Corporate Governance, Audit Recommendations, and Financial Resilience: The Case of State-owned Indonesian Mining and Energy Enterprises

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ABSTRACT

This study examined how corporate governance and audit recommendations affected the financial resilience of Indonesian state-owned enterprises'. For five years, 2018-2022, 20 SOEs were studied. The period was chosen to reflect before, during, and after the pandemic. SPSS processed data using OLS. The results showed that board effectiveness and audit recommendations positively and significantly influenced financial resilience. Board effectiveness, in this study, measured by board number, affected an organization's decision-making and strategic outcomes. The auditor's recommendations assisted decision-makers in uncovering and preventing errors, irregularities, fraud, and inefficient practices, fixing deficiencies, and monitoring improvement. However, the hypothesis that government ownership influenced financial resilience was not supported. The findings have extended the growing literature on monitoring mechanisms in the Agency Theory to improve financial resilience and the SAIs activities in SOEs in emerging countries. This study contributes to practical implications such as understanding performance audits and audit recommendations done by the Indonesia Supreme Audit Institution and giving the recommendations to regulators to develop world-class and effective SOEs.

Keywords: board effectiveness, audit recommendations, financial resilience, State-owned enterprises, Badan Pemeriksa Keuangan

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INTRODUCTION

State-owned enterprises (SOEs) have a substantial impact on today's economies. They can be regarded as a means to expedite economic growth while delivering public services and promoting societal values (Keulen, 2020). SOEs are officially recognized business entities in which the government has ownership and exerts control (OECD, 2015b). The State exercises the ownership of SOEs in the general public's interest (OECD, 2015a). When SOEs operate inefficiently and are subject to weak governance arrangements, they can strain public resources.

Underperforming SOEs pose a significant challenge in Indonesia, with a notable number experiencing financial losses over the years (Hafiyyan & Damara, 2023). This persistent trend of losses burdens the state considerably (Nugroho, 2020). For SOEs to prosper amidst difficult circumstances, they must strengthen their resilience (Baharin et al., 2021; Huang & Farboudi Jahromi, 2021). Resilience refers to the capacity to predict and withstand significant negative occurrences, such as threats or shocks, and subsequently bounce back. Financial resilience refers to the ability of a system to adapt and preserve its functionality throughout periods of financial instability (Salignac et al., 2019; Salignac et al., 2022)

Due to the critical nature of SOEs, the auditing of SOEs is a mandated responsibility of the Supreme Audit Institutions (SAIs). SAIs aid in determining whether SOEs are acting in the public interest, guarantee the efficiency and effectiveness of the products and services offered by SOEs and assure their operations are conducted in a transparent, accountable, and regulatory-compliant manner (Keulen, 2020). In addition, the role is to minimize waste, fraud, and abuse in the provision of products and services to citizens. Thus, follow-up audit recommendations are crucial to complete this stage to ensure the effective implementation of the auditor's recommendations (Din et al., 2017; Umor et al., 2016). Public Sector officials are accountable for implementing audit recommendations (Furqan et al., 2020).

Good governance, which is defined as a mechanism of decision-making that is accountable, transparent, fair, proactive, and participative, is a crucial component of resilience (Bedi et al., 2014; Linkov & Trump,

2019). Boards of directors are responsible for the oversight of managerial information. They can potentially improve financial reporting and performance, that can lead to resilience (Oruke et al., 2020; Cordery & Hay, 2021; Vagliasindi et al., 2023). Cordery and Hay (2019, 2021) noted that the agency problem in the public sector is more complex than in the private sector due to various ties.

There is a scarcity of research on resilience in specific of Indonesian SOEs (Lisdiono et al., 2022). Literature on SAI outcome and their influence on the performance and improvement of their auditees is limited and primarily qualitative (Bonollo, 2019; Bostan et al., 2021). Lin et al. (2020) suggested that future studies examining the roles of board members of SOEs in the labour market would contribute valuable insights to the current body of literature. Hence this study aimed to examine whether board effectiveness, government ownership and audit recommendations by the Indonesian SAI improve the financial resilience of Indonesian state-owned enterprises.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The Agency Theory

The Agency Theory proposes that contracts are established between the owners of economic resources (principals) and agents responsible for utilizing and managing those resources. This theory identifies the existence of agency problems, caused by information asymmetry, which in turn lead to agency costs (Jensen & Meckling, 1976). This problem gives rise to moral hazards and hampers the principals' capacity to monitor whether agents adequately serve their interests effectively. The agency problem in SOEs is complex in nature because government as owner has the broader goals to achieve. These goals go beyond maximizing profit and include social, economic, and strategic aims. The government's dual role as regulator and owner presents distinct challenges in aligning the goals of SOE management with national and public interests, often resulting in inefficiencies and agency costs (Shleifer & Vishny, 1994; Vining & Boardman, 1992). Siregar and Utama (2008) proposed that auditors, acting as impartial entities, can help alleviate agency relationships by evaluating the equity of financial accounts.

The relationship is fundamentally complex since it involves multiple stakeholders, such as the government, the public, and private investors (Freeman, 2004).

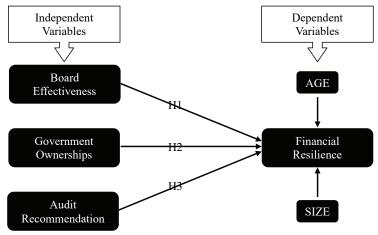


Figure 1: Theoretical Framework

Hypotheses Development

Board Effectiveness and Financial Resilience

Corporate governance relies on boards (Sidki et al., 2023). Various theories exist about the best board structure for success. These viewpoints include board diligence, size, independence, and competence. The empirical evidence on board arrangements' usefulness and size is inconclusive (Zhang et al., 2022). Board effectiveness in this study referred to board size. Zhang et al. (2022) found that a diverse board helps companies recover from adverse event. Buyl et al. (2019) found that board monitoring mitigates the impact of CEO narcissism on riskiness and risk-taking behavior throughout the firm, which can contribute to resilience. Abang'a et al. (2022) concluded that board size and independent non-executive directors positively but insignificantly affected financial performance. Shawtari et al. (2017) observed that board size affected Malaysian SOE performance.

Kiel. and Nicholson (2003) discovered that board size boosted Australian public company value. Ebaid (2022) found that larger boards were more effective. Because more observers bring a larger range of talents and expertise, the board of directors performs better. Fodi et al. (2013) discovered a negative association between earnings and board and audit committee sizes. Hence (De Andres et al., 2005) recommended limiting board size. Smaller boards are more cohesive and encourage participation, thus increase performance. Thus, smaller boards work better. The appropriate board size ensures smooth, efficient, and effective board operations (OECD, 2021). The OECD recommends 5-8 board members for most state-owned firms (OECD, 2013). Croci et al. (2023) revealed that board-related features affect short-term market reactions to disruptive events. There are inconclusive results regarding the impact of board effectiveness seen from the number of boards to company's performance. We proposed the first hypothesis:

H1: There is a positive impact of Board Effectiveness to Enterprise Financial Resilience

Government Ownership and Financial Resilience

Aguilera et al. (2021) found that state ownership was inefficient and hinders company performance. The Agency Theory says state ownership undermines business because state owners have various goals that conflicts with stakeholders (Lazzarini & Musacchio, 2018). State owners often promote other interests that benefit special interests (such as politicians). State owners also have poor oversight (Dharwadkar et al., 2000) and conservative policies that disadvantaged corporations (Tihanyi et al., 2019) our understanding of how state ownership and political connections affect firm performance remains limited and marked by conflicting findings. Using meta-analytical techniques on a sample of 210 studies spanning 139 countries, we examine two key research questions: (a. State ownership negatively affected company performance in most research (Abramov et al., 2017; Cuervo-Cazurra & Li, 2021; Kalasin et al., 2020; Musacchio et al., 2015; Okhmatovskiy et al., 2021). The Agency Theory is used to argue that state owners' inability and unwillingness to enhance the enterprise's financial performance adversely affected the results (Lazzarini & Musacchio, 2018). State ownership can cause agency conflicts that prevent SOEs from achieving their goals and improving performance (Musacchio & Lazzarini, 2014)illiteracy, unemployment and disease. It faced the challenge of growth and change to catch up with the developed countries. It had to decide on

vital issues such as its development strategy for the future, the industrial policy it had to adopt to achieve the goals of the development strategy, the corporate action that had to follow as a consequence of such industrial policy, the need for setting up the State Owned Enterprises (SOEs. Cardinale (2022) found that less government ownership boosts financial performance.

Chen et al. (2017) discovered a U-shaped link between state ownership and airline firm performance in a regression test of publicly traded Chinese airlines. Thus, government ownership could improve performance to certain level. Cheng and Ng (2018) showed that state ownership affected financial performance using Tobin's Q and stock returns. Garel and Petit-Romec (2020) discovered that companies with more short-term or active investors had worse stock returns. These findings suggest that long-term investors such as the government help enterprises weather market shocks. Government as owners with long term interests will guide SOEs to also emphasize on long-term, sustainability purposes. Kubo and Phan (2019) showed that the impact of state ownership depends on its type of source of fund. Companies operate best under governmental ownership, such as a sovereign wealth fund. They also noted that state ownership and firm success were non-linear. The previous studies showed the positive and negative impacts of government ownership. Nevertheless, in this study we proposed the second hypothesis:

H2: There is a positive impact of Government ownership to Enterprise Financial Resilience

Audit Recommendation and Enterprise Financial Resilience

The presence of an audit in the public sector serves as an impartial and unbiased entity, enhancing the efficiency of public administration. The implementation of performance audit recommendations and corrective actions has a direct influence on the effectiveness of a performance auditing system (Almashhadani, 2023). Developing appropriate audit recommendations is an effort that requires intensive human and financial resources, and such an effort is wasted if these recommendations are not implemented (Al-Mohaimeed, 2000). Daujotaitė and Adomavičiūtė (2017) found that the adoption of mutually agreed-upon recommendations resulted in improved performance. Brown and Solomon (1991) stated that the nature of the audit findings and recommendations were the key factors influencing implementation that could lead to improvement of performance.

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The local government typically adopts audit recommendations to enhance financial transparency (Setyaningrum, 2017). Audit recommendations could increase transparency in fiscal matters (Asare, 2009). Gabrini (2013) and Liu and Lin (2012) stated that adherence to audit recommendations enhance the transparency and accountability of financial management of local government's. Setyaningrum et al. (2017) suggested that enhancing audit opinion can be achieved by actively pursuing audit recommendations. Audit recommendations follow up increase public services (Mukhamediyeva, 2020). Rajagukguk et al. (2017) stated that certain type of audit influence sustainability, especially the achievement of Sustainable development goals (SDGs). Follow up of audit recommendations are best in situations where SDGs are either partially embedded in a program or not embedded at all.

Dwiputrianti (2011) discovered that the effectiveness of an audit report is enhanced when the organization being reviewed implements the recommendations provided in the report. This demonstrates the quality of the audit report and its potential for improvement. Liu and Lin (2012) contended that audit institutions have a role in the subsequent stages of financial investigations. This included imposing direct sanctions, assigning cases to other responsible parties, offering suggestions to rectify identified weaknesses, and monitoring the implementation of recommendations stemming from financial investigation outcomes. This implementation of audit recommendations could lead to improvements. According to Sari et al. (2013), implementing more recommendations leads to improved performance. In their study, Din et al. (2017) found that conducting a follow-up of financial investigations led to a decrease in the magnitude of financial losses. Thus, we proposed the third hypothesis as:

H3: There is a positive relationship between audit recommendation and Enterprise Financial Resilience.

METHODOLOGY

This research adopted a quantitative approach using secondary data from Indonesia's SOEs mining and energy sector. The annual reports of these companies were collected from the period of 2018-2022 (5 years) and some data were collected from the Indonesia Supreme Audit Institution (BPK-RI). The periods were chosen to reflect the financial resilience of those SOEs before, during, and after COVID-19 pandemic. The mining and energy sectors were chosen since this sector had the most significant assets among all SOEs. The detail of purposive sampling and operationalization of variables are shown in Tables 1 and 2. The collected data were analysed with the SPSS software.

Table 1: Purposive Sampling

Criteria	2018	2019	2020	2021	2022	Total
Listing companies in energy sector	2	2	2	2	2	10
Listing companies in mining sector	3	3	3	3	3	15
Non-listing companies in energy sector	14	14	14	14	14	70
Non-listing companies in mining sector	1	1	1	1	1	5
Total	20	20	20	20	20	100

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Table 2: Operationalization of Variables

Variable	Measurement	Source
Financial resilence:	$X_{(1,2,\dots,\text{etc})} = \mu + LF + \varepsilon$	Cheema-Fox et al. (2021)
Growth in revenue	$= \frac{Revenue_{(t)} - Revenue_{(t-1)}}{Revenue_{(t-1)}}$	
Growth in profit	$= \frac{Profit_{(t)} - Profit_{(t-1)}}{Profit_{(t-1)}}$	
Growth in assets	$= \frac{Total \ assets_{(t)} - Total \ assets_{(t-1)}}{Total \ assets_{(t-1)}}$	
Debt to equity	$= \frac{Total \; debt_{(t)}}{Total \; shareholders \; equity_{(t)}}$	
Growth in return on investment (ROI)	$= \frac{ROI_{(t)} - ROI_{(t-1)}}{ROI_{(t-1)}}$	
Board effectiveness	\sum Board members	Ahrens and Ferry (2020)

Government ownership	\sum Government shares	Kalasin et al. (2020)
Audit recommendations	$= \frac{Total\ follow - up_{(t)}}{Total\ recommendations_{(t)}}$	Furqan et al. (2020)
Age	= current year-established year	Arimany-Serrat et al. (2023)
Size	LnSize _(t)	Arimany-Serrat et al. (2023)

Empirical Model

Regression analysis was used in this research to determine the connection between the independent and dependent variables. It's possible that one independent variable has an impact on another dependent variable, in which case regression analysis is employed to find out (Bougie & Sekaran, 2020).

$$FinRes_{i,t} = \alpha_0 + \alpha_1 Board_{i,t} + \alpha_2 GOV_{i,t} + \alpha_3 AudRec_{i,t} + \alpha_4 AGEi,t) + \alpha_5 SIZE_i,t + \sum Year + \varepsilon_i(i,t)(1)$$

RESULTS AND DISCUSSION

Result of Factor Analysis for Financial Resilience

This study employed an index to assess the financial resilience of SOEs in the energy and mining sectors in Indonesia. Factor Analysis, conducted using the SPSS statistical software, is utilized to calculate index scores that evaluate the financial resilience indicators. The financial resilience index is designed to capture the financial health of SOEs based on several financial ratio aspects, including (a) revenue growth, (b) profit growth, (c) assets growth, (d) debt-to-equity ratio, and (e) Return on Investment (ROI) growth. These five financial ratios were chosen because they were considered representative of an SOE's financial resilience, particularly in understanding its response to the impacts of COVID-19, as argued by Arimany-Serrat et al. (2023).

Measure of Sampling Adequacy and the Bartlett's Test of Sphericity was performed as a pre-requisite before conducting Factor Analysis. Kim and Mueller (1978) defined the threshold values on the assessment of measure factor analysis that KMO (Kaiser-Meyer-Olkin) value minimum of 0.5 and anti-image matrices a minimum of 0.4.

Table 3: KMO and Bartlett's Test of Financial Resilience Constructs

Financial Resilience	Matrices	KMC) & Barl	ett's	Test	Total Va	ariance E	xplained
Component		кмо	Χ²	df	Sig.	Total	% Var	Cum %
Revenue growth	0.595					1.927	38.531	38.531
Profit growth	0.502					1.254	25.074	63.605
Assets growth	0.596	0.593	199.3	10	0.000	1.025	20.498	84.102
Debt-to-equity	0.513							
ROI growth	0.521							

Table 3 presents the statistical results of the factor analysis conducted on the financial resilience index. It revealed that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.593, surpassing the minimum threshold of 0.50, and indicating sufficient data adequacy for factor analysis. Furthermore, Bartlett's Test of Sphericity yielded a significant p-value at the 1% level, validating the suitability of the data for factor analysis. As a result, the scores of each indicator were deemed appropriate for constructing the factor analysis, forming a new index for measuring Financial Resilience. Additionally, the factor loadings for all five indicators exceeded 0.4, reaffirming the KMO value of 0.593 and a chi-square statistic of 199.3. The analysis identified three factors explaining 38.53%, 25.10%, and 20.50% of the variance, respectively, cumulating in a total explained variance of 84.102%. Hence, the formulation of a new total score for the Financial Resilience Index was proposed as follows:

$$Total\ score = \left[\frac{\%\ Variance}{Cumulative\ \%}\right]x\ Factor$$

Total score of Financial Resilience
$$= \left[\frac{38.53\%}{84.10\%} \right] x Factor 1 + \left[\frac{25.10\%}{84.10\%} \right] x Factor 2 + \left[\frac{20.50\%}{84.10\%} \right] x Factor 3$$
 (2)

$$FinRes_{i,t} = \alpha_0 + 0.036 \, Board_{i,t} + 0.165 \, GOV_{i,t} + 0.270 \, AudRec_{i,t} + 0.001 \, AGE_{i,t} - 0.012 \, SIZE_{i,t} + \sum_{i,t} (2018 - 2022) + \varepsilon_{i,t}$$
(3)

The analysis identified three factors as the most significant in constructing a new continuous variable for financial resilience. However, this calculation did not ascertain the dominant principle in representing the variables that constitute financial resilience. This limitation stems from employing the Explanatory Factor Analysis method, coupled with a Principal Component Analysis (PCA) approach, in the factor analysis process. All the indicators of financial resilience, indicators are effective in facilitating the factor analysis for the financial resilience variable. Thus, this allowed the research to advance to the subsequent phase of analysis.

Descriptive Statistics

As shown in Table 4 the descriptive statistics for the dependent variable was financial resilience, and independent variables, which were board effectiveness, government ownership, and audit recommendation, and for the control variables were company size and age.

Table 4. Descriptive Statistics (II – 100)						
Variable	Minimum	Maximum	Mean	Std. Dev		
Financial Resilience	-0.36	1.05	0.443	0.260		
Board Effectiveness	2	11	5.380	1.644		
Government Ownership	0.570	1.00	0.899	0.163		
Audit Recommendation	0.000	1.00	0.885	0.302		
Age	2	77	30.750	22.056		
Size	5.58	23.26	14.321	6.224		

Table 4: Descriptive Statistics (n = 100)

Based on the result of descriptive statistics, six variables (financial resilience, board effectiveness, government ownership, audit recommendation, company age, and company size) showed that the mean value exceeded the standard deviation, and this indicated that the mean provides reliability. Hence, this allowed the research to advance to the subsequent phase of regression analysis.

Regression Results

The regression results can be seen in Table 5, where company size was measured with (Ln) of total assets.

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Independent		Dependent Resilie			
variable	Expectation	Coefficient (0)	Sig.	Sig.	Conclusion
		Coefficient (β)	(2-tailed)	(1-tailed)	
Board	h(+)	0.036	0.059	0.03	H ₁ Accepted
Gover	(+)	0.165	0.414	0.21	H ₂ Rejected
AudRec	(+)	0.270	0.001	0.00	H ₃ Accepted
Control:					
Age		0.001	0.633	0.312	
Size		-0.012	0.003	0.002	

Table 5: Regression Outcome

F Test Result (ANOVA)

The test of Analysis of Variance (ANOVA), assesses whether the independent variables collectively exert a significant influence on the dependent variable. It does so by comparing the variance between groups to the variance within groups, thereby determining if any statistically significant differences exist among group means. This method is pivotal in evaluating the overall model fit in regression analysis. The results of the F test (ANOVA) in this study can be seen in the Table 6 below:

Table 6: F (ANOVA)

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.250	5	0.450	9.520	0.000
	Residual	4.443	94	0.047		
	Total	6.693	99			

The calculated F value for the dependent variable, Financial Resilience, was 9.520, with a significance level of 0.000, which was below the threshold of 0.05. This result led to the rejection of the null hypothesis (H0) and acceptance of the alternative hypothesis (H1), indicating that Board Effectiveness, Government Ownership, and Audit Recommendation collectively had a significant influence on inancial esilience.

Correlation Coefficient Test Results (R2)

The Determination Coefficient (R^2) is utilized to measure the extent to which the model can explain the dependent variable. The value of the determination coefficient ranges between zero and one ($0 < R^2 < 1$). The results of the determination coefficient test can be viewed in the Table 7 below:

Table 7: Coefficient Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.580a	0.336	0.301	0.21740

The adjusted R² value was 0.301. This indicated that the collective independent variables—Board Effectiveness, Government Ownership, and Audit Recommendation—explained 30.1% of the variance in the dependent variable, Financial Resilience. The remaining 69.9% of the variance was attributed to factors not encompassed within the model

FINDINGS AND DISCUSSION

The first hypothesis proposed a positive impact of board effectiveness on SOEs resilience. This finding supported the premise that a more comprehensive board can offer diverse insights and governance practices, strengthening the organization's financial stability. This finding aligns with the research conducted by Sidki et al. (2023), Li et al. (2021), Zhang et

al. (2022), Ebaid (2022), Croci et al. (2023) and Shawtari et al. (2017). Establishing the optimal board size guarantees a smoothly operating, efficient, and proficient board (OECD, 2021). The board members can significantly contribute to discussions, fostering a dynamic environment where strategic decisions are well-informed and reflective of a broad range of insights. There were contradictory results on previous studies that could be caused by various reason, among others the size influence the cohesiveness of the boards and the effectiveness of the operation (De Andres et al., 2005; OECD, 2021).

In the context of the Agency Theory, an effective board serves as an important oversight mechanism to reduce agency conflicts and ensure that management acts in the interests of shareholders. A diverse and highly qualified board can provide better oversight of management, offer valuable strategic advice, and strengthen corporate decision-making. This directly contributes to the financial resilience of the company by minimizing risks and maximizing operational and financial efficiency. In addition, the effectiveness of the board in carrying out its oversight duties can increase investor and other stakeholder confidence, which is an important aspect of financial resilience. Investors tend to be more willing to invest in companies with good governance, which can access capital at more favourable conditions and improve their ability to face financial challenges. Thus, Agency Theory and board effectiveness are intrinsically linked to a firm's financial resilience, suggesting that good governance practices not only reduce internal conflicts but also strengthen a firm's financial foundation.

Croci et al. (2023), highlighted the beneficial effects of board composition on financial resilience further validating the hypothesis that effective governance plays a pivotal role in safeguarding a company's financial health. Diverse and well-structured boards bring a range of perspectives, expertise, and oversight capabilities that are crucial for strategic decision-making and risk management. Research has shown that boards with a mix of skills, experiences, and backgrounds are better equipped to challenge assumptions, foster innovation, and navigate complex financial landscapes, thereby enhancing the company's ability to withstand economic downturns and financial uncertainties. This underlines the importance of governance structures in building and maintaining financial resilience, suggesting that companies with strong, diverse boards are more likely to achieve sustainable financial performance and security.

The findings of the study didnot support Hypothesis 2 that suggested a positive impact of Government Ownership on Financial Resilience. These findings implied that government ownership did not affect financial resilience, indicating that a government stake in a company does not significantly contribute to its ability to withstand financial challenges or shocks. This outcome suggested that factors other than government ownership may be more pivotal in influencing a company's financial resilience. The lack of impact from government ownership on financial resilience might also reflect the complexity of governance and its interaction with financial performance. This finding prompts further investigation into how different types of ownership and governance structures affect a company's financial stability and capacity to manage economic uncertainties. Ownership is intended to establish incentives that align individual goals with organizational objectives, offer valuable feedback on progress toward these objectives, and serve as a foundation for internal and external accountability (Cavalluzzo & Ittner, 2004) The findings are supported by Aguilera et al. (2021); Cuervo-Cazurra et al. (2014); Tihanyi et al. (2019); Abramov et al., 2017; CuervZhao-Cazurra & Li, 2021; Kalasin et al., 2020; Musacchio et al., 2015; Okhmatovskiy et al., 2021) that suggest ownership is inefficient and hinders corporate performance. From the Agency Theory perspective, state ownership hinders business results because state owners have many objectives that conflict with other stakeholders (Lazzarini & Musacchio, 2018). State owners are also known for inefficient oversight (Dharwadkar et al., 2000, Cuervo-Cazurra & Li, 2021; Kalasin et al., 2020). The studies often stated the use of the Agency Theory and claimed that state owners' limited capacity and willingness to improve the enterprise's financial performance causes adverse effects (Lazzarini & Musacchio, 2018). Lee et al. (2022) indicated that SOEs face difficulties attaining financial viability. Cardinale (2022) found that less government ownership improves financial performance.

The third hypothesis suggested a positive relationship between Audit Recommendation and Financial Resilience. These results indicated that the recommendations from BPK (Supreme Audit Institutions) auditors increase the financial resilience of state-owned companies in the mining and energy sector. This positive impact suggested that implementing audit recommendations can lead to improvements in financial management, risk assessment, and compliance practices within these companies. It highlighted

the critical role that external audits play in identifying inefficiencies, potential risks, and areas for improvement, thereby contributing to a more robust financial framework. Furthermore, this finding underscores the value of transparency and accountability in enhancing companies' operational and financial stability, particularly those in sectors critical to national infrastructure and economic security. By adhering to the best practices and corrective measures suggested by auditors, state-owned enterprises in the energy sector can better navigate financial uncertainties, safeguard assets, and secure sustainable growth paths.

The link between the Agency Theory, audit recommendations and financial resilience showed how good corporate governance can affect the financial stability of a company. The Theory, which outlines the dynamics between owners (principals) and managers (agencies), often highlights problems arising from misaligned interests between these two parties. Audit recommendations, as a monitoring mechanism, play an important role in addressing these potential issues by providing an objective evaluation of a company's financial statements and operations, and identifying areas that require improvement. Audit recommendations help reduce information asymmetry between management and shareholders by ensuring transparency and accuracy in financial reporting. This directly contributes to the company's financial resilience by minimizing financial and operational risks that can arise from ineffective management of the company.

Furthermore, by implementing audit recommendations, a company can improve its operational efficiency, optimize the use of its resources, and strengthen its position in the market, all of which are key elements of financial resilience. Thus, the relationship between the Agency Theory, audit recommendations, and financial resilience suggests that strong audit practices and good corporate governance are not only essential for addressing agency conflicts, but also vital in building and maintaining corporate financial stability. These practices enable firms to be more resilient in the face of economic and financial challenges, and increase investors' and other stakeholders' confidence in the integrity and performance of the firm.

This result is in line with previous studies (Almashhadani, 2023; Al-Mohaimeed, 2000; Daujotaitė & Adomavičiūtė, 2017); Setyaningrum, 2017; Setyaningrum et al., 2017; Mukhamediyeva, 2020). Dwiputrianti

(2011a, 2011b) discovered that the effectiveness of an audit report is enhanced when the organization being reviewed for the implementation of audit recommendations. Sari et al. (2013) found that implementing more recommendations leads to improved performance. Furthermore, Din et al. (2017) found that conducting a follow-up of financial investigations leads to a decrease in the magnitude of financial losses.

CONCLUSION

The finding of this research framework enriches the monitoring mechanism literature. This study used the Agency Theory to examine how internal and external control mechanisms affect financial resilience. The research examined 20 SOEs in various sectors over five years and found that internal and external monitoring systems can reduce agency problems in SOEs, particularly in energy and mining sectors, that could lead to financial resilience. This study found that board effectiveness and audit recommendations significantly influenced the improvement of SOEs financial resilience. The BPK audits and advises SOEs to enhance financial management and performance.

The sustainability and success of enterprises in this crucial sector depend on robust audit processes and corporate governance. These practices reduce risks and build stakeholder confidence by improving openness, accountability, and efficiency. This study empirically contributes to the literature on monitoring mechanisms to promote financial resilience. SOEs in the energy and mining sectors benefit from internal and external monitoring measures like board effectiveness and audit recommendations. This study enriches the present literature is inadequate in addressing SOEs in strengthening financial resilience from agency theory perspective.

This study contributes to the literature by emphasizing the need for strong internal and external monitoring systems, such as board effectiveness and BPK audit recommendations, to ensure SOEs' financial resilience and sustainability. This study offers several practical implications. First, it encourages the SOEs in energy and mining sectors to put more attention on audit recommendations to improve financial performance. This improved performance helps SOEs meet their strategic goals and

contribute to national growth while guaranteeing financial viability. Audit recommendations generally identify inefficiencies and advise process and control improvements. Audit recommendations also help SOEs examine and optimize financial management, operations, and compliance on risks. Secondly, this study could be used by BPK to improve the quality of audit process to develop constructive audit recommendations. Third, these findings could be considered by regulators, such as the Ministry of SOEs and Ministry of Finance to develop regulations to create world class Indonesia SOEs

This study has limitations that must be acknowledged when evaluating its results. Due to missing data, SOE samples dropped from 77 to 20. Therefore, a greater number of samples is better for a more complete study. Second, this study focussed on audit outcomes, specifically financial perspective audit recommendations. Non-financial results were not included in this research. Third, since this study utilized secondary data from company annual reports, the measurement of the financial resilience index is solely based on proxies from financial ratios. Other measurements, such as survey results through questionnaires, were not conducted due to the potential bias associated with content analysis when interpreting the findings of this research.

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