

## The Effect of Financial Performance on Audit Delay with Firm Size as Moderation

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### Abstract

**Purpose:** This study examines the effect of profitability, solvency, and liquidity on audit delay, with Firm size as a moderating variable. The healthcare sector was chosen due to its strict regulations, service stability, and reporting complexity exacerbated by the impact of the COVID-19 pandemic, making it relevant to study.

**Method:** Research using logistic regression analysis with the assistance of EViews 12 in healthcare sector companies using the purposive sampling method.

**Results:** The research results indicate that the variables of profitability and solvency have an impact on audit delay, whereas the liquidity variable does not affect audit delay. Regarding the firm size variable, it can moderate the influence of profitability and liquidity on audit delay, while the firm size cannot moderate the impact of solvency on audit delay.

**Implications:** These results emphasize the importance of transparency and financial management in reducing audit delays in the healthcare sector. The findings are helpful for auditors and regulators in improving audit efficiency and the timeliness of financial reporting.

**Novelty:** This research focused on the healthcare sector in Indonesia, which is an innovation from the study conducted by Anggraini et al. (2024). The study employed Return on Equity (ROE) measurement to identify profitability variables.

**Keywords:** audit delay; financial performance; firm size; healthcare sector

### Abstrak

**Tujuan:** Penelitian ini menguji pengaruh profitabilitas, solvabilitas, dan likuiditas terhadap audit delay, dengan ukuran perusahaan sebagai variabel moderasi. Sektor kesehatan dipilih karena peraturan yang ketat, stabilitas layanan, dan kompleksitas pelaporan yang diperparah oleh dampak pandemi COVID-19, sehingga relevan untuk diteliti.

**Metode:** Penelitian menggunakan analisis regresi logistik dengan bantuan EViews 12 pada perusahaan sektor kesehatan dengan metode purposive sampling.

**Hasil:** Hasil penelitian menunjukkan bahwa variabel profitabilitas dan solvabilitas memiliki pengaruh terhadap audit delay, sedangkan variabel likuiditas tidak memiliki pengaruh terhadap audit delay. Mengenai variabel ukuran perusahaan dapat memoderasi pengaruh profitabilitas dan likuiditas terhadap audit delay, sedangkan ukuran perusahaan tidak dapat memoderasi pengaruh solvabilitas terhadap audit delay.

**Implikasi:** Hasil ini menekankan pentingnya transparansi dan pengelolaan keuangan dalam mengurangi audit delay di sektor kesehatan. Temuan ini bermanfaat bagi auditor dan regulator dalam meningkatkan efisiensi audit serta ketepatan waktu pelaporan keuangan.

**Kebaruan:** Penelitian ini difokuskan pada sektor kesehatan di Indonesia, yang merupakan inovasi dari penelitian yang dilakukan oleh Anggraini et al. (2024). Penelitian tersebut menggunakan pengukuran Return on Equity (ROE) untuk mengidentifikasi variabel profitabilitas.

**Kata kunci:** audit delay; kinerja keuangan; ukuran perusahaan; sektor kesehatan

## INTRODUCTION

Audit delay is one of the significant problems in the business world, especially in corporate financial reporting (Inneh et al., 2022). Audit delay occurs when the audit process of financial statements takes longer than specified, causing delays in the submission of annual financial reports to the public and regulators (Super & Shil, 2019). Based on existing data, audit delay has shown an increasing trend in recent years, especially in sectors that are under great pressure due to changes in regulations and economic conditions, such as the health sector (Murdiansyah & Sari, 2023). This phenomenon is a serious concern, considering that timely financial reports play an important role in assessing corporate transparency and accountability.

Research on audit delays is important because of the significant impact that audit delays have on various stakeholders (Ozer et al., 2023). Investors, creditors, and regulators rely heavily on financial reports as a basis for decision-making. Delays in financial reporting can reduce market confidence in the company, increase information risk, and hinder the effectiveness of business decision-making (Nisfiarani et al., 2023). In addition, companies that experience audit delay risk face sanctions from regulators and lose competitiveness in the market. Therefore, research on the factors that influence audit delay is very relevant to finding solutions to reduce the risk of audit delays (Trisnaningsih & Sutrisno, 2023).

Audit delay is influenced by various factors, including profitability, solvency, and liquidity of the company. High profitability can encourage companies to complete the audit process faster, but on the other hand, it can also increase audit complexity due to more diverse transactions (Al-Faruqi, 2020). Solvency relates to the company's ability to fulfill its long-term obligations, whereas companies with low solvency tend to face stricter audits (Shadrina & Kuntadi, 2024). Meanwhile, liquidity affects audit delay because it reflects the company's capability to fulfill short-term obligations. Companies with low liquidity may face obstacles in providing adequate financial information, thus extending the audit duration (Tumanggor & Lubis, 2022).

Firm size is considered a moderating variable in this study because it has a role in determining audit complexity (R. Putra et al., 2018). Large companies

generally have more complex reporting systems, so audits may take longer. However, large companies are also more likely to have sufficient resources to facilitate a more efficient audit process (Dura, 2017). Therefore, it is important to understand how Firm size can strengthen or weaken the relationship between profitability, solvency, liquidity, and audit delay.

This research focuses on the healthcare sector, which has unique characteristics compared to other sectors. The sector is governed by strict regulations, has a stable demand for services, and is directly impacted by the COVID-19 pandemic, which affects financial performance and the audit process (Sembiyeva et al., 2023). The pandemic increased demand for healthcare services and pharmaceutical products, which in turn presented additional challenges in financial reporting and the audit process. Therefore, understanding audit delays in this sector is becoming increasingly crucial to improve the transparency and accountability of healthcare companies. As emphasized by Kristalina Georgieva, Managing Director of the International Monetary Fund (IMF), during the COVID-19 crisis. In times of crisis, transparency and trust are more important than ever (Nabila et al., 2022). Strong financial reporting and audits are essential to maintaining public confidence (Sapiri, 2024). This statement was made in response to the global surge in emergency spending, especially in the healthcare sector, where governments and international institutions allocated large-scale funding for vaccines, medical supplies, and economic recovery (Makin & Layton, 2021). The urgency of disbursing these funds increased the risk of fraud, misuse, and reporting errors, particularly as normal audit procedures were disrupted due to lockdowns and remote work systems. As a result, delays or inaccuracies in audits can hinder timely policy-making, reduce investor confidence, and weaken public trust in institutions responsible for managing public health and safety during crises (Aisyaturrahmi et al., 2021).

The purpose of this study is to analyze the effect of profitability, solvency, and liquidity on audit delay with Firm size as a moderating variable. This study also aims to identify whether Firm size can strengthen or weaken the relationship between these factors and audit delay. Thus, the results of this study are expected to provide academic and practical contributions for companies, auditors, and regulators in improving the efficiency of the audit process and ensuring timely financial reporting.

Signaling Theory argues that companies communicate their financial condition to external parties—such as auditors and investors—through signals embedded in financial performance and reporting behavior. In this context, profitability serves as a signal of a company's financial strength and operational success. However, high profitability can also raise suspicions of potential earnings manipulation, prompting auditors to increase the scope and depth of their audit procedures. This cautious response may result in longer audit durations, thereby increasing audit delay (Spence, 1973).

Signaling Theory is appropriate for explaining the relationship between profitability, solvability, and liquidity to audit delay because it captures how auditors interpret financial performance as a signal of underlying risk, which in turn affects their audit strategy and timing (Saputra & Fadjarenie, 2022). By focusing on this theory, the study assumes that greater profitability may lead to more complex audit evaluations, rather than faster reporting, due to heightened auditor scrutiny (Chen et al., 2024).

The effect of profitability on audit delay can be explained through the signaling theory. signaling theory argues that high profitability can be a signal for auditors to conduct a more thorough examination, as high profitability is sometimes associated with potential financial manipulation (Suginam, 2016). Based on this theory, high profitability can extend the audit delay. The results of previous studies vary; some found that profitability does have an effect on audit delay (Alisha & Muis, 2018; Handoko et al., 2019), there are also those who state that there is no effect (Anggraini et al., 2024). The theory and previous research resulted in the first hypothesis as follows:

**H<sub>1</sub>: Profitability has a positive effect on audit delay**

Signaling theory states that high solvency may encourage auditors to be more thorough, as strong financial conditions may sometimes hide hidden risks. Therefore, high solvency may prolong the audit if the auditor performs a more comprehensive assessment. Previous research, such as that conducted by (Alisha & Muis, 2018; Anggraini et al., 2024; Gustiana & Rini, 2022), indicates that solvency affects audit delay. However, other studies such as those conducted by Handoko et al., (2019); Hersan & Fettry, (2020); Suginam, (2016) have not found a significant influence between solvency and audit delay. Based on theory and previous research, the second hypothesis is as follows:

**H<sub>2</sub>: Solvency has a positive effect on audit delay**

Signal theory, high liquidity can signal auditors to be more thorough, because financial conditions that look stable can hide hidden risks, thus prolonging the audit process (Lubis et al., 2019). Research by Alisha & Muis (2018); Anggraini et al. (2024); Gustiana & Rini (2022); Karina & Kusumawardhani (2023); Tumanggor & Lubis (2022) indicates that liquidity affects audit delay, while research Handoko et al. (2019) Hersan & Fettry (2020); Suginam (2016) did not find any significant influence between the two. Theory and previous research lead to the following third hypothesis:

**H<sub>3</sub>: Liquidity has a positive effect on audit delay**

Signaling theory also states that high profitability sends positive signals to auditors regarding low financial risk, which may also speed up the audit process. However, firm size may moderate this relationship, as large companies with high

profitability often have more complex financial statements, requiring more time for auditors to complete the audit, thereby increasing the likelihood of audit delay (Wada et al., 2021). Research indicates that firm size can affect audit delay Alisha & Muis (2018) Gustiana & Rini, (2022); Handoko et al. (2019), but some argue that firm size has no effect (Julia, 2020; Siswanto & Suhartono, 2022). Therefore, further research is needed to understand the role of firm size in moderating the effect of profitability on audit delay, in accordance with the findings (Anggraini et al., 2024; Lapinayanti & Budiarta, 2018). Theory and previous research lead to the following hypothesis:

**H<sub>4</sub>: Firm size can moderate the negative effect of profitability on audit delay**

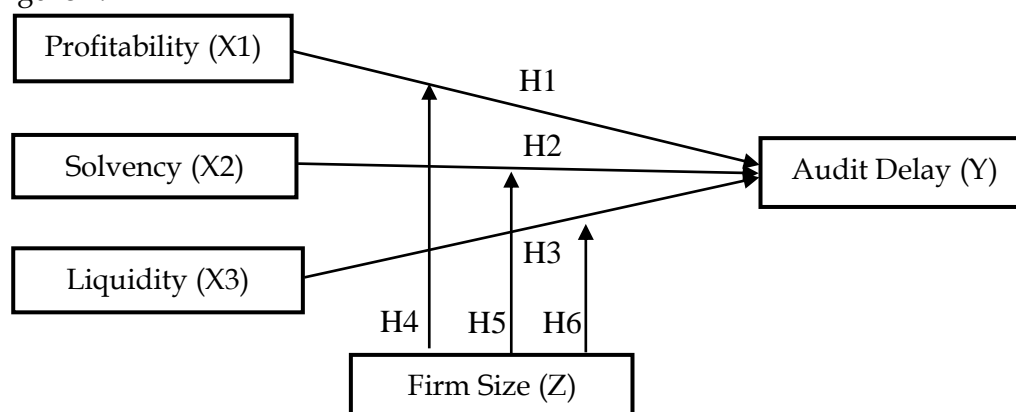
Signaling theory states that high solvency sends a positive signal to the auditor, who considers the company to have low risk, potentially speeding up the audit process. However, firm size may moderate this relationship, as large companies with high solvency often have more complex financial statements and many transactions to examine, which may extend the audit time (I. P. K. B. Putra & Sukartha, 2023). Therefore, although high solvency should speed up the audit, the complexity of financial statements in large companies can lead to a longer audit delay. Research indicates that firm size can affect audit delay Alisha & Muis (2018); Gustiana & Rini (2022); Handoko et al. (2019), while some other studies argue otherwise (Julia, 2020; Siswanto & Suhartono, 2022). Penelitian Anggraini et al., (2024) states that firm size can moderate the impact of solvency on audit delay. Theory and previous research lead to the fifth hypothesis as follows:

**H<sub>5</sub>: Firm size can moderate the negative effect of solvency on audit delay.**

Signaling theory states that high liquidity sends positive signals to auditors about the company's ability to meet short-term obligations, which should facilitate the audit process. However, firm size may moderate this relationship. In larger companies, although high liquidity indicates a healthy financial condition, auditors may extend the audit time to conduct a more in-depth examination of liquidity. This is due to the complexity of financial statements and the number of transactions that need to be verified in detail (I. P. K. B. Putra & Sukartha, 2023). As a result, firm size can extend the audit delay even though the company's liquidity is at a high level. Research shows that firm size affects audit delay Alisha & Muis, (2018); Gustiana & Rini, (2022); Handoko et al. (2019), while other studies suggest otherwise (Julia, 2020; Siswanto & Suhartono, 2022). Research by Anggraini et al. (2024), supports that firm size can moderate the effect of liquidity on audit delay by encouraging auditors to be more thorough in evaluating financial statements. Theory and previous research produce the sixth hypothesis as follows:

**H<sub>6</sub>: Firm size can moderate the positive effect of liquidity on audit delay.**

The scope of this study includes an analysis of profitability, solvency, and liquidity on audit delay with firm size as a moderating variable in health sector companies. Thus, the conceptual framework of this research can be shown in Figure 1.



**Figure 1. Conceptual Framework**  
Source: Processed Data (2025)

## METHOD

This research uses a quantitative approach to analyze the relationship between financial performance indicators, profitability, solvency, liquidity, and audit delay, with firm size as a moderating variable. The quantitative method is suitable as the study aims to statistically test hypotheses and measure relationships between variables (Sugiyono, 2016). The health sector was selected as the research focus because it faced increased financial scrutiny and demand for transparency during the COVID-19 pandemic, making timely audit reporting especially critical (Makin & Layton, 2021). The study targets health sector companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2023 period, with a population of 34 companies. The sample was determined using purposive sampling, based on specific criteria such as the availability of complete audited financial statements and relevant variable data throughout the observation period, as shown in Table 1.

**Table 1. Sampling Criteria**

No.	Description	Total
1.	Number of companies in the healthcare sector as listed on the IDX.	34
2.	The number of companies in the health sector that are not listed on the IDX and do not have information on the company's official website in 2020-2023.	-10
3.	Companies that do not provide data related to research variables or whose data is incomplete in publications throughout the 2020-2023 period.	0
Sample Quantity		24
Total observation data (n x research period) (24 x 4)		96

Source: Processed Data (2025)

This study employs logistic regression analysis with the assistance of EViews software to examine the effect of profitability, solvency, and liquidity on audit delay, moderated by firm size. The logistic regression model allows the estimation of the probability of a company experiencing audit delay based on its financial characteristics (Purwantoro & Suhartono, 2023). Logistic regression is used because the dependent variable, Audit Delay (AUDEL), is a dummy variable. The selection of this dummy variable is based on the policy of extending the deadline for submitting financial reports issued by the Indonesia Stock Exchange in 2020, which was later revoked in 2023, returning the deadline to March 31. The operational definition of research variables can be seen in Table 2.

**Table 2: Operational Definition of Variables**

Variables	Definition	Indicator
Audit Delay (AUDEL)	The audit delay in 2020 and 2021 is 151 days, and the lag in 2022 and 2023 is 90 days.	In 2020 and 2021, if it exceeds 151 days, it will be assigned a dummy code of 1; if it does not exceed, it will be assigned a dummy code of 0. In 2022 and 2023, if it exceeds 90 days, it will be assigned dummy code 1; if it does not exceed 90 days, it will be assigned dummy code 0. (Saputra et al., 2020)
Profitability (ROE)	Profitability is calculated using Return on Equity (ROE).	$\text{Return on Equity (ROE)} = \frac{\text{Profit After Tax}}{\text{Total Equity}}$ (Rahmawati & Arief, 2020)
Solvency (DER)	Solvency is measured by the debt-to-equity ratio (DER).	$\text{Debt to Equity Ratio (DER)} = \frac{\text{Total Debt}}{\text{Total Equity}}$ (Alisha & Muis, 2018)
Liquidity (CR)	Liquidity is measured by the Current Ratio (CR).	$\text{Current Ratio (CR)} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$ (Anggraini et al., 2024)
Firm Size (FS)	The total assets of the company measure the size of the company.	$\text{Firm Size (FS)} = \text{Ln (Total Assets)}$ (Siswanto & Suhartono, 2022)

**Source: Processed Data (2025)**

This study adopts a panel data approach combining time-series and cross-sectional data. Several tests are conducted, including descriptive statistics, Overall Model Fit Testing Hosmer and Lemeshow Test Results. Because the dependent variable (Audit Delay) is a dummy variable, logistic regression is used to analyze the effect of profitability, solvency, and liquidity on audit delay, with firm size as a moderating variable (LaValley, 2008). The analysis is

performed using EViews 12, and the logistic regression equation used in this study is:

$$\text{Ln} \left( \frac{\text{AUDEL}}{1 - \text{AUDEL}} \right) = c + \beta_1 \text{ROE} + \beta_2 \text{DER} + \beta_3 \text{CR} + \beta_1 \text{ROE} * Z + \beta_2 \text{DER} * Z + \beta_3 \text{CR} * Z + e$$

## RESULTS AND DISCUSSION

A descriptive analysis test refers to a series of statistical techniques used to describe, summarise, or visualise the essential characteristics of a set of data (Dong, 2023). Each variable's smallest, highest, and average values can illustrate detailed information that describes the variable. Table 3 presents the results of the research data's minimum, maximum, average, and standard deviation values.

**Table 3. Descriptive Statistics Test Results**

Variabel	Obs.	Mean	Median	Min.	Max.	Std. Dev.
ROE	96	0.920	0.119	-0.285	72.356	7.375
DER	96	-1.605	0.427	-235.217	14.957	24.151
CR	96	2.970	2.075	0.162	16.151	2.753
AUDEL	96	0.104	0.000	0.000	1.000	0.307
FS (Z)	96	28.368	28.400	21.902	30.936	1.585

**Source: Processed Data (2025)**

The ROE variable has a minimum value of -0.285 and a maximum of 72.356, with an average of 0.920 and a standard deviation of 7.375, which indicates that the level of profitability of companies in the sample has considerable variation. The median value of 0.119 indicates that most companies have a lower ROE than the average, indicating that there are several companies with very high ROE values which cause the average to be greater than the median.

The DER variable recorded a minimum value of -235,217 and a maximum of 14,957, with an average of -1,605 and a standard deviation of 24,151. A negative DER value in the average indicates the presence of companies with negative equity, which indicates a less healthy financial condition. The high standard deviation value indicates that the leverage level of companies in the sample has a very large variation.

The CR variable has a minimum value of 0.162 and a maximum of 16.151, with an average of 2.970 and a standard deviation of 2.753. This shows that most companies have a fairly good liquidity ratio, although there are companies with very high or very low liquidity. The median of 2,075 which is lower than the average indicates that there are companies with very high liquidity ratios that affect the average value.

The AUDEL variable has a minimum value of 0.000 and a maximum of 1.000 because it is a dummy, where a value of 0 indicates that the company reported the audit on time and a value of 1 indicates a delays. The average of



0.104 indicates that around 10.4% of companies in the sample experience audit delay. The standard deviation of 0.307 indicates that the majority of companies tend to report audits on time.

The FS variable (Z), which represents firm size, has a minimum value of 21,902 and a maximum of 30,936, with an average of 28,368 and a standard deviation of 1,585. This value indicates that the size of the companies in the sample has a fairly wide range, although the variation is not too significant, considering the standard deviation is relatively small compared to the average value. The median of 28,400, which is almost close to the average, indicates a relatively symmetrical distribution of firm size in the research sample.

**Table 4. Overall Model Fit Testing**

<i>Test</i>	<i>Prob.</i>
Log-likelihood	-25.391

Source: Processed Data (2025)

The overall model fit test results listed in Table 4 show a probability (Likelihood) value of -25.391, which indicates that the ROE, DER, and CR variables simultaneously affect the AUDEL variable. Furthermore, this value indicates that the model fits the data used well.

**Table 5. Hosmer and Lemeshow Test Results**

<i>Test</i>	<i>Prob.</i>	<i>Test</i>	<i>Prob.</i>
Statistik H-L	8.710	Prob. Chi-Sq (8)	0.367

Source: Processed Data (2025)

The Hosmer and Lemeshow test results presented in Table 5 show an H-L statistical value of 8.710 and a Chi-Square probability value of 0.367 which indicates that the model applied has met the eligibility standards. The probability of 0.367, which is greater than 0.05, indicates that there is no difference between the logistic regression estimation data and the data analyzed in this study, so that the model can be considered suitable or feasible to use.

**Table 6. Results of Logistic Regression Test and Moderation Regression Test**

<i>Variables</i>	<i>Model 1</i>			<i>Model 2</i>		
	$\beta$	<i>z-Statistic</i>	<i>Prob.</i>	<i>B</i>	<i>z-Statistic</i>	<i>Prob.</i>
c	-3.651			91.326		
ROE	2.337	2.225	0.026	208.777	2.550	0.011
DER	0.721	2.253	0.024	-26.726	-1.409	0.159
CR	0094	0.671	0.503	-38.419	-2.354	0.019
ROE*FS				-7.515	-2.511	0.012
DER*FS				0.983	1.424	0.155
CR*FS				1.336	2.366	0.018
McFadden R-Squared	0.208			0.681		

Source: Processed Data (2025)

The coefficient of determination tests whether the independent variables can explain the dependent variable. The results of this test are determined by looking at the McFadden R-squared value, as shown in Table 6. The McFadden R-squared value is 0.208. This figure shows that profitability, solvency, and liquidity together have an explanatory power of 20.846% on the audit delay variable.

In the logistic regression results of Model 1, the ROE coefficient is 2.337 with a z-statistic of 2.225 and a probability of 0.026, which means that ROE has a positive and significant effect on the dependent variable at the 5% significance level ( $p < 0.05$ ). Similarly, the DER coefficient is 0.721 with a z-statistic of 2.253 and a probability of 0.024, indicating that DER also has a positive and significant effect on the dependent variable at the 5% significance level. However, the CR variable has a coefficient of 0.094 with a z-statistic of 0.671 and a probability of 0.503, indicating that CR has no significant effect on the dependent variable as the probability value is greater than 0.1.

After including the moderating variable (FS) in Model 2, there is a change in the regression coefficient. ROE remains a positive effect with  $B = 208.777$ , z-statistic 2.550, and probability 0.011, which means its effect remains significant ( $p < 0.05$ ). However, DER changes the direction of the coefficient to negative ( $-26.726$ ) with a probability of 0.159, so it is no longer significant in Model 2. Meanwhile, CR, which was previously insignificant, becomes significant after being moderated by FS, with  $B = -38.419$ , z-statistic -2.354, and probability 0.019 ( $p < 0.05$ ), which indicates a significant negative effect after interaction with the moderating variable.

In the moderation interaction results, the ROE\*FS variable has a coefficient of -7.515 with a z-statistic of -2.511 and a probability of 0.012, which indicates that FS is able to weaken the relationship between ROE and the dependent variable significantly. The DER\*FS variable has a coefficient of 0.983 with a z-statistic of 1.424 and a probability of 0.155, which means that the interaction between DER and FS is not significant because  $p > 0.1$ . Meanwhile, the CR\*FS variable has a coefficient of 1.336 with a z-statistic of 2.366 and a probability of 0.018, which indicates that FS is able to significantly strengthen the effect of CR on the dependent variable. From these results, it can be concluded that FS moderation plays a role in influencing the relationship between the independent variables and the dependent variable, especially on ROE and CR, while its effect on DER is not significant.

### **Effect of Profitability on Audit Delay**

Based on the test results, profitability, as measured by ROE, has a positive effect on audit delay (AUDEL). The results show that the higher the company's profitability, the greater the likelihood of audit delay. Thus, the first hypothesis in this study is accepted. This is in line with signaling theory, where companies

with high profitability tend to want to give positive signals to the market regarding their financial condition. However, auditors may be more careful in examining the financial statements of companies that have a high level of profitability to ensure that there are no indications of earnings manipulation or errors in the presentation of financial statements. High transparency can also increase the complexity of the examination so that auditors take longer to complete the audit, which ultimately causes audit delays (Ali & Handro, 2022). Furthermore, this finding is particularly relevant in the context of the COVID-19 pandemic, which heavily impacted the health sector. The pandemic introduced operational disruptions, remote audit challenges, and increased financial volatility, all of which may have compounded the audit process.

This result aligns with the studies of Alisha & Muis, (2018); Handoko et al., (2019); Lapinayanti & Budiarta, (2018), who also found a positive relationship between profitability and audit delay. One possible explanation is based on Signaling Theory, where high profitability may trigger greater auditor scrutiny due to the potential risk of earnings management. In such cases, auditors may require more time to verify the accuracy of financial statements, thereby prolonging the audit process. However, these findings are not in line with those of Novalista et al. (2024), who concluded that profitability does not significantly affect audit delay. The difference in findings may be attributed to variations in the research context, such as differences in industry sector characteristics, sample periods, or regulatory environments. For instance, profitability in capital-intensive sectors may be perceived differently by auditors compared to service-based industries. Additionally, methodological differences, such as how audit delay is measured or how profitability is operationalized, may also contribute to inconsistent findings.

### **The Effect of Solvency on Audit Delay**

The results showed that solvency has a significant effect on audit delay, with a significance value of 0.024 (smaller than 0.05) and a positive coefficient of 0.721. This indicates that the higher the company's solvency, the greater the possibility of audit delay. Based on signaling theory, high solvency reflects the company's ability to meet its long-term obligations. However, auditors often assess this condition as a risk factor that requires more in-depth examination to ensure there are no hidden financial problems, resulting in a longer audit process. This condition became more pronounced during the COVID-19 pandemic, which placed substantial financial pressure on many health sector companies. The pandemic increased operational costs and caused financial uncertainty, prompting some companies to rely more heavily on debt financing. As a result, auditors were required to carry out more thorough assessments of going concern assumptions and debt sustainability.

This result supports the findings of Alisha & Muis (2018); Karina & Kusumawardhani (2023); Tri Rahmawati & Arief (2020), who found that solvency has a significant effect on audit delay. However, it contradicts the studies of Handoko et al. (2019); Hersan & Fettry (2020), which concluded that solvency does not influence audit delay. These conflicting results may stem from differences in the characteristics of the research samples, such as the financial health, industry sector, or risk profile of the companies studied. Companies with higher levels of debt may be perceived as riskier by auditors, leading to more thorough audit procedures and longer audit completion times. In contrast, in other contexts or sectors, solvency may not significantly affect the auditor's workload or risk assessment. Therefore, the differences in context may explain the inconsistency in findings. Based on the results of this study, the second hypothesis is accepted.

### **The Effect of Liquidity on Audit Delay**

The results showed that liquidity has no significant effect on audit delay. A significance value greater than 0.05 indicates that the company's liquidity level does not directly affect audit delay. Based on signaling theory, high liquidity usually provides a positive signal regarding the company's ability to meet its short-term obligations. Companies with good liquidity are considered to have higher financial stability, resulting in a lower risk of bankruptcy. However, in the context of audit delay, the results of this study indicate that liquidity is not the main factor considered by auditors in determining audit duration. Auditors tend to pay more attention to other aspects, such as the complexity of financial statements, debt policy, and the quality of corporate information disclosure. Thus, the high liquidity of a company does not directly speed up or slow down the audit process. This is particularly relevant during the COVID-19 pandemic, which heavily affected the health sector. Although many companies maintained good liquidity to navigate the crisis, the unprecedented uncertainty and increased operational disruptions led auditors to focus more on assessing business continuity, revenue recognition from emergency services, and government funding received.

The results of this study differ from several previous studies. For instance, Alisha & Muis (2018), Karina & Kusumawardhani (2023); and Tri Rahmawati & Arief (2020) found that liquidity has a significant effect on audit delay. According to their findings, companies with high liquidity tend to complete audits more quickly because they are perceived to have lower financial risk and stronger cash flow management, which can facilitate a smoother audit process. However, the results of this study are in line with those of Handoko et al. (2019); Hersan & Fettry (2020), which found that liquidity does not significantly affect audit delay. This inconsistency may be due to differences in sample characteristics, audit firm practices, or the level of auditor reliance on liquidity ratios when assessing audit

risk. In some cases, auditors may place more emphasis on other financial indicators, such as solvency or profitability, leading to liquidity having a minimal role in determining audit duration.

### **The Effect of Profitability on Audit Delay with Firm Size as a Moderating Variable**

The results of this study indicate that firm size acts as a moderating variable in the relationship between profitability and audit delay. This is evidenced by a significance value of 0.012 which is below the 0.05 threshold and a negative coefficient of -7.515. This finding indicates that companies with high profitability tend to complete audits faster when they have a larger size. This condition is caused by a more structured accounting system, the availability of adequate resources, and more sophisticated technological support in large companies. With these factors, auditors can work more efficiently in the process of examining financial statements. In the context of the COVID-19 pandemic, this role of firm size becomes even more critical—especially in the health sector, which faced increased demand, financial pressure, and operational complexity during 2020–2023. Larger health companies were generally better equipped to adapt to remote work systems, maintain transparent financial reporting, and support the audit process through digital collaboration tools. In contrast, smaller firms may have struggled to maintain audit readiness amid pandemic-related disruptions.

This convenience accelerates the audit process because auditors face fewer obstacles in collecting and verifying the necessary data. Larger firms generally have more organized financial systems, greater internal control, and more experienced staff, which can streamline the audit process and reduce delays. According to Signaling Theory, large firms are also more likely to send positive signals to the market and auditors through transparent financial disclosures and timely reporting. When these firms are also highly profitable, the signal is even stronger, indicating operational success and financial stability, potentially increasing auditor confidence and facilitating faster audit completion. Thus, firm size can strengthen or weaken the influence of profitability on audit delay. The results of this study support the findings of Lapinayanti & Budiarta (2018), who concluded that firm size moderates the relationship between profitability and audit delay, showing that the effect of profitability on audit timeliness is more pronounced in larger firms.

### **The Effect of Solvency on Audit Delay with Firm Size as a Moderating Variable**

The results showed that firm size does not act as a moderating variable in the relationship between solvency and audit delay. This is evidenced by the significance value of 0.155, which is greater than the 0.05 threshold, so it can be

concluded that firm size does not affect the relationship between solvency and audit delay. In other words, in both large and small companies, the level of solvency does not contribute significantly to audit duration. Auditors still carry out inspection procedures according to applicable standards without considering firm size when assessing the impact of solvency on audit delay. This finding is particularly relevant in the context of the COVID-19 pandemic, which had a substantial impact on the health sector. During the pandemic, many healthcare companies experienced financial pressure and increased debt to maintain operations and expand capacity. Even larger firms were not immune to these challenges, as they faced complex funding structures, government subsidies, and increased operational costs.

The results of this study are in line with the findings of I. M. R. A. Putra & Wirakusuma (2022), who concluded that firm size does not moderate the relationship between solvency and audit delay. This suggests that regardless of a company's scale, the level of debt or financial risk reflected by its solvency ratio influences audit delay in a similar way. From a Signaling Theory perspective, high solvency may signal financial risk, prompting increased auditor caution. However, this signal appears to be interpreted similarly across both large and small firms. In contrast, the results differ from those of Novalista et al. (2024), who found that firm size does have a moderating effect, indicating that larger firms might be better equipped to mitigate the perceived risk from high debt levels, possibly due to better internal control systems or reputational concerns. These differences may be due to varying sample characteristics, industry focus, or differences in how firm size and audit practices are perceived in each study context.

### **The Effect of Liquidity on Audit Delay with Firm Size as a Moderating Variable**

The results showed that firm size acts as a moderating variable in the relationship between liquidity and audit delay. The significance value of 0.018, which is below the 0.05 threshold, and the positive coefficient of 1.336 indicate that companies with high liquidity tend to experience longer audit delays if they have a larger size. This is due to the increasing complexity of financial statements in large companies, where even though liquidity conditions indicate financial stability, the audit process still takes longer. Auditors must conduct a thorough examination of various aspects of financial statements that are more complex than those of smaller companies. This dynamic became especially evident during the COVID-19 pandemic, which significantly affected the health sector. While many healthcare companies maintained liquidity to manage surging service demands, large firms faced additional challenges such as increased regulatory scrutiny, government assistance audits, and pandemic-related operational adjustments.

The results of this study are consistent with the findings of Anggraini et al. (2024), which states that firm size can moderate the effect of liquidity on audit delay. Although high liquidity generally signals strong financial stability and lower audit risk, large companies often face more complex audit procedures due to the size of their operations, multiple business units, and broader transaction volumes. From the perspective of Signaling Theory, even when liquidity sends a positive signal to auditors, the inherent complexity and scale of large firms may offset the benefits of that signal, resulting in longer audit durations. This suggests that firm size plays an important role in shaping how liquidity influences audit timeliness, with larger firms potentially requiring more extensive audit work regardless of their financial condition.

## CONCLUSION

This study concludes that profitability and solvency significantly increase audit delay in the Indonesian healthcare sector, primarily due to the complexity of financial statements and the more rigorous audit procedures required for financially strong or high-risk companies. In contrast, liquidity has no significant effect, suggesting that the ability to meet short-term obligations does not directly influence audit duration. Additionally, firm size moderates certain relationships: it reduces the audit delay caused by high profitability and increases the delay associated with high liquidity, while it does not affect the relationship between solvency and audit delay. These findings are particularly relevant in the context of the COVID-19 pandemic, which brought increased demand, operational strain, and regulatory attention to the healthcare sector. The resulting financial and reporting complexities led auditors to exercise greater caution, thereby contributing to audit delays. Theoretically, the study supports Signaling Theory, as auditors respond to financial signals differently depending on company size and complexity. Practically, this highlights the importance of robust audit planning and regulatory support to improve audit efficiency, particularly for large firms with high profitability or debt levels during crisis periods.

However, this study has several limitations. It focuses solely on the healthcare sector in Indonesia and uses data from 2020 to 2023, a period heavily affected by the COVID-19 pandemic. Therefore, the findings may not be generalizable to other sectors or timeframes. Additionally, the study only examines a limited set of financial variables, without considering other potentially relevant factors such as audit quality, auditor experience, or regulatory interventions during the pandemic. Future research is recommended to explore these variables and expand the analysis to other industries to provide a more comprehensive understanding of audit delay determinants.

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