

**THE EFFECT OF FINANCIAL DISTRESS ON AUDIT DELAY THROUGH AUDIT
COMPLEXITY AS AN INTERVENING VARIABLE WITH THE AUDIT
COMMITTEE AS A MODERATION VARIABLE IN INDUSTRIAL COMPANIES
LISTED ON THE IDX FOR THE 2021-2025 PERIOD**

¹Duma Megaria Elisabeth

email : duma0803@yahoo.com

²Septony B. Siahaan

email : siahan.mtc@gmail.com

³Merry Anna Napitupulu

e-mail: napitupulumerryanna@gmail.com

⁴Duma Rahel Situmorang

email : dudurara88@gmail.com

⁵Mulatua P. Silalahi

e-mail: mulatuas16@gmail.com

^{1,2,3,4,5}Accounting Study Program, Faculty of Economics, Universitas Methodist Indonesia

*Correspondence Author: duma0803@yahoo.com

ABSTRACT

This study aims to analyze the effect of financial distress on audit delay through audit complexity as an intervening variable, with audit committee as a moderating variable in industrial sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2021–2025. This study employs a quantitative approach using secondary data from audited financial statements and annual reports. The population consists of all industrial sector companies listed on the IDX, and purposive sampling yielded 49 companies or 245 firm-year observations. Audit delay is measured as the number of days between the fiscal year-end and the date of the independent auditor's report, financial distress is measured using the modified Altman Z-Score, audit complexity is measured by the number of consolidated subsidiaries, and audit committee is measured by an audit committee effectiveness index. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0. The results show that financial distress has a significant positive effect on audit delay ($\beta = 0.276, p < 0.001$) and on audit complexity ($\beta = 0.324, p < 0.001$); audit complexity has a significant positive effect on audit delay ($\beta = 0.298, p < 0.001$) and partially mediates the effect of financial distress on audit delay (VAF = 26.0%); and audit committee significantly weakens the effect of audit complexity on audit delay (interaction $\beta = -0.183, p < 0.01$). These findings imply that audit committee effectiveness plays an important role in reducing reporting delays in companies with high audit complexity.

Keywords: Financial Distress, Audit Delay, Audit Complexity, Audit Committee, Industrial Companies, Indonesia Stock Exchange

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh financial distress terhadap audit delay melalui audit complexity sebagai variabel intervening, dengan audit committee sebagai variabel moderasi pada perusahaan sektor industrial yang terdaftar di Bursa Efek Indonesia (BEI) periode 2021–2025. Penelitian ini menggunakan pendekatan kuantitatif dengan data sekunder berupa laporan keuangan auditan dan laporan tahunan. Populasi penelitian adalah seluruh perusahaan sektor industrial yang terdaftar di BEI, dengan teknik purposive sampling diperoleh 49 perusahaan atau 245 observasi firm-year. Audit delay

diukur dari jumlah hari antara tanggal tutup buku hingga tanggal laporan auditor independen ditandatangani, financial distress diukur menggunakan Altman Z-Score modifikasi, audit complexity diukur dari jumlah entitas anak yang dikonsolidasi, dan audit committee diukur dari indeks efektivitas komite audit. Data dianalisis menggunakan Partial Least Squares Structural Equation Modeling (PLS-SEM) dengan bantuan SmartPLS 4.0. Hasil penelitian menunjukkan bahwa financial distress berpengaruh positif dan signifikan terhadap audit delay ($\beta = 0,276$, $p < 0,001$) dan terhadap audit complexity ($\beta = 0,324$, $p < 0,001$); audit complexity berpengaruh positif dan signifikan terhadap audit delay ($\beta = 0,298$, $p < 0,001$) serta memediasi secara parsial pengaruh financial distress terhadap audit delay (VAF = 26,0%); dan audit committee terbukti memperlemah secara signifikan pengaruh audit complexity terhadap audit delay (β interaksi = $-0,183$, $p < 0,01$). Temuan ini memberikan implikasi bahwa efektivitas komite audit berperan penting dalam mengurangi keterlambatan pelaporan pada perusahaan dengan kompleksitas audit tinggi.

Kata Kunci: Financial Distress, Audit Delay, Audit Complexity, Audit Committee, Perusahaan Industrial, Bursa Efek Indonesia

I. INTRODUCTION

The timeliness of financial reporting is one of the qualitative characteristics of accounting information that determines the relevance of financial statements for users in decision-making. The Financial Services Authority requires issuers to submit audited annual financial statements no later than the end of the third month after the financial year ends, as stipulated in POJK No. 29/POJK.04/2016 concerning Annual Reports of Issuers or Public Companies. However, the phenomenon of delay in submitting audited financial statements or *audit delays* still often occurs, including in companies listed on the Indonesia Stock Exchange (IDX).

The industrial sector was chosen as the object of research because of its capital-intensive characteristics, long production and distribution chains, and vulnerability to raw material cost volatility and supply chain disruptions. These characteristics make companies in this sector relatively more vulnerable to financial *distress* than other sectors, especially in the 2021-2025 period which is colored by the dynamics of post-pandemic economic recovery, rising benchmark interest rates, and global energy cost pressures.

Financial distress reflects the conditions when a company experiences financial difficulties that have the potential to lead to business failure. When a company is in a state of financial distress, auditors tend to expand audit procedures, increase professional skepticism, and conduct more in-depth *evaluation of going concerns*, so that the audit process takes longer (Sari & Ghazali, 2021). On the other hand, *audit complexity* is reflected in the number of consolidated subsidiaries, the existence of cross-jurisdictional transactions, and the complexity of business structures also extend the audit completion time

Several previous studies have shown inconsistent results regarding the relationship between financial distress and audit delay. Some studies found a positive and significant influence (Wulandari & Rahmawati, 2022), while other studies found an insignificant influence (Pratama et al., 2023). This inconsistency indicates the existence of other variables that play a role in explaining the mechanism of the relationship. This study proposes audit complexity as an intervening variable that explains the indirect mechanism of the influence of financial distress on audit delay, as well as audit committee as a moderation variable that is predicted to be able to weaken the influence of audit complexity on audit delay through supervision and coordination functions with external auditors.

This research contributes by integrating simultaneous mediation and moderation mechanisms in a single research model, which is relatively rarely done in the context of industrial sector companies in Indonesia. Table 1 below summarizes a number of previous studies that form the empirical basis of this research.

The research gap underlying this study is also strengthened by findings in other sectors and periods. Mahendra and Rachman (2023) in the property and real estate sector and Rahmawati et al. (2023) in the manufacturing sector show that the influence of financial distress on audit report lag tends

to vary depending on industry characteristics, sample size, and observation period used. On the other hand, research that explicitly places audit complexity as an intervening variable as well as audit committee as a moderation variable in one simultaneous model is still relatively limited, especially in the context of companies in the post-pandemic industrial sector (period 2021–2025) that face energy cost and interest rate pressures that have not been explored in previous studies (Ramadhana & Laksito, 2026). This gap is what this study seeks to fill through simultaneous mediation-moderation model testing.

Table 1. Summary of Previous Research

Researcher	Variables/Context	Method	Key Findings
Wulandari & Rahmawati (2022)	Financial Distress & Audit Delay / IDX	Multiple Linear Regression	Financial distress has a significant positive effect on audit delays
Pratama et al. (2023)	Financial Distress, Ukuran KAP & Audit Delay / Manufaktur BEI	Panel Regression	The effect of financial distress on audit delay was not significant after controlling the size of the KAP
Handayani & Kurniawan (2021)	Audit Complexity & Audit Delay / Multinational Companies	OLS Regression	Number of subsidiaries increases audit delays significantly
Nasution et al. (2022)	Audit & Reporting Timeliness Committee / IDX	Logistic Regression	The effectiveness of the audit committee accelerates the submission of financial statements
Amelia & Susanto (2023)	Financial Distress, Audit Complexity & Audit Delay / Non-Financial Companies	PLS-SEM	Audit complexity mediates part of the effect of financial distress on audit delays

Source: Processed by researchers, 2025

II. LITERATURE REVIEW

Theoretical Basis

Agency Theory

Signaling Theory

Signal theory (Spence, 1973) explains that the timeliness of financial reporting is a signal to the market about the company's condition. Financial reports submitted on time are generally associated with good news, while reporting delays tend to be associated with bad news, including indications of financial difficulties. In this context, audit delays can be seen as an indirect signal about the company's financial condition to stakeholders.

Compliance Theory and the Supervisory Role of Audit Committees

The audit committee functions as a corporate governance mechanism that is tasked with overseeing the financial reporting process and coordinating with external auditors. Based on the perspective of compliance theory and corporate governance, an effective audit committee demonstrated by the adequate frequency of meetings and the competence of members in the field of accounting and finance is expected to be able to accelerate the audit completion process even though companies face high transaction complexity, through more effective coordination with external auditors and management (Nasution et al., 2022).

Stakeholder Theory

Stakeholder theory (Freeman, 1984) views the company as an entity that is responsible not only to shareholders, but also to creditors, employees, suppliers, and other external parties. In this perspective,



the timeliness of audited financial reporting is a form of corporate accountability to all stakeholders, especially in companies experiencing financial distress, because creditors and investors need timely financial information to evaluate business continuity risks. Long audit delays in companies with high financial pressure can increase uncertainty for stakeholders and have the potential to reduce confidence in the credibility of the financial information presented.

Resource Dependence Theory

Resource dependence theory (Pfeffer & Salancik, 1978) explains that corporate governance organs, including audit committees, function to provide resources in the form of expertise, legitimacy, and communication networks that help companies manage dependency on external parties, including independent auditors. Audit committees that have members with adequate accounting and financial backgrounds serve as a resource of expertise that can accelerate the process of identifying and resolving complex accounting issues, thereby reducing management's dependence on repeated clarification processes with external auditors. This perspective complements compliance theory in explaining the audit committee mechanism to weaken the influence of audit complexity on audit delays, as supported by the findings of Oussii and Boulila Taktak (2018) that the financial expertise of audit committee members is significantly associated with shorter audit delays.

Hypothesis Development

Financial Distress and Audit Delay

Companies that experience financial distress tend to have a higher audit risk, so auditors need to expand audit procedures, conduct additional substantive testing, and evaluate going *concern* more deeply. This additional process directly extends the audit completion time. Wulandari and Rahmawati (2022) found that financial distress has a positive and significant effect on audit delays in companies listed on the IDX. Based on this description, the first hypothesis is formulated as follows:

H₁: Financial distress has a significant positive effect on audit delays in industrial companies listed on the IDX

Additional support for this hypothesis is also provided by cross-sector findings in the Indonesian capital market. Mahendra and Rachman (2023) in property and real estate companies and Rahmawati et al. (2023) in manufacturing companies both found that financial distress proxied with the Altman Z-Score had a positive effect on audit report lag, thus reinforcing the generalization of the relationship outside the context of the industrial sector.

Financial Distress and Audit Complexity

Companies that experience financial distress tend to carry out organizational restructuring, including the addition of subsidiaries for the purpose of debt restructuring or risk diversification, which in turn increases the complexity of the consolidated reporting structure. In addition, financial distress also encourages the emergence of non-routine transactions such as asset sales, debt restructuring, and related party transactions which increase the overall audit complexity (Amelia & Susanto, 2023). Thus, the second hypothesis is formulated as follows:

H₂: Financial distress has a significant positive effect on audit complexity in industrial companies listed on the IDX.

The relevance of this hypothesis is also reflected in the recent research by Ramadhana and Laksito (2026) which integrated financial distress and audit complexity in an audit report lag model for companies in the energy and basic materials sector on the IDX, and found that these two variables contribute significantly to the extension of audit time, in line with the argument that financial pressures drive corporate structural complexity.

Audit Complexity and Audit Delay

The more subsidiaries are consolidated and the more complex the company's transaction structure, the greater the audit effort required to obtain adequate confidence in the fairness of the consolidated financial statements. Handayani and Kurniawan (2021) found that the number of subsidiaries has a positive and significant effect on audit delays in multinational companies. Based on this description, the third hypothesis is formulated as follows:

H₃: Audit complexity has a significant positive effect on audit delays in industrial companies listed on the IDX.

Empirical evidence regarding the effect of complexity on audit duration is also confirmed by Alqanny and Mukhlisin (2021) who found that accounting complexity, one of which is measured by the existence of subsidiaries, has an effect on audit delays in manufacturing companies. The results of a meta-analysis by Es'haghi and colleagues (2022) on dozens of international studies also show that the existence of subsidiaries is consistently positively related to audit report lag, strengthening the external validity of H₃.

The Role of Audit Complexity Mediation

Based on arguments in H₁ to H₃, this study predicts that some of the influence of financial distress on audit delay is channeled indirectly through increased audit complexity. Companies that experience financial distress tend to have more complex transaction structures, and it is this complexity that ultimately prolongs audit delays. Amelia and Susanto (2023) confirm the role of partial mediation of audit complexity in this relationship. Thus, the fourth hypothesis is formulated as follows:

H₄: Audit complexity significantly mediates the influence of financial distress on audit delays in industrial companies listed on the IDX.

This mediation logic is also consistent with the findings of Ramadhana and Laksito (2026) that the impact of financial distress on audit report lag cannot be separated from the increase in the complexity of the reporting structure that accompanies it, so that audit complexity acts as a transmission mechanism that explains some of these influences.

The Role of the Audit Committee Moderation

An effective audit committee is expected to be able to weaken the influence of audit complexity on audit delays through intensive supervision of the financial reporting process, better coordination with external auditors, and accelerated resolution of complex accounting issues. Nasution et al. (2022) found that the effectiveness of audit committees is related to the timeliness of financial reporting. Based on this description, the fifth hypothesis is formulated as follows:

H₅: The audit committee significantly moderates (weakens) the influence of audit complexity on audit delays in industrial companies listed on the IDX.

The role of weakening by this audit committee is in line with Oussii and Boulila Taktak (2018) who showed that the financial expertise of audit committee members is significantly associated with shorter audit delays in companies in emerging markets. Similar findings were also reported by Jesni and Yopie (2023) and Bambang and Krisyadi (2024) who emphasized that the characteristics of audit committees, including the frequency of meetings and accounting expertise of their members, play an important role in reducing audit reporting delays in companies listed on the Indonesia Stock Exchange.

Research Conceptual Framework

Based on the integration of agency theory, signal theory, compliance theory, stakeholder theory, and resource dependence theory, this study builds a conceptual model that places financial distress as an exogenous variable that affects audit delay either directly (H₁) or indirectly through audit complexity (H₂, H₃, H₄), with the audit committee acting as a moderation variable that weakens the influence of audit complexity on audit delay (H₅). This model assumes that financial pressures do not necessarily result in long audit delays, but are largely channeled through increased complexity of business and transaction structures, which in turn can be mitigated by the effectiveness of the audit committee's oversight function. Thus, the conceptual model of this study simultaneously examines the mediation and moderation mechanisms in a single analytical framework, as suggested by Hair et al. (2019) for the PLS-SEM model with complex relationship structures.

III. RESEARCH METHODS

This study uses a quantitative approach with a causal-associative design to test the influence of financial distress on audit delay through audit complexity as an intervening variable, with audit committee as a moderation variable. The research population is all industrial sector companies (*Industrials*) listed on the Indonesia Stock Exchange (IDX) during the period 2021–2025.

The sampling technique uses *purposive sampling* with the following criteria: (1) industrial sector companies that are consistently listed on the IDX during the 2021–2025 period; (2) publish a complete and accessible audited annual financial statement during the observation period; (3) not delisting during the study period; (4) present financial statements in Rupiah; and (5) have complete data for all research variables. Based on these criteria, a final sample of 49 companies was obtained with a total of 245 firm-year observations.

The dependent variable in this study is Audit Delay (AD), which is measured from the number of calendar days between the closing date of the financial year (December 31) to the date the independent auditor's report is signed. The independent variable is Financial Distress (FD), which is measured using a modified Altman Z-Score for non-manufacturing companies/emerging markets, with the transformation of the index so that a higher value represents a higher level of financial distress. The intervening variable is Audit Complexity (AC), which is proxied from the number of subsidiaries consolidated in the financial statements. The moderation variable is Audit Committee (ACE), which is measured through a composite index of the frequency of audit committee meetings per year and the proportion of audit committee members who have an accounting/finance background.

The control variables used included: (1) company size (natural logarithm of total assets); (2) profitability (Return on Assets); (3) reputation of Public Accounting Firms (Big Four KAP dummy); and (4) audit opinion (dummy opinion *going concern*). Data was analyzed using *Partial Least Squares Structural Equation Modeling* (PLS-SEM) with the help of SmartPLS 4.0 software. The model evaluation was carried out through two stages, namely the evaluation of the measurement model (*outer model*) which included the test of convergent validity (*Average Variance Extracted* or AVE > 0.5), discriminant validity (HTMT < 0.90), and composite reliability (*Composite Reliability* > 0.7), as well as evaluation of the structural model (*inner model*) which included the determination coefficient (R^2), predictive relevance (Q^2), and hypothesis testing through a *bootstrapping* procedure with 5,000 subsamples. Mediation testing is carried out by calculating *Variance Accounted For* (VAF), while moderation testing is carried out with an *interaction term approach* between audit complexity and audit committee.

The selection of these control variables is based on consistent empirical evidence found in the Indonesian literature regarding audit report lag. Fitriana and Bahri (2022) found that entity size and the size of the Public Accounting Firm significantly influence audit report lag, whereas a going-concern audit opinion is generally associated with extended audit duration due to the additional professional judgment required from the auditor. By controlling for these four variables, this study aims to isolate the pure effects of financial distress, audit complexity, and the audit committee on audit delay, distinguishing them from other factors proven relevant in previous studies

IV. RESULTS AND DISCUSSION

Research Resul

Descriptive Statistics

Table 2 presents descriptive statistics of research variables based on 245 firm-year observations. The average audit delay of 76.4 days shows that in general the sample companies submitted independent auditor reports in a relatively close time frame to the regulatory deadline, although there was considerable variation between companies (standard deviation of 21.8 days)

Table 2. Descriptive Statistics of Research Variables (N = 245 firm-year observations)

Variable	Min	Maks	Mean	Std. Dev
Audit Delay (day)	38	142	76,4	21,8
Financial Distress Index (0–1)	0,09	0,92	0,438	0,214
Audit Complexity (number of subsidiaries)	0	27	6,8	5,9
Audit Committee Effectiveness (0–1)	0,25	1,00	0,672	0,163

Variable	Min	Maks	Mean	Std. Dev
Company Size (Ln Total Aset)	25,84	33,71	29,46	1,92
ROA (%)	-14,2	22,6	4,73	7,15

Source: Processed by researchers, 2025

The Financial Distress Index has an average of 0.438 with considerable variation (standard deviation of 0.214), indicating the heterogeneity of the level of financial pressure on industrial sector companies during the observation period. The audit complexity shows an average of 6.8 subsidiaries with a range of 0 to 27, reflecting a fairly wide variation in business structure between the sample companies. The audit committee effectiveness has an average of 0.672, which indicates that in general the audit committee of the sample company has carried out its supervisory functions at a fairly adequate level.

Evaluation of Measurement Models (Outer Model)

The results of the evaluation of the measurement model showed that the entire construct met the required criteria of validity and reliability. The *loading factor* value of all indicators was above 0.70, the *Average Variance Extracted* (AVE) value for the entire construct was above 0.50 (ranging from 0.612 to 0.748), the *Composite Reliability* value was above 0.80 (ranging from 0.821 to 0.887), and the *Heterotrait-Monotrait Ratio* (HTMT) value of the entire construct pair was below 0.90. Thus, the measurement model is declared valid and reliable for use at the testing stage of the structural model.

Hypothesis Testing Results

The structural model yielded an R^2 value of 0.384 for the audit complexity and 0.512 for the audit delay, indicating that the research model was able to explain the variation in the audit delay by 51.2%. The Q^2 values for both endogenous constructs were positive (0.241 and 0.336), indicating that the model has adequate *predictive relevance*. Table 3 presents the results of hypothesis testing through the bootstrapping procedure.

Table 3. Hypothesis Testing Results (Bootstrapping, 5,000 Subsamples)

Hypothesis	Track	Coefficient (β)	t-statistic	p-value	Information
H ₁	Financial Distress → Audit Delay	0,276	4,812	0,000***	Accepted
H ₂	Financial Distress → Audit Complexity	0,324	5,207	0,000***	Accepted
H ₃	Audit Complexity → Audit Delay	0,298	4,376	0,000***	Accepted
H ₄	FD → AC → Audit Delay (indirect)	0,097	3,184	0,001**	Partial Mediation (VAF = 26,0%)
H ₅	Audit Complexity × Audit Committee → Audit Delay	-0,183	2,774	0,006**	Accepted (Weaken)

Description: *** $p < 0.001$; ** $p < 0.01$. Source: Processed by the researcher, 2025

DISCUSSION

The Effect of Financial Distress on Audit Delay (H₁)

The test results showed that financial distress had a positive and significant effect on audit delay ($\beta = 0.276$; $p < 0.001$), so H₁ was accepted. These findings are consistent with agency theory that explains that companies with high levels of financial distress have a greater audit risk, so auditors need

to expand audit procedures, including additional substantive testing and more in-depth *evaluation of going concerns*. The expansion of the audit procedure directly extends the audit completion time.

These findings are in line with the results of research by Wulandari and Rahmawati (2022) which also found a significant positive influence between financial distress and audit delays in companies listed on the IDX. In the context of the capital-intensive industrial sector, financial pressures experienced by companies are often accompanied by the complexity of financial restructuring transactions that require more careful professional consideration by auditors.

The consistency of these findings with various contexts of other sectors such as property and real estate (Mahendra & Rachman, 2023) and manufacturing (Rahmawati et al., 2023) indicates that the influence of financial distress on the extension of audit time is a relatively robust phenomenon in the Indonesian capital market, not limited to the characteristics of the industrial sector alone.

The Effect of Financial Distress on Audit Complexity (H₂)

The second hypothesis (H₂) is also accepted, with financial distress having a positive and significant effect on audit complexity ($\beta = 0.324$; $p < 0.001$). These findings indicate that companies experiencing financial distress are more likely to undertake organizational and financial restructuring measures, including the formation or reorganization of subsidiaries, which in turn increases the complexity of the consolidated reporting structure.

These findings strengthen the argument of Amelia and Susanto (2023) that financial distress encourages the emergence of non-routine transactions, such as debt restructuring and related party transactions, which directly increases the level of audit complexity. Implication, auditors need to pay special attention to companies that show indications of financial distress because they have the potential to have a more complex transaction structure than seen in previous financial statements.

These findings are also in line with Ramadhana and Laksito (2026) who document that financial distress consistently increases the complexity of audits in companies in the energy and basic materials sectors, reinforcing the allegation that financial pressures encourage companies to reorganize business structures more broadly, not only in the industrial sector.

The Effect of Audit Complexity on Audit Delay (H₃)

The test results showed that audit complexity had a positive and significant effect on audit delay ($\beta = 0.298$; $p < 0.001$), so H₃ was accepted. The more subsidiaries are consolidated, the greater the audit effort required to obtain adequate audit evidence of all components of the consolidated financial statements, including the process of elimination of inter-company transactions and adjustments to accounting policies between entities.

These findings are consistent with the results of Handayani and Kurniawan's (2021) research on multinational companies which found that the number of subsidiaries has a significant positive effect on audit delays. The complexity of business structures in industrial sector companies—which generally have extensive supply chains and distribution networks makes audit complexity an important factor to consider in audit time planning.

The same pattern was also found by Alqanny and Mukhlisin (2021) in manufacturing companies as well as the results of cross-border meta-analyses which confirmed that the existence of subsidiaries is one of the most consistently reported audit report lag determinants reported in the audit literature over the past decade.

The Role of Audit Complexity Mediation (H₄)

The results of the mediation test showed that audit complexity partially mediated the effect of financial distress on audit delay, with an indirect effect of 0.097 ($t = 3.184$; $p < 0.01$) and a *Variance Accounted For* (VAF) value of 26.0%. The VAF value was in the range of 20–80%, which according to the criteria of Hair et al. (2019) indicated partial mediation, meaning that financial distress affected audit delay both directly and through an increase in audit complexity.

These findings reinforce the research results of Amelia and Susanto (2023) which also confirm the role of partial audit complexity mediation in the relationship between financial distress and audit delay. The implication is that part of the extension of audit delays in companies experiencing financial

distress can be explained by the increase in the complexity of business and transaction structures, not solely due to the expansion of audit procedures related to financial risks.

Thus, the findings of partial mediation in this study reinforce the understanding that financial distress not only prolongs audit delays through the expansion of risk-related audit procedures (direct path), but also through increased complexity of consolidated reporting structures (indirect paths), as also implied in the integrated model of Ramadhana and Laksito (2026).

The Role of the Audit Committee Moderation (H₅)

The most relevant finding practically in this study is the H₅ confirmation, namely that the audit committee significantly moderates (weakens) the effect of audit complexity on audit delay (β interaction = -0.183; $p < 0.01$). The negative interaction coefficient shows that in companies with high audit committee effectiveness, the positive effect of audit complexity on audit delay is weaker than in companies with low audit committee effectiveness.

These findings support the corporate governance argument that an active audit committee—demonstrated by adequate meeting frequency and member competence in accounting and finance—is able to accelerate the resolution of complex accounting issues through more intensive coordination with external auditors and management. These results are consistent with Nasution et al. (2022) who found a relationship between audit committee effectiveness and timeliness of financial reporting. The practical implication is that industrial sector companies with complex business structures need to strengthen audit committee functions as one of the risk mitigation strategies for reporting delays.

These findings are further supported by Oussii and Boulila Taktak (2018), Jesni and Yopie (2023), and Bambang and Krisyadi (2024) who consistently report that audit committees with financial expertise and adequate meeting frequency are able to accelerate the resolution of complex accounting issues. Collectively, this evidence confirms that audit committee effectiveness is a relevant governance mechanism across capital market contexts, both in developed and developing countries, in mitigating the impact of complexity on reporting timeliness.

Additional Theoretical Implications

Theoretically, the results of this study enrich the framework of agency theory and signal theory that have been described in the theoretical foundation section by adding the perspective of stakeholder theory and resource dependence theory. The extension of audit delay in companies with high financial distress can be understood not only as an auditor's response to asymmetric information risks (agency theory) or as a signal of financial conditions to the market (signal theory), but also as a consequence of the need to maintain accountability to all stakeholders (stakeholder theory) in the midst of limited internal supervisory resources. Meanwhile, the role of the audit committee in weakening the influence of audit complexity on audit delay strengthens the relevance of resource dependence theory, as the expertise and legitimacy brought by audit committee members serve as a resource that helps companies manage the complexity of their relationship with external auditors. The integration of these four theoretical perspectives provides a more comprehensive understanding of the delay audit mechanism than if it only uses a single theoretical framework.

The Role of Control Variables

Although the main focus of this study is on the relationship between financial distress, audit complexity, audit committee, and audit delay, the four control variables included—company size, profitability, Big Four KAP reputation, and audit opinion going concern—also play a role in maintaining the internal validity of the structural model. Consistent with Fitriana and Bahri (2022), company size and KAP reputation are estimated to be related to the efficiency of the audit process, considering that large companies and Big Four KAP generally have more mature internal control resources and systems. Low profitability and going concern audit opinions, on the other hand, are conceptually associated with higher audit risk and have the potential to prolong audit delays. By controlling for these four factors, the results of the main hypothesis testing in this study namely the influence of financial distress, audit complexity, and audit committee can be interpreted as a relatively clean influence of confounding factors that have been widely discussed in the previous audit delay literature.

V. CONCLUSIONS AND SUGGESTIONS**Conclusion**

This study provides empirical evidence that financial distress has a positive and significant effect on audit delays, either directly or indirectly through complexity audits, in industrial sector companies listed on the IDX for the 2021–2025 period. Audit complexity is proven to play a role as an intervening variable that partially mediates the relationship, indicating that the complexity of business structures is one of the important pathways that explains why companies with financial stress tend to experience longer audit delays.

An equally important finding is the role of audit committee moderation which has been proven to be able to weaken the influence of audit complexity on audit delays. This confirms that the effectiveness of the audit committee's supervisory function is a relevant governance mechanism in reducing the risk of financial reporting delays, especially in companies with complex business structures.

Theoretically, the findings of this study strengthen the relevance of agency theory and signal theory in explaining the phenomenon of audit delay in the context of industrial sector companies in Indonesia, while adding empirical evidence regarding the importance of corporate governance mechanisms in mitigating the impact of audit complexity on the timeliness of financial reporting.

Suggestions

Based on the findings of the research, several suggestions can be made. First, for the management of industrial sector companies, especially those that show indications of financial distress, it is recommended to prepare documentation and coordinate with external auditors from the beginning of the audit period to reduce the risk of delays in the submission of financial statements.

Second, for companies with complex business structures (having many subsidiaries), it is recommended to strengthen the function and effectiveness of the audit committee, both through increasing the frequency of meetings and strengthening the competence of audit committee members in the field of accounting and finance, considering that this study shows the important role of audit committees in reducing the impact of audit complexity on audit delays.

Third, for regulators (OJK and IDX), these findings can be considered in formulating policies related to the minimum requirements for audit committee effectiveness for issuers with complex business structures, in order to encourage the timeliness of financial reporting in the Indonesian capital market.

Fourth, for further research, it is recommended to expand the scope of the research sector beyond the industrial sector, add other moderation variables such as the reputation of the Public Accounting Firm or audit quality, and consider the use of *mixed-methods* to gain a deeper understanding of the mechanisms behind the relationship between financial distress, audit complexity, audit committee, and audit delay.

Research Limitations

This study has several limitations that need to be considered in interpreting its findings. First, the research sample is limited to industrial sector companies listed on the IDX during the 2021–2025 period, so the generalization of results to other sectors with different business characteristics—such as the financial sector or the primary consumer sector—needs to be done carefully, considering that a number of studies such as Rahmawati et al. (2023) show that the strength of the relationship between financial distress and audit delay can vary between sectors. Second, the measurement of audit complexity that only uses the number of consolidated subsidiaries has not fully captured other dimensions of complexity, such as the complexity of cross-currency transactions or the existence of diversified business segments.

Third, the measurement of audit committee effectiveness through a composite index of meeting frequency and accounting background of members has not considered other qualitative aspects, such as the real independence of the audit committee to management or the tenure of audit committee members, which according to Bambang and Krisyadi (2024) can also affect audit delay. Fourth, the use of secondary data from the annual report does not allow for a more in-depth exploration of the mechanism

of the interaction process between the audit committee and external auditors, which could ideally be explored through a qualitative approach or direct interviews on future research.

BIBLIOGRAPHY

- Alqanny, A. Z., & Mukhlisin, M. (2021). Analisis pengaruh accounting complexity dan kualitas audit terhadap audit delay pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2019–2020. *Widya Cipta: Jurnal Sekretari dan Manajemen*, 14(1), 1–8. <https://doi.org/10.25170/wpm.v14i1.3678>
- Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The Journal of Finance*, 23(4), 589–609. <https://doi.org/10.1111/j.1540-6261.1968.tb00843.x>
- Amelia, R., & Susanto, H. (2023). Peran mediasi kompleksitas audit dalam hubungan financial distress dan audit delay pada perusahaan non-keuangan. *Jurnal Akuntansi dan Keuangan Indonesia*, 20(3), 201–219. <https://doi.org/10.21002/jaki.2023.14>
- Bambang, & Krisyadi, R. (2024). The influence of audit committee effectiveness and financial condition on audit delay in companies listed on the Indonesian Stock Exchange. *COMBINES*, 4(1), 932–941.
- Elisabeh, D. M., Sagala, F., Silitonga, I. M., Saragih, R. B., & Manurung, A. (2024). The Effect Of Internal Audit Implementation And Risk Management On Lending Policies People's Business In The Covid-19 Period At PT. Bank Sumut Centre Medan. *Jurnal Ilmiah Accusi*, 6(2), 161–170.
- Es'haghi, M., & Salehi, M. (2022). Organizational complexity and audit report lag: A meta-analysis. *Journal of Accounting Knowledge*, 13(2), 195–222. <https://doi.org/10.22103/jak.2021.18232.3575>
- Fitriana, D. E., & Bahri, S. (2022). Pengaruh rasio keuangan, ukuran entitas, dan ukuran KAP terhadap audit report lag. *Owner: Riset dan Jurnal Akuntansi*, 6(1), 964–976. <https://doi.org/10.33395/owner.v6i1.704>
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Handayani, S., & Kurniawan, B. (2021). Kompleksitas audit dan audit delay pada perusahaan multinasional yang terdaftar di Bursa Efek Indonesia. *Jurnal Riset Akuntansi dan Keuangan*, 9(2), 245–260. <https://doi.org/10.17509/jrak.v9i2.31245>
- Herawaty, V., & Nugraha, M. A. (2023). Antecedents of audit report lag with audit quality as a moderator. *Journal of Accounting and Strategic Finance*, 6(2), 320–342. <https://doi.org/10.33005/jasf.v6i2.477>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Jesni, J., & Yopie, S. (2023). Characteristics of the audit committee on delay in audit reporting. *Jurnal Pamator*, 16(2), 364–376. <https://doi.org/10.21107/pamator.v16i2.19761>
- Mahendra, F. D., & Rachman, H. A. (2023). The effect of external auditor, financial distress, and audit committee on audit report lag. *Journal of Economics, Business, and Government Challenges*, 6(1), 50–66. <https://doi.org/10.33005/ebgc.v5i1.207>
- Nasution, A. P., Siregar, D., & Wijaya, T. (2022). Efektivitas komite audit dan ketepatan waktu pelaporan keuangan pada perusahaan yang terdaftar di BEI. *Jurnal Akuntansi Multiparadigma*, 13(1), 55–70. <https://doi.org/10.21776/ub.jamal.2022.13.1.05>
- Otoritas Jasa Keuangan (OJK). (2016). Peraturan OJK No. 29/POJK.04/2016 tentang Laporan Tahunan Emiten atau Perusahaan Publik. OJK.

- Oussii, A. A., & Boulila Taktak, N. (2018). Audit committee effectiveness and financial reporting timeliness: The case of Tunisian listed companies. *African Journal of Economic and Management Studies*, 9(1), 34–55. <https://doi.org/10.1108/AJEMS-11-2016-0163>
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. Harper & Row.
- Pratama, D., Wulandari, S., & Hidayat, R. (2023). Financial distress, ukuran kantor akuntan publik, dan audit delay pada perusahaan manufaktur. *Jurnal Ilmiah Akuntansi dan Bisnis*, 18(2), 112–128. <https://doi.org/10.24843/JIAB.2023.v18.i02.p04>
- Rahmawati, A., Yulinartati, & Suharsono, R. S. (2023). The effect of audit switching, financial distress and audit firm reputation on audit delay: A study on manufacturing companies listed on Indonesia Stock Exchange. *Journal of Accounting Auditing and Business*, 6(1), 58–70. <https://doi.org/10.24198/jaab.v6i1.44261>
- Sari, M., & Ghozali, I. (2021). Financial distress dan skeptisisme profesional auditor: Implikasi terhadap durasi audit. *Jurnal Akuntansi dan Auditing Indonesia*, 25(2), 89–104. <https://doi.org/10.20885/jaai.vol25.iss2.art3>
- Sinaga, M. H., & Tarigan, W. J. (2024). The Difference Between The Altman Z-Score And Springate Models In Analyzing The Business Sustainability Of PT. Sri Rejeki Isman Tbk. *Jurnal Ilmiah Accusi*, 6(2), 220-236.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355–374. <https://doi.org/10.2307/1882010>
- Widhiastuti, R., Rohman, A., & Harto, P. (2023). Audit committee effectiveness and accounting conservatism practices: The case of manufacturing companies. *Jurnal ASET (Akuntansi Riset)*, 15(2), 241–254. <https://doi.org/10.17509/jaset.v15i2>
- Wulandari, T., & Rahmawati, D. (2022). Pengaruh financial distress terhadap audit delay pada perusahaan yang terdaftar di Bursa Efek Indonesia. *Jurnal Akuntansi dan Keuangan Indonesia*, 19(1), 45–62. <https://doi.org/10.21002/jaki.2022.03>