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Audit Report Lag and Its Determinants: Empirical Evidence from ROA, Financial Distress, and Audit Firm Size in Indonesia

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Abstract. *This study aims to examine the effect of Return on Assets (ROA), financial distress, and audit firm size on Audit Report Lag (ARL) in companies listed on the Indonesia Stock Exchange during the 2020–2023 period. The study employed a quantitative approach using a causal research design. The data used were secondary data obtained from companies' annual reports and financial statements. Using purposive sampling, 212 firm-year observations were selected as the research sample. Data analysis was conducted using panel data regression with the assistance of Python statistical software after undergoing data cleaning, winsorization, variable transformation, and classical assumption testing to ensure that the model satisfied the BLUE criteria. The results indicate that financial distress has a significant effect on Audit Report Lag, suggesting that companies experiencing higher levels of financial difficulty tend to require longer audit completion times. This condition is associated with increased audit risk and greater audit effort. Meanwhile, ROA and audit firm size do not significantly affect ARL, indicating that profitability and auditor characteristics are not the primary determinants of audit reporting delays within the research model. These findings confirm that ARL is more strongly influenced by a company's financial risk condition than by performance factors or auditor attributes. The study implies the importance of strengthening corporate governance and internal control systems to reduce audit delays and improve the timeliness of financial reporting.*

Keywords: Audit Report Lag (ARL), financial distress, Return on Assets (ROA), audit firm size, agency theory, timeliness of financial reporting.

INTRODUCTION

The timeliness of financial reporting is one of the fundamental pillars of accounting information quality, as it provides essential information for stakeholders in making economic decisions. In the context of public company reporting, the timeliness of audited financial statements is a crucial factor influencing investor confidence, capital market efficiency, and corporate compliance with prevailing regulations (Bhuiyan et al., 2024). Audit Reporting Lag (ARL), defined as the period between a company's fiscal year-end and the issuance date of the independent auditor's report, has become a major concern for regulators, investors, and academics. Delays in financial reporting may reduce the relevance of accounting information in supporting

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economic decision-making processes. Timely financial reporting also plays an important role in reducing uncertainty and minimizing information asymmetry in capital markets (Abdillah et al., 2019). Furthermore, audited financial statements represent a reliable source of information for investors; therefore, delays in issuing audit reports are often perceived as signals of potential financial or operational problems within the company (Endri et al., 2024; Pratiwi, 2018). Empirical evidence also suggests that firms experiencing longer audit reporting lags tend to face higher equity capital costs due to increased information asymmetry and the risk of future financial statement restatements (Bhuiyan et al., 2024). Thus, audit reporting lag not only affects the relevance of accounting information but may also generate significant economic consequences for companies.

The issue of audit reporting lag is not merely theoretical but represents an actual phenomenon occurring in the Indonesian capital market. In 2024, the Indonesia Stock Exchange imposed sanctions on several public companies, including manufacturing firms, for delays in submitting audited financial statements, as stated in the Indonesia Stock Exchange Sanction Announcement (Number Peng-S-00014/BEI.PLP-05-2024). Indonesian regulations require public companies to submit audited financial statements and annual reports no later than four months after the end of the fiscal year. Nevertheless, some companies remain unable to meet the required reporting deadlines. In the context of manufacturing companies, research on audit reporting lag becomes increasingly important because the manufacturing sector generally involves greater operational complexity, higher transaction volumes, and more extensive production activities compared to other sectors (Endri et al., 2024; Lau & Daito, 2025), which may prolong the audit process. Moreover, the imposition of sanctions on several manufacturing firms due to delayed financial reporting further strengthens the urgency of examining the determinants of audit reporting lag in Indonesian manufacturing companies. Therefore, this study is important in contributing to the improvement of the quality, transparency, and timeliness of financial reporting among companies listed on the Indonesia Stock Exchange.

Research concerning the determinants of Audit Reporting Lag (ARL) continues to attract scholarly attention because previous studies have produced inconsistent findings. These inconsistencies indicate that the influence of several variables on ARL requires further investigation, particularly within the context of manufacturing companies in Indonesia. Regarding profitability, proxied by Return on Assets (ROA), several studies have found that ROA significantly affects ARL, suggesting that firms with higher profitability tend to complete the audit process more quickly (Fujianti & Satria, 2020; Setiyowati & Januarti, 2022). However, other studies report contrasting results, indicating that ROA does not significantly influence ARL (Handoko et al., 2019; Handoko & Marshella, 2020). Similar inconsistencies are also found in studies examining audit firm size. Some researchers argue that audit firm size significantly affects ARL because larger audit firms are considered to possess superior resources and greater audit efficiency (Fujianti & Satria, 2020; Setiyowati & Januarti, 2022). In contrast, other studies conclude that audit firm size has no significant effect on ARL (Handoko et al., 2019; Handoko & Marshella, 2020). Furthermore, the findings regarding financial distress also remain inconclusive. Studies conducted by (Khamisah et al., 2021; Watini et al., 2024) found that financial distress significantly affects ARL, whereas (Bimo & Sari, 2022) as well as (Pingass & Dewi, 2022) reported no significant relationship between financial distress and ARL. These inconsistent findings indicate the existence of a research gap, highlighting the need for further investigation into the effects of ROA, audit firm size, and financial distress on audit reporting lag. Accordingly, this study seeks to provide relevant empirical evidence, particularly in the context of manufacturing companies listed on the Indonesia Stock Exchange.

LITERATURE REVIEW

Agency Theory

From the perspective of agency theory, the separation between principals (shareholders) and agents (management) creates information asymmetry and potential conflicts of interest, thereby increasing the need for credible financial reporting and effective external monitoring mechanisms, particularly external auditing. In this context, Audit Report Lag (ARL) is closely related to the agency environment in which financial reporting and audit activities are conducted, as auditors are required to mitigate information

asymmetry and ensure the reliability of financial statements prior to their publication (Gerged et al., 2023; Marini et al., 2022). Agency theory suggests that variations in corporate characteristics and reporting conditions may influence the extent of audit procedures, the complexity of audit engagements, and the amount of time required to complete audit work, all of which are ultimately reflected in the length of ARL as part of the financial reporting process.

Within this framework, prior studies have identified firm profitability, financial condition, and audit firm characteristics as important elements of the agency environment that may shape audit processes and monitoring effectiveness. Profitability, commonly proxied by Return on Assets (ROA), is frequently discussed in the literature as an indicator of corporate performance that influences audit risk assessment and financial reporting evaluation (Gerged et al., 2023; Marini et al., 2022). Firms with stronger profitability are generally perceived to have lower business risk and better operational performance, which may facilitate a more efficient audit process. Conversely, financial distress is widely recognized as a condition that increases audit complexity due to heightened risk, uncertainty, and the need for more extensive audit procedures (Emmanuel et al., 2024). Companies experiencing financial difficulties often require auditors to exercise greater professional skepticism and perform additional verification procedures, potentially extending the audit completion period.

Furthermore, the size and reputation of Public Accounting Firms (KAP) are frequently associated with differences in audit approaches, resource capabilities, and quality control systems, all of which may affect the efficiency and effectiveness of the audit process (Appah et al., 2024; Gerged et al., 2023). Larger audit firms are generally considered to possess more advanced audit methodologies, greater technological support, and more experienced personnel, enabling them to conduct audit engagements more efficiently compared to smaller audit firms. Taken together, these studies provide an agency theory-based foundation for positioning ROA, financial distress, and KAP size as important constructs within the audit environment that may influence audit reporting processes and reporting timeliness. Therefore, these variables are considered relevant for further hypothesis development in this study.

Hypothesis Development: The Effect of Financial Distress on Audit Report Lag (ARL)

From the perspective of agency theory, the separation between principals (owners) and agents (managers) generates information asymmetry and conflicts of interest, thereby increasing the need for external monitoring mechanisms, particularly auditing. In this context, Audit Report Lag (ARL) represents an important outcome of agency frictions within the financial reporting process, as auditors are required to reduce information asymmetry and ensure the reliability of financial statements prior to their publication (Gerged et al., 2023; Marini et al., 2022). Agency theory further emphasizes that variations in firms' financial conditions may influence audit risk assessments, the intensity of audit procedures, and the complexity of audit engagements, all of which are reflected in the length of audit completion time.

Within this framework, financial distress is widely recognized as a condition that increases audit complexity due to higher perceived risk, uncertainty, and the likelihood of going concern issues, which require auditors to conduct more extensive audit procedures (Emmanuel et al., 2024; Gerged et al., 2023). Prior empirical studies also provide evidence that financially distressed firms demand greater audit effort as auditors respond to elevated business risk by expanding testing procedures and exercising greater professional skepticism. This increased audit effort ultimately contributes to longer audit completion times. Consistent with these arguments, empirical findings from (Khamisah et al., 2021; Watini et al., 2024) indicate a significant positive association between financial distress and ARL, suggesting that auditors treat financial distress as an indicator of higher audit risk, thereby extending audit duration. Based on agency theory and prior empirical evidence, the following hypothesis is formulated:

H_1: Financial distress has a positive effect on Audit Report Lag (ARL).

Hypothesis Development: The Effect of ROA on Audit Report Lag (ARL)

From the perspective of agency theory, the separation between principals (owners) and agents (managers) creates information asymmetry and conflicts of interest, thereby increasing the demand for

credible financial reporting and effective external monitoring mechanisms, particularly auditing. In this context, Audit Report Lag (ARL) represents an important outcome of agency frictions in the financial reporting process, as auditors are required to ensure the reliability of financial statements and reduce information asymmetry before their publication (Gerged et al., 2023; Marini et al., 2022). Agency theory further emphasizes that firm-level characteristics and reporting conditions may influence audit risk assessments, the complexity of audit engagements, and the duration required to complete audit work, all of which are reflected in ARL.

Within this framework, Return on Assets (ROA) is widely recognized in the literature as an important indicator of firm performance that is incorporated into audit risk evaluation and reporting assessment processes (Gerged et al., 2023; Marini et al., 2022). Prior studies suggest that profitability may shape audit-related incentives and reporting behavior, where firms with stronger financial performance tend to be associated with more timely reporting and lower audit delay due to stronger incentives to disclose favorable information to the market (Fujianti & Satria, 2020; Setiyowati & Januarti, 2022). Empirical findings also indicate that ROA is significantly associated with ARL, although the direction of this relationship may vary depending on institutional and contextual differences, such as audit environment and client risk characteristics (Gerged et al., 2023). In addition, ROA is considered by auditors in assessing engagement risk and determining audit effort, which may influence the overall audit completion process. Based on agency theory and prior empirical evidence, the following hypothesis is formulated:

H_2: Return on Assets (ROA) affects Audit Report Lag (ARL).

Hypothesis Development: The Effect of CPA Firm Size on Audit Report Lag (ARL)

From the perspective of agency theory, the separation between principals (shareholders) and agents (management) creates information asymmetry, thereby increasing the need for external monitoring mechanisms, particularly through credible independent audits. In this context, Audit Report Lag (ARL) reflects the audit process influenced by the complexity of agency relationships, in which auditors are required to ensure that financial statements fairly represent the company's actual condition before they are publicly released (Gerged et al., 2023; Marini et al., 2022). Furthermore, agency theory suggests that the characteristics of external auditors, including the size and reputation of Public Accounting Firms (CPA firms/KAP), constitute important components of the monitoring mechanism that may influence the quality and effectiveness of the audit process. Larger CPA firms generally possess stronger quality control systems, greater resource capacity, and more structured audit methodologies, enabling them to perform more effective monitoring functions over corporate management (Appah et al., 2024; Gerged et al., 2023).

Within this framework, CPA firm size is considered an important factor that may affect the audit process and the timeliness of audit completion within the financial reporting system. Large CPA firms, particularly those affiliated with the Big Four, are typically characterized by superior resource availability, higher operational efficiency, and advanced audit technologies, which theoretically may accelerate audit completion through better task allocation and more efficient audit procedures (Fujianti & Satria, 2020; Setiyowati & Januarti, 2022). However, prior literature also indicates that large CPA firms tend to implement stricter and more comprehensive audit procedures in order to maintain their reputation and audit quality standards, which under certain circumstances may prolong the audit completion process (Gerged et al., 2023; Marini et al., 2022). Based on the above discussion, the following hypothesis is proposed:

H_3**:** CPA firm size has an effect on Audit Report Lag (ARL).

METHODS

Research Design

This study employs a quantitative research design with a causal approach. The quantitative approach is utilized because the study aims to examine the effect of independent variables on the dependent variable through numerical measurement and statistical analysis. Meanwhile, the causal approach is applied to

analyze the cause-and-effect relationships between Return on Assets (ROA), Financial Distress (FD), and Public Accounting Firm Size (CPA Size) on Audit Reporting Lag (ARL).

The study uses secondary data derived from companies' annual reports and financial statements obtained from the Indonesia Stock Exchange and the official websites of the respective companies during the 2020–2023 period.

Population and Sample

The population of this study consists of all manufacturing companies listed on the Indonesia Stock Exchange during the 2020–2023 period, totaling 131 companies. The sampling technique employed in this study is purposive sampling, which is a sample selection method based on specific criteria aligned with the objectives of the research.

The criteria used in selecting the sample include: (1) companies consistently listed on the Indonesia Stock Exchange during the 2020–2023 period; (2) companies that published complete annual financial statements throughout the observation period; (3) companies with complete data related to the research variables, namely Audit Reporting Lag (ARL), Return on Assets (ROA), Financial Distress (FD), and Public Accounting Firm Size (CPA Size); and (4) companies presenting their financial statements in Indonesian Rupiah. Based on the sample selection process, a total of 212 firm-year observations were obtained and used in this study.

Type and Source of Data

The data used in this study are quantitative data in the form of numerical information obtained from corporate financial statements. The study utilizes secondary data collected from companies' annual reports, independent auditor reports, the official website of the Indonesia Stock Exchange, and the official websites of the respective companies. The data collected include information related to the date of the independent auditor's report, company earnings, total assets, financial distress conditions, and information regarding the Public Accounting Firms (CPA firms) engaged by the companies.

Data Collection Technique

The data collection technique employed in this study is the documentation method. This method was conducted by collecting and recording relevant data from the annual reports and financial statements of the sampled companies during the 2020–2023 observation period.

Operational Definition of Variables
Dependent Variable

Audit Reporting Lag (ARL)

Audit Reporting Lag (ARL) refers to the length of time required to complete the audit of a company's financial statements, measured from the end date of the fiscal year to the date of the independent auditor's report. ARL is calculated using the following formula:

ARL = Audit Report Date − Fiscal Year-End Date

The result of the calculation is expressed in the number of days required to complete the audit process.

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Independent Variables

1. Return on Assets (ROA)

Return on Assets (ROA) is a profitability ratio that reflects a company's ability to generate earnings from its total assets. ROA is measured using the following formula:

ROA = Net Income / Total Assets

A higher ROA indicates better efficiency in utilizing company assets to generate profits.

2. Financial Distress (FD)

In this study, financial distress is measured using the Altman Z-Score model. The formula is expressed as follows:

$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5$

where:

- X_1 = Working Capital / Total Assets
- X_2 = Retained Earnings / Total Assets
- X_3 = Earnings Before Interest and Taxes (EBIT) / Total Assets
- X_4 = Market Value of Equity / Total Liabilities
- X_5 = Sales / Total Assets

The Altman Z-Score is used to evaluate the financial condition of a company and to identify the likelihood of financial distress.

3. Public Accounting Firm Size (CPA Size)

Public Accounting Firm Size (CPA Size) is measured using a dummy variable, defined as follows:

- A value of **1** is assigned to companies audited by Big Four CPA firms.
- A value of **0** is assigned to companies audited by non-Big Four CPA firms.

Data Analysis Technique

The data analysis technique employed in this study is panel data regression analysis using Python statistical software. Several stages of analysis were conducted to ensure the reliability and validity of the research findings.

Descriptive Statistics Analysis

Descriptive statistical analysis was conducted to provide an overview of the characteristics of the research data. This analysis includes the minimum value, maximum value, mean, and standard deviation of each research variable. Descriptive statistics are used to explain the distribution and general characteristics of the data before further statistical testing is performed.

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Classical Assumption Tests

The classical assumption tests in this study were conducted based on the approach proposed by (Ghozali & Ratmono, 2017) to ensure that the regression model satisfies the criteria of the Best Linear Unbiased Estimator (BLUE). Compliance with these assumptions ensures that the estimation results are unbiased and reliable for hypothesis testing and decision-making purposes. The classical assumption tests employed in this study include the normality test, heteroscedasticity test, autocorrelation test, and multicollinearity test.

The normality test was performed using the Jarque–Bera method to determine whether the residuals in the regression model are normally distributed. If the test results indicate a probability value below 0.05, the residuals are considered not normally distributed. Under such conditions, data treatment procedures were applied, including 5 percent winsorization to reduce the influence of extreme values (outliers), as well as the use of robust standard errors to maintain the reliability of the regression estimates despite violations of the normality assumption.

The heteroscedasticity test was conducted using the Breusch–Pagan method to examine whether the residual variance is constant across observations. The regression model is considered free from heteroscedasticity if the probability value exceeds 0.05. Furthermore, the autocorrelation test was performed using the Durbin–Watson statistic to detect the presence of correlation among residuals. Based on the general rule of thumb, Durbin–Watson values range between 0 and 4, where a value close to 2 indicates no autocorrelation, a value approaching 0 indicates positive autocorrelation, and a value approaching 4 indicates negative autocorrelation.

The multicollinearity test was conducted using the Variance Inflation Factor (VIF) to examine the correlation among independent variables in the regression model. The model is considered free from multicollinearity if the VIF values are below 10. Once all classical assumptions are satisfied, the regression model is deemed appropriate for further analysis and hypothesis testing.

Regression Model Specification

The regression model employed in this study is formulated as follows:

$$ln\_ARL = \alpha + \beta 1ROA + \beta 2FD + \beta 3CPASize + \varepsilon$$

Where:

- ln_ARL = Audit Reporting Lag
- α = konstanta
- β1−β3 = Regression coefficients
- ROA = Return on Assets
- FD = Financial Distress
- CPASize = Public Accounting Firm Size
- ε = error term

Hypothesis Testing

Partial Test (t-Test)

The t-test is used to examine the partial effect of each independent variable on the dependent variable. According to (Ghozali & Ratmono, 2017), the t-test assesses the extent to which an individual independent variable explains the variation in the dependent variable, assuming that other independent variables remain constant. The decision criteria in this study are as follows: if the significance value is less than 0.05, the hypothesis is accepted, indicating that the independent variable has a significant effect on the dependent

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variable. Conversely, if the significance value is greater than 0.05, the hypothesis is rejected, indicating that the independent variable does not have a significant partial effect on the dependent variable.

Coefficient of Determination (Adjusted R-Square) and Model Feasibility (F-Test)

The F-test is used to examine the overall feasibility of the regression model. According to Ghozali (2017), the regression model is considered appropriate if the significance value of the F-test is less than 0.05, indicating that all independent variables jointly have a significant effect on the dependent variable. Conversely, if the significance value exceeds 0.05, the model is considered statistically insignificant. In practice, significance levels between 0.05 and 0.10 may be interpreted as marginally significant.

The coefficient of determination (Adjusted R^2) is used to measure the extent to which the independent variables explain the variation in the dependent variable within the regression model (Ghozali, 2017). A higher Adjusted R^2 value indicates a greater explanatory power of the independent variables on the dependent variable. Conversely, a lower Adjusted R^2 value suggests that a substantial portion of the variation in the dependent variable is explained by other factors outside the research model.

RESULTS AND DISCUSSION

Description of the Research Data

This study utilizes secondary data obtained from companies' financial statements, with a total of 212 firm-year observations. The dependent variable in this study is Audit Reporting Lag (ARL), while the independent variables consist of Financial Distress (FD), Return on Assets (ROA), and Public Accounting Firm Size (CPA Size). The CPA Size variable is measured using a dummy variable, where a value of 1 is assigned to companies audited by Big Four audit firms and a value of 0 is assigned to companies audited by non-Big Four audit firms. Based on the data screening process, no missing values were identified across all variables; therefore, all observations were included in the empirical analysis.

Descriptive Statistics Results

Descriptive statistical analysis was conducted to provide an overview of the characteristics of the research data. The results of the descriptive statistics are presented in Table 1 below.

Table 1. Descriptive Statistics Results

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ARL	212	-175.000	355.000	155.198	46.623
ROA	212	-0.325	0.349	0.061	0.084
FD	212	0.800	8.760	3.610	1.826
CPASize	212	0.000	1.000	0.604	0.490

Source: Processed data, 2026.

Based on Table 1, the Audit Reporting Lag (ARL) variable has an average value of 155.198 days with a standard deviation of 46.623. The minimum value of -175 and the maximum value of 355 indicate a relatively high variation in audit report delay among the sampled companies.

The Return on Assets (ROA) variable has an average value of 0.061, indicating that, on average, the sample firms generate a profit of 6.1% from their total assets. The minimum value of -0.325 reflects firms experiencing losses, while the maximum value of 0.349 indicates a profitability level of up to 34.9%.

The Financial Distress (FD) variable has a mean value of 3.610 with a standard deviation of 1.826. This suggests that there is considerable variation in the financial conditions of the sampled firms.

Meanwhile, the CPA Size variable has an average value of 0.604. As a dummy variable, this indicates that approximately 60.4% of the sample firms are audited by Big Four audit firms, while the remaining firms are audited by non-Big Four audit firms.

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Classical Assumption Test Results

Normality Test Results

The normality test was conducted to determine whether the residuals of the regression model are normally distributed. The test was performed using the Jarque–Bera method. The results are presented in Table 2 below.

Table 2. Normality Test Results (Jarque–Bera)

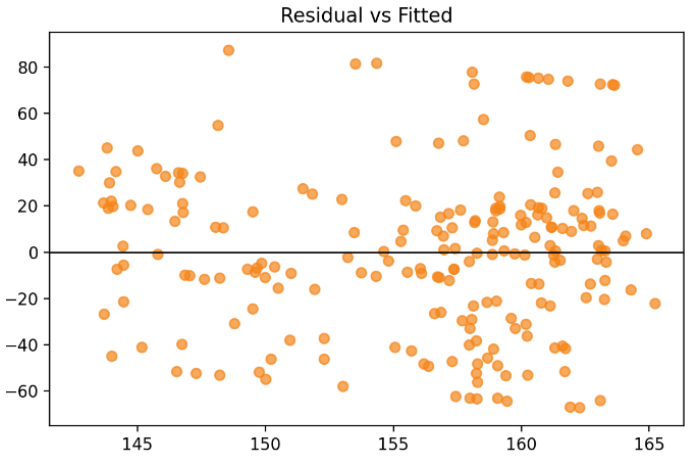
Description	Value
Jarque-Bera	1632.5446
Probability	0.0000

Source: Processed data

The Jarque–Bera test results show a statistic value of 1632.5446 with a probability value of 0.0000. These results indicate that the residuals in the initial model are not normally distributed, as the probability value is below 0.05. Therefore, data treatment was applied using 5% winsorization and robust standard errors to improve model reliability.

Figure 1 illustrates the distribution of Audit Reporting Lag (ARL) after the 5% winsorization procedure. The histogram indicates that the data distribution becomes more stable, and the influence of extreme values is reduced compared to the pre-treatment condition.

Figure 1. Histogram of the Distribution of Audit Reporting Lag (ARL) After Winsorization



Heteroscedasticity Test Results

The heteroscedasticity test was conducted using the Breusch–Pagan method to examine whether there is inequality in the variance of residuals. The results are presented in Table 3 below.

Table 3. Heteroscedasticity Test Results (Breusch–Pagan)

Description	Value
Breusch-Pagan	1.4788
Probability	0.6872

Source: Processed data

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The Breusch–Pagan test results show a statistic value of 1.4788 with a probability value of 0.6872. Since the probability value is greater than 0.05, it can be concluded that the regression model does not exhibit heteroscedasticity.

Autocorrelation Test Results

The autocorrelation test was conducted using the Durbin–Watson statistic. The results are presented in Table 4 below.

Table 4. Autocorrelation Test Results (Durbin–Watson)

Description	Value
Durbin-Watson	1.5718

Source: Processed data

The Durbin–Watson test result shows a value of 1.5718. This indicates that the model does not suffer from serious autocorrelation issues, although there is a weak indication that the residuals are not yet fully ideal.

Multicollinearity Test Results

The multicollinearity test was conducted using the Variance Inflation Factor (VIF). The results are presented in Table 5 below.

Table 5. Multicollinearity Test Results (VIF)

Variable	VIF	Description
FD	~1	No multicollinearity
ROA	~1	No multicollinearity
CPASize	~1	No multicollinearity

Source: Processed data

The results show that all independent variables have VIF values close to 1, indicating that there is no multicollinearity problem in the regression model.

Data Treatment

Based on the results of the classical assumption tests on the initial model, several data issues were identified, including the presence of outliers, non-normally distributed residuals, and a regression model that was not yet statistically significant in the overall specification. Therefore, data treatment procedures were applied to obtain a more stable and reliable model for further analysis.

The treatment procedures include 5% winsorization of continuous variables and the use of robust standard errors. Winsorization was applied to reduce the influence of extreme values that could distort the regression estimates, while robust standard errors were employed to improve the validity of statistical inference in the presence of minor violations of classical assumptions. After the implementation of these treatments, the regression model exhibited improved performance compared to the initial specification.

Regression Results After Treatment

The regression results after data treatment indicate an F-statistic value of 2.3728 with a probability of 0.0714. The R-square value is 0.0301, while the Adjusted R-square is 0.0161.

These results suggest that the regression model has improved compared to the initial specification. At the 10 percent significance level, the model can be considered marginally significant, indicating that it is more appropriate for hypothesis testing than the initial model. The detailed regression results after treatment are presented in Table 6 below.

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Table 6. Regression Results After Treatment

Variable	Coefficient	t-statistic	Probability
Constant	167.2241	25.6573	0.0000
FD	-3.5821	-2.5385	0.0111
ROA	10.9114	0.2387	0.8113
CPASize	1.6736	0.3138	0.7537

Source: Processed data

The results of the regression analysis after data treatment are presented in Table 6. The findings show that Financial Distress (FD) has a negative and statistically significant effect on Audit Reporting Lag (ARL), as indicated by a coefficient of -3.5821 and a probability value of 0.0111. This suggests that higher levels of financial distress are associated with shorter audit reporting delays, and thus the hypothesis regarding FD is accepted, although the relationship is negative. In contrast, Return on Assets (ROA) and CPA Size do not have a significant effect on ARL, with probability values of 0.8113 and 0.7537, respectively, leading to the rejection of both hypotheses.

F-Test and Coefficient of Determination (R^2)

Based on the multiple regression results after data treatment, which includes 5% winsorization and the use of robust standard errors, the F-statistic is 2.3728 with a probability value of 0.0715. In addition, the R-square value is 0.0301, while the Adjusted R-square is 0.0161.

These results indicate that the regression model has improved compared to the initial model. The F-test probability value of 0.0715 shows that the model is not statistically significant at the 5% significance level, but it is marginally significant at the 10% level. Therefore, the model is considered moderately acceptable for hypothesis testing.

The R-square value of 0.0301 indicates that Financial Distress (FD), Return on Assets (ROA), and CPA Size collectively explain 3.01% of the variation in Audit Reporting Lag (ARL), while the remaining variation is explained by other factors outside the model.

Discussion

Effect of Financial Distress on Audit Reporting Lag (ARL)

The results of this study indicate that financial distress has a significant effect on Audit Report Lag (ARL). This finding suggests that higher levels of financial distress are associated with longer audit completion times. This relationship can be explained through the mechanism of increased audit risk and greater audit effort required by auditors. Firms experiencing financial distress are more likely to face higher risks of material misstatement and more complex going concern issues. As a result, auditors are required to expand audit procedures and exercise a higher level of professional skepticism during the audit process. This increased audit complexity ultimately extends the audit completion period, thereby increasing ARL. Consistent with this explanation, prior empirical studies also document that financial distress is positively and significantly associated with ARL, as auditors tend to respond to distress conditions by increasing perceived business risk, which in turn leads to additional audit effort and delays in audit report issuance (Gerged et al., 2023; Marini et al., 2022).

From the perspective of agency theory, this finding can be explained by the increase in information asymmetry between principals and agents when firms experience financial distress. In such conditions, the likelihood of managerial opportunistic behavior increases due to pressure to maintain a favorable perception of firm performance. This situation intensifies the reliance of principals on external auditors as a monitoring mechanism to ensure the credibility of financial reporting. Consequently, auditors respond by increasing audit risk assessments and expanding audit procedures, particularly in relation to going concern evaluations, which ultimately leads to longer audit completion time. Therefore, financial distress reflects higher agency

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frictions that directly affect both the intensity and duration of the audit process (Emmanuel et al., 2024; Gerged et al., 2023).

The implications of this finding suggest that financial distress not only affects a firm's internal condition but also has a significant impact on the timeliness of financial reporting. For auditors and regulators, this result emphasizes the importance of implementing a risk-based audit approach when dealing with financially distressed firms, even though it may result in longer ARL (Marini et al., 2022). For investors and creditors, an increase in ARL may serve as an early warning signal of financial pressure that should be considered in economic decision-making, particularly regarding going concern risk and financial reporting quality. Meanwhile, for corporate management, this finding highlights the importance of strengthening corporate governance and internal control systems to ensure more efficient audit processes without compromising audit quality, thereby minimizing reporting delays under financial distress conditions (Emmanuel et al., 2024; Gerged et al., 2023).

Effect of Return on Assets (ROA) on Audit Reporting Lag (ARL)

The results of this study indicate that Return on Assets (ROA) does not have a statistically significant effect on Audit Report Lag (ARL). This finding suggests that firm profitability is not necessarily a primary determinant in explaining variations in audit reporting delays. Empirically, previous studies have reported inconsistent evidence regarding the relationship between ROA and ARL across different countries and research contexts. For instance, (Marini et al., 2022) found that ROA does not significantly affect reporting delay, while other risk-related variables such as liquidity and leverage play a more dominant role in explaining audit delays. In addition, prior literature presents mixed findings, where ROA is reported to have a negative effect on ARL in some studies, while in other specifications it shows a positive and significant relationship (Gerged et al., 2023). These variations suggest that the effect of ROA is unstable and tends to become insignificant when combined with other risk and audit-related variables that are more dominant in the research model.

From an agency theory perspective, ARL is a consequence of monitoring mechanisms designed to reduce information asymmetry between principals and agents. Auditors act as independent parties responsible for ensuring the reliability of financial statements before publication; therefore, audit complexity is more strongly influenced by reporting risk and the financial condition of the firm rather than profitability alone (Emmanuel et al., 2024; Marini et al., 2022). In this context, ROA as a measure of asset efficiency does not necessarily reflect the level of information risk or potential misstatement, which are the primary concerns of auditors. Accordingly, within the agency theory framework, the insignificance of ROA suggests that audit effort and monitoring costs are driven more by risk-related and audit complexity factors than by firm profitability (Gerged et al., 2023).

In terms of implications, this finding indicates that improvements in profitability cannot be used as the main indicator for predicting faster audit report issuance. For management, efforts to reduce ARL are more effectively achieved through strengthening internal control systems, improving information transparency, and reducing reporting risk rather than solely focusing on increasing ROA. For investors and creditors, this result highlights that ARL should not be interpreted based solely on profitability but must also consider other more relevant risk and financial condition factors in the audit process (Marini et al., 2022). Moreover, since ARL is associated with risk perception and the cost of capital, managing audit timeliness remains an important aspect in improving information efficiency and reducing firms' financing costs (Emmanuel et al., 2024).

Effect of CPA Firm Size on Audit Reporting Lag (ARL)

The results of this study indicate that Public Accounting Firm (CPA/KAP) size does not have a statistically significant effect on Audit Report Lag (ARL). This finding suggests that differences between large and small audit firms do not necessarily influence the speed of audit report issuance. Empirically, previous studies have also reported consistent evidence that CPA firm size is not statistically significant in explaining ARL. For instance, (Handoko & Marshella, 2020; Marini et al., 2022) found that CPA size does

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not affect ARL, even though other variables such as profitability may exhibit significant effects. Similar findings are reported in studies on firms listed on the Indonesia Stock Exchange, where CPA size is not significantly associated with ARL, while other factors such as liquidity, audit fees, and firm-specific characteristics play a more dominant role (Gerged et al., 2023). In addition, studies focusing on manufacturing firms in Indonesia also show that audit firm reputation does not significantly influence audit report lag, with explanations suggesting that standardized auditing procedures reduce observable differences in audit completion time between large and small audit firms (Gerged et al., 2023). Thus, ARL appears to be more strongly influenced by client-level audit complexity and risk rather than the size or reputation of the audit firm.

From an agency theory perspective, auditing functions as a monitoring mechanism to reduce information asymmetry between principals and agents, where auditors are responsible for ensuring the reliability of financial statements before publication (Emmanuel et al., 2024). However, the cost and duration of the audit process are primarily determined by the level of risk and complexity of information that must be verified, rather than by the characteristics of the audit service provider. This explains why CPA firm size does not consistently influence ARL, as both large and small audit firms are required to comply with the same auditing standards and evidence-gathering procedures in addressing agency problems (Gerged et al., 2023). Moreover, although larger audit firms are often associated with higher audit quality, this does not necessarily lead to faster audit completion, since auditors must still adjust their audit procedures based on client-specific risk assessments (Appah et al., 2024). Therefore, within the agency theory framework, ARL reflects the level of monitoring required due to client risk rather than the capacity or size of the audit firm itself.

In terms of implications, these findings suggest that selecting a large audit firm cannot be considered the sole strategy for accelerating audit report issuance. For companies, efforts to reduce ARL are more effectively achieved through strengthening internal control systems, improving audit readiness of financial data, and managing transaction complexity and organizational structure. For investors and regulators, this result highlights that ARL should not be directly interpreted as a reflection of audit firm size or reputation, but rather as an indicator of client risk and audit complexity (Gerged et al., 2023; Marini et al., 2022). Therefore, the evaluation of audit reporting timeliness should place greater emphasis on firm-specific structural and risk-related factors rather than solely on auditor characteristics.

CONCLUSIONS

Based on the findings of this study, it can be concluded that Financial Distress has a significant effect on Audit Report Lag (ARL), while Return on Assets (ROA) and Public Accounting Firm (CPA/KAP) size do not have a statistically significant effect on ARL. These results indicate that variations in audit reporting delays are primarily driven by firms' underlying financial risk conditions rather than profitability or auditor characteristics. Financial distress emerges as a key determinant that prolongs ARL, as it increases audit complexity, elevates the risk of material misstatement, and raises going concern issues, thereby requiring auditors to perform more extensive and in-depth audit procedures, ultimately extending audit completion time.

Meanwhile, the insignificance of ROA suggests that profitability is not always a primary indicator in explaining audit reporting timeliness. This implies that even firms with strong profitability may still experience prolonged audit processes when other risk-related factors such as leverage, liquidity, and overall financial condition play a more dominant role in the audit environment. Similarly, the non-significant effect of CPA firm size indicates that differences in auditor scale and reputation do not automatically lead to faster audit completion, as all audit firms operate under the same auditing standards and are required to adjust audit procedures based on client-specific risk profiles.

Overall, this study reinforces the agency theory perspective that ARL is the outcome of monitoring mechanisms designed to reduce information asymmetry between principals and agents, where auditors act as independent parties responding to firm risk levels. Consequently, ARL is more strongly influenced by financial risk conditions and operational complexity than by performance indicators (ROA) or auditor

attributes (CPA firm size). The key implication of these findings is that efforts to reduce audit report lag should not rely solely on improving profitability or selecting specific audit firms, but should instead emphasize strengthening corporate governance, improving internal control quality, and managing financial risks comprehensively to enhance audit efficiency without compromising audit quality.

References

Abdillah, M. R., Mardijuwono, A. W., & Habiburrochman, H. (2019). The Effect of Company Characteristics And Auditor Characteristics To Audit Report Lag. *Asian Journal of Accounting Research*, *4*(1), 129–144. https://doi.org/10.1108/AJAR-05-2019-0042

Appah, E., Duoduo, G., & Eburunobi, E. O. (2024). Firm Attributes and Corporate Financial Distress of Listed Manufacturing Firms at The Nigeria Exchange Group. *British Journal of Multidisciplinary and Advanced Studies: Business and Management Sciences*, *5*(1), 16–40.

Bhuiyan, B. U., Man, Y., & Lont, D. H. (2024). Audit Report Lag and The Cost of Equity Capital. *Journal of Capital Markets Studies*, *8*(2), 212–241. https://doi.org/10.1108/JCMS-02-2024-0008

Bimo, A. A., & Sari, I. R. (2022). The Effect Of Audit Complexity, Financial Distress And Institutional Ownership On Audit Report Lag (Empirical Study On Property And Real Estate Sub-Sector Companies Listed On The Indonesia Stock Exchange For The 2017-2021 Period). *Current Advanced Research on Sharia Finance and Economic Worldwide*, *2*(1), 75–89. https://ojs.transpublika.com/index.php/CASHFLOW/

Emmanuel, O. O., Joseph, B. A., & Portia, A. D. (2024). Enhancing Financial Stability in Ghana ' s Universal Banking Sector: A Governance Perspective and Practical Insights. *Journal of Business and Strategic Management*, *9*(1), 1–21.

Endri, E., Dewi, S. S., & Pramono, S. E. (2024). The Determinants of Audit Report Lag: Evidence from Indonesia. *Investment Management and Financial Innovations*, *21*(1), 1–12. https://doi.org/10.21511/imfi.21(1).2024.01

Fujianti, L., & Satria, I. (2020). Firm size, profitability, leverage as determinants of audit report lag: Evidence from Indonesia. *International Journal of Financial Research*, *11*(2), 61–67. https://doi.org/10.5430/ijfr.v11n2p61

Gerged, A. M., Yao, S., & Albitar, K. (2023). Board Composition, Ownership Structure and Financial Distress: Insights from UK FTSE 350. *Corporate Governance: The International Journal of Business in Society*, *23*(3), 628–649.

Ghozali, I., & Ratmono, D. (2017). *Analisis Multivariat dan Ekonometrika (Teori, Konsep, dan Aplikasi Eviews 10)*. Badan Penerbit Universitas Diponegoro.

Handoko, B. L., Deniswara, K., & Nathania, C. (2019). Effect of Profitability, Leverage, Audit Opinion and Firm Reputation toward Audit Report Lag. *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, *9*(1), 2214–2219. https://doi.org/10.35940/ijitee.A4787.119119

Handoko, B. L., & Marshella, M. (2020). Analysis of Factors Affecting Audit Report Lag in the Consumer Goods Industrial Manufacturing Company. *International Journal of Innovation, Creativity and Change*, *12*(6), 362–375.

Khamisah, N., Listya, A., & Saputri, N. D. M. (2021). Does Financial Distress Has an Effects on Audit

Proceedings of the Perbanas International Seminar on Economics, Business, Management, Accounting and IT
[June 2026] [ISSN 3047-0951]

Report Lag? (Study on Manufacturing Companies Listed in Indonesia Stock Exchange). *Akuntabilitas*, *15*(1), 19–34. https://doi.org/10.29259/ja.v15i1.13058

Lau, R. J. R., & Daito, A. (2025). The Effect of Financial Disruption, Profitability and Audit Quality on Audit Report Lag (Empirical Study on Manufacturing Companies on the IDX for the 2018 – 2022 Period). *International Journal of Economics, Management and Accounting*, *2*(2), 16–25. https://doi.org/10.61132/ijema.v2i2.567

Marini, V., Caratelli, M., Stella, G. P., & Barbaraci, I. (2022). Is corporate governance of private equity targets more effective for risk mitigation? In *Journal of Management and Governance* (Vol. 26, Issue 3). Springer US. https://doi.org/10.1007/s10997-021-09571-z

Pengumuman Sanksi Atas Penyampaian Laporan Keuangan Auditan Tahunan per 31 Desember 2023 (2024).

Pingass, R. L., & Dewi, N. L. (2022). The Influence of Financial Distress and Audit Opinion on Audit Delay. *Jurnal Akuntansi Universitas Jember*, *20*(1), 63–77.

Pratiwi, D. S. (2018). Ukuran Perusahaan Memoderasi Pengaruh Profitabilitas, Leverage, Komite Audit, dan Komisaris Independen Terhadap Audit Delay. *Jurnal Akuntansi Dan Keuangan Methodist*, *2*(1), 1–13.

Setiyowati, M., & Januarti, I. (2022). Analysis of Influencing Factors Affecting Audit Report Lag. *Jurnal ASET (Akuntansi Riset)*, *14*(2), 235–244. https://doi.org/10.17509/jaset.v14i2.48654

Watini, S. S., Himmah, E. F., & Putri, A. (2024). Effect of Operating Complexity, Audit Tenure And Financial Distress on Audit Report Lag With The Size of The Public Accountant Firm as The Moderating Variable. *International Journal of Business, Economics and Social Development*, *5*(4), 505–512.