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THE EFFECT OF PROFITABILITY AND COMPANY SIZE ON AUDIT DELAY IN BASIC INDUSTRY AND CHEMICAL SUB-SECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE (2021–2025)

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Abstract

This study analyzes the effect of profitability (ROA) and firm size (total assets) on audit delay in basic industry and chemical sub-sector companies listed on the IDX from 2021 to 2025. Using purposive sampling, 355 observation data were collected from annual financial statements and analyzed via multiple linear regression using SPSS 26. The results show that simultaneously, profitability and firm size significantly affect audit delay ($p = 0.000 < 0.05$. Partially, profitability has no significant effect ($p = 0.076 > 0.05$), whereas firm size has a significant effect ($p = 0.000 < 0.05$), making firm size the dominant factor. The R2 value of 0.049 indicates that both variables explain 4.9% of audit delay variation, while 95.1% is influenced by other factors. Future research is suggested to include additional variables such as solvency, liquidity, and auditor reputation.

Keywords: Profitability, Firm Size, Audit Delay

Abstrak

Penelitian ini menganalisis pengaruh profitabilitas (ROA) dan ukuran perusahaan (total aset) terhadap audit delay* pada perusahaan subsektor industri dasar dan kimia yang terdaftar di BEI periode 2021–2025. Dengan menggunakan metode *purposive sampling, terkumpul 355 data observasi dari laporan keuangan tahunan yang kemudian dianalisis melalui regresi linear berganda menggunakan SPSS 26. Hasil penelitian menunjukkan bahwa secara simultan, profitabilitas dan ukuran perusahaan berpengaruh signifikan terhadap audit delay ($p = 0{,}000 < 0{,}05$). Secara parsial, profitabilitas tidak berpengaruh signifikan ($p = 0{,}076 > 0{,}05$), sedangkan ukuran perusahaan berpengaruh signifikan ($p = 0{,}000 < 0{,}05$), sehingga ukuran perusahaan menjadi faktor yang dominan. Nilai R^2 sebesar 0,049 menunjukkan bahwa kedua variabel tersebut menjelaskan 4,9% variasi *audit delay*, sementara 95,1% sisanya dipengaruhi oleh faktor-faktor lain. Penelitian selanjutnya disarankan untuk menyertakan variabel tambahan seperti solvabilitas, likuiditas, dan reputasi auditor.

Kata Kunci: Profitabilitas, Ukuran Perusahaan, Penundaan Audit

INTRODUCTION

The timeliness of financial statement submission is a key element of the relevance of public information (Dewi et al., 2023). Audit delay the time span between the fiscal year-end and the issuance date of the independent auditor's report serves as an indicator of audit process efficiency and compliance with capital market regulations (Putri et al., 2024). OJK regulations require the submission of annual financial statements within a maximum of 90 days (3 months). However, late submission remains widespread on the IDX, with 91 companies reported late in 2021, 61 in 2022, 129 in 2023, 130 in 2024, and 90 in 2025. This is particularly evident in the basic industry and chemical sub-sector due to operational complexity, significant inventory values, and large fixed assets.

This study is grounded in Agency Theory (Jensen & Meckling, 1976), which explains that conflicts of interest between principals (owners) and agents (management) trigger information asymmetry (Agista et al., 2023). Audit delay arises as a consequence of an intensive monitoring mechanism aimed at minimizing the risk of material misstatements (Valencia, 2020). Research Objective To examine and analyze the simultaneous and partial effects of Profitability (ROA) and Firm Size (Total Assets) on Audit Delay in basic industry and chemical sub-sector companies listed on the IDX during the 2021–2025 period.

METHOD

This quantitative study was conducted on basic industry and chemical sub-sector companies listed on the Indonesia Stock Exchange (IDX) over a six-month period, from March to August 2026. The data utilized were secondary data in the form of audited annual financial statements for the 2021–2025 period, obtained through documentation techniques by downloading them directly from the official IDX website (www.idx.co.id). From a total population of 108 companies, sampling was carried out using a purposive sampling technique based on specific criteria, resulting in 71 sample companies (including issuers such as ANTM, BRPT, INKP, SMGR, TPIA, etc.) with a total of 355 observation data over the 5 year observation period. The data were analyzed using Multiple Linear Regression Analysis via SPSS version 26.0 software to test the equation Audit Delay = α + β1 ROA) + β2 (Ln Total Assets) + e which includes the F-test (simultaneous), t-test (partial), and Coefficient of Determination (R2) analysis

RESULTS

Descriptive Statistical Analysis Results.

Table 1. Dìescriptivìe Statistics

Dìescriptivìe Statistics

	N	Minimùm	Maximùm	Mìean	Std. Dìeviation
Profitabilitas (X1)	355	-.541050	.395323	.03836483	.079262078
Ukuran Perusahaan (X2)	355	24.263920	33.301400	28.71693730	1.860163065
Audit Delay (Y)	355	2.833213	5.187386	4.39228898	.231841482
Valid N (Listwisìe)	355				

Based on Table 1 the descriptive statistical analysis of 355 observation data from basic industry and chemical sub-sector companies listed on the IDX for the 2021–2025 period shows that the Profitability variable (X_1) has a mean value of 0.038 with a standard deviation of 0.079 (ranging from -0.541 to 0.395), where a standard deviation higher than the mean indicates high variation in profit fluctuations across companies. Meanwhile, the Firm Size variable (X_2) has a mean value of 28.717 with a standard deviation of 1.860 (ranging from 24.264 to 33.301), and the Audit Delay variable (Y) has a mean value of 4.392 with a standard deviation of 0.232 (ranging from 2.833 to 5.187). Since the standard deviations for Firm Size and Audit Delay are smaller than their respective means, both variables exhibit relatively homogeneous and stable data distributions. Overall, the data demonstrate high variability in corporate profitability efficiency, but remain relatively stable regarding firm size scale and audit delay duration.

Normality Test

The normality test determines whether the residual in the regression model follows a normal distribution, evaluated through graphical analysis (normal probability plot and histogram) and statistical tests (Kolmogorov-Smirnov test and skewness/kurtosis examination). This study employs the non-parametric One-Sample Kolmogorov-Smirnov (K-S) test, where data are assumed to be normally distributed if the significance value is greater than 0.05 ($p > 0.05$.

Table 2. Normality Test

		Unstandardizìed Rìesidùal
N		355
Normal Paramìetìers[a,b]	Mìean	.0000000
	Std. Dìeviation	.22610206
Most Extrìemìe Diffìerìencìes	Absolùtìe	.169
	Positivìe	.124
	Nìegativìe	-.169
Tìest Statistic		.169
Asymp. Sig. (2-tailìed)		.075[c]

a. Tìest distribìution is Normal.
b. Calcìulatìed from data.
c. Lilliìefors Significancìe Corrìection.

Based on Table 2, the results of the Kolmogorov-Smirnov and Shapiro-Wilk tests show that the significance values for all variables are greater than 0.05 ($p > 0.05$). Additionally, the Unstandardized Residual significance value of 0.75 ($p > 0.05$) indicates that the residuals are normally distributed.

Multicollinearity Test

The multicollinearity test determines whether high correlations exist among independent variables in a regression model, which can destabilize regression coefficients. Multicollinearity is detected using Tolerance and Variance Inflation Factor (VIF) values, with the non-multicollinearity criteria of Tolerance > 0.10 and VIF < 10 (Ghozali, 2021).

Table 3. Multicollinearity Test

Coìefficiìents[a]

Modìel		Unstandardizìed Coìefficiìents		Standardizìed Coìefficiìents	Collinìearity Statistics	
		B	Std. Error	Bìeta	Tolìerancìe	VIF
1	(Constant)	5.078	.187			
	Profitabilitas (X1)	-.273	.153	-.093	.983	1.017
	Ukuran Perusahaan (X2)	-.024	.007	-.189	.983	1.017

A. Dìepìendìent Variablìe: Audit Delay (Y)

Based on Table 3, Profitability (X_1) and Firm Size (X_2) both show a Tolerance value of 0.983 (> 0.10) and a VIF value of 1.017 (< 10). Because these values satisfy the criteria it is concluded that there is no strong correlation between the independent variables. Therefore, the regression model is free from multicollinearity, allowing Profitability and Firm Size to be used together to explain their effect on Audit Delay

Heteroscedasticity Test

The heteroscedasticity test determines whether there is inequality of residual variance across independent variable values, where a good regression model requires homoscedasticity (constant variance). According to Ghozali (2021), heteroscedasticity can be detected using a scatterplot; if no distinct pattern appears in the plot of residuals against predicted values, the homoscedasticity assumption is met.

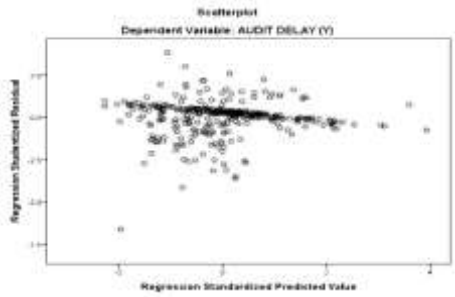

Figure 1. Heteroscedasticity Test.

Based on Figure 1 the data points are randomly scattered above and below 0 on the Y-axis without forming any specific pattern (such as narrowing, spreading or wavy patterns). This confirms that the regression model is free from heteroscedasticity and the classical assumption of homoscedasticity is met.

Autocorrelation Test

The autocorrelation test determines whether there is a correlation between residuals across observation periods in a regression model, where a good model should be free from autocorrelation. This study uses the Durbin-Watson (DW) test to detect autocorrelation, with the results presented in the following table

Table 4. Autocorrelation Test

Modèl Sùmmary[b]

Modèl	R	R Sqùarè	Adjùstèd R Sqùarè	Std. Error of thè Estimatè	Dùrbin-Watson
1	.221[a]	.049	.043	.226743485	.848

A. Prèdictors: (Constant), Ukuran Perusahaan (X2), Profitabilitas (X1)

B. Dèpèndènt Variablè: Audit Delay (Y)

Based on Table 4, the Durbin-Watson test yielded a value of 0.848. When compared against the Durbin-Watson critical values, this score lies below the upper bound (dU), indicating positive autocorrelation in the regression model

Multiple Linear Regression Analysis

Multiple linear regression analysis is used to determine the effect of Profitability (X_1) and Firm Size (X_2) on Audit Delay (Y) in basic industry and chemical sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021–2025 period. The data processing results using the SPSS program are presented as follows

Table 5. Multiple Linear Regression

Coèfficiènts[a]

Modèl	Unstandardizèd Coèfficiènts		Standardizèd Coèfficiènts	t	Sig.
	B	Std. Error	Bèta		
1 (Constant)	5.078	.187		27.108	.000
Profitabilitas (X1)	-.273	.153	-.093	-1.781	.076
Ukuran Perusahaan (X2)	-.024	.007	-.189	-3.601	.000

A. Dèpèndènt Variablè: Audit Delay (Y)

Based on Table 5, the multiple linear regression equation is as follows:

$$Y = 5.078 - 0.273X_1 - 0.024X_2 + e$$

Interpretation:

1. Constant (5.078) : If Profitability and Firm Size are zero or held constant, Audit Delay is 5.078.
2. Profitability Coefficient (-0.273): A 1-unit increase in Profitability decreases Audit Delay by 0.273 units, holding other variables constant. The negative sign indicates an inverse relationship.
3. Firm Size Coefficient (-0.024): A 1-unit increase in Firm Size decreases Audit Delay by 0.024 units, holding other variables constant. The negative sign indicates that larger firms tend to have shorter audit delays.

Simultaneous Test (F-Test)

The F-test is used to determine whether the independent variables simultaneously have a significant effect on the dependent variable. The results of the simultaneous test (F-test) are shown in the following table

Table 6. Simultaneous Test (F-Test)

ANOVA[a]

Modìel	Sìum of Sqìuarìes	df	Mìean Sqìuarìe	F	Sig.
1 Rìegrìession	.930	2	.465	9.049	.000[b]
Rìesidìual	18.097	352	.051		
Total	19.028	354			

A. Dìepìendìent Variablìe: Audit Delay (Y)

B. Prìedictors: (Constant), Ukuran Perusahaan (X2), Profitabilitas (X1)

Based on Table 6, the F-test yields a significance value of 0.000 (< 0.05), so H_0 is rejected and H_1 is accepted. This confirms that Profitability and Firm Size simultaneously have a significant effect on Audit Delay in basic industry and chemical sub-sector companies listed on the IDX for the 2021–2025 period. This result shows that the combination of a firm's profitability and scale significantly influences how quickly its financial audit is completed

Partial Test (t-Test)

The t-test is used to determine the partial effect of each independent variable on the dependent variable, namely Audit Delay. The test is conducted by comparing the significance value with a significance level (α) of 5% or 0.05.

Table 7 Partial Test (t-Test)

Coìefficiìents[a]

Modìel	Unstandardizìed Coìefficiìents		Standardizìed Coìefficiìents	t	Sig.
	B	Std. Error	Bìeta		
1 (Constant)	5.078	.187		27.108	.000
Profitabilitas (X1)	-.273	.153	-.093	-1.781	.076
Ukuran Perusahaan (X2)	-.024	.007	-.189	-3.601	.000

A. Dìepìendìent Variablìe: Audit Delay (Y)

Based on Table 7 (t-test results), Profitability (X_1) has a regression coefficient of -0.273, a t-statistic of -1.781, and a significance value of 0.076. Since the significance value exceeds 0.05 ($p > 0.05$), H_0 is accepted and H_2 is rejected, indicating that Profitability has no significant effect on Audit Delay. In contrast, Firm Size (X_2) yields a regression coefficient of -0.024, a t-statistic of -3.601 and a significance value of 0.000. Because the significance value is less than 0.05 ($p < 0.05$), H_0 is rejected and H_3 is accepted, proving that Firm Size has a significant negative effect on Audit Delay

Coefficient of Determination (R^2)

According to Sugiyono (2018:284), the coefficient of determination measures how much influence the independent variables have on the dependent variable. The calculation results are presented in the following table:

Table 8 Coefficient of Determination (R^2)

Modèl Sùmmary[b]

Modèl	R	R Sqùarè	Adjùstèd R Sqùarè	Std. Error of thè Estimatè
1	.221[a]	.049	.043	.226743485

A. Prèdictors: (Constant), Ukuran Perusahaan (X2), Profitabilitas (X1)

B. Dèpèndènt Variablè: Audit Delay (Y)

Based on Table 8 the R-Square (R^2) value is 0.049 (4.9%), indicating that Profitability (X_1) and Firm Size (X_2) explain 4.9% of the variation in Audit Delay (Y), while the remaining 95.1% is explained by other factors outside the research model. Additionally, the Adjusted R-Square value of 0.043 (4.3%) reflects the explanatory power of Profitability and Firm Size after adjusting for the number of independent variables in the model.

DISCUSSION

Simultaneous Effect of Profitability and Firm Size on Audit Delay

Based on the simultaneous F-test, the F-statistic is 9.049 with a significance value of 0.000 ($p < 0.05$), meaning that H_0 is rejected and H_1 is accepted. Thus, Profitability and Firm Size simultaneously have a significant effect on Audit Delay in basic industry and chemical sub-sector companies listed on the IDX for the 2021–2025 period. Theoretically, Agency Theory (Jensen & Meckling, 1976) explains that information asymmetry between principals and agents can be mitigated through timely audited financial reports. Although profitability partially shows no significant effect, its combination with firm size provides a collective framework for explaining variations in Audit Delay.

Effect of Profitability on Audit Delay

The partial t-test for Profitability yields a significance value of 0.076 ($p > 0.05$\$), indicating that H0 is accepted and H_2 is rejected. This proves that Profitability has no significant effect on Audit Delay. Under Agency Theory, management with high profitability has incentives to accelerate financial reporting to convey good news and reduce information asymmetry. However, in practice, auditors adhere strictly to standard audit procedures regardless of a company's profit level. The audit completion timeline is primarily determined by transaction complexity, internal control systems, document availability, and audit evidence sufficiency rather than earnings magnitude. Consequently, profitability is not a dominant factor in driving Audit Delay.

Effect of Firm Size on Audit Delay

The partial t-test reveals that Firm Size achieves a significance value of 0.000 ($p < 0.05$) with a negative regression coefficient, leading to the acceptance of H3. This indicates that Firm Size has a significant negative effect on Audit Delay, meaning that larger firm size corresponds to a shorter audit duration. According to Agency Theory, larger firms experience higher public and regulatory oversight, compelling management to publish financial statements promptly to maintain market trust. Additionally, larger corporations possess superior accounting information systems, stronger internal controls, and greater financial resources, which significantly expedite auditor field procedures and evidence collection

CONCLUSION

Based on the analysis in the previous chapter, the research findings are summarized as follows:

1. Profitability (X_1) and Firm Size (X_2) simultaneously affect Audit Delay (Y) in basic industry and chemical sub-sector companies, as both variables collectively influence the timeliness of audit completion and financial reporting.
2. Profitability (X_1) does not affect Audit Delay (Y) indicating that a firm's profit level does not determine the speed of audit completion.
3. Firm Size (X_2) affects Audit Delay (Y) as larger firms possess superior internal control systems and resources, enabling a more efficient audit process

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