HOW INDONESIAN STATE-OWNED ENTERPRISES CHOOSE THEIR AUDITOR?

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Abstract: As a tool to ensure the credibility of financial reports, appointing an external auditor on state-owned enterprises (SOE) is an exciting topic of study since SOE acts as an agent of development that pursues profit only. This study aims to investigate the behavior of Indonesian SOE in the selection of quality auditors by focusing on the determinants of state ownership, size, and complexity. Using a sample of central SOE and local SOE listed on the Indonesia Stock Exchange in 2014-2020, hypothesis testing was carried out using the logistic regression method. The results show that state ownership is negatively correlated with the appointment of Big-4 auditors. Meanwhile, this study reveals that both size and complexity firm variables are positively correlated with the work of Big-4 auditors.
Keywords: auditor choice, Big 4, state ownership, size, complexity.

A. Introduction

In 2018, the Indonesian people were shocked by the financial report scandal of one of the SOE, Garuda Indonesia Airline (GIA). In its statement, GIA reported a profit of USD 809.85 thousand in 2018, after recording a significant loss of USD 216.5 million in 2017. The report's credibility is questionable because of the suspicion that the company's financial statements were not presented following applicable standards. Various authorities have carried out investigations and concluded that there was a mistake in sanctioning the GIA and the auditors. According to the Ministry of Finance (2019), sanctions on auditor was to foster the financial profession and protect the public interest.

Why the auditor is sanctioned cannot be separated from the responsibility in the auditing process. The purpose of the audit is to form an independent opinion that shows whether the financial statements reflect accurate data and are prepared under accounting standards (Hadfield, 2021). When the auditor is not able to carry out these duties properly, it is very reasonable if the auditor becomes one of the parties subject to sanctions. Habib et al. (2021) explain that auditors will always be the ones to blame if there is a corporate financial scandal because they are supposed to protect the public interest in the capital market.

Auditing is essential to provide an independent view of the credibility of financial information (De Fond & Zang, 2014). The GIA case shows that the company's financial statements that an independent auditor has audited are not necessarily reliable. It shows that somehow the audit results differ in quality. According to De Angelo (1981), audit quality can be seen from how an auditor can find violations in the financial statements and report these violations. Li (2019) explains that audit quality can be measured through 3 approaches: audit firm size, unclean opinion, and discretionary accrual value. The size of the auditor's company illustrates that the larger the auditor's company, the higher the quality of the audit produced. Audit firm sizes are usually grouped under the terms Big-4 or Big-10. Unclean's opinion reveals how independent the auditors are so that they can later issue quality audit results. Meanwhile, discretionary accruals describe earnings management where a higher level of discretionary accruals indicates a higher probability of audit failure and vice versa.

Auditor size is the most used approach to describe audit quality. This approach assumes that large audit firms are able to produce higher-quality audits because they have professional knowledge and audit technology (Zureiget, 2011). Therefore, the company's decision to choose a particular auditor over other auditors is crucial. The auditor selection decision is able to send a signal to external parties regarding the value of the company so that investors can obtain accurate and reliable financial information if a qualified auditor carries out the audit process (Chen et al., 2020).

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The importance of audits makes the demand for audit services continue to exist even without the Government's requirement (Watts and Zimmerman, 1983). A comprehensive literature review study by Habib et al. (2019) groups the determinants of auditor selection into 3 (three) groups: ownership structure and governance mechanisms, determinants driven by information asymmetry, and institutional factors. The study of SOE auditor selection continues to grow because of its uniqueness, especially regarding ownership held by the Government. Several studies have further explored the auditor selection process at SOE, including Wang et al. (2008), Guedhami (2009), and Ben- Hassoun et al. (2018). Guedhami (2009) found that globally, the level of state ownership in privatized firms is inversely proportional to the probability of selecting Big4 auditors. Similar results were also found by Wang (2008), where SOE in China tend to choose local auditors. Ben- Hassoun et al. (2018) also provided a finding that state ownership of privatized firms in the Middle East and North Africa was negatively correlated with the selection of a large auditor firm.

In Indonesia, research related to audit quality in SOE has been carried out, including Ali & Aulia (2015) and Prakoso (2016) using discretionary accrual proxies. To the best, we know there is no research related to SOE audit quality using auditor firm size as the dependent variable. This study attempts to fill this gap as a contribution to explain how SOE make decisions to choose particular auditors. The selection of a qualified auditor becomes vital in line with the findings of fraud in various SOE financial reports. This study uses a sample of SOE that has go-public, both owned by the central government and local governments. This research focuses on the relationship of state ownership, size, and complexity to the auditor selection decision.

B. Research Methodology

The population of this study is Indonesian SOE listed on the Indonesia Stock Exchange, both owned by the central government and local governments during the 2014-2020 period. Given differences in business characteristics and regulatory policies, financial service companies were excluded, so overall, this study used a sample of 18 SOE consisting of 16 central and 2 local SOE (Table 1). In terms of the number of ownership, Government can be the majority or minority shareholder. Initially, SOE were wholly owned by Government. The privatization process has resulted in several SOE being partially owned by the public, although Government ownership remains the majority. The Government of Indonesia then launched a holding program to consolidate several companies with similar businesses so that the Government's majority ownership becomes a minority. In 2014-2020, the Government succeeded in forming a mining and oil & gas holding in 2017 and a pharmaceutical holding in 2020. Meanwhile, 2 local SOE that have gone public consist of 1 company owned by the local Government, which is the majority, and 1 is the minority.

Table 1. Sample Description

Year	Central SOE		Local SOE		Number
	Majority	Minority	Majority	Minority	
2014	16	-	1	1	18
2015	16	-	1	1	18
2016	16	-	1	1	18
2017	12	4	1	1	18
2018	12	4	1	1	18
2019	12	4	1	1	18
2010	10	6	1	1	18

The data in this study are secondary data obtained from each company's financial statements and annual reports. This study seeks to explore the behavior of SOE in making decisions to choose a particular auditor. This study uses a binary logistic regression model by selecting Big-4 auditors as the dependent variable. Considering the characteristics of Indonesian SOE, the authors use state ownership, firm size, and firm complexity as the dependent variable. By

adopting various previous research models, the author uses multiple control variables: leverage, risk, loss, industry type, and holding participation. The specifications of the model in this study are arranged as follows:

$$Big4_{it}: \quad \alpha + \beta_1 GOV_{it} + \beta_2 SIZE_{it} + \beta_3 SUBS_{it} + \beta_4 LEV_{it} + \beta_4 RISK_{it} + \beta_4 LOSS_{it} + \beta_4 INDUSTRY_{it} + \beta_4 HOLDING_{it} + e$$

According to the above model specifications, variable names and operationalizations can be seen in Table 2 below:

Table 2. Definition of Variable

Symbol	Name	Description and Measurement
BIG4	Big-4 audit firm	Dummy variable equals 1 if the SOE hire Big-4 audit firms, 0 otherwise
GOV	Government ownership	Percentage of family ownership in the firm
SIZE	SOE size	Total Asset
SUBS	SOE complexity	Number of subsidiaries
LEV	Leverage	Percentage of debt to total assets
RISK	Risk	Percentage of current assets to total assets
LOSS	Loss	Dummy variable equals 1 if a company reported loss, 0 otherwise
INDUSTRY	Industry type	Dummy variable equals 1 if manufacturing SOE and 0 otherwise
HOLDING	Holding membership	Dummy variable equals 1 if SOE enter into holding company and 0 otherwise

Since this study uses logistic regression analysis, a multicollinearity test will first be carried out, as has been done by Hoyt and Khang (2000) and Alzeaideen & Al-Rawash (2018). Multicollinearity test ensures whether there is intercorrelation or collinearity between independent variables.

C. Result and Discussion

Descriptive Analysis. Descriptive statistics function to provide characteristics of each variable in the research sample, including maximum, minimum, and average values. Table 3 reports some essential variable descriptive statistics. Indonesian SOE has relied enough on Big-4 auditors to carry out audit work up to 54.75%. The complexity reflected in the number of subsidiaries shows that, on average, SOE has 7 subsidiaries, whereas the most complex SOE even has 22 subsidiaries. More than half of SOEs are engaged in the manufacturing industry sector, which makes SOE's size vary in asset values ranging from IDR 997 billion (USD 69 billion) to IDR 249 trillion (USD 17 billion). Although most SOEs have good performance, several SOEs still recorded losses, which amounted to 11.9%, mainly due to the Covid-19 pandemic in 2020.

Table 3. Descriptive Statistic

Variable	Minimum	Maximum	Mean
BIG4	0	1	54,76%
GOV	0	90,03%	54,35%
SIZE (IDR trillion)	0,997	249,46	44,75
SUBS	0	22	7,2
LEV	0,06%	109,79%	54,29%
RISK	6,45%	92,69%	45,9%
LOSS	0	1	11,9%
INDUSTRY	0	1	55,55%
HOLDING	0	1	15,07%

Multicollinearity *Test.* The model is said to have multicollinearity symptoms if the tolerance and VIF (variance inflation factor) values are close to 10. The test results (Table 4)

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show that the model does not have multicollinearity problems because the tolerance and VIF values are below 10.

Tabel 4. Multicolinearity Test

Variable	Tolerance	VIF
GOV	0.213000	4.69
SIZE	0.404258	2.47
SUBS	0.224224	4.46
LEV	0.100428	9.96
RISK	0.202809	4.93
LOSS	0.730542	1.37
INDUSTRY	0.420656	2.38

Hypothesis Testing. Both the influence of the independent variable and the control variable regression result can be seen in Table 4. Based on table 4, the results of hypothesis testing can be presented as follows:

Table 4. Regression Result

BIG4	Coef.	Std. Err	z	P>|z|
GOVT	-2.880209	.9925589	-2.90	0.004
SIZE	2.56e-08	9.17e-09	2.79	0.005
SUBS	0.2991248	.0707443	4.23	0.000
LEV	-4.209237	1.700.395	-2.48	0.013
RISK	-.718784	.9793352	-0.73	0.463
LOSS	193.208	.867835	2.23	0.026
INDUSTRY	1.048.981	.6211534	1.69	0.091
_cons	.8783031	1.506.189	0.58	0.560

State Ownership And Auditor Selection. Following Table 4, the state ownership variable (GOV) has a coefficient of -2.880209 and a p-value of 0.004. These results indicate that the percentage of government ownership negatively correlates with the selection of Big-4 auditors. With a coefficient value of -2.880209, the odds value can be found at $e^{-2.880209}$ = 0.056, meaning that an increase in state ownership of one unit will make the probability of appointing a Big-4 auditor decrease by 0.056 times. This result follows the previous hypothesis, which states that state ownership is negatively correlated with the selection of Big-4 auditors. Based on these findings, hypothesis 1 is empirically accepted.

Companies with a high concentration of state ownership tend to use the services of auditors other than the Big-4. The greater the share of the Government, the greater the authority of the Government to regulate and control company activities. The Government to freely assign assignments to companies so that operationally, companies will act according to government directives. Under these conditions, the company has no incentive to use the services of a higher-quality auditor. Control from the Government through assignments is also a mechanism for SOE supervision to reduce agency problems. The results of this study are in line with the findings of several previous studies such as Guedhami (2009), Wang (2008), and Ben- Hassoun et al. (2018).

Soe Size And Auditor Selection. The firm size variable represented by asset value (SIZE) has a coefficient of 2.56e-08 and a p-value of 0.005. These results indicate that the percentage of SOE size positively correlates with the selection of Big-4 auditors. With a coefficient value of 2.56e-08, the odds value can be found at $e^{2.56e-08}$ = 1, meaning that an increase in one unit's asset value will increase the probability of appointing a Big-4 auditor by 1 time. This result follows the previous hypothesis, which states that firm size is positively correlated with the selection of Big-4 auditors. Based on these findings, hypothesis 2 is empirically accepted.

The findings indicate that the larger the size of SOE, the greater the possibility to hire Big-4 auditors. In terms of diversity, Indonesian SOE has a size variation seen from the value

of its assets. SOE with large asset values tend to be owned by SOE engaged in the manufacturing sector, which has a more complicated character than the service sector. The growth in company size will be accompanied by an increase in transaction volume so that errors in accounting records and financial reports can often occur (Tauringana & Clarke, 2000). To minimize this, the appointment of a qualified auditor is the right strategy. In addition, companies with a larger size tend to use the services of quality auditors to maintain their reputation for being the market attention (Darmadi, 2016). The results of this study further strengthen the findings of previous studies such as Fan & Wong (2005), El-Ghoul et al. (2007), and Ngo et al. (2020).

Soe Complexity And Auditor Selection. The company complexity variable represented by the number of subsidiaries (SUBS) has a coefficient of 0.2991248 and a p-value of 0.000. These results indicate that the percentage of SOE size positively correlates with the selection of Big-4 auditors. With a coefficient value of 0.2991248, the odds value can be found at $e^{0.2991248} = 1.349$, meaning that for every 1 unit increase in the number of subsidiaries, the probability of appointing a Big-4 auditor will increase by 1.349 times. These results are consistent with the previous hypothesis, which states that firm complexity is positively correlated with the selection of Big-4 auditors. Based on these findings, hypothesis 3 is empirically accepted.

Under Indonesian regulation, SOE subsidiaries have a different legal position from SOE. SOE subsidiaries are not part of the state finances, so they are not subject to audit by the Supreme Audit Institution. SOE subsidiaries, therefore, are more agile than the parent. The Indonesian Government does not strictly regulate the establishment of SOE subsidiaries, so SOE managers have extraordinary authority to form. The establishment is used to support the parent company's operations and sometimes even has better performance than the parent. However, some subsidiaries do not have good performance, so they only become the burden of the parent company. The establishment of a subsidiary is followed by the transfer of authority, reducing the supervision process; therefore, a critical audit process by a qualified auditor is vital.

D. Conclusion

This study provides empirical evidence on how Indonesian SOE choose their auditors. While the size and complexity of the company are factors driving the appointment of Big-4 auditors, the level of government ownership is negatively correlated with the selection of Big-4 auditors. With the findings of fraud in several Indonesian SOE, supervision is essential to ensure the SOE performance and the credibility of their financial reports. This supervision of SOE needs to be optimized, especially for SOE with a high government ownership structure because they tend not to use the services of a Big-4 auditor. This study has limitations because it only uses a sample of SOE that has been listed on the Indonesia Stock Exchange. Most Indonesian SOE have not gone public, so further research is needed with larger sample size.

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