



## The Determinants of Audit Delay with Profitability as a Moderating Variable in State-Owned Enterprises in Indonesia

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### Abstract

**Purpose:** This study purpose to analyzes the effects of leverage, audit committee size, audit opinion, and auditor reputation on audit delay, with profitability as a moderating variable

**Method:** The method of this study uses quantitative research with explanatory method. The sample consists of 29 SOEs listed on the Indonesia Stock Exchange during the period 2022–2024, resulting in 87 firm-year observations. Hypothesis testing was conducted using multiple linear regression to examine the direct effects of the independent variables on audit delay, followed by Moderated Regression Analysis (MRA) to test the moderating role of profitability.

**Findings:** The findings of this research, indicate that leverage does not have a significant effect on audit delay, suggesting that debt-related risk does not necessarily prolong audit completion in SOEs. In contrast, audit committee size and auditor reputation have a positive and significant effect on audit delay, reflecting increased monitoring intensity and audit rigor. Furthermore, profitability strengthens the positive relationship between these governance and audit-quality factors and audit delay, but does not moderate the leverage–audit delay relationship.

**Originality/Value:** This study contributes to the literature by integrating agency and signaling theories in the context of SOEs, highlighting the trade-off between audit quality and reporting timeliness. It provides critical insights for policymakers and SOE management in balancing accountability with efficiency in financial reporting.

**Keywords:** Audit Delay; Leverage; Audit Opinion; Audit Committee; Auditor Reputation; Profitability

**Paper Type:** Research Paper.

## 1. Introduction

Timely financial reporting is a fundamental pillar of corporate transparency, accountability, and market efficiency. Audited financial statements serve as a primary source of information for investors, regulators, creditors, and other stakeholders in evaluating a firm's performance and financial position. The relevance of such information is highly dependent on its timeliness; delayed financial reporting reduces decision usefulness and may weaken market confidence (Ashton et al., 1987; Habib & Bhuiyan, 2011). Consequently, audit delay, defined as the length of time between a firm's fiscal year-end and the issuance of the auditor's report, has become a critical issue in accounting and auditing research.

In Indonesia, the timeliness of audited financial reporting is regulated by the Financial Services Authority (Otoritas Jasa Keuangan/OJK) through POJK No. 29/POJK.04/2016, which requires listed companies to publish audited annual financial

statements no later than 90 days after the fiscal year-end. Despite this regulatory mandate, audit delay remains a persistent phenomenon, particularly among firms with complex organizational structures, extensive regulatory oversight, and heightened public accountability. Such conditions increase audit complexity and require more rigorous audit procedures, potentially prolonging audit completion (Habib et al., 2019).

State-Owned Enterprises (SOEs) represent a distinctive institutional context for examining audit delay. Unlike private firms, SOEs operate under dual objectives: achieving financial performance while fulfilling public service and policy mandates. In addition, SOEs are subject to multiple layers of supervision from government ministries, parliament, supreme audit institutions, and capital market regulators. Prior international studies suggest that political influence, public ownership, and heightened scrutiny increase audit risk and audit effort, which may extend audit report lag (Chan et al., 2006; Habib & Muhammadi, 2018). Recent evidence from Indonesian accounting research also highlights that strong governance and monitoring mechanisms play a crucial role in ensuring reporting credibility in entities with high public accountability, such as SOEs (Inayah & Chariri, 2024). As a result, audit delay in SOEs cannot be fully explained using conventional firm-level characteristics alone.

Previous empirical research has examined various determinants of audit delay, including leverage, audit committee characteristics, audit opinion, and auditor reputation. Studies conducted in both developed and emerging markets report mixed findings. High leverage is often associated with increased audit risk and longer audit delay due to greater verification of debt covenants and going-concern considerations (Carslaw & Kaplan, 1991). However, other studies find no significant relationship, particularly in firms with strong governance and institutional support (Habib & Bhuiyan, 2011). Similarly, audit committees and Big Four auditors are generally associated with higher audit quality, but their impact on audit timeliness remains inconclusive. While stronger governance mechanisms may enhance monitoring, they may also increase coordination complexity and procedural rigor, thereby extending audit duration (Sultana et al., 2015; Abbott et al., 2016). Consistent with this perspective, prior empirical studies suggest that effective corporate governance can enhance reporting quality while simultaneously increasing procedural intensity in audit-related processes (Mutmainah & Mahmudah, 2024).

One potential explanation for these inconsistent findings is the absence of moderating variables that capture firm performance and signaling incentives. Profitability is a key indicator of financial performance and serves as an important signal to the market regarding firm quality and managerial effectiveness (Spence, 1973). From a signaling perspective, highly profitable firms are motivated to release audited financial statements more promptly to convey positive information to stakeholders. Conversely, profitable firms, particularly those operating in politically sensitive environments such as SOEs, may face greater scrutiny from auditors and regulators, resulting in more extensive audit procedures and longer audit delays (Chan et al., 2006).

Although audit delay has been widely studied, several important gaps remain in the literature. First, international evidence focusing specifically on SOEs is still limited, especially in emerging economies where institutional characteristics differ significantly from those of developed markets. Most prior studies rely on samples of private or manufacturing firms, thereby overlooking the unique governance structures and political exposure of SOEs (Habib & Muhammadi, 2018). Second, empirical studies rarely examine profitability as a moderating variable in the relationship between governance mechanisms, auditor characteristics, and audit delay. As a result, the conditional role of firm performance in shaping audit timeliness remains underexplored.

This study addresses these gaps by investigating the determinants of audit delay in Indonesian SOEs and examining the moderating role of profitability. Specifically, this study analyzes the effects of leverage, audit committee size, audit opinion, and auditor reputation on audit delay, with profitability as moderating variable. By integrating agency theory and signaling theory within the context of SOEs, this study extends prior literature by highlighting the trade-off between audit quality, governance intensity, and reporting timeliness in politically connected and publicly accountable entities.

The findings of this study are expected to contribute to the literature in several ways. First, this study provides empirical evidence on audit delay in SOEs, a setting that remains underrepresented in international auditing research. Second, by incorporating profitability as a moderating variable, this study offers a more nuanced understanding of how firm performance conditions the relationship between governance mechanisms and audit delay. Third, the results offer practical insights for SOE management, auditors, and regulators in balancing accountability, audit quality, and timeliness of financial reporting.

## 2. Literature Review and Hypothesis Development

### 2.1. Theoretical Framework

#### 2.1.1. *Agency Theory*

Agency theory explains the contractual relationship between principals (shareholders or the state) and agents (management), in which information asymmetry may give rise to agency conflicts and opportunistic behavior (Jensen & Meckling, 1979). Independent audits serve as an important monitoring mechanism to reduce agency costs by enhancing the credibility and reliability of financial statements. From this perspective, audit delay reflects the level of audit effort and monitoring intensity required to mitigate agency problems. Firms with higher risk exposure, complex governance structures, or stronger oversight mechanisms are likely to experience longer audit processes due to increased verification and control procedures (Habib et al., 2019).

In the context of State-Owned Enterprises (SOEs), agency problems are more complex due to the presence of multiple principals, including government ministries, regulators, parliament, and the public. These multiple layers of accountability increase political influence, public scrutiny, and audit risk, thereby intensifying audit effort and potentially extending audit delay (Chan et al., 2006; Habib & Muhammadi, 2018). Evidence from Indonesian accounting research also suggests that strong governance and monitoring mechanisms in publicly accountable entities may increase procedural rigor in audit-related processes (Inayah & Chariri, 2024). Therefore, agency theory provides a strong theoretical foundation for explaining audit delay in SOEs.

#### 2.1.2. *Signaling Theory*

Signaling theory posits that firms convey information about their quality and performance to external stakeholders through observable signals, such as financial reporting timeliness (Spence, 1973). Timely publication of audited financial statements signals strong managerial competence and good financial performance, whereas delayed reporting may be interpreted as a negative signal by investors and regulators.

Profitability is a key signal of firm performance. Highly profitable firms have incentives to disclose financial information promptly to reinforce positive market perceptions. However, signaling theory also suggests that strong signals may attract greater scrutiny from auditors and regulators, especially in firms with high public visibility such as

SOEs. As a result, profitability may intensify audit procedures and extend audit delay when combined with strong governance mechanisms or high-quality auditors (Chan et al., 2006).

## 2.2. Hypothesis Development

### 2.2.1. *Leverage and Audit Delay*

Leverage reflects the extent to which a firm's assets are financed through debt and is commonly associated with higher financial risk. From an agency theory perspective, highly leveraged firms face greater monitoring demands from creditors, which may increase audit complexity and audit effort. Prior studies suggest that high leverage requires auditors to conduct additional procedures related to debt covenants, going-concern assessments, and risk evaluation, potentially lengthening audit delay (Carshaw & Kaplan, 1991; Al-Ghanem & Hegazy, 2021).

However, empirical findings remain inconclusive. Several studies report that leverage does not significantly affect audit delay (Ensaf et al., 2025). In SOEs, government backing and structured debt arrangements may mitigate the audit risks typically associated with leverage. Based on these arguments, the following hypothesis is proposed:

**H<sub>1</sub>:** Leverage affects audit delay.

### 2.2.2. *Audit Committee and Audit Delay*

The audit committee is a key corporate governance mechanism responsible for overseeing financial reporting, internal control, and the external audit process. According to agency theory, an effective audit committee strengthens monitoring and reduces information asymmetry between management and stakeholders. However, a larger or more active audit committee may also increase coordination complexity and require more extensive interactions with external auditors, potentially prolonging the audit process (Sultana et al., 2015; Abbott et al., 2016).

Empirical evidence supports this view. Studies conducted in various institutional settings find that audit committee size and activity are positively associated with audit delay due to increased scrutiny and procedural rigor (Sultana et al., 2015; Al-Ghanem & Hegazy, 2021). In SOEs, audit committees often operate within multilayered governance systems involving government oversight, which may further intensify audit procedures. Therefore, the following hypothesis is formulated:

**H<sub>2</sub>:** Audit committee size affects audit delay.

### 2.2.3. *Audit Opinion and Audit Delay*

Audit opinion reflects the auditor's professional judgment regarding the fairness of a firm's financial statements. Modified audit opinions typically indicate higher audit risk, accounting disputes, or internal control weaknesses, which require additional audit effort and extended negotiations with management. Consequently, firms receiving modified opinions are expected to experience longer audit delay compared to those receiving unqualified opinions (Habib et al., 2019; Sauri et al., 2024).

Prior studies provide evidence that audit opinion is a significant determinant of audit delay (Harjoto et al., 2022; Ensaf et al., 2025) particularly in emerging markets where financial reporting quality varies widely. Although SOEs are generally expected to maintain higher reporting standards, the relationship between audit opinion and audit delay remains theoretically relevant. Accordingly, the following hypothesis is proposed:

**H<sub>3</sub>:** Audit opinion affects audit delay.

#### ***2.2.4. Auditor Reputation and Audit Delay***

Auditor reputation, commonly proxied by Big Four affiliation, reflects perceived audit quality and credibility. Big Four auditors are associated with stricter audit standards, more rigorous quality control systems, and higher levels of professional skepticism. From an agency theory perspective, engaging reputable auditors enhances monitoring effectiveness but may also increase audit effort and audit duration (DeAngelo, 1981; Annafisah & Adi, 2025).

Empirical evidence suggests that firms audited by Big Four auditors tend to experience longer audit delay due to more extensive testing and multilayer review (Habib & Bhuiyan, 2011; Abbott et al., 2016; Chen et al., 2022; Ensaf et al., 2025). This effect may be more pronounced in SOEs, where audits involve complex transactions and heightened public scrutiny. Therefore, the following hypothesis is proposed:

**H<sub>4</sub>:** Auditor reputation affects audit delay.

#### ***2.2.5. Profitability as a Moderating Variable***

Profitability reflects a firm's ability to generate earnings and serves as an important signal of financial performance. From a signaling theory perspective, profitability influences how stakeholders interpret corporate disclosures, including the timeliness of audited financial statements. Highly profitable firms attract greater attention from auditors, regulators, and the public, which may intensify audit procedures and extend audit delay (Khoufi & Khoufi, 2018; Liu et al., 2023).

#### ***2.2.6. Profitability, Leverage, and Audit Delay***

While leverage increases financial risk, profitability may mitigate concerns regarding a firm's ability to meet its obligations. However, prior studies indicate that profitability does not necessarily reduce audit effort related to debt verification and risk assessment (Khoufi & Khoufi, 2018; Fitriadi et al., 2024; Ensaf et al., 2025). Thus, the following hypothesis is proposed:

**H<sub>5</sub>:** Profitability moderates the effect of leverage on audit delay.

#### ***2.2.7. Profitability, Audit Committee, and Audit Delay***

In highly profitable firms, audit committees may enforce stricter oversight to ensure the credibility and sustainability of reported earnings. This increased monitoring intensity may require auditors to perform more detailed verification, particularly in SOEs where earnings have political and public implications (Afsilah & Damayanti, 2023). Accordingly, the following hypothesis is proposed:

**H<sub>6</sub>:** Profitability moderates the effect of audit committee size on audit delay.

#### ***2.2.8. Profitability, Audit Opinion, and Audit Delay***

Profitability may influence how auditors evaluate the appropriateness of financial reporting and the issuance of audit opinions (Khoufi & Khoufi, 2018). Firms with high profitability may be subject to heightened scrutiny to ensure that earnings are not overstated, potentially affecting audit duration (Harjoto et al., 2022). Therefore, the following hypothesis is proposed:

**H<sub>7</sub>:** Profitability moderates the effect of audit opinion on audit delay.

### ***2.2.9. Profitability, Auditor Reputation, and Audit Delay***

Highly profitable firms audited by Big Four auditors may experience longer audit delays due to increased audit effort and professional skepticism applied to verify earnings quality. Prior studies indicate that reputable auditors intensify audit procedures when auditing firms with strong performance signals (Sari, 2021; Annafisah & Adi, 2025). Thus, the following hypothesis is proposed:

**H<sub>3</sub>:** Profitability moderates the effect of auditor reputation on audit delay.

## **3. Research Method**

### **3.1. Research Approach**

This study employs a quantitative research approach with an explanatory design. The quantitative approach is appropriate because this study relies on numerical data derived from audited financial statements and applies statistical techniques to examine causal relationships among variables. The explanatory design is used to identify the effects of leverage, audit committee size, audit opinion, and auditor reputation on audit delay, as well as to test the moderating role of profitability.

This research design is consistent with agency theory and signaling theory, which emphasize the role of measurable financial indicators and governance mechanisms in explaining audit outcomes and reporting behavior (Spence, 1973; Jensen & Meckling, 1979).

### **3.2. Data and Sample**

This study uses secondary data obtained from the audited annual financial statements of State-Owned Enterprises (SOEs) listed on the Indonesia Stock Exchange (IDX) for the period 2022–2024. We choose the years 2022 to 2024 because during that period there was a transition of state-owned companies in Indonesia, and there was a policy of the Republic of Indonesia government to form Danantara. Audited financial statements are used to ensure data reliability and accuracy, as they have been verified by independent external auditors.

The data were collected using documentation techniques from official sources, including the IDX website and the respective corporate websites of the sampled firms. The sampling technique employed is purposive sampling, with the following criteria:

1. Companies classified as State-Owned Enterprises (SOEs) during the observation period;
2. Companies listed on the Indonesia Stock Exchange throughout 2022–2024;
3. Availability of complete audited annual reports;
4. Availability of data required to measure all research variables.

Based on these criteria, 29 SOEs were selected, resulting in 87 firm-year observations.

### **3.3. Variable Measurement**

This study examines one dependent variable, four independent variables, and one moderating variable. The operational definitions and measurements of each variable are summarized in Table 1.

**Table 1. Operational Definition and Measurement of Variables**

No	Variable	Definition	Measurement
1	Audit Delay	Length of time required to complete the audit process (Habib et al., 2019).	Number of days from fiscal year-end - audit report date (Carslaw & Kaplan, 1991; Habib & Bhuiyan, 2011).
2	Leverage	Firm's financial risk level (Jensen & Meckling, 1979).	DER = (Total Liabilities / Total Equity) (Khoufi & Khoufi, 2018).
3	Audit Committee	Corporate governance control mechanism (Sultana et al., 2015; Abbott et al., 2016)	Number of audit committee members (Sultana et al., 2015).
4	Audit Opinion	Auditor's professional judgment (DeAngelo, 1981).	Dummy: 1 = Unqualified opinion; 0 = Others (Habib et al., 2019; Harjoto et al., 2022).
5	Auditor Reputation	External auditor credibility and perceived audit quality (DeAngelo, 1981).	Dummy: 1 = If the firm is audited by a Big Four; 0 = Non-Big Four (Habib & Bhuiyan, 2011; Abbott et al., 2016).
6	Profitability	The company's earnings performance and financial efficiency (Spence, 1973).	ROA = (Net Income / Total Assets) (Khoufi & Khoufi, 2018; Liu et al., 2023).

**Source:** Audited annual reports of SOEs listed on the Indonesia Stock Exchange (2022-2024).

Audit delay represents the timeliness of audited financial statement publication and is measured as the number of days between the company's fiscal year-end and the issuance date of the independent auditor's report. A longer audit delay indicates slower audit completion, which may reduce the usefulness of financial information for stakeholders (Ashton et al., 1987).

Leverage is measured using the Debt to Equity Ratio (DER) to capture the extent to which a firm's assets are financed through liabilities. Higher leverage reflects greater financial risk and may require additional audit procedures related to debt verification and going-concern assessment.

The audit committee variable is measured by the number of members serving on the audit committee during the fiscal year. The audit committee plays an important role in overseeing the financial reporting process and facilitating communication between management and external auditors.

Audit opinion is measured as a dummy variable, where unqualified opinions are coded as 1 and all other opinions as 0. Modified opinions generally reflect higher audit risk and may require more extensive audit effort.

Auditor reputation is proxied by Big Four affiliation, reflecting higher perceived audit quality, stricter quality control systems, and more rigorous audit procedures.

Profitability is measured using Return on Assets (ROA), which reflects management effectiveness in generating earnings from total assets and serves as a key performance signal to stakeholders.

### 3.4. Model Specification

This study employs Moderated Regression Analysis (MRA) to examine the direct effects of leverage, audit committee size, audit opinion, and auditor reputation on audit delay, as well as to test the moderating role of profitability. Profitability is treated as a moderating variable because it is expected to influence the strength of the relationship

between the independent variables and audit delay. The regression model is specified as follows:

$$\beta_0 + \beta_1\text{LEV} + \beta_2\text{AC} + \beta_3\text{OP} + \beta_4\text{REP} + \beta_5\text{PROF} + \beta_6(\text{LEV}\times\text{PROF}) + \beta_7(\text{AC}\times\text{PROF}) + \beta_8(\text{OP}\times\text{PROF}) + \beta_9(\text{REP}\times\text{PROF}) + \varepsilon \dots\dots\dots (1)$$

Where:

- LEV = Leverage
- AC = Audit Committee
- OP = Audit Opinion
- REP = Auditor Reputation
- PRO = Profitability
- $\varepsilon$  = Error term

The interaction terms are included to examine whether profitability strengthens or weakens the relationship between each independent variable and audit delay. A statistically significant interaction coefficient indicates the presence of a moderating effect.

### 3.5. Data Analysis Technique

Data analysis was conducted using SPSS version 27. Descriptive statistics were used to summarize the characteristics of each variable. Prior to hypothesis testing, classical assumption tests were performed to ensure the validity of the regression model, including tests of normality, multicollinearity, heteroscedasticity, and autocorrelation.

Hypothesis testing was conducted using multiple linear regression to examine the direct effects of the independent variables on audit delay, followed by Moderated Regression Analysis (MRA) to test the moderating role of profitability. All statistical tests were conducted at a 5% significance level.

## 4. Results and Discussion

### 4.1. Descriptive Statistics

The results of the descriptive statistical analysis are presented below:

**Table 2. Descriptive Statistics Results**

	<i>N</i>	<i>Minimum</i>	<i>Maksimum</i>	<i>Mean</i>	<i>Std. Dev</i>
Audit Delay	87	20.00	180.00	75.09	26.29
LEV	87	0.08	12.46	0.56	0.23
OP	87	1.00	1.00	1.00	0.00
AC	87	3.00	9.00	4.20	1.55
AR	87	0.00	1.00	0.60	0.49
PRO	87	-0.05	0.30	0.06	0.07

**Source(s):** Authors' own work

The descriptive statistics indicate that the average audit delay among Indonesian State-Owned Enterprises (SOEs) is 75.09 days, which is below the regulatory deadline of 90 days, although substantial variation exists across firms. This finding suggests that, on average, SOEs are able to comply with the timeliness requirements set by the Financial Services Authority.

The mean audit committee size is 4.20 members, indicating compliance with corporate governance regulations and reflecting the presence of adequate oversight

mechanisms within SOEs. All sampled firms received unqualified audit opinions, demonstrating the high level of regulatory supervision and standardized financial reporting practices applied to SOEs.

Profitability, measured by Return on Assets (ROA), shows an average value of 6.4%, with values ranging from  $-5.2\%$  to  $30.2\%$  after winsorization. This indicates moderate profitability performance among SOEs while minimizing the influence of extreme values on subsequent regression analysis.

#### 4.2. Classical Assumption Tests

Prior to hypothesis testing, classical assumption tests were conducted to ensure the validity of the regression model. The results indicate that the residuals are normally distributed, the variance inflation factor (VIF) values are below the threshold of 10, heteroscedasticity is not present, and the Durbin-Watson statistic is close to 2, indicating no autocorrelation. Therefore, the regression model is deemed appropriate for hypothesis testing.

#### 4.3. Regression and Hypothesis Testing

**Table 3. Regression Results and Hypothesis Testing**

Variable	Coefficient (B)	t-statistic	Sig.	Hypothesis
Leverage (LEV)	0.027	0.709	0.481	H1 Rejected
Audit Committee (AC)	0.022	3.695	0.001	H2 Accepted
Auditor Reputation (REP)	0.057	3.083	0.003	H4 Accepted
LEV $\times$ PROF	-0.000	-1.312	0.193	H5 Rejected
AC $\times$ PROF	0.827	2.971	0.004	H6 Accepted
REP $\times$ PROF	0.828	2.979	0.005	H8 Accepted

**Source(s):** Authors' own work

Table 3 presents the results of the regression and hypothesis testing. The regression model is statistically significant (F-statistic = 10.108;  $p < 0.001$ ) and explains approximately 29.8% of the variation in audit delay, indicating a moderate explanatory power that is acceptable for studies examining governance and audit-related behavior.

The results show that leverage does not have a significant effect on audit delay ( $\beta = 0.027$ ;  $p = 0.481$ ), leading to the rejection of H1. In contrast, audit committee size has a positive and statistically significant effect on audit delay ( $\beta = 0.022$ ;  $p = 0.001$ ), supporting H2. Auditor reputation, proxied by Big Four affiliation, also exhibits a positive and significant effect on audit delay ( $\beta = 0.057$ ;  $p = 0.003$ ), thus supporting H4.

The moderating analysis indicates that profitability does not moderate the relationship between leverage and audit delay ( $\beta = -0.000062$ ;  $p = 0.193$ ), resulting in the rejection of H5. However, profitability significantly strengthens the positive relationship between audit committee size and audit delay ( $\beta = 0.827$ ;  $p = 0.004$ ) and between auditor reputation and audit delay ( $\beta = 0.828$ ;  $p = 0.004$ ), supporting H6 and H8, respectively. The effects of audit opinion and its interaction with profitability could not be tested due to the absence of variation, as all sampled firms received unqualified audit opinions.

#### 4.4. Discussion

##### 4.4.1. *Leverage and Audit Delay*

The findings indicate that leverage does not significantly affect audit delay among Indonesian State-Owned Enterprises (SOEs). This result suggests that higher levels of corporate debt do not necessarily prolong audit completion time in firms operating under strong institutional support and government backing. Although agency theory posits that leverage increases monitoring demands due to heightened financial risk, SOEs typically benefit from government guarantees, standardized debt contracts, and intensive regulatory supervision, which reduce auditors' perceived debt-related risks.

This finding is consistent with studies conducted in institutional environments characterized by strong governance and political oversight (Habib & Bhuiyan, 2011; Fitriadi et al., 2024). However, it contrasts with evidence from private-sector firms, where leverage is often associated with longer audit delay due to increased verification of debt covenants and going-concern assessments (Carslaw & Kaplan, 1991). These differences underscore the importance of institutional context in explaining audit delay.

##### 4.4.2. *Audit Committee and Audit Delay*

The results demonstrate that audit committee size has a positive and significant effect on audit delay. This finding indicates that stronger governance mechanisms, while enhancing oversight and accountability, may increase audit completion time. From an agency theory perspective, audit committees function as monitoring bodies that reduce information asymmetry; however, larger audit committees tend to require more extensive communication, deliberation, and coordination with external auditors.

This result aligns with prior studies suggesting that audit committee effectiveness and size are positively associated with audit delay due to increased procedural rigor (Sultana et al., 2015; Abbott et al., 2016). In SOEs, audit committees operate within multilayered governance structures involving government ministries and regulators, which further intensify oversight requirements and extend audit timelines.

##### 4.4.3. *Audit Opinion and Audit Delay*

The effect of audit opinion on audit delay could not be empirically tested because all sampled SOEs received unqualified audit opinions during the observation period. This lack of variation reflects the stringent regulatory oversight, standardized reporting practices, and high accountability standards applied to SOEs in Indonesia. Although audit opinion could not be statistically examined, its theoretical relevance remains intact, as prior studies document longer audit delays for firms receiving modified opinions due to increased audit complexity (Habib et al., 2019; Sauri et al., 2024).

The homogeneity of audit opinions represents a methodological limitation of this study but simultaneously highlights an important institutional characteristic of SOEs. Future research may extend the observation period or include non-SOE firms to capture greater variation in audit opinions.

##### 4.4.4. *Auditor Reputation and Audit Delay*

The findings reveal that auditor reputation, proxied by Big Four affiliation, has a positive and significant effect on audit delay. This result suggests that firms audited by reputable auditors experience longer audit completion times. Consistent with agency theory, Big Four auditors apply stricter audit standards, higher professional skepticism, and multilayer quality control procedures.

This finding is consistent with prior international evidence indicating that reputable auditors require more extensive audit effort, particularly when auditing complex and publicly accountable firms (Habib & Bhuiyan, 2011; Abbott et al., 2016). In the context of SOEs, where audits involve politically sensitive transactions, higher audit quality is often accompanied by longer audit delay.

#### ***4.4.5. Profitability as a Moderator of Leverage and Audit Delay***

The interaction between leverage and profitability does not significantly affect audit delay, indicating that profitability does not moderate the leverage–audit delay relationship. This suggests that auditors’ assessment of debt-related risks remains consistent regardless of firm performance. Even in highly profitable SOEs, auditors are required to conduct thorough evaluations of debt covenants, repayment capacity, and going-concern assumptions.

This result is consistent with prior studies reporting no moderating effect of profitability on leverage and audit delay (Fitriadi et al., 2024). From a signaling theory perspective, although profitability conveys positive performance signals, it does not eliminate the need for rigorous audit procedures related to financial risk.

#### ***4.4.6. Profitability as a Moderator of Audit Committee and Audit Delay***

The results indicate that profitability significantly strengthens the positive relationship between audit committee size and audit delay. This finding implies that in more profitable SOEs, audit committees intensify oversight to ensure the credibility and sustainability of reported earnings, thereby increasing audit completion time.

This result supports signaling theory, which suggests that strong performance signals attract greater scrutiny from governance bodies and auditors (Spence, 1973). Prior studies also document that governance mechanisms become more active in firms with strong financial performance (Santoso & Dewi, 2020). In SOEs, profitability may carry political and public implications, further motivating audit committees to strengthen monitoring activities.

#### ***4.4.7. Profitability as a Moderator of Audit Opinion and Audit Delay***

The moderating effect of profitability on the relationship between audit opinion and audit delay could not be tested due to the absence of variation in audit opinions. While this limits empirical testing, the theoretical relevance of profitability as a moderating variable remains valid. In more heterogeneous samples, profitability may influence auditors’ judgment and audit duration through heightened scrutiny of earnings quality.

#### ***4.4.8. Profitability as a Moderator of Auditor Reputation and Audit Delay***

The findings show that profitability significantly strengthens the positive relationship between auditor reputation and audit delay. This indicates that Big Four auditors tend to intensify audit procedures when auditing highly profitable SOEs. From a signaling theory perspective, high profitability represents a strong performance signal that increases stakeholders’ expectations regarding reporting credibility.

Consistent with prior studies (Wirayudha & Budiarta, 2022), reputable auditors respond to strong performance signals by increasing audit effort to mitigate reputational risk. In SOEs, where financial performance is closely linked to political evaluation and public scrutiny, this conservative audit approach contributes to longer audit delays.

## 5. Conclusion

This study examines the determinants of audit delay in Indonesian State-Owned Enterprises (SOEs) and investigates the moderating role of profitability. Using a sample of SOEs listed on the Indonesia Stock Exchange during the period 2022–2024, this study provides empirical evidence on how financial risk, governance mechanisms, and auditor characteristics influence audit timeliness in a highly regulated and politically sensitive institutional context.

The results indicate that leverage does not significantly affect audit delay, suggesting that debt levels do not necessarily increase audit completion time in SOEs due to strong government oversight and institutional support. In contrast, audit committee size and auditor reputation (Big Four affiliation) have a positive and significant effect on audit delay, indicating that stronger governance structures and higher audit quality are associated with longer audit processes. Furthermore, profitability strengthens the positive relationship between audit committee size and audit delay, as well as between auditor reputation and audit delay, but does not moderate the relationship between leverage and audit delay. The moderating effect of audit opinion could not be empirically tested due to the absence of variation in the sample, as all firms received an unqualified opinion during the observation period.

Overall, these findings highlight a trade-off between audit quality and reporting timeliness in SOEs, where enhanced monitoring and rigorous audit procedures improve accountability but may delay the issuance of audited financial statements.

This study contributes to the auditing literature by extending agency theory and signaling theory within the context of State-Owned Enterprises. First, the findings support agency theory by demonstrating that stronger monitoring mechanisms—such as larger audit committees and reputable auditors—are associated with increased audit effort, reflected in longer audit delay. This evidence confirms that enhanced governance and audit quality entail higher monitoring costs in the form of extended audit timelines.

Second, this study enriches signaling theory by showing that profitability not only functions as a performance signal but also conditions auditors' and governance bodies' behavior. In highly profitable SOEs, audit committees and Big Four auditors intensify their oversight to ensure the credibility and sustainability of reported earnings, resulting in longer audit delay. By incorporating profitability as a moderating variable, this study provides a more nuanced theoretical understanding of how performance signals interact with governance mechanisms in shaping audit outcomes.

The findings of this study offer several practical implications for SOE management, auditors, and regulators. For SOE management, the results highlight the importance of balancing strong governance and audit quality with reporting efficiency. Early audit planning, improved internal coordination, and timely communication with audit committees and external auditors may help reduce unnecessary delays without compromising audit quality.

For auditors, particularly Big Four firms, the findings emphasize the need to manage audit resources effectively when dealing with highly profitable and publicly accountable entities. While rigorous audit procedures are essential, process efficiency and the use of audit technology may help mitigate excessive audit delay.

For regulators and policymakers, the results suggest that audit delay in SOEs should be interpreted within the context of governance intensity and audit quality. Regulatory evaluations of reporting timeliness should consider the trade-off between accountability and efficiency, particularly in entities with complex public mandates.

Despite its contributions, this study has several limitations. First, the sample is limited to SOEs listed on the Indonesia Stock Exchange, which may restrict the generalizability of the findings to other types of firms or institutional settings. Second, the audit opinion variable could not be statistically tested due to the homogeneity of unqualified opinions across the sample. Third, this study employs a single proxy for profitability, which may not fully capture all dimensions of firm performance.

Future research is encouraged to extend the sample period, include non-SOE firms for comparative analysis, and employ alternative measures of profitability such as return on equity or operating margin. Additionally, future studies may incorporate other explanatory variables, such as internal control quality, ownership structure, or operational complexity, to further explain variations in audit delay.

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