The Influences of Audit Tenure and Firm Size on Audit Delay Moderated by Financial Distress

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ABSTRACT

Financial reports submitted on time by the company to the public will increase the relevance of information and reduce the risk of misinterpretation in decision making from related parties. Until 2022, several property and real estate companies in the Indonesia Stock Exchange are still late publishing financial reports. Several factors are thought to influence this delay, including audit tenure, firm size, and financial distress. This study on 56 property and real estate companies aims to investigate the impact of audit tenure and firm size on audit delay and determine the role of financial distress in moderating the influence of both independent variables on audit delay. The research results indicate that audit tenure does not affect audit delay, and firm size negatively affects audit delay. Apart from that, the impact of audit tenure on audit delay is not strengthened or weakened by financial distress, but financial distress is able to influence the relationship between firm size and audit delay.

Keywords**:** Audit Tenure; Audit Delay; Firm Size; Financial Distress.

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1. INTRODUCTION

For a company which has been listed publicly, accuracy and punctuality of financial reports are very important in providing relevant information, which means that the punctuality of financial reports provisions done by companies shows their goodwill towards the public. However, in the year 2022, there were still 61 companies which were late to provide their financial reports, with the majority originating from the property and real estate industries, having 14 companies out of the 61. The time gap between financial report date and the audit date is called the audit delay, which can decrease trust from the public to a company. The factors which are predicted to cause audit delay includes audit tenure, firm size, and financial distress. Audit tenure is the duration in which one single Public Accounting Firm has provided its services towards a company. Previous research shows an inconsistent result on how audit tenure and firm size affect audit delay. One of the reasons is expected to be due to financial distress, as the audit risk forces auditors to prolong the audit process. The purpose of this research is to ascertain whether financial distress truly moderates the relationship of audit tenure and firm size with audit delay.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Agency theory emphasizes the auditor's role as an independent management monitor responsible for reporting to shareholders (Jensen & Meckling, 1976). Audit tenure is the duration of service of a Public Accounting Firm to its client. Audit tenure can be defined

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as the duration of audit duty between an auditor (Public Accounting Firm) with an audited company continuously without changing to other public accounting party (Rahmina & Agus, 2014). Firm size shows the size of a company as measured by its total assets and has a role in determining firm profitability (Susan et al., 2022). Audit delay states the time required to complete an audit process and is determined from the financial year's closing date until the audit report's completion (Imam et al., 2001; Tam et al., 2023; Bamahros, 2023). Financial difficulties or financial distress indicate that a company is at risk of bankruptcy (Ragab & Saleh, 2022), and there are doubts about the survival of a company experiencing financial difficulties (Puspaningsih, 2024).

2.1 Relationship between Audit Tenure and Audit Delay

The duration of the association between Public Accounting Firm and a company will affect the auditor's understanding on the audit rules and standards which will be applicable for both the company or the auditor personally. Having the auditor understanding the client company will hasten the audit process. On the other hand, personal emotional attachment can decrease independency and prolong audit duration. Audit tenure is the essential factor related to audit delay (Chen et al., 2022). According to Mai & Pham (2014); Andreas & Ming (2020) and Indreswari & Erinos (2023), there is an influence of audit tenure towards audit delay. This shows that the longer the duration of partnership between Public Accounting Firm and its client company, the audit delay may be affected to be longer or shorter. Based on this, the first hypothesis is:

H1: Audit tenure affects audit delay

2.2 Relationship between Firm Size and Audit Delay

Firm size is the scale of a business entity measurable through the total assets that the firm has and is one of the determining factors for financial performance (Susan, 2022). Larger firms have the interest to uphold their reputation in the public eyes, which compels them to submit their reports on time (Khoufi & Khoufi, 2018). These larger firms are always noticed by many parties which puts them under pressure to provide their financial report punctually (Hassan, 2016; Gustiana & Rini, 2022). Earlier financial reports indicated positive information about the company's performance (Al Daoud et al., 2014). Based on this, the second hypothesis is:

H2: Firm size affects audit delay

2.3 Relationship between Audit Tenure, Financial Distress, and Audit Delay

Terrible financial situations that may lead to bankruptcy are called financial distress, which can be reflected in the firm's inability to pay debts. A company tend financial problems tends to need longer periods of time to complete and submit the financial reports. This is due to the auditors slowing down the auditing process through more thorough inspection towards the risks that their client is facing (Fathi & Gerayli, 2017). High audit risks will impact the possibility of a late audit report. There is a positive relationship between auditor risk assessment and audit risk, and audit work will increase as audit risk rises (Kend & Nguyen, 2021). According to Pradnyaniti & Suardikha (2019), financial distress can have a moderating aspect by lessening the impact of audit tenure towards audit delay. The third hypothesis for this research is:

H3: Financial distress moderates the impact of audit tenure toward audit delay

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2.4 Relationship between Firm Size, Financial Distress, and Audit Delay
The companies which face financial distress need to do some fixes on their financial report, which will cause audit delay. Financial distress can function as a lessening factor which minimalize the impact of firm size on audit delay. Financial Condition affects Audit Report Lag. Audit process requires a longer time to be completed when a company is experiencing financial distress due to audit risk, which will worsen as the firm size increases (Palupi & Karmudiandri, 2021; Abdillah et al., 2019). The fourth hypothesis for this research is:

H4: Financial distress moderates the relationship between firm size and audit delay

The research model is presented in Figure 1.

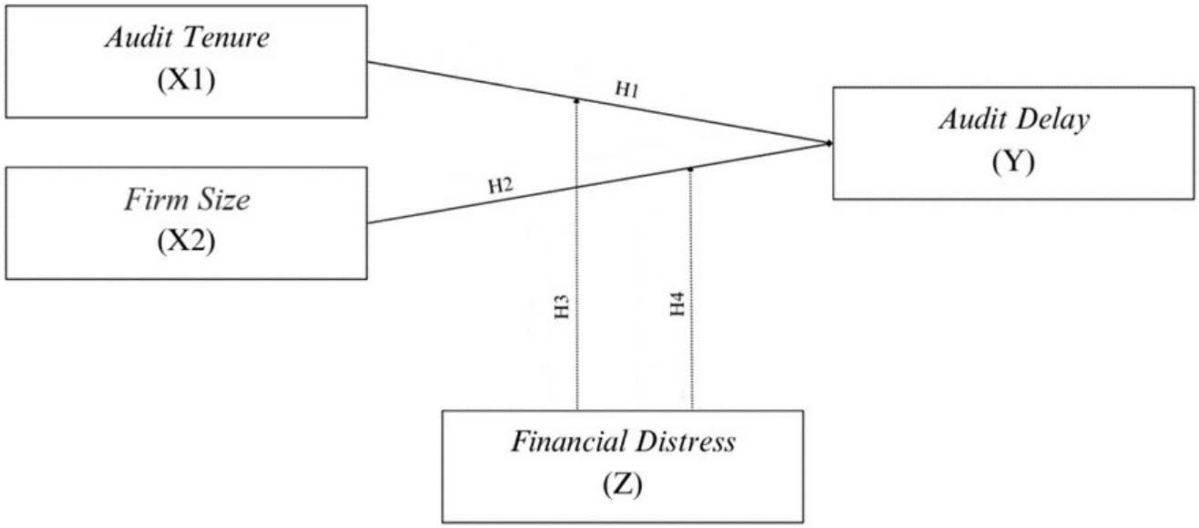

Figure 1: Research Model

3. RESEARCH METHOD

The type of research is explanatory research (Sekaran & Bougie, 2021). The research object is property and real estate sector companies on the Indonesia Stock Exchange (IDX) in 2020 – 2022. The measurement of each variable is audit tenure: duration of partnership between the auditor and the client company, firm size: total assets' natural logarithm, and financial distress: Altman Z-Score model III.
The population is 92 companies. The samples that are in line with the research purpose are chosen through purposive sampling. The criteria are:

1. The company is be listed in IDX before 1 January 2020
2. The company submitted complete yearly financial report and independent auditor report throughout the year 2020 – 2022.

The criteria yield 56 companies as the sample.

Data is obtained from the IDX official website (www.idx.co.id) or relevant websites. The following table shows the sampling frame arranged according to the determined criteria.

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Table 1. Sampling Frame

	Criteria	No. of sample
1.	Property and real estate sector companies in IDX.	92
2.	Property and real estate sector companies in IDX before 1 January 2020.	(25)
3.	Property and real estate sector companies which submitted complete yearly financial report and independent auditor report throughout the year 2020 – 2022.	(11)
Total company samples which meet the criteria		56
Total amount of data from the research (Total sample x 3 years)		168

Data processing was conducted using SPSS version 26 to investigate the relationship between dependent, independent, and moderating variables.

4. RESULTS AND DISCUSSION

Descriptive analysis is done to illustrate the data characteristics. The results are presented in Table 2.

Table 2. Descriptive Statistics

	N	Min.	Max.	Mean	Standard Deviation
Audit Tenure	168	1	3	1.64	0.746
Firm Size	168	24.8485	31.8054	28.8230	1.5289
Financial Distress	168	-11.7728	456.4814	10.9871	39.4544
Audit Delay	168	41	306	108.86	40.998

Before performing multiple linear regression analysis, a classic assumption test (Tables 3 – 6) is conducted to ensure the parameter estimation and regression coefficient do not have any bias, and the samples used are normal and free from multicollinearity, heteroscedasticity, and autocorrelation.

Table 3. One-Sample Kolmogorov-Smirnov Test Results

		Unstandardized Residual
N		154
Normal Parameters	Mean	0.0000000
	Std. Deviation	0.22306748
Most Extreme Differences	Absolute	0.069
	Positive	0.069
	Negative	-0.061
Test Statistic		0.069
Asymp. Sig. (2-tailed)		0.074

On the normality test, 14 data is discovered to be outliers which causes the data to distribute abnormally. As such, the outliers need to have special treatment, one of which is to remove extreme data from multiple linear regression analysis. After these outliers are omitted, there are 154 total data remaining. Normality test can be seen from the value of *Asymp. Sig (2-*

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tailed), which shows a value of 0.074 > 0.05 (Table 3). It concludes that the data used in the regression model has a normal distribution.

Table 4. Multicollinearity Test Results

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	7.898	1.115		7.081	0.000		
Audit Tenure	-0.067	0.041	-0.127	-1.609	0.110	0.996	1.004
Firm Size	-0.981	0.332	-0.233	-2.957	0.004	0.996	1.004

Table 4 shows that audit tenure and firm size variables have a VIF value of 1.004 < 10 and a tolerance value of 0.996 > 0.10. As such, based on this test, no indication of multicollinearity issue is present.

Table 5. Heteroscedasticity Test Results

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.549	0.656		0.836	0.404
Audit Tenure	-0.030	0.024	-0.099	-1.221	0.224
Firm size	-0.107	0.195	-0.044	-0.546	0.586

Based on heteroscedasticity test on Table 5, the audit tenure has a significance value of 0.224 > 0.05. Furthermore, firm size variable has a significance value of 0.586 > 0.05. Based on *Glejser* test results on audit tenure (X1) and firm size (X2), it concludes that no heteroscedasticity issues are present.

Table 6. Autocorrelation Test Results

R	R^2	Adjusted R^2	Std. Error of the Estimate	DW
0.258	0.067	0.054	0.22454	2.108

Referring to the *Durbin-Watson table,* a dL value of 1.7103 and dU value of 1.7629 are obtained. These numbers are compared with the numbers located in Table 6, which states of a *Durbin-Watson* (DW) value of 2.108. As such, no autocorrelation occurs in this regression model as it fulfills the criteria of dU < DW value < 4-dU, which is 1.7629 < 2.108 < 2.2371.

Table 7. Statistic F Test Results based on MRA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.543	2	0.272	5.388	0.005
Residual	7.613	151	0.050		
Total	8.156	153			

The statistic F test is used to ensure the simultaneous impact of the independent on dependent variables. It can be determined to be simultaneous if the significant value is

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below 0.05. The significant value is known to be 0.005 < 0.05, shown in Table 7 based on Statistic F test findings. Thus, audit delay can be said to be affected by Audit Tenure and firm size simultaneously.

Table 8. Statistic F Test Results based on MRA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.913	5	0.183	3.792	0.003
Residual	6.789	141	0.048		
Total	7.701	146			

Based on the Statistic F test results (Table 8), a significance value of 0.004 < 0.05 is presented. As such, it can be concluded with a 95% confidence level that audit delay is influenced by audit tenure, firm size, financial distress, interaction of audit tenure and financial distress, and interaction of firm size and financial distress simultaneously.

Table 9. Multiple Regression Analysis Results

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	7.898	1.115		7.081	0.000
Audit Tenure	-0.067	0.041	-0.127	-1.609	0.110
Firm Size	-0.981	0.332	-0.233	-2.957	0.004

To measure the relationship between research variables, a linear regression analysis is needed. In this research, 2 (two) regression analysis are conducted, which are: 1) Multiple Linear Regression Analysis, and 2) Moderated Regression Analysis (MRA). A Regression Equation from multiple linear regression analysis results is presented in Table 9, which states as follows:

$$\text{Audit Delay} = 7.898 - 0.067\ \text{Audit Tenure} - 0.981\ \text{Firm Size} + \varepsilon$$

Table 10. Moderated Regression Analysis (MRA) Results

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.000	1.863		2.684	0.008
Audit Tenure	-0.037	0.072	-0.070	-0.504	0.615
Firm Size	-0.111	0.553	-0.027	-0.200	0.842
Financial Distress	2.413	1.048	12.322	2.302	0.023
Audit Tenure and Financial Distress Interaction	-0.016	0.037	-0.070	-0.434	0.665
Firm Size and Financial Distress Interaction	-0.728	0.313	-12.325	-2.322	0.022

Moderated regression analysis is needed to measure the interaction between independent and moderating variable. As presented in Table 10, the regression equation is:

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Audit Delay = 5.000 - 0.037 Audit Tenure - 0.111 Firm Size + 2.413 Financial Distress – 0.016 Interaction of Audit Tenure and Financial Distress – 0.728 Interaction of Firm Size and Financial Distress + ε

Table 9 explains the partial test (Statistic T) with 5% significance level. The results are as follows:

- Audit Tenure (X1) has a p-value of 0.110. As such, the first hypothesis is rejected. This shows that audit tenure can not be proven to have an impact on significance level of 0.05 on audit delay.
- Firm size (X2) has a p-value of 0.004, which indicates that the second hypothesis is accepted. It shows that firm size affects the audit delay (0.05 significance level).

Table 10, partial test (statistic t) with moderated regression analysis using a significance level of 0.05 or 5% on interaction variables, shows a result as follows:

- Financial distress (Z) has a p-value of 0.023 < 0.05. It indicates that financial distress affects audit delay.
- Interaction audit tenure with financial distress (X_1Z) variable has a p-value of 0.665 > 0.05. The third hypothesis in the study is rejected, which means that interaction between audit tenure and financial distress cannot be proven to impact audit delay.
- Interaction firm size with financial distress (X_2Z) variable has a p-value of 0.022 < 0.05. It concludes that the fourth hypothesis is accepted. It shows that the interaction between firm size and financial distress has an impact on audit delay variable.

Table 11. Determination Coefficient Test Results

R	R^2	Adjusted R^2	Std. Error of the Estimate
0.258	0.067	0.054	0.22454

Table 11 presents an adjusted R^2 of 0.054 or 5.4% in the regression model without the interaction of financial distress as a moderating variable, demonstrating that audit tenure and company size explain around 5.4% of the variation in audit delay as the dependent variable.

Table 12. Determination Coefficient Test Results based on MRA

R	R^2	Adjusted R^2	Std. Error of the Estimate
0.344	0.119	0.087	0.21942

Table 12 presents an adjusted R^2 of 0.087 or 8.7% with the interaction of financial distress as a moderating variable. It shows that audit tenure (X1), firm size (X2), financial distress (Z), the interaction of audit tenure with financial distress (X1Z), and the interaction of firm size with financial distress (X2Z) explain around 8.7% of the variation in audit delay.

The incremental value of the adjusted R square of 3.3%, from a model without variable interactions (5.4%) to a model with interactions (8.7%), demonstrates that the financial distress as a moderating variable makes an additional contribution in explaining variations in audit delay. Although the increase is relatively small, the interaction of the financial

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distress variable significantly enriches the model by providing additional explanation for the observed variation.

Further data processing was conducted to test the impact of audit tenure, firm size, and financial distress on audit delay without involving interactions between variables. The processing results show that the three independent variables simultaneously impact audit delay with a p-value of 0.010 and an F-value of 3.929, contributing 5.7%. Testing the impact of each variable on audit delay shows that audit tenure and firm size can determine audit delay with p-values of 0.057 and 0.004, respectively. At the same time, financial distress is not statistically significant, with a p-value of 0.684 (Table 13), which means that firm financial distress does not necessarily determine audit delay.

Table 13 Regression Results (Without Moderating Variable)

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	207.686	34.896		5.952	0.000
Audit Tenure	-4.728	2.464	-0.155	-1.919	0.057
Firm Size	-3.501E-6	0.000	-0.243	-2.940	0.004
Financial Distress	-1.835E-8	0.000	-0.034	-0.407	0.684

5. CONCLUSIONS AND SUGGESTIONS

Some enlightenments were derived based on research results regarding the impact of firm size and audit tenure on audit delay, using financial distress as a moderating variable. It can be concluded that at a significance level of 0.05: (1) Audit tenure has yet to be proven to influence audit delay; (2) Firm size impacts negatively on the effect against audit delay; (3) A firm's financial distress does not strengthen or weaken the correlation between audit tenure and audit delay.; and finally (4) Financial distress can moderate the impact of firm size on audit delay by weakening the relationship between both variables.

Further research may consider other explorable factors that might influence audit delay. Some variables include audit fees, public accounting firm size, auditor switching, and the auditor numbers in the firm to understand better the factors that influence audit delay. Research can also be carried out for industrial sectors with different characteristics as comparison substances.

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