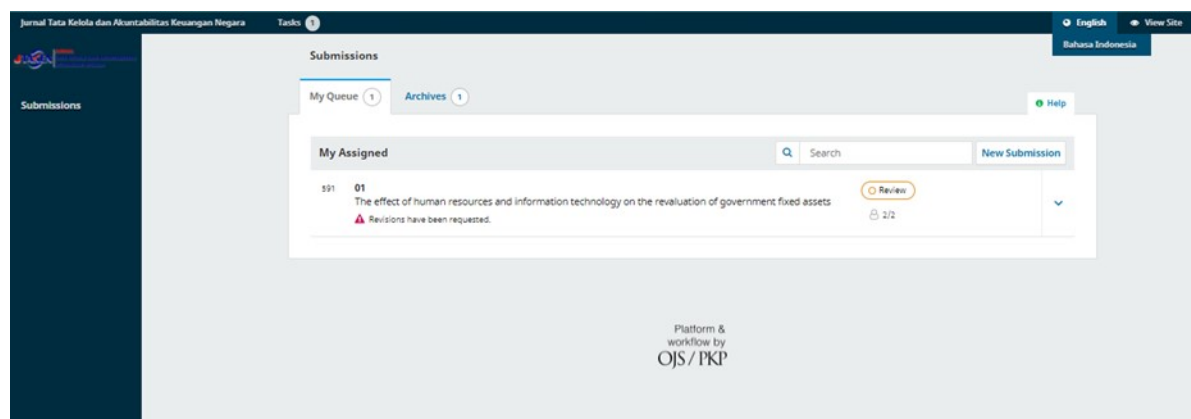
Figure 12. Responding to a Review

b. Click on the "Editor Decision". The review results will be displayed at the bottom of the editor's notification, whether in the form of notes or attached files. Based on the information in the editor's message, you must now prepare your revisions.
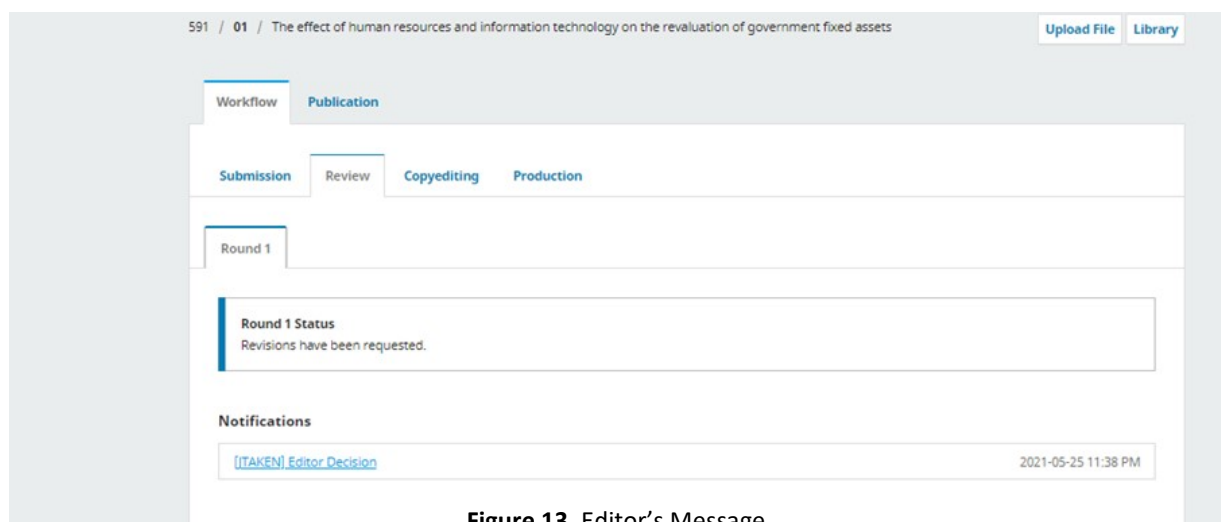
Figure 13. Editor's Message

c. By scrolling down the page, you will find a panel for **Revisions**. Use the "Upload a File" link to upload your revised article. Use the dropdown menu to choose that you are uploading a revision of an existing file. Then upload the revised file and hit Continue. Check the file details and hit Continue again. If you have any additional files to upload, do so now. Otherwise, hit Complete. Your revised file is now visible in the Revisions panel.
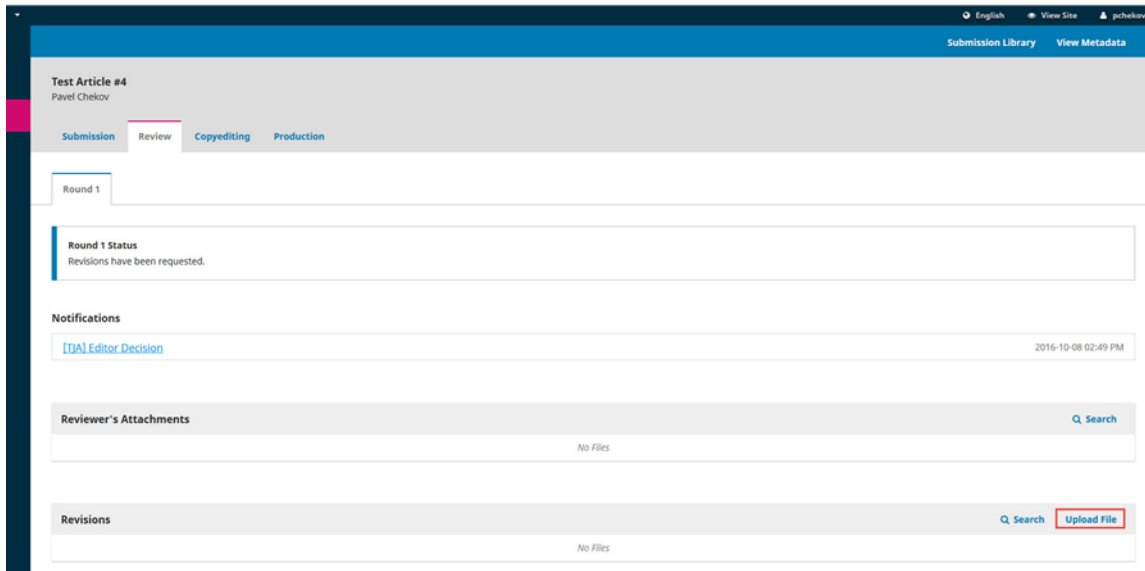
Figure 14. Upload Revision

d. To inform the editor that the revised file go to the Review Discussion panel, select the Add Discussion link. Use the Add User link to add the editor. Add a subject line and a message. Hit OK to send the message. An email has now been sent to the editor. The author and the editor can see the message in the Review Discussions panel. At this point, the author needs to wait to hear back from the editor as to whether the revisions are acceptable.
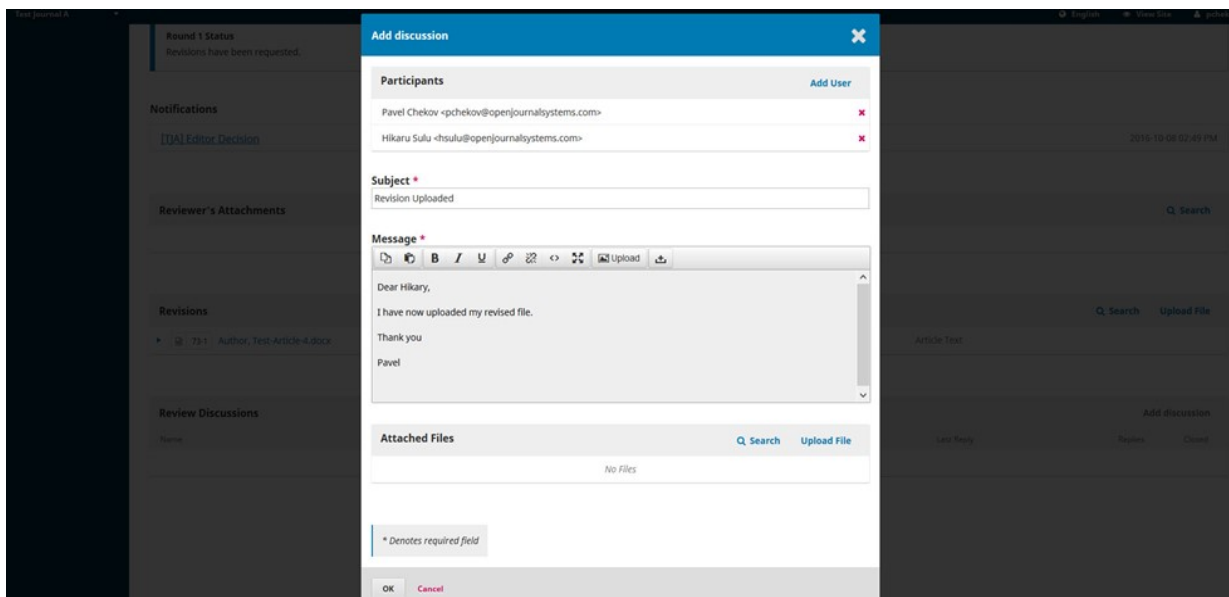
Figure 15. Add Discussion

Copyediting Stage

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

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

If needed, the author could attach a revision, but we will simply approve the changes and hit OK for this example. On the dashboard, the last person to reply to the message was the author. The author's role in the copyediting process is now complete, and can wait for the request to proofread the final galleys (e.g., PDFs, HTML, etc.) before publication.
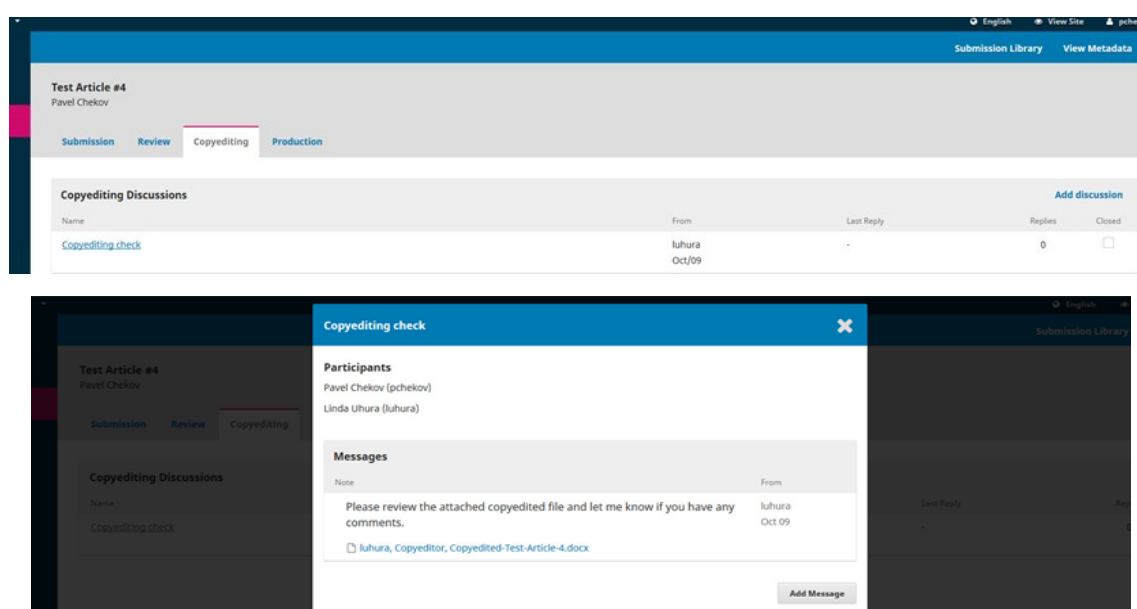
Figure 16. Copyediting stage

Proofreading Stage

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