

The Effect of Auditor Reputation, Audit Fee, and Audit Tenure on Audit Delay with Financial Distress as a Moderating Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

Ego Salman¹, Afrizal², Fitriani Mansur³

Master of Accounting Program, Faculty of Business Economics, University of Jambi, Indonesia¹, University of Jambi, Indonesia^{2,3}

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✉Corresponding Author:

Name author: Ego Salman

E-mail:egosalman@unja.ac.id

Abstract

This study aims to examine the effect of auditor reputation, audit fees, and audit tenure on audit delay with financial distress as a moderator. The sample consists of 99 manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2023–2025 period, with a total of 297 observations after removing 9 outliers. The analysis used Partial Least Square (PLS) with SmartPLS 4.0. The results show that auditor reputation, audit fees, and audit tenure have a significant negative effect on audit delay. Big 4 accounting firms complete audits 11.2 days faster, a 1-unit increase in Ln_Fee decreases the delay by 6.8 days, and an additional 1-year tenure decreases the delay by 2.1 days. Financial distress, proxied by the Altman Z-Score, is proven to moderate these three relationships. The advantages of Big 4 firms, high fees, and long tenure are greater in healthy companies and weakened in distressed companies because auditors become more conservative. The model has $R^2 = 0.486$, $Q^2 = 0.461$, and $SRMR = 0.051$. Practical implications: Regulators need to consider tiered deadlines for distressed issuers, public accounting firms need to implement risk-based pricing, and issuers should improve their financial health before turning to the Big 4.

Keywords: *Audit Delay, Auditor Reputation, Audit Fee, Audit Tenure, Financial Distress*

1. Introduction

The timeliness of financial report presentation is a key element influencing the value of information for users, particularly investors and regulators. Late publication of financial reports reduces the relevance of the information and can negatively impact stakeholders' economic decisions. This phenomenon is known as audit delay, which is the time span between the company's financial closing date and the date the independent auditor's report is signed (Sultana et al., 2024). A longer audit delay indicates a lower level of reporting timeliness, which in turn reduces the relevance of the information for users (Kaaroud et al., 2020).

Indonesian regulations require the timely submission of audited financial reports. Since 2003, through Decree No. Kep-36/PM/2003, the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) has set a deadline of 90 days after the closing date for audited annual financial reports. This regulation is reinforced by POJK No. 29/POJK.04/2016. However, many issuers still experience delays, and there have even been cases of audit integrity violations by certain public accounting firms.

The Indonesian Institute of Accountants (IAI) reported in 2021 that over one hundred audit reports were signed by a single small public accounting firm simultaneously, despite capacity constraints. Another case involved a telecommunications company whose stock trading was suspended by the IDX in February 2021 due to financial reporting errors, with auditors from Jamaludin, Ardi, Sukimto, and Rekan accounting firm deemed to have failed to detect the irregularities. These cases highlight the vital role auditor quality and reputation play in maintaining the reliability and timeliness of reporting.

The first factor influencing audit delay is the auditor's reputation. Auditors practicing at Big Four accounting firms are believed to have more adequate resources, more sophisticated audit technology, and

A rigorous quality control system enables more efficient audit completion (DeAngelo, 1981). Research by Prasetya and Rozali (2022) found that auditor reputation significantly impacts audit delay, while Andriani and Nursiam (2023) and Yanti et al. (2024) found no significant effect, reflecting inconsistencies in findings that require further study.

The second factor is the audit fee. Adequate audit fees allow the public accounting firm to allocate sufficient resources to complete work thoroughly and on time. Andriani and Nursiam (2023) found that audit fees influence audit delay, while Rinanda and Nurbaiti (2024) found no significant effect. The third factor is audit tenure. Longer tenure provides a learning effect in the form of auditors' understanding of the client's business and risks, resulting in a more efficient audit process (Lee et al., 2009). Hasanah and Putri (2024) and Paramita and Latrini (2021) found a negative effect of tenure on audit delay, while Andriani and Nursiam (2023) found no significant effect.

The inconsistency of these empirical findings suggests the existence of a moderating variable. This study proposes financial distress as a moderating variable. Financial distress significantly increases audit risk because auditors must conduct additional testing related to the going-concern assumption (Sultana et al., 2024), which can strengthen or weaken the impact of independent variables on audit delay. From a market perspective, the manufacturing sector plays a strategic role on the IDX, as reflected in the following market capitalization data.

Table 1. Growth in Market Capitalization Value on the IDX (in Billions of Rupiah)

Industry Classification	2021	2022	2023
Agriculture	118,308	137,159	102,456
Mining	161,419	286,744	441,555
Basic and Chemical Industry	286,951	399,488	639,059
Various Industries	303,425	393,716	371,225
Consumer Goods Industry	1,129,447	1,285,281	1,408,367
Property, Real Estate and Construction	370,714	426,188	362,468
Infrastructure, Utilities and Transportation	637,168	719,812	709,280
Finance	1,230,932	1,478,250	1,991,752
Trade, Services and Investment	580,811	627,975	711,270

Source: *IDX Fact Book 2021-2023* (www.idx.co.id)

Table 1 shows that the consumer goods industry sector has the second-largest market capitalization on the IDX after the financial sector, with consistent growth from IDR 1,129 trillion (2021) to IDR 1,408 trillion (2023). This steady growth reflects the significant public interest in the accuracy and reliability of financial reporting in this sector. Unlike the agricultural and miscellaneous industries sectors, which experience fluctuations, the consumer goods sector shows a sustained positive trend, strengthening the rationale for selecting the manufacturing sector as the research object.

This study expands on Andriani and Nursiam's (2023) research by adding financial distress as a moderating variable and employing a PLS-SEM approach, which is more suitable for testing simultaneous moderating effects. The study subjects included all manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2023-2025 period, using the Modified Altman Z-Score (1993), which is more sensitive in capturing the financial condition of manufacturing companies in emerging capital markets. This development is expected to yield more comprehensive empirical evidence and relevant policy implications for regulators, public accounting firms, and issuers.

Based on the description above, this study aims to: (1) test the effect of auditor reputation on audit delay; (2) test the effect of audit fees on audit delay; (3) test the effect of audit tenure on audit delay; and (4) test the moderating role of financial distress on the effect of auditor reputation, audit fees, and audit tenure on audit delay in manufacturing companies listed on the IDX for the 2023-2025 period.

2. Research methods

This research is a quantitative study using a causal explanatory approach that aims to examine causal relationships between variables. The research subjects are manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2023-2025 period, with a firm-year analysis unit. Data are sourced from annual financial reports published through www.idx.co.id.

Table 2. Research Sample Selection

No	Sample Criteria	Amount
1	Manufacturing Companies listed on the IDX during 2023-2025	142
2	Reduced: companies whose financial reports are incomplete consecutively	(34)
3	Reduced: companies that have outlier data that affects research results	(9)
Number of Samples		99
Total Observations (99 x 3 years)		297

Source: IDX data, processed 2026

The independent variables consist of: (1) auditor reputation (X1) measured using a dummy variable (1 = Big Four KAP; 0 = Non-Big Four); (2) audit fee (X2) measured using the natural logarithm of the professional fees account to address extreme skewness; and (3) audit tenure (X3) measured from the number of consecutive years of KAP engagement with the client. The dependent variable is audit delay (Y) measured from the difference in calendar days between the independent auditor's report date and the book closing date of December 31.

The moderating variable is financial distress (Z) which is proxied by the Modified Altman Z-Score (1993) with the formula $Z = 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4$, where X1 = working capital/total assets, X2 = retained earnings/total assets, X3 = EBIT/total assets, and X4 = book value of equity/total liabilities. A company is categorized as distressed if Z is less than 1.81.

Table 3. Operationalization of Research Variables

Variables	Operational Definition	Measurement	Scale
Auditor Reputation (X1)	The image or good name of the auditor based on the KAP affiliation	1 = Big Four; 0 = Non-Big Four	Nominal
Audit Fee (X2)	Remuneration for audit services from KAP to clients	Ln (professional fees)	Interval
Tenure Audit (X3)	Length of KAP's engagement with the same client	Number of consecutive years of engagement	Interval
Audit Delay (Y)	Time to complete audit work	Auditor's report date - book closing date (day)	Interval
Financial Distress (Z)	Condition of declining company financial performance	Modified Altman Z-Score (1993)	Interval

Source: Various references, processed 2026

Data analysis used the Partial Least Square-Structural Equation Modeling (PLS-SEM) approach with the help of SmartPLS 4.0. The selection of PLS-SEM was based on: (1) the research model involves three moderating effects that are more efficiently estimated simultaneously with product indicators; (2) the data is not multivariate normally distributed; and (3) the sample size of 297 is in the medium category so that PLS is more robust. Significance was tested through bootstrapping 5,000 subsamples with Bias-Corrected and Accelerated (BCa) 95% confidence interval. Moderation effects were tested using mean-centered product indicators to reduce multicollinearity.

3. Results and Discussion

Descriptive Statistics

Table 4. Descriptive Statistics of Research Variables (N=297)

Variables	Min	Max	Mean	Std. Dev	Skewness	Kurtosis
Audit Delay (days)	70	89	79.62	5.41	0.124	-1,021
Big4 (dummy)	0	1	0.414	0.493	0.349	-1,891
Ln Fee	5.63	9.62	6,842	1,018	0.521	-0.432
Tenure (years)	1	7	3,202	1,456	0.612	-0.218
Z-Score	1.71	5.11	3,052	0.892	0.311	-0.621
Big4*ZScore	0.00	5.11	1,264	1,623	0.987	-0.512
Ln Fee*ZScore	9.62	49.17	20,887	8,342	0.743	-0.112

Tenure*ZScore	1.71	35.77	9,772	6,891	1,021	0.342
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Source: SmartPLS 4.0 data processing results, 2026

Based on Table 4, audit delay ranges from 70 to 89 days with an average of 79.62 days (SD = 5.41), indicating that the entire sample still complies with the 90-day time limit of POJK No. 29/POJK.04/2016. The Big4 variable with an average of 0.414 means that 41.4% of the 297 observations were audited by Big Four KAPs. Audit fees after Ln transformation have an average of 6.842 (SD = 1.018), reflecting a distribution closer to normal after eliminating extreme skewness (original fee skewness = 2.341). The average audit tenure of 3.20 years (SD = 1.456) is still far below the 6-year rotation limit of PP No. 20 of 2015, so the risk of familiarity threat is relatively low. The average Z-Score of 3.052 indicates that the majority of samples are in the safe zone, with a distribution of 50.5% safe zone, 42.1% grey zone, and 7.4% distress zone.

Model Evaluation

Measurement and Structural

Since all constructs are measured using a single indicator, the outer loading is automatically 1.000, AVE = 1.000, Composite Reliability = 1.000, and Cronbach Alpha = 1.000, meeting all thresholds. Discriminant validity was tested with HTMT with a value of 0.112-0.412, far below the conservative threshold of 0.85 (Henseler et al., 2015), proving there is no conceptual overlap between variables.

Table 5. Structural Model Evaluation (Inner Model)

Indicator	Mark	Criteria	Information
R-Square (Audit Delay)	0.486	more than 0.33	Moderate
Adjusted R-Square	0.472	more than 0.33	Moderate
Q-Square (Predictive Relevance)	0.461	more than 0	Good Prediction
SRMR	0.051	less than 0.08	Fit Model
NFI	0.891	approaching 0.9	Marginal Fit

Source: SmartPLS 4.0 data processing results, 2026

The structural model explains 48.6% of the variation in audit delay ($R^2 = 0.486$; Adjusted $R^2 = 0.472$), categorized as moderate according to Hair et al. (2022). $Q^2 = 0.461$ confirms good predictive relevance, meaning the model not only explains the relationship in the estimation sample but is also able to predict out-of-sample data. SRMR = 0.051 is below the threshold of 0.08 (Hu and Bentler, 1999), indicating good model fit.

Hypothesis Testing

Table 6. Hypothesis Testing Results (Bootstrapping 5,000 Subsamples)

H	Relationship Path	Coefficient	T-Statistic	P-Value	f2	Decision
H1	Auditor Reputation (Big4) -> Audit Delay	-0.298	5,121	0,000	0.112	Accepted
H2	Audit Fee (Ln_Fee) -> Audit Delay	-0.184	3,472	0.001	0.041	Accepted
H3	Audit Tenure -> Audit Delay	-0.156	2,891	0.004	0.029	Accepted
H4	Financial Distress (ZScore) -> Audit Delay	-0.221	4,012	0,000	0.058	Accepted
H5	Big4*ZScore -> Audit Delay	-0.141	2,541	0.011	0.022	Accepted
H6	Ln_Fee*ZScore -> Audit Delay	-0.098	2,111	0.035	0.013	Accepted
H7	Tenure*ZScore -> Audit Delay	-0.087	1,982	0.048	0.011	Accepted

Source: SmartPLS 4.0 data processing results, 2026. Significance criteria: T-Statistic more than 1.96 and P-Value less than 0.05

Discussion

The Effect of Auditor Reputation on Audit Delay (H1)

The test results show that auditor reputation has a negative and significant effect on audit delay (coef. = -0.298; T = 5.121; p = 0.000; f2 = 0.112 medium category). This finding indicates that companies using the services of Big Four KAPs complete audits an average of 11.2 days faster than Non-Big Four. The f2 value = 0.112 makes auditor reputation the largest practical determinant in explaining variations in audit delay, confirming that the superiority of resources, technology, and quality control systems of Big Four significantly contributes to the efficiency of audit completion.

This finding is consistent with DeAngelo (1981), who asserted that large public accounting firms have strong reputational incentives to maintain audit quality and timeliness. These results support Prasetia and Rozali (2022) but differ from Andriani and Nursiam (2023) and Yanti et al. (2024). This difference is likely due to the use of PLS-SEM in this study, which allows reputation effects to be more clearly detected when tested alongside moderating variables. Theoretically, this finding aligns with agency theory, which emphasizes the auditor's role in reducing information asymmetry, where high-reputation auditors have a greater incentive to complete tasks efficiently to maintain their reputation.

Effect of Audit Fee on Audit Delay (H2)

Audit fees were shown to have a negative and significant effect on audit delay (coef. = -0.184; T = 3.472; p = 0.001; f2 = 0.041). These results indicate that the higher the fees paid by a company, the faster the audit completion. Adequate fees allow the public accounting firm to allocate sufficient auditors, specialists, and necessary working hours, resulting in faster completion of fieldwork. The average fee for sample companies reached Rp1.715 billion before the transformation, with a maximum value of Rp15.1 billion for large companies.

These results are consistent with Andriani and Nursiam (2023) and Yanti et al. (2024), but differ from Rinanda and Nurbaiti (2024). The natural logarithm transformation successfully addressed the problem of extreme skewness, thus improving the relationship between fees and audit delay. This finding supports IAPI Regulation No. 2 of 2022 concerning the importance of setting adequate fees to prevent low-balling practices that compromise audit quality. From an agency theory perspective, adequate fees are a mechanism for aligning the interests of principals and agents when information asymmetry is high.

The Effect of Audit Tenure on Audit Delay (H3)

Audit tenure has a negative and significant effect on audit delay (coef. = -0.156; T = 2.891; p = 0.004; f2 = 0.029). The longer the auditor's engagement with the client, the shorter the audit completion time. The learning effect of long tenure allows the auditor to understand the internal control system, business risks, and client characteristics more deeply, thus making audit planning and implementation more efficient (Lee et al., 2009). The average tenure of 3.20 years, far from the 6-year rotation limit, minimizes the risk of familiarity threat.

These results are consistent with Hasanah and Putri (2024), Paramita and Latrini (2021), and Panjaitan and Chariri (2014), but differ from Andriani and Nursiam (2023) and Rinanda and Nurbaiti (2024). These findings serve as a consideration for policymakers, as excessive auditor rotation can diminish efficiency benefits. For regulators, evaluating whether the three-year audit firm rotation limit is optimal or whether it can be extended is an important consideration, particularly for relatively low-risk industries, to maximize the benefits of the learning curve without compromising auditor independence.

The Moderating Role of Financial Distress (H5, H6, H7)

Financial distress is proven to moderate the influence of auditor reputation (coef. = -0.141; p = 0.011), audit fee (coef. = -0.098; p = 0.035), and audit tenure (coef. = -0.087; p = 0.048) on audit delay. The negative coefficients on all three interactions indicate that the effect of the three independent variables in shortening audit delay is greater in healthy financial conditions (high Z-Score). Conversely, in distressed companies, this advantage is weakened because auditors need to perform additional procedures related to the going-concern assumption and more intensive substantive testing.

This finding is consistent with Jensen and Meckling's (1976) agency theory, which states that information asymmetry increases in conditions of financial distress. Habib et al. (2020) explain that distressed companies tend to delay the publication of bad news or manipulate earnings, thus increasing

auditor professional skepticism. Big Four accounting firms have reputational and litigation incentives that encourage greater caution with high-risk clients, but this also increases audit time. Although the f^2 values for all three moderation variables are small (0.011–0.022), statistical significance demonstrates that financial distress consistently alters the relationship dynamics in this model.

4. Conclusion

This study examines the effect of auditor reputation, audit fees, and audit tenure on audit delay, with financial distress as a moderating variable, in 297 observations of manufacturing companies on the Indonesian Stock Exchange (IDX) for the period 2023-2025. All seven hypotheses are statistically supported. Big Four auditor reputation is the strongest determinant (coef. = -0.298; f^2 = 0.112 medium), followed by financial distress (coef. = -0.221; f^2 = 0.058), audit fees (coef. = -0.184; f^2 = 0.041), and audit tenure (coef. = -0.156; f^2 = 0.029). Financial distress moderates all three relationships, with Big Four prominence, high fees, and long tenure increasing in healthy companies but weakening in distressed conditions.

The PLS-SEM model explains 48.6% of the variation in audit delay (R^2 = 0.486; Q^2 = 0.461; SRMR = 0.051). Practical implications: (1) OJK is advised to develop a ZScore-based early warning system to monitor grey area issuers starting in the third quarter; (2) Non-Big Four Public Accounting Firms are advised to form a manufacturing industry desk and invest in data analytics to improve efficiency; (3) issuers with a ZScore below 2.90 should conduct pre-audit meetings earlier and consider Big Four Public Accounting Firms. Further research is suggested to use multiple indicators, expand the sample to all BEI sectors, and add audit opinion variables, auditor turnover, or audit committee effectiveness to increase the R^2 model.

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