

## Development of Risk-Based State-Owned Enterprises Performance Audit Framework to Enhance Company Value

Rudi Irwanto Hamonangan Sinaga<sup>1</sup>, Noer Azam Achsani<sup>2</sup>, Idqan Fahmi<sup>3</sup>, Chandra Wijaya<sup>4</sup>

### Abstract

*In the face of fierce economic competition among State Owned Enterprises (SOE), encouraging each company to grow its corporate value through the development of a risk-based performance audit framework may be the best option for SOEs in Indonesia. SOE management can make ongoing improvements and respond rapidly to market changes by detecting company performance risks. The purpose of this research is to develop an SOE risk-based performance audit framework in order to increase company value. The Analytical Hierarchy Process (AHP) method was utilized to create an effective and efficient performance audit framework based on expert justification. The study's findings indicate that the Supreme Audit Institution (BPK) strategy's main priorities for the construction of the SOE risk-based performance audit framework include three important aspects: 1) synergy between BPK audits and SOE risk management and risk assessment by SOE internal auditors; 2) development and improvement of SOE risk management quality, and 3) effective risk assessment by SOE internal auditors. This strategy is supported by various major variables, including SOE risk management, risk assessment by SOE internal auditors, BPK audit scope, BPK audit standards, BPK audit guidelines, and BPK auditor competencies.*

**Keywords:** *performance audit, risk-based audit, BPK, SOE performance, corporate value.*

### INTRODUCTION

The 1945 Constitution of the Republic of Indonesia (UUD 1945) Articles 23 E, 23 F, and 23 G specifically regulate the existence of the Supreme Audit Agency (BPK) as an independent and autonomous state financial management and accountability audit institution. The duties and authority of the BPK are further regulated in Law Number 15 of 2006 concerning the Supreme Audit Agency, and the examination of state financial management and accountability is further regulated in Law Number 15 of 2004. The BPK is tasked with examining state financial management and accountability carried out by the Central Government, Regional Governments, other State Institutions, Bank Indonesia, State-Owned Enterprises (SOE), Public Service Agencies (BLU), Regional-Owned

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<sup>1</sup> School of Business, IPB University, Bogor, Indonesia, rudi@apps.ipb.ac.id

<sup>2</sup> Lecturer, School of Business IPB University, Bogor, Indonesia

<sup>3</sup> Lecturer, School of Business IPB University, Bogor, Indonesia

<sup>4</sup> Lecturer, Faculty of Administrative Science Universitas Indonesia, Depok, Indonesia

Enterprises (BUMD), and other institutions or agencies that manage state finances.

Based on Law Number 15 of 2004, BPK audits are divided into three types: financial audits, performance audits, and audits with specific objectives. Financial audits produce opinions on financial statements. An Unqualified Opinion (WTP) is the highest opinion (Amyulianty, 2020), including for SOE financial statements. Law Number 19 of 2003 concerning SOE, Article 71 paragraph (1) states that the examination of the company's financial statements is carried out by an external auditor. Although paragraph (2) states that the BPK has the authority to audit SOE in accordance with the provisions of the legislation, SOE's financial statements are currently audited by a Public Accounting Firm (KAP) as an external auditor. The BPK conducts performance audits and audits with specific objectives for SOE.

The increasingly fierce business competition requires State-Owned Enterprises in Indonesia to be able to maintain their superiority in a dynamic market. To achieve this goal, a proper strategy is needed in managing and optimizing company performance, one of which is through performance audits. The International Organisation of Supreme Audit Institutions (INTOSAI) in the International Standards of Supreme Audit Institutions (ISSAI) 300 (INTOSAI 2019) defines performance audits as independent, objective, and reliable audits of whether undertakings, systems, operations, programs, activities or organizations operate in accordance with the principles of economy, efficiency, and effectiveness and whether there is room for improvement.

Although performance audits can provide a more in-depth assessment of financial management in SOE, financial transparency remains a fundamental need to avoid bias in performance assessments that use financial data. Disclosure of audit reports focuses on improving governance transparency and reducing information asymmetry. Governance transparency aims to increase confidence and decision-making for internal stakeholders (Stefanescu, 2011). Performance audit reports, like financial audits, also require quality assurance so decision-makers can use them properly. Quality audit results are needed to mitigate agency problems, as in agency theory, where the company owner (principal) has difficulty ensuring that the agent or company management has acted to maximize the welfare of the owner.

Realizing the problem in agency theory, the BPK sees the need to understand risks in auditing. The BPK, in BPK Regulation Number 1 of 2017 concerning State Financial Audit Standards in the Conceptual Framework section, stipulates that auditors must be vigilant, aware, and consider and manage audit risks. The auditor's assessment of audit risk affects the adequacy of audit evidence, both in terms of the quantity and quality of audit evidence. A risk-based performance audit framework is an approach that identifies risks that can affect company performance, both positively and negatively, and ultimately determine the value of the company.

The value of a company is a condition that has been achieved by a company as a reflection of public trust through a process of activities over several years. Reporting by companies aims to maintain the trust given by the public. Companies need to mitigate risks that can disrupt company performance and ultimately reduce public trust. A risk-based performance audit framework can facilitate SOE management in identifying problems and opportunities in the business environment so that they can respond appropriately to each risk and improve company performance. In the context of Indonesia, the importance of

formulating a risk-based SOE performance audit framework strategy is increasing, given the large contribution of SOE to the Indonesian economy.

In line with this, the BPK in the 2020-2024 Strategic Plan formulated one of the BPK's foresight roles to assist the public and decision-makers by highlighting the long-term implications of current Government decisions or policies. Foresight is very important for an audit institution like the BPK to analyze the risks that will arise from every decision or policy taken by the Government. Risk-based performance audits will support the BPK in carrying out this foresight role. The BPK needs to implement an effective and efficient risk-based performance audit strategy, especially for SOE to increase the value of the company. For this reason, this research needs to be carried out with the aim of formulating an efficient and effective SOE risk-based performance audit framework by the BPK to increase the value of the company.

## **METHODS**

This research uses a quantitative approach with the Analytical Hierarchy Process (AHP) method based on the justification of experts/key persons through in-depth interviews and Forum Group Discussions (FGD). The opinions of experts as primary data are collected using AHP questionnaires through interviews or discussions. AHP data is processed and analyzed using the Expert Choice application program. The hierarchy in the AHP method is based on experts' opinions through experience and literature, as well as confirmation results with expert respondents in their field using the interview (depth interview) and discussion methods. Data processing and revision are carried out after the questionnaire is collected. The process of creating and processing AHP data in research can be schematically illustrated in the form of a process flow as seen in Figure 1.

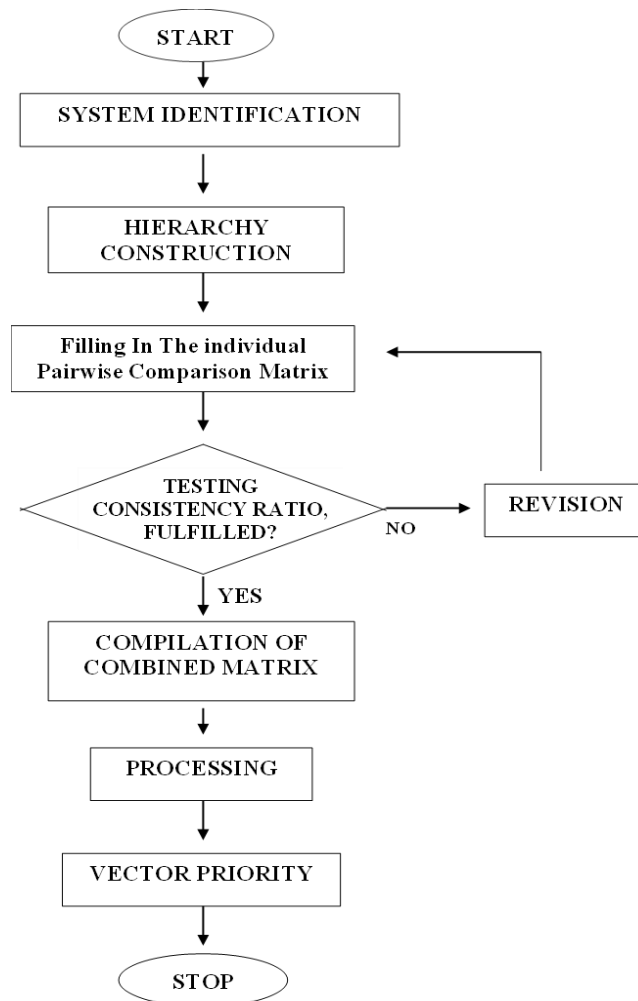


Figure 1 Schematic of data processing Process Hierarchy Analysis (Saaty (1993))

Based on Sargent's opinion (1998), model validation is defined substantively as an analysis model in a domain with application capabilities at an adequate level of accuracy and is consistent with the intended model or system application. Model verification is often interpreted to ensure that the computational program of the analysis model and its implementation are correct. Validation and verification of models relate to the model development process for a specific purpose or application purpose, a model is considered to apply to certain conditions of a study, and a certain level of accuracy is required that can be accepted. Validation and verification of models sometimes require quite expensive costs and a long time just to determine that a model is valid for a domain with the intended application capability.

In this study, verification and validation use face validity as proposed by Sargent (1999) that validation can be done by using or asking for opinions from experts who really master the problem, especially in an effective audit system model developed in the pandemic era based on research results validation and verification of models in a simple modelling process can be seen in Figure 2.

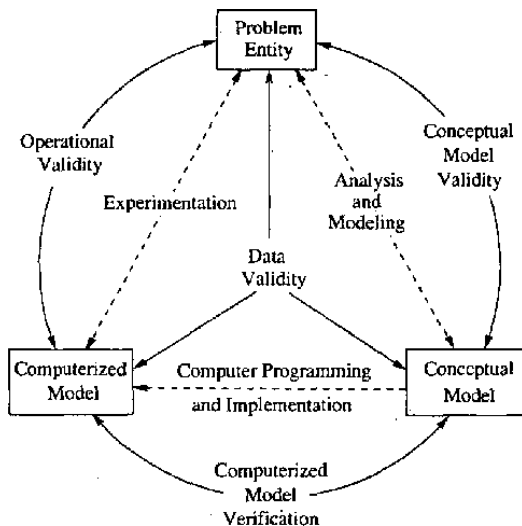


Figure 2 Model validation and verification in a simple modelling process (Sargent, 1998)

The results of the analysis are the results of qualitative and quantitative descriptive analysis, institutional analysis, and model design validated and verified through Individual Depth Interviews (IDI) involving competent stakeholders and discussed in Focus Group Discussions (FGD).

## RESULTS AND DISCUSSIONS

Construction of SOE Risk-Based Performance Audit Framework by BPK with Analytical Hierarchy Process

Taking into account the data and facts on the ground, the results of the study and depth interviews, matrix weighting can be carried out, which is used in the Construction of SOE Risk-Based Performance Audit Framework by BPK. The determination of factors is carried out comprehensively and in-depth so that there are no errors in determining factors that can result in errors in solving problems in compiling the Construction of SOE Risk-Based Performance Audit Framework by BPK. The weighting factor for developing the Construction of SOE Risk-Based Performance Audit Framework by BPK can be grouped into five clusters, each consisting of several nodes or variables. Grouping in the type of cluster is carried out by considering the classification of systems in input-output (Marimin, 2007). In this study, a hierarchy was formed that has a structure with various strata that are interrelated, as seen in Figure 3.

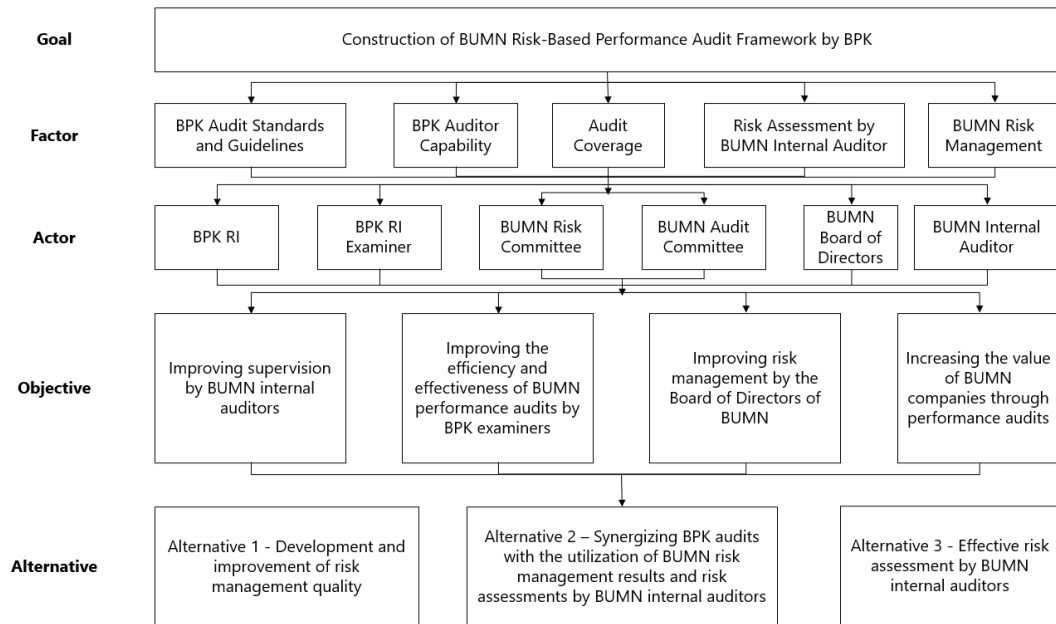


Figure 3 The hierarchy of the Construction of SOE Risk-Based Performance Audit Framework by BPK.

Level 1: The goal or objective to be achieved, Construction of SOE Risk-Based Performance Audit Framework by BPK

Level 2: Factors in the Construction of SOE Risk-Based Performance Audit Framework by BPK, namely:

1. BPK Audit Standards and Guidelines
2. BPK Auditor Capability
3. Audit Coverage
4. Risk Assessment by SOE Internal Auditor
5. SOE Risk Management

Level 3: Actors involved in the Construction of SOE Risk-Based Performance Audit Framework by BPK, namely:

1. BPK RI
2. BPK RI Examiner
3. SOE Risk Committee
4. SOE Audit Committee
5. SOE Board of Directors
6. SOE Internal Auditor

Level 4: Objectives to be achieved in the Construction of SOE Risk-Based Performance Audit Framework by BPK, namely:

1. Improving supervision by SOE internal auditors
2. Improving the efficiency and effectiveness of SOE performance audits by BPK examiners
3. Improving risk management by the Board of Directors of SOE
4. Increasing the value of SOE companies through performance audits

Level 5: The priority strategy for the Construction of SOE Risk-Based Performance Audit Framework by BPK, namely:

1. Development and improvement of risk management quality
2. Synergizing BPK audits with the utilization of SOE risk management results and risk assessments by SOE internal auditors
3. Effective risk assessment by SOE internal auditors.

The determination of priority strategies using the AHP method is carried out to determine the best alternative strategy based on an analysis of influential factors or objectives according to the perspective of interest. In this AHP analysis, the results of the most influential priority factors, actors who play a role, the objectives of the priority strategy to be applied, and the most appropriate strategy to be applied in the development of the Construction of SOE Risk-Based Performance Audit Framework by BPK are also obtained. Based on the AHP framework, an AHP questionnaire was prepared and distributed to seven experts who interacted directly with the Construction of SOE Risk-Based Performance Audit Framework by BPK. The questionnaire results from each expert's justification were input and processed using Expert Choice 11.

The strategy considered most appropriate and a top priority in developing the Construction of SOE Risk-Based Performance Audit Framework by BPK is to synergize BPK audits with the utilization of SOE risk management results and risk assessments by SOE internal auditors. Through this synergy, SOE risk management and risk assessments by SOE internal auditors can provide valuable input for the BPK in designing a more effective and efficient performance audit framework. This input can help the BPK in determining objectives, scope, criteria, methodology, and audit procedures that are appropriate to the conditions and characteristics of the audited SOE. The results of the BPK audit are expected to be more accurate and reliable because they are based on valid and relevant data and evidence. Overall, the use of this strategy will improve the quality of BPK audits and provide greater benefits for SOE and society as a whole (Putra et al. 2022). This synergy is important because it can improve the effectiveness and efficiency of supervision as well as realize good governance and clean government. This synergy institutionally can provide benefits such as avoiding duplication, utilizing information, improving quality, accountability, transparency, efficiency, effectiveness, and added value from audited or supervised institutions.

The second alternative strategy proposed in this study is the development and improvement of risk management quality. According to Ispas (2023), risk management is a systematic and integrated process for identifying, measuring, and controlling risks faced by an organization. Good implementation of risk management at SOE can help manage risks more effectively and reduce potential losses for SOE and society. In addition, the development and improvement of risk management quality can increase transparency and accountability for SOE in managing risks. This strategy is expected to reduce the possibility of errors or fraud in SOE operations. This will facilitate audits by the BPK, which can focus more on remaining risks, especially those related to company performance.

The third alternative strategy proposed in this study is effective risk assessment by SOE internal auditors. Risk assessment is the process of determining the level of risk faced by an organization and the priority actions needed to manage that risk (ISO 31000:2018). Effective risk assessment can provide a clear picture of SOE's risks, allowing internal auditors to develop an appropriate audit plan.

Effective risk assessment can also help internal auditors determine audit policies and procedures that are appropriate for the level of risk faced by SOE. Thus, effective risk assessment by internal auditors can improve the effectiveness and efficiency of SOE performance audits and provide greater benefits in mitigating risks and maximizing opportunities (Rinaldi et al., 2021; Nawari & Wardhani, 2022).

SOE internal auditors can take a more strategic role in connecting the company internally with BPK examiners as external parties to the company in developing the construction of an SOE risk-based performance audit framework by BPK. SOE internal auditors, as fellow auditors, certainly have the same sensitivity and perspective on risk as BPK examiners. This sensitivity and perspective will allow internal auditors to provide input to management to improve and/or improve their risk management, including improving internal controls to prevent things that harm the company. Thus, residual risks that escape from risk management capture can be captured by internal auditors so that residual risks will be fewer and BPK examiners will be more focused on significant remaining risks. BPK examiners will be more specific or focused in determining the scope of performance audits in terms of audit topics and key areas examined. SOE performance audits by BPK will become more effective and efficient. The BPK can allocate its limited audit resources to areas that really have significant residual risks.

In general, these three alternative strategies have similarities in terms of improving the quality of SOE risk management so that BPK examiners can design their audits more effectively and efficiently and provide appropriate performance improvement recommendations to SOE Directors. The difference between them is that improving the quality of risk management will be more dominantly carried out by risk management actors (first layer), internal auditors (third layer), or giving equal roles between internal and external SOE through synergy between risk management, internal auditors, with BPK examiners. Below is a complete table of alternative strategies that have been processed using AHP analysis tools.

Table 1 Alternative Development Strategy Construction of SOE Risk-Based Performance Audit Framework by BPK

No.	Alternative Policy	Priority Vector	Priority
1.	Development and improvement of risk management quality	0,250	2
2.	Synergizing BPK audits with the utilization of SOE risk management results and risk assessments by SOE internal auditors	<b>0,587</b>	1
3.	Effective risk assessment by SOE internal auditors.	0,163	3

SOE risk management is the factor with the highest weight of 0.472. This is because SOE risk management is an important consideration for examiners in determining the scope of performance audits as the first layer in company risk management. The second factor with a weight of 0.193 is the risk assessment by internal auditors responsible for evaluating the risks within SOE, including operational, financial, and reputational risks. A risk assessment by internal auditors will provide valuable insights to management and external examiners in identifying potentially problematic or weak areas in SOE risk management. The third factor is followed by audit coverage with a weight of 0.177, which includes the scope of performance audits carried out by external or independent auditors. In managing SOE risks, it is important for auditors to ensure that performance audits cover relevant and high-risk areas. Comprehensive audit coverage will



help identify weaknesses in internal control systems, violations of policies or regulations, and other issues that may affect SOE’s performance and sustainability. The fourth factor is BPK audit standards and guidelines, with a weight of 0.084. BPK audit standards and guidelines provide guidance and a framework that auditors must follow in carrying out their duties. Relevant standards and guidelines will ensure that audits are conducted consistently, professionally, and effectively. The fifth factor is the capability of BPK auditors, with a weight of 0.074; this capability includes the quality, expertise, and experience of BPK auditors in conducting audits on SOE. High BPK auditor capability will increase their ability to identify and evaluate risks that exist within SOE.

Based on the results of AHP processing, the actor with the highest weight is the SOE Board of Directors, with the highest average weight of 0.383. Furthermore, the SOE Audit Committee has a weight of 0.205, followed by the SOE Internal Auditor with a weight of 0.177, the BPK RI Examiner with a weight of 0.165, BPK RI with a weight of 0.096, and the SOE Risk Committee as the sixth actor with a weight of 0.077. The weights at the goal level are, respectively: increasing the value of SOE companies through performance audits (0.489), improving risk management by the Board of Directors of SOE (0.205), improving supervision by SOE internal auditors (0.158), and improving efficiency and effectiveness performance audits by BPK examiners (0.149).

The final weighting analysis result is the average relationship between objectives and three alternative strategies. Based on the analysis results, it was found that the strategies in order from highest to lowest weight were synergizing BPK audits with utilization of SOE risk management results and risk assessments by SOE internal auditors (0.587), development and improvement of risk management quality (0.250), and effective risk assessment by SOE internal auditors (0.163). The average weights of relationships between strata/levels in AHP are presented in detail in Figure 4.

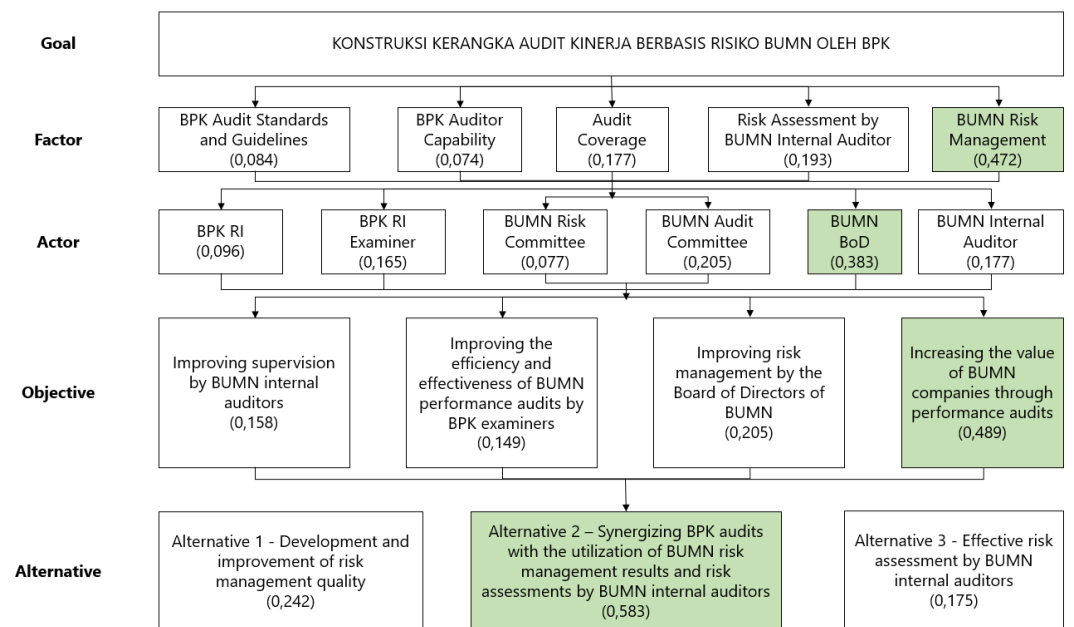


Figure 4 The overall importance of the AHP Results Development Strategy BPK created the SOE Risk-Based Performance Audit Framework.

## **MANAGERIAL IMPLICATIONS**

At least three managerial implications can be applied from the top priority strategy set by BPK in the Construction of the SOE Risk-Based Performance Audit Framework. The first managerial implication is that the SOE Board of Directors needs to optimize SOE risk management through strategic policies followed by systematic tiered policies starting from the coordinative policies of the SOE Risk Committee to the operational policies of the Head of the Internal Supervisory Unit or Head of the SOE Internal Auditor Division. This optimization is mainly by ensuring that increasing the value of the company through performance audits becomes one of the prioritized goals in risk assessment and formulating responses to company risks.

The second implication is that BPK needs to develop its Audit Standards and Guidelines in order to optimize the existence of the Head of the SOE Internal Auditor Work Unit and the SOE Audit Committee to become effective partners for BPK, both for BPK as an institution and for BPK examiners. These Audit Standards and Guidelines should allow BPK examiners to optimally utilize risk management results and risk assessments by internal auditors as a primary consideration for BPK examiners in determining performance audit coverage.

The third implication is that BPK can develop a policy for monitoring follow-up on its audit results, not only oriented towards short-term follow-up on recommendations but more towards the long-term impact of implementing recommendations on company value. This BPK policy will ensure that SOE carries out sustainable development of SOE risk management to increase company value by optimally utilizing recommendations from BPK performance audit results, especially those related to improving internal auditor risk assessments and overall SOE risk management.

## **CONCLUSION AND RECOMMENDATIONS**

### **CONCLUSION**

In conclusion, to increase the value of the company, SOE in Indonesia needs to implement a strategy for formulating a risk-based performance audit framework. Implementation through risk identification that affects company performance, SOE management can make continuous improvements and respond quickly to market changes. However, in conducting performance audits, financial transparency also needs to be considered as a fundamental need to avoid bias in performance assessments that use financial data.

Disclosure of audit reports focuses on improving governance transparency and reducing information asymmetry, whereas governance transparency aims to increase confidence and decision-making for internal stakeholders. Financial transparency itself is part of corporate transparency and as specific corporate information to external stakeholders, where disclosure of audit reports shows the accountability of an organization.

The research results show that synergizing the BPK audit with the utilization of SOE risk management results and risk assessment by SOE internal auditors is a priority strategy agreed upon by experts in the development of the SOE Risk-Based Performance Audit Framework Construction by BPK. Through this synergy, SOE risk management and risk assessment by SOE internal auditors can provide valuable input for BPK in designing a more effective and efficient performance audit framework. The main factor determining the strategy is SOE Risk Management itself, while the main actor who plays the most role is the

SOE Board of Directors. This means that the success of this strategy is highly dependent on the SOE Board of Directors. The main goal is to increase the value of SOEs through performance audits. The results of the BPK audit are expected to be more accurate and reliable. Thus, the use of this strategy will improve the quality of BPK audits and provide greater benefits for SOEs and society as a whole.

## RECOMMENDATIONS

Recommendations that can be conveyed for BPK as an institution responsible for conducting performance audits of SOE in Indonesia, BPK needs to pay serious attention to the strategy of synergizing BPK audits with the utilization of SOE risk management results and risk assessments by SOE internal auditors. Therefore, BPK needs to improve coordination and communication with related SOE to ensure that risk management results and risk assessments by SOE internal auditors can be well integrated into performance audits by BPK. The BPK also needs to ensure that SOE internal auditors have adequate ability and competence in conducting effective risk assessments. This can be done by providing appropriate training and education to SOE internal auditors, as well as ensuring that they have access to the information needed to conduct accurate risk assessments.

For State-Owned Enterprises, it is expected to pay attention to cooperation and coordination between risk management, internal auditors, and BPK in constructing a risk-based performance audit framework. State-Owned Enterprises can strengthen their risk management by developing and improving the quality of risk management and risk assessment by internal auditors. In addition, State-Owned Enterprises need to improve the quality of financial information disclosure and governance to increase transparency and accountability for companies. The Board of Directors of State-Owned Enterprises is expected to always carry out follow-up on recommendations from the Supreme Audit Agency (BPK) that have been designed SMART (Specific, Measurable, Achievable, Relevant, and Time Bond), especially in formulating strategic and operational policies. This will improve the effectiveness of State-Owned Enterprises' performance audits by the Supreme Audit Agency (BPK) and supervision by internal auditors.

For further research, it is expected to deepen understanding of aspects of risk management and best practices in integrating risk management with performance audits. It is also necessary to conduct field research to collect more comprehensive data and information about how this strategy is implemented in different State-Owned Enterprises. It is also recommended to consider factors that influence the success or failure of implementing this strategy, such as management support, involvement of internal and external auditors, and cooperation between various parties involved. Thus, research can provide more detailed insights and recommendations on how State-Owned Enterprises can optimize this strategy to improve company performance and risk management.

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