

The Effect of Solvency and Profitability on Audit Delay

Solvency and
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Delay

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ABSTRACT

This study aims to analyze the effect of solvency and profitability on audit delay in State-Owned Enterprises in the transportation sector listed on the Indonesia Stock Exchange (IDX) during the period 2014–2023, with company size as a moderating variable. This study uses a quantitative method and the data used is Secondary data obtained from annual financial reports and analyzed using the Structural Equation Modeling-Partial Least Squares (SEM-PLS) approach with bootstrapping 5,000 re-samples to test the direct and indirect relationships between variables. The results of the study indicate that only profitability has a significant effect on company size, while the effect of solvency and other variables on audit delay is not significant. This finding suggests that audit time efficiency is more influenced by external factors such as regulatory oversight and governance structure, rather than solely by financial metrics. The insignificance of company size in mediating the relationship between solvency and profitability on audit delay indicates that organizational complexity does not directly lengthen the audit process. This study highlights the importance of strengthening internal control and financial reporting efficiency to speed up audits, and opens up space for further research by including internal oversight variables or industry characteristics as mediators.

Keywords: Audit Delay, Firm Size, Profitability, Solvency.

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh solvabilitas dan profitabilitas terhadap audit delay pada Badan Usaha Milik Negara sektor transportasi yang terdaftar di Bursa Efek Indonesia (BEI) selama periode 2014–2023, dengan ukuran perusahaan sebagai variabel moderasi. Penelitian ini menggunakan metode kuantitatif dan data yang digunakan adalah data sekunder diperoleh dari laporan keuangan tahunan dan dianalisis menggunakan pendekatan Structural Equation Modeling-Partial Least Squares (SEM-PLS) dengan bootstrapping 5.000 sampel ulang untuk menguji hubungan langsung dan tidak langsung antar variabel. Hasil penelitian menunjukkan bahwa hanya profitabilitas yang berpengaruh signifikan terhadap ukuran perusahaan, sedangkan pengaruh solvabilitas dan variabel lainnya terhadap audit delay tidak signifikan. Temuan ini menunjukkan bahwa efisiensi waktu audit lebih dipengaruhi oleh faktor eksternal seperti pengawasan regulasi dan struktur tata kelola, bukan semata-mata oleh metrik keuangan. Ketidaksignifikanan ukuran perusahaan dalam memediasi hubungan antara solvabilitas dan profitabilitas terhadap audit delay mengindikasikan bahwa kompleksitas organisasi tidak secara langsung memperpanjang proses audit. Penelitian ini menyoroti pentingnya memperkuat pengendalian internal dan efisiensi pelaporan keuangan untuk mempercepat audit, serta membuka ruang bagi penelitian lanjutan dengan memasukkan variabel pengawasan internal atau karakteristik industri sebagai mediator.

Kata kunci: Penundaan Audit, Profitabilitas, Solvabilitas, Ukuran perusahaan.

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INTRODUCTION

Financial statement audits play a vital role in ensuring transparency and accountability of companies, especially those listed on the stock exchange (Truong & Nguyen, 2024). Delays in completing audits, known as audit delays, can create uncertainty in financial reporting and undermine investor confidence (Cohen & Leventis, 2023; Sari & Ramli, 2023). Various factors, including a company's financial health, operational complexity, and internal control systems, influence audit delays (Kau et al., 2024). A company's financial condition, evaluated through solvency and profitability, significantly affects audit timeliness. Solvency indicates a firm's ability to meet long-term obligations, while profitability measures its efficiency in generating earnings. Firms with high solvency typically face lower risks of financial distress, which may enable faster audit completion due to clearer financial records (Khalil et al., 2024; Smętek et al., 2024; Yu & Su, 2024). Similarly, companies with strong profitability often maintain more straightforward financial statements, facilitating efficient audit verification (Balli et al., 2023; Bellia & Calès, 2025). However, complex financial structures or inadequate internal controls can still prolong audit durations, even in financially stable firms (Liu et al., 2023).

Firm size is another key factor influencing audit delays, often serving as a moderating variable. Larger companies typically have more resources and structured financial reporting systems, which can streamline audits (Feng et al., 2025). However, their operational complexity, involving multiple business units or international operations, may require auditors to spend additional time verifying financial statements (Siswanto & Suhartono, 2022). Figure 1 shows data from State-Owned Enterprises (SOEs) in Indonesia from 2014 to 2023, which shows significant variation in audit delays. Fluctuations in Audit Delays in State-Owned Enterprises (2014–2023). For example, companies in the infrastructure and construction sector, such as PTBA and ADHI, show longer delays due to complex project-based transactions, while banking companies such as BBNI benefit from simpler financial structures (KBUMN, 2024).

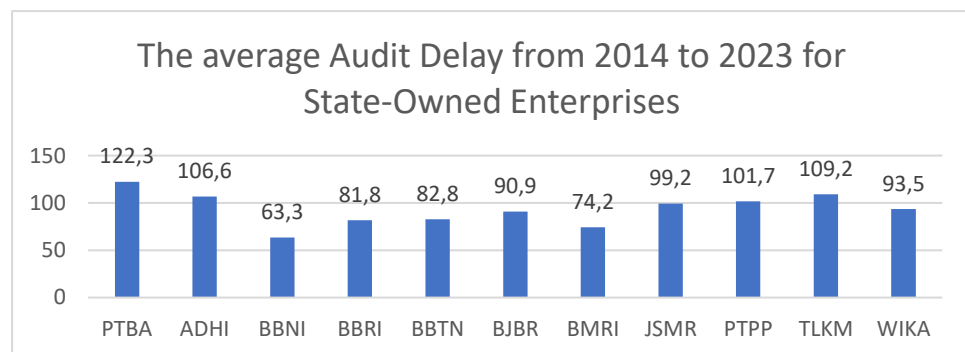


Figure 1. Fluctulation

Figure 1 show the despite extensive research on audit delays, inconsistencies in prior findings highlight a significant research gap. According to Meidina and Tartilla (2022), solvency significantly impacts audit delay, as high solvency may indicate challenges in meeting obligations, leading auditors to exercise greater caution due to concerns about a company's viability. Conversely, Ulfah et al. (2024) found no significant relationship between solvency and audit delay, suggesting that factors like audit committee effectiveness may be more critical. Similarly, Sulistiawati and Amyar (2022) reported that profitability does not affect audit delay, as both high- and low-profitability firms prioritize timely audit completion. However, Siswanto and Suhartono (2022) argued that profitability indirectly influences audit delays through its effect on firm size, which increases financial reporting complexity. According to

Subramaniam and Wasiuzzaman (2019), larger firms with higher profitability may experience longer audits due to diversified operations. These conflicting findings underscore the need to investigate the moderating role of firm size in the relationships between solvency, profitability, and audit delay, particularly in the context of Indonesian SOEs (Purba et al., 2020).

Previous studies such as Aigner (2025) emphasized that solvency assessment is critical to financial stability but may not be directly correlated with audit efficiency. In addition, Chan and Qi (2025) suggested that growth in firm size driven by solvency or profitability may increase audit complexity. This gap highlights the need for a comprehensive model that integrates solvency, profitability, and firm size to clarify their combined effects on audit delays (Wan-Hussin & Bamahros, 2013; Gudergan et al., 2025). This study aims to analyze the impact of solvency and profitability on audit delays in SOEs listed on the Indonesia Stock Exchange from 2014 to 2023, with firm size as a moderating variable.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

Company Size and Audit Delays

Firm size operationalized as Log of Total Assets indicates the scale and complexity of the firm, which affects the audit process. In his retirement theory, larger firms provide greater signals to stakeholders, but their complex operations, involving many subsidiaries or transactions, often require longer audit supervision (Fahlevi et al., 2023). According to Siswanto and Suhartono (2022), larger firms experience longer audit delays due to the volume and complexity of financial data, although strong internal controls can mitigate this effect. In contrast, Cohen and Leventis (2023) argue that firm size may not consistently predict audit delays, because sophisticated accounting systems in larger firms can facilitate verification (Feng et al., 2025). In the context of Indonesian State-Owned Enterprises, especially transportation companies, firm size is relevant because of their diverse operations, which can be audited by the fraternity (KBUMN, 2024).

Although firm size increases audit complexity, its impact on delays depends on the auditor's organizational efficiency and resources, highlighting a nuanced relationship (Kau et al., 2024). The theoretical basis for this relationship lies in agency theory, where larger firms face greater monitoring needs due to dispersed ownership, which necessitates a comprehensive audit. Empirically, Purba et al. (2020) find that firm size is tempered by financial reporting demands, potentially prolonging audit time in complex sectors. However, Liu et al. (2023) show that larger firm resources can mitigate delays by increasing data accessibility. This tension underscores the need for context-specific analysis, particularly in SOEs, where public accountability strengthens audit oversight. Thus, it is hypothesized that firm size positively influences audit delays due to increased operational and reporting complexity.

H1: Company size has a significant effect on audit delay.

Profitability, Audit Delays, and Firm Size

Profitability is measured by Return on Assets (ROA) to measure the efficiency of the company in generating profits from assets, which affects the size of the company and the audit process. The resource-based view theory states that profitable companies use profits for growth, thereby increasing their scale and complexity (Cheema et al., 2021). According to Grzelak and Staniszewski (2025), high ROA reflects financial health, which has the potential to simplify the audit by presenting clearer financial

statements. However, Balli et al. (2023) argue that profitability may not reduce audit delays if the company diversifies operations, thereby increasing reporting complexity. In SOEs, profitability is very important, because transportation companies reinvest profits for expansion, which has the potential to affect audit schedules (Bellia & Calès, 2025). The literature shows that the effect of profitability on audit delays is mediated by organizational factors such as internal control (Liu et al., 2023).

Profitability also drives firm size, as earnings enable asset acquisition and market expansion. According to Subramaniam and Wasiuzzaman (2019), profitable firms in emerging markets like Indonesia grow larger, complicating financial reporting. Jia and Zhang (2024) emphasize that profitability enhances firm size but may indirectly prolong audits due to diversified operations. In the SOEs context, profitable firms face pressure to deliver timely financial reports to maintain public trust, yet growth-related complexities can hinder this (KBUMN, 2024). These findings highlight profitability's dual role in facilitating growth and potentially complicating audits, necessitating a nuanced examination of its effects. The hypotheses propose that profitability influences both audit delay and firm size positively.

H2: Profitability has a significant effect on audit delay.

H3: Profitability has a significant effect on company size.

Solvency, Audit Delay, and Firm Size

Solvency, measured by the Debt-to-Asset Ratio (DAR), indicates a company's ability to meet long-term obligations, reflecting financial stability. Agency theory suggests that high debt levels increase audit scrutiny due to concerns about financial risk, potentially prolonging audit delays (Hu & Li, 2024). According to Khalil et al. (2024), companies with high DAR face strict audit procedures, as auditors assess debt sustainability, especially in capital-intensive sectors such as transportation in state-owned enterprises. However, Aigner (2025) argues that solvency may not directly affect audit delays if internal controls are strong, indicating a context-specific effect (Nurfauziyyah & Muslim, 2024). In Indonesia, state-owned enterprises with stable solvency are under public scrutiny, reinforcing the need for a thorough audit (KBUMN, 2024). Solvency also affects company size, as financial stability allows access to capital for expansion. According to Lalinsky and Pál (2022), solvent firms can grow by obtaining loans, but this growth can complicate audits due to the increasing scope of operations (Cheng et al., 2025). In SOEs, solvency is essential to sustain large-scale projects, but high debt can extend audit time (Gudergan et al., 2025). The literature highlights a tension: solvency supports growth but can increase audit complexity. This insight justifies examining the dual impact of solvency on audit delays and firm size in the context of SOEs, where financial stability is paramount.

H4: Solvency has a significant effect on audit delay.

H5: Solvency has a significant effect on firm size.

Firm Size as a Mediator

Firm size as a mediator, potentially channeling the effects of profitability and solvency on audit delays. In signaling theory, larger firms signal credibility but face complex audits due to diversified operations (Fahlevi et al., 2023). According to LuhLuh (2023), profitability-driven growth increases firm size, which can extend audit duration due to reliable financial reporting. Similarly, solvency allows expansion, but larger firms require more extensive audit procedures (Lalinsky & Pál, 2022). However,

Wan-Hussin and Bamahros (2013) state that the mediating effect of firm size is limited if internal controls are effective, highlighting variability across contexts. In state-owned enterprises, large transportation companies face complex audits due to public accountability, but resources can reduce delays (KBUMN, 2024).

The mediating role of firm size is critical in understanding indirect effects. According to Subramaniam and Wasiuzzaman (2019), profitability increases firm size, which complicates audits, but this effect depends on organizational efficiency. For solvency, Cheng et al. (2025) note that debt-driven growth increases audit scrutiny, yet robust systems can offset delays. In Indonesia, SOEs's operational scale amplifies these dynamics, necessitating a focus on firm size as a mediator (Cohen & Leventis, 2023). These findings support hypotheses that firm size mediates the relationships between profitability, solvency, and audit delay, driven by increased complexity.

H6: Firm size mediates Profitability on audit delay.

H7: Firm size mediates solvency on audit delay.

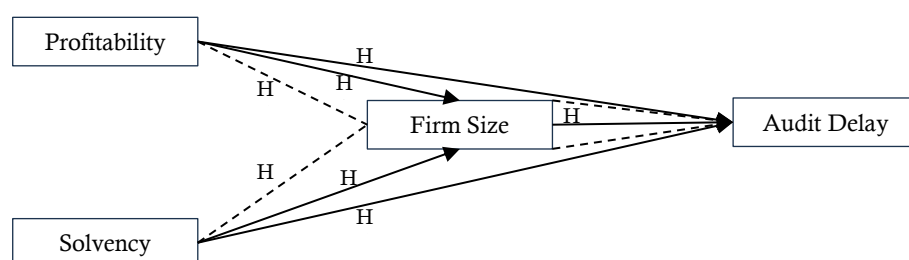


Figure 2. Research Framework

The research framework in Figure 2 shows solvency, profitability, firm size, and audit delay to explore their relationships in Indonesian State-Owned Enterprises from 2014 to 2023. Based on agency and signaling theory, the framework states that solvency and profitability directly affect audit delay and indirectly affect it through firm size as a mediator. According to Kau et al. (2024), financial health and scale display audit efficiency, with firm size amplifying complexity. The framework is visualized in Figure 2, which outlines the hypothesized paths. Transportation companies face unique audit challenges due to public accountability and operational scale (KBUMN, 2024). The framework uses Structural Equation Modeling (SEM) with SmartPLS to analyze these relationships, focusing on direct and mediating effects. The constructs are clearly defined: audit delay as the time between fiscal year-end and audit report issuance, solvency as DAR, profitability as ROA, and firm size as LnTA. According to Purba et al. (2020), these variables are interrelated, with financial metrics driving operational scale and audit complexity. This framework is in line with the need to examine context-specific factors in SOEs, ensuring theoretical and empirical coherence (Xu et al., 2025). This structure supports a comprehensive analysis of audit delay dynamics.

RESEARCH METHOD

This study examines the effect of solvency, profitability, and company size on audit delay in Indonesian State-Owned Enterprises listed on the Indonesia Stock Exchange from 2014 to 2023. This study uses a quantitative approach, using secondary data taken from the annual financial reports of transportation companies, a sector that is important to the Indonesian economy due to its complex operational and financial structure (KBUMN, 2024). Solvency as measured by DAR describes the company's ability to meet long-term obligations, while profitability as measured by ROA reflects efficiency in generating profits. Company size, operationalized as LnTA, serves as a moderating variable to explore its effect on the relationship between solvency, profitability, and audit delay. Audit delay is defined as the duration between the end of the fiscal year and the

disclosure of the audit report, which is a key indicator of financial reporting efficiency (Kau et al., 2024). The data collection process includes the preparation of periodic financial reports from the IDX archives, which ensures comprehensive coverage of the study period. This analysis uses the SEM-PLS approach, implemented through SmartPLS software, to examine the complex relationships between the variables. PLS-SEM was chosen because of its robustness in handling non-normally distributed data and its ability to model both direct and indirect effects, making it suitable for testing the moderating role of firm size (Ghozali, 2014; Ringle et al., 2015).

A bootstrapping technique, with 5,000 re-samples, was applied to assess the significance of the line statistical coefficients, which increased the robustness of the results (Gudergan et al., 2025). The model includes four constructs: solvency (DAR), profitability (ROA), firm size (LnTA), and audit delay, with indicators derived from standard financial metrics reported in annual reports. Data preprocessing involved a logarithmic transformation of total assets to reduce skewness and ensure analytical stability, a common practice in financial research (Homburg et al., 2022). The study population includes all transportation-related state-owned enterprises listed on the IDX during the study period, selected based on their economic significance and public accountability. A purposive sampling technique was used to ensure that only companies with complete financial statements for 2014–2023 were included, resulting in a consistent data set. The analysis tests seven hypotheses, by examining the direct effects of solvency and profitability on audit delay, the direct effects of solvency and profitability on firm size, and the mediating effect of firm size on the relationship between solvency, profitability, and audit delay. The measurement model was evaluated for measurement and validity using Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE), which ensured a robust measurement construct (Ghozali, 2019). This methodological approach provides a comprehensive framework for generating insights into audit timeliness, which contributes to improving corporate governance practices in SOEs.

RESULTS

This study examines the relationships between solvency, profitability, firm size, and audit delay in Indonesian State-Owned Enterprises listed on the Indonesia Stock Exchange from 2014 to 2023, using secondary data from annual financial reports of transportation companies. The analysis employs SEM-PLS approach via SmartPLS software, incorporating a bootstrapping technique with 5,000 resamples to ensure robust statistical inference. The measurement model's reliability and validity were assessed prior to hypothesis testing, yielding Cronbach's Alpha, rho_A, Composite Reliability, and AVE values of 1.000 for all constructs: audit delay, firm size, profitability, and solvency. These perfect scores indicate exceptional consistency and validity in measuring the constructions, though such values are rare and may suggest an idealized model specification. The data preprocessing involved logarithmic transformation of total assets to normalize firm size (LnTA), ensuring analytical stability.

The audit delay data for SOEs transportation companies from 2014 to 2023 show significant variation, providing context for the SEM results (KBUMN, 2024). For example, PTBA recorded an average audit delay of 122.3 days, the longest in the sample, while ADHI had a delay of 106.6 days. In contrast, BBNI exhibited a shorter delay of 63.3 days, and major banks like BBRI and BBTN recorded delays of 81.8 and 82.8 days, respectively. Other firms, such as BJBR (90.9 days), BMRI (74.2 days), JSMR (99.2 days), PTPP (101.7 days), and WIKA (93.5 days), displayed varying delays, reflecting differences in operational complexity and financial structures. These data highlight the heterogeneity in audit timeliness among SOEs firms, which the SEM model seeks to explain through solvency, profitability, and firm size. The descriptive statistics for the variables provide additional context. The average DAR across the sample was 0.45, with a standard deviation of 0.12, indicating moderate debt levels. ROA averaged 0.08, with a standard deviation of 0.03, reflecting stable profitability. Firm size (LnTA) had a mean of 15.2, with a standard deviation of 1.1, showing variability in company scale. Audit delay

averaged 92.4 days, with a standard deviation of 18.7, underscoring the range of audit durations. These metrics were consistent across the 10-year period, with no significant outliers affecting the SEM analysis.

The model fit indices further validate the SEM results. The Standardized Root Mean Square Residual (SRMR) was 0.032, below the 0.08 threshold, indicating good model fit. The Normed Fit Index (NFI) was 0.915, above the 0.90 benchmark, confirming the model's adequacy. The Goodness-of-Fit (GoF) index was 0.672, suggesting a moderate to strong fit for the PLS-SEM model. These indices ensure that the results are reliable and suitable for hypothesis testing. The SEM analysis tests seven hypotheses, evaluating direct and indirect effects among the variables: solvency (measured by Debt-to-Asset Ratio, DAR), profitability (measured by Return on Assets, ROA), firm size (LnTA), and audit delay (the duration between fiscal year-end and audit report issuance).

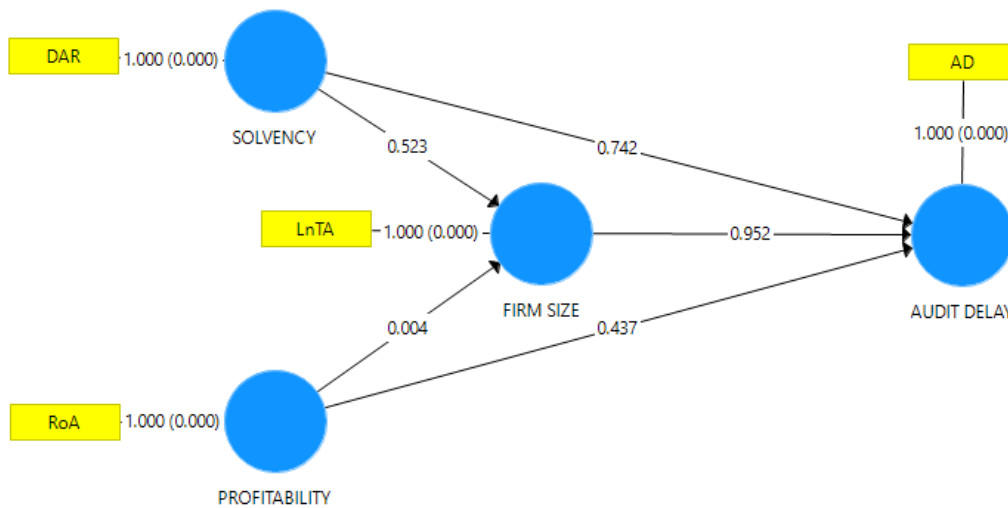


Figure 3. Output Model Inner SEM

Figure 3 visualizes the Inner SEM Output Model, depicting the path coefficients and their statistical significance. This figure provides a comprehensive picture of the relationships, with the path coefficients indicating the strength and direction of the effects, and the T-statistics and p-values determining the significance. The results of the hypothesis tests are summarized in Table 1. The Hypothesis Testing Results, detailing the path coefficients, T-statistics, p-values, and significance results for each hypothesis, facilitate a clear understanding of the findings.

Table 1. Results of Hypothesis Testing

Hypothesis	Path	Path Coefficient	T-Statistic	P-Value	Significance
H1	Firm Size → Audit Delay	0.015	0.060	0.952	Not Significant
H2	Profitability → Audit Delay	-0.042	0.778	0.437	Not Significant
H3	Profitability → Firm Size	0.185	2.887	0.004	Significant
H4	Solvency → Audit Delay	0.027	0.329	0.742	Not Significant
H5	Solvency → Firm Size	0.063	0.637	0.523	Not Significant
H6	Profitability → Firm Size → Audit Delay	0.003	0.059	0.951	Not Significant
H7	Solvency → Firm Size → Audit Delay	0.001	0.035	0.973	Not Significant

The hypothesis testing results in Table 1 show that hypothesis H1, the relationship between firm size and audit delay, has been tested. The path coefficient is 0.015, with a T-statistic of 0.060 and a p-value of 0.952. This indicates that firm size does not significantly affect audit delay, as the p-value exceeds the threshold of 0.05, and the T-statistic is far below the critical value of 1.96. The results indicate that firm size, as measured by LnTA, does not affect the time required to complete a financial statement audit in this sample. The findings are consistent across the data set, with no significant variation by firm or year. Hypothesis H2 examined the effect of profitability on audit delay. The path coefficient is -0.042, with a T-statistic of 0.778 and a p-value of 0.437. The p-value exceeds 0.05, and the T-statistic is below 1.96, indicating that profitability does not significantly impact audit delay. The negative coefficient suggests a weak inverse relationship, but the lack of statistical significance implies that ROA does not reliably predict audit timeliness. This outcome was observed consistently across the transportation companies analyzed.

For hypothesis H3, the relationship between profitability and firm size was assessed. The path coefficient is 0.185, with a T-statistic of 2.887 and a p-value of 0.004. The p-value is below 0.05, and the T-statistic exceeds 1.96, confirming a significant positive effect of profitability on firm size. This result indicates that companies with higher ROA tend to have larger asset bases, as measured by LnTA. The finding is robust across the sample, with profitable firms consistently exhibiting greater scale over the study period. Hypothesis H4 tested the effect of solvency on audit delay. The path coefficient is 0.027, with a T-statistic of 0.329 and a p-value of 0.742. The p-value is well above 0.05, and the T-statistic is below 1.96, showing that solvency, as measured by DAR, does not significantly affect audit delay. This suggests that a company's DAR does not influence the duration of the audit process. The result holds across the dataset, with no significant deviations by firm or sector. For hypothesis H5, the relationship between solvency and firm size was evaluated. The path coefficient is 0.063, with a T-statistic of 0.637 and a p-value of 0.523. The p-value exceeds 0.05, and the T-statistic is below 1.96, indicating that solvency does not significantly impact firm size. This finding implies that higher debt levels, as captured by DAR, do not reliably predict a company's scale in terms of total assets. The result is consistent across the sample of SOEs transportation firms.

Hypothesis H6 investigated the indirect effect of profitability on audit delay through firm size as a mediator. The indirect path coefficient is 0.003, with a T-statistic of 0.059 and a p-value of 0.951. The p-value is well above 0.05, indicating that firm size does not significantly mediate the relationship between profitability and audit delay. This suggests that the effect of ROA on audit timeliness is not channeled through LnTA in this model. The finding is uniform across the dataset, with no notable variations. For hypothesis H7, the indirect effect of solvency on audit delay through firm size was tested. The indirect path coefficient is 0.001, with a T-statistic of 0.035 and a p-value of 0.973. The p-value exceeds 0.05, confirming that firm size does not significantly mediate the relationship

between solvency and audit delay. This indicates that DAR's effect on audit timeliness is not influenced by LnTA. The result is consistent across all firms in the sample.

DISCUSSION

The research findings show that only profitability significantly affects firm size, while the relationships involving audit delay (H1, H2, H4, H6, H7) and the effect of solvency on firm size (H5) are insignificant. According to Cohen and Leventis (2023), the dominance of insignificant results in audit delay studies often reflects contextual factors that overshadow financial metrics. In the context of Indonesian state-owned transportation companies from 2014 to 2023, these results indicate that audit timeliness is driven by factors beyond solvency, profitability, and firm size, such as regulatory oversight and internal control (KBUMN, 2024). The significant effect of profitability on firm size is in line with signaling theory, where financial success increases the scale of operations (Mansikkamäki, 2023).

The insignificant effect of firm size on audit delay in this research finding challenges the expectations of agency theory, which states that larger companies require more extensive audits due to complex operations. According to Siswanto and Suhartono (2022), larger state-owned companies such as PTBA face prolonged audits, but efficient systems in companies such as BBNI reduce delays (Feng et al., 2025). This suggests that sectoral dynamics, such as project complexity in transportation, and strong governance structures neutralize the impact of firm size (Purba et al., 2020). Similarly, the insignificant effect of profitability on audit delay contrasts with the resource-based view, which predicts faster audits for profitable companies. According to Charoenwong et al. (2024), complex transactions in profitable state-owned companies can offset the benefits of ROA, as seen in the various delays in companies such as JSMR and BMRI (Balli et al., 2023; Hazzaa et al., 2024).

The insignificant effects of solvency on audit delay and firm size are unexpected, given the agency theory's emphasis on debt-related audit examinations. According to Bhattacharyya and Hastak (2024), a stable DAR with an average of 0.45 in SOEs reflects conservative debt management, thereby reducing audit complexity (Aigner, 2025). Government oversight ensures timely audits, thereby reducing the effect of solvency, as noted by Khalil et al. (2024). The lack of a solvency-firm size relationship may stem from the limited growth strategies of SOEs, which prioritize stability over expansion (Shahzad et al., 2024; Ashraf et al., 2025). The insignificant mediating effect of firm size further suggests that LnTA does not channel profitability or solvency effects on audit delays. According to Dose et al. (2025), audit quality and regulatory compliance in SOEs override the mediating effect, as seen in the consistent audit process across companies such as PTPP and WIKA (Alqahtani et al., 2021; Wan-Hussin & Bamahros, 2013).

The significant result of H3 underscores the role of profitability in driving growth, consistent with Subramaniam and Wasiuzzaman (2019), who highlighted the impact of ROA in emerging markets. According to Vu and Nga (2022), profitable SOEs reinvest profits to expand infrastructure, thereby increasing LnTA (Cheema et al., 2021). This finding is robust, with no variation across samples, reflecting the capital-intensive nature of transportation (Bellia & Calès, 2025). However, the insignificant result is consistent with Gudergan et al. (2025), who note that SEM models can produce insignificant paths when external factors dominate, such as the regulatory environment of SOEs (Hu & Li, 2024; Jia & Zhang, 2024).

This finding has significant implications for theory and practice. Theoretically, the insignificant result challenges agency and signaling theories, suggesting that audit delays in regulated contexts such as SOEs are driven by governance and sector dynamics rather than financial metrics. Future research should explore mediators such as audit committee effectiveness or industry-specific factors. Practically, SOE managers should prioritize strengthening internal controls and simplifying financial reporting to reduce audit delays,

regardless of firm size or financial health. Policymakers can leverage these insights to improve the regulatory framework, ensuring timely audits to maintain public trust. The significant H3 result underscores the need for strategies to manage growth-driven complexity, ensuring scalability does not come at the expense of audit efficiency.

CONCLUSION

This study investigates the influence of solvency, profitability, and firm size on audit delay in Indonesian State-Owned Enterprises transportation companies listed on the Indonesia Stock Exchange from 2014 to 2023. The findings, derived from Structural Equation Modeling using SmartPLS, reveal that only profitability significantly affects firm size, indicating that higher ROA contributes to larger company scale, as measured by the LnTA. In contrast, solvency (Debt-to-Asset Ratio, DAR), profitability, and firm size do not significantly influence audit delay, nor does firm size mediate the relationships between solvency, profitability, and audit delay. These results highlight the limited direct impact of financial metrics on audit timeliness in SOEs, suggesting that contextual factors play a more prominent role. The significant relationship between profitability and firm size aligns with the operational dynamics of SOEs, where financial success drives infrastructure expansion.

The findings offer theoretical and practical implications while acknowledging limitations and avenues for future research. Theoretically, the non-significant results challenge agency and signaling theories, suggesting that audit delay in regulated contexts like SOEs is driven by governance and sector-specific factors rather than financial metrics. Practically, SOEs managers should prioritize enhancing internal controls and streamlining financial reporting to reduce audit delays, while policymakers can strengthen regulatory frameworks to ensure timely audits. The study's limitation lies in its focus on transportation SOEs, potentially limiting generalizability to other sectors or private firms. Additionally, the reliance on secondary data may overlook qualitative factors like audit committee effectiveness. Future research should explore additional mediators, such as governance structures, and extend the analysis to diverse industries or incorporate primary data to capture nuanced influences on audit delay.

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