Jurnal Analisis Bisnis Ekonomi
Vol. 24 No. 1 (2026) pp. 23-38
pISSN: 1693-5950 | eISSN: 2579-647x
Journal Homepage: http://journal.unimma.ac.id/index.php/bisnisekonomi

Financial Distress and Audit Report Lag: Does Profitability Matter? The Role of Operational Complexity and Firm Size

Sri Maryati[1], **Dewi Permatasari**[1], **Hendra Prasetyo**[2]
[1]Accounting Department, Faculty of Economics, Universitas Sriwijaya, Palembang, Indonesia
[2]Pharmacy Departement, STikes Abdurahman, Palembang, Indonesia

maryatisri@fe.unsri.ac.id

https://doi.org/10.31603/bisnisekonomi.v24i1.18051

Submitted: 12/01/2026 Revised: 17/03/2026 Accepted: 21/03/2026

Keywords:
Audit report lag; Financial distress; Operational complexity; Firm size; Profitability

Abstract

This study aims to analyze the influence of financial distress, operational complexity, and firm size on audit report lag, and to examine the role of profitability in moderating these relationships within energy sector companies listed on the Indonesia Stock Exchange (IDX). The study employs a quantitative approach using secondary data specifically annual reports and financial statements from energy sector companies for the 2021–2023 period. A purposive sampling technique was used, resulting in a sample of 42 companies with a total of 126 observations. Data analysis was conducted using panel data regression and Moderated Regression Analysis (MRA) with the assistance of EViews 12. The results indicate that neither financial distress nor operational complexity has a significant effect on audit report lag. Conversely, firm size has a significant negative effect on audit report lag, suggesting that larger companies tend to experience shorter audit report delays. Profitability was found to moderate the relationship between financial distress and audit report lag, but it does not moderate the relationships involving operational complexity or firm size. These findings underscore the importance of considering firm size and profitability when understanding the timeliness of audit completion. Companies should strengthen their financial management and reporting readiness to facilitate the timely completion of audits. This research provides empirical evidence regarding the factors influencing audit report lag and the moderating role of profitability within the context of energy sector companies in Indonesia.

Kata kunci:
Audit report lag; Financial distress; Kompleksitas operasional; Ukuran perusahaan; Profitabilitas

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh financial distress, kompleksitas operasional, dan ukuran perusahaan terhadap audit report lag, serta menguji peran profitabilitas dalam memoderasi hubungan tersebut pada perusahaan sektor energi yang terdaftar di Bursa Efek Indonesia (BEI). Penelitian ini menggunakan pendekatan kuantitatif dengan data sekunder berupa laporan tahunan dan laporan keuangan perusahaan sektor energi selama periode 2021–2023. Sampel dipilih menggunakan teknik purposive sampling dan menghasilkan 42 perusahaan dengan total 126 observasi. Analisis data dilakukan menggunakan regresi data panel dan Moderated Regression Analysis (MRA) dengan bantuan EViews 12. Hasil penelitian menunjukkan bahwa financial distress dan kompleksitas operasional tidak berpengaruh signifikan terhadap audit report lag. Sebaliknya, ukuran perusahaan berpengaruh negatif dan signifikan terhadap audit report lag, yang menunjukkan bahwa perusahaan berukuran lebih besar cenderung memiliki keterlambatan laporan audit yang lebih pendek. Profitabilitas terbukti memoderasi hubungan antara financial distress dan audit report lag, tetapi tidak memoderasi hubungan kompleksitas operasional maupun ukuran perusahaan dengan audit report lag. Temuan ini menegaskan pentingnya mempertimbangkan ukuran perusahaan dan profitabilitas dalam memahami ketepatan waktu penyelesaian audit. Perusahaan perlu memperkuat pengelolaan keuangan dan kesiapan pelaporan untuk mendukung penyelesaian audit secara tepat waktu. Penelitian ini memberikan bukti empiris mengenai faktor-faktor yang memengaruhi audit report lag serta peran moderasi profitabilitas dalam konteks perusahaan sektor energi di Indonesia.

1. Introduction

The delay in the issuance of an audit report, known as Audit Report Lag (ARL), serves as an important metric for assessing how quickly a company's financial information

is communicated to the public. Audit report lag refers to the time interval between the fiscal year-end date and the date the audit report on a company's financial statements is issued (Parahyta, 2020). Timely and accurate financial information is crucial, as it enables stakeholders such as investors and creditors to make informed and strategic business decisions. A delay in the publication of financial statements not only hinders the decision-making process but can also trigger negative speculation in the capital market, potentially leading to a decline in the company's stock price (Nurianti, 2024).

The phenomenon of delayed financial reporting among energy-sector companies listed on the Indonesia Stock Exchange (IDX) points to underlying issues in the preparation and auditing processes of their financial statements. Between 2020 and 2023, several energy companies failed to submit their audited financial statements by the deadlines mandated by the IDX. According to reports from (Liputan6.com) some companies such as PT Sugih Energy Tbk (SUGI) and PT Trada Alam Minera Tbk (TRAM) experienced such delays on more than one occasion. In response, the IDX imposed sanctions, including written warnings and fines, reflecting a lack of compliance with the exchange's regulations. This phenomenon of delayed reporting also reflects the challenges faced by companies in a state of financial distress, as they struggle to secure sufficient funding to support operations and meet their reporting obligations. Companies experiencing financial difficulties tend to postpone the submission of their financial statements a delay that may stem from management's attempts to conceal a poor financial situation or from a more complex audit process (Nurquran & Ardianto, 2023).

Financial distress can affect a company's business continuity, particularly in the context of delayed financial reporting a situation that risks incurring additional fines and sanctions. This aligns with the findings of Damayanti (2024), which indicate a positive correlation between financial distress and audit report lag. Their research further suggests that companies experiencing financial distress tend to have longer audit report lags.

Conversely, other research such as that by Al & Wijayanti, (2021) indicates that financial distress has no impact on audit report lag among manufacturing companies listed on the Indonesia Stock Exchange (IDX) between 2017 and 2019. Although some studies support a link between financial distress and audit report lag, the inconsistency in the findings of previous research creates a research gap that needs to be addressed.

In addition to financial distress, another factor contributing to delays in financial reporting is operational complexity a business aspect that can present further challenges for both auditors and company accountants (Napisah & Soeparyono, 2024). According to Rahayu et al. (2021). operational complexity is characterized by the number of subsidiaries a company possesses; this indicates a high volume of operational units that must be audited, along with their associated transactions and accounting records, thereby requiring additional time to complete the audit.

Research by Rosharlianti et al. (2023), which states that operational complexity affects the duration of audit delay due to the time required for auditors to handle multiple branches and the increased audit costs associated with each subsidiary. Other studies have yielded mixed results. For instance, Prabowo et al. (2024) found that operational complexity

has no significant impact on audit report lag a view consistent with findings by researchers such as Jannah et al. (2024), who observed that operational complexity did not affect audit report lag among manufacturing companies listed on the Indonesia Stock Exchange (IDX) between 2017 and 2019. Conversely, this is challenged by (Hari et al., 2022), who reported that operational complexity has a significant negative effect on audit report lag in manufacturing firms during the 2015–2020 period. This perspective is further supported by Saputra et al. (2024). whose findings indicate that audit delays are primarily driven by operational complexity rather than leverage.

Company size is related to operational complexity, resource availability, and the company's ability to provide the financial information needed by auditors. Company size can be determined based on total assets, number of sales, average sales level, and average total assets (Hari et al., 2022). Large companies in the energy sector include PT Medco Energi Internasional Tbk (MEDC) and PT Astrindo Nusantara Infrastruktur Tbk (BIPI). These companies have significant total assets, extensive operations, and high complexity. However, despite having adequate resources, large companies still face challenges in the audit process due to higher operational complexity and the large number of subsidiaries. According to Downey & Bedard (2019), features of larger public companies increase auditor coordination and communication costs, which can cause challenges in audit implementation. Jeffrey et al (2007) found that companies that are smaller, younger, financially weaker, more complex, rapidly growing, or undergoing restructuring are more likely to experience material weaknesses in internal control.

Profitability can either strengthen or weaken the relationship between key factors, such as firm size and audit report lag. High profitability can serve as a factor that mitigates the negative impact of small firm size on audit report lag. As demonstrated in the study by Fujianti & Satria (2020), profitability plays a role in moderating the influence of firm size, leverage, audit opinion, audit firm size, and operating profit or loss on audit report lag. Small firms with high profitability are better able to allocate resources efficiently, enhance the effectiveness of internal controls, and accelerate the audit process. Conversely, low profitability can exacerbate the negative impact of firm size on audit report lag. Large firms with low profitability may, in fact, be at a higher risk of experiencing a longer audit report lag compared to small firms with high profitability. This is because low profitability is often associated with liquidity issues, operational inefficiencies, and constraints in paying adequate audit fees (Al-Faruqi et al., 2021).

This study aims to analyze the influence of financial distress, operational complexity, and firm size on audit report lag, and to examine the role of profitability in moderating these relationships within energy sector companies listed on the Indonesia Stock Exchange. The novelty of this study lies in integrating financial conditions and firm-specific characteristics into a comprehensive framework to better understand the factors influencing audit report timeliness. The findings are expected to contribute to the auditing literature and provide practical insights for auditors and regulators in identifying companies at greater risk of delayed audit reporting.

2. Literature Review

2.1. Theoretical Background

2.1.1. Agency Theory

This studi uses agency and compliance theory, Agency theory defines a contractual relationship between a party that grants a mandate (the principal) and a party that receives the mandate (the agent) to perform specific tasks. In a corporate context, this relationship exists between the company's owners (principals) and its management (agents), who are authorized to make operational decisions (Jensen & Meckling, 1976). According to Hanif & Ariani, (2023), audits are frequently delayed because company managers and auditors have different objectives: managers may seek to conceal corporate issues, while auditors aim to ensure the accuracy of the company's financial statements. This divergence of interests extends the audit process. Such delays can negatively impact investor confidence in the company, as they may signal the existence of hidden problems.

2.1.2. Compliance Theory

Downey & Bedard (2019) note that compliance theory particularly within the fields of psychology and sociology underscores the vital role of socialization in shaping individual behavior. They identify two primary perspectives on compliance: the instrumental and the normative. The instrumental perspective highlights the influence of self-interest and incentives, while the normative perspective emphasizes the role of moral values and the legitimacy of authority. In the context of accounting, this normative perspective is particularly relevant, as public companies are required under Law No. 8 of 1995 to comply with regulations regarding the periodic submission of financial statements. Timeliness in financial reporting which is often influenced by the duration of the audit process is crucial for upholding the principle of real-time information disclosure for companies listed on the Indonesia Stock Exchange (Pasupati & Husain, 2022).

2.2. Hypotheses Theoretical Background

Agency theory suggests that companies experiencing financial distress tend to attempt to improve their financial statements, which results in a longer audit process. Meanwhile, from the perspective of compliance theory, difficult financial conditions increase the complexity of ensuring that a company adheres to all applicable regulations and accounting standards (Napisah & Soeparyono, 2024). Furthermore, compliance theory emphasizes the importance of companies remaining in compliance with financial reporting regulations, even when facing financial distress. Based on research by Rosharlianti et al. (2023). financial distress has an impact on audit report lag. They state that companies facing financial distress are more likely to experience delays in the completion of their audits, due to increased control and detection risks within the audit process. Consistent with this research, studies by Hari Stiawan (2021), Soeparyono (2024), and Saputra et al. (2024) also indicate that financial distress has a significant effect on audit report lag. Accordingly, this study aims to test the following hypothesis:

H1: Financial distress has an effect on audit report lag

A high level of operational complexity creates difficulties for auditors in gathering transaction data from a company's various branches (Adam et al., 2022). According to agency theory, the more subsidiaries an entity possesses, the greater the number of opinions and reports an auditor must provide, thereby increasing the volume of information to be communicated. A high level of operational complexity creates difficulties for auditors in gathering transaction data from a company's various branches (Sunersa et al., 2022). Drawing on agency theory, the more subsidiaries an entity possesses, the greater the number of opinions and reports that auditors must provide, thereby increasing the volume of information disclosed. Khamisah et al. (2023) indicate that a company's operational complexity contributes to delays in the reporting of audited financial statements. Prabowo et al. (2024) concludes that a company's operational complexity has a significant partial effect on audit report lag. Furthermore, (Adam et al., 2022), and (Damayanti, 2024) also state that operational complexity influences audit report lag. Consequently, this study aims to test the following hypothesis:

H2: Operational complexity affects audit report lag

In their study, Sasvinorita & Meini (2023) state that the difference in the level of oversight between large and small companies is a primary factor in this regard. Large companies, which are subject to rigorous scrutiny by various parties such as regulators and investors tend to possess more robust internal control systems. Conversely, small and medium-sized enterprises often face less intensive oversight, which frequently results in a lower quality of internal control. Research conducted by (Prabowo & Zulfikar, 2024) concludes that firm size influences audit report lag. This suggests that large companies, benefiting from superior resources and systems, are able to complete the audit process in a shorter timeframe. Consistent with these findings, studies by Parahyta (2020) and Soeparyono (2024) also identify an effect of firm size on audit report lag. Accordingly, this study aims to test the following hypothesis:

H3: Firm size has an effect on audit report lag

According to Downey & Bedard (2019) profitability can moderate the relationship involving audit report lag. Because they possess good news (profits), profitable companies tend to release their financial statements promptly, resulting in a shorter audit duration Furthermore, high profitability reflects a healthier financial position, enabling a company to afford adequate audit services, maintain a positive relationship with its auditors, and avoid potential audit-related complications stemming from liquidity constraints. Consequently, high profitability is hypothesized to moderate the impact of financial distress on audit report lag. This is because highly profitable firms are better equipped to manage financial pressure and are motivated to promptly communicate "good news" to stakeholders (Nurlen & Sutarjo, 2021). Moreover, such firms have a stronger incentive to uphold their market reputation by ensuring the timely publication of their financial statements. Conversely, if a company experiences financial distress alongside low profitability, the negative impact of financial distress on audit report lag may be exacerbated. In such a situation, a company might encounter greater obstacles in completing the audit for instance, difficulties in providing the necessary documentation to auditors or an inability to pay audit fees on time. Companies

experiencing financial distress tend to face greater financial pressure and higher reporting risks, which can prolong the audit process. Profitability may moderate this relationship, as firms that remain capable of generating profit possess both the incentive and the capacity to maintain the quality of their financial reporting and reduce information asymmetry. Meanwhile, Compliance Theory emphasizes the importance of a company's adherence to deadlines for the submission of audited financial statements. Highly profitable firms are expected to be better positioned to maintain compliance with reporting deadlines, even when facing financial pressure. Consequently, profitability is anticipated to weaken the positive impact of financial distress on audit report lag, although the nature of this moderating effect remains to be empirically verified. Thus, this study aims to test the following hypothesis:

H4: Profitability moderates the effect of financial distress on audit report lag

Companies with high levels of profitability tend to possess superior accounting and financial management systems, which can mitigate the challenges arising from operational complexity during the audit process (Nurquran & Ardianto, 2023). High profitability also reflects a company's financial stability, which can enhance the efficiency of communication between management and auditors, as well as facilitate the prompt provision of necessary documentation (Adam et al., 2022). Profitable companies generally maintain more robust internal control systems and possess adequate resources to manage operational complexity, thereby moderating the impact of such complexity on audit report lag. Agency theory posits that operational complexity can increase information asymmetry between management and shareholders, thereby heightening the need for audit procedures and potentially extending the audit report lag. Profitability serves as a moderating variable because companies capable of generating profit possess greater resources and incentives to support effective financial reporting systems and facilitate the audit process. Meanwhile, compliance theory emphasizes that companies are obligated to submit audited financial statements within established deadlines. Highly profitable companies are expected to be better equipped to meet these obligations, even when faced with operational complexity. Consequently, profitability is hypothesized to weaken the positive impact of operational complexity on audit report lag, although the direction of this moderation requires verification through empirical testing. Accordingly, this study aims to test the following hypothesis:

H5: Profitability moderates the effect of operational complexity on audit report lag

According to Basuki (2021) large-scale companies generally possess effective internal control systems, which allow the audit process to be completed more efficiently. Research by Sasvinorita & Meini (2023), suggests that the ability of large companies to generate significant profits enables them to engage reputable independent auditors, which in turn enhances the credibility of the company's financial statements. Therefore, it is posited that profitability may moderate the influence of firm size on the reduction of audit report lag. Large companies with high profitability often engage in more complex transactions, necessitating a more in depth audit process (Napisah & Soeparyono, 2024). Large, profitable firms enjoy a dual advantage: they possess robust internal control systems and the financial capacity to hire reputable auditors. Furthermore, high profitability provides an additional incentive to report audit results in a timely manner, as there is *good news* that the company

wishes to communicate promptly to its stakeholders. Profitability serves as a moderating variable because highly profitable firms generally possess greater resources and incentives to enhance the quality of their financial reporting and support the efficiency of the audit process. Meanwhile, compliance theory emphasizes the importance of a firm's adherence to deadlines for the submission of audited financial statements. High profitability can bolster a company's ability to meet reporting deadlines by providing better resources and more robust reporting systems. Consequently, profitability is expected to moderate the relationship between firm size and audit report lag, though the direction of this moderation depends on whether the firm's available resources outweigh the organizational complexities it faces. Accordingly, this study aims to test the following hypothesis:

H6: Profitability moderates the influence of firm size on audit report lag

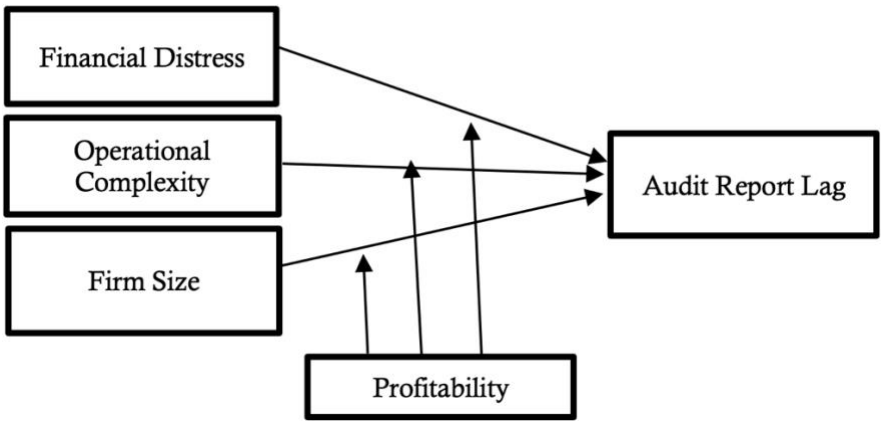


Figure 1. Research framework

3. Methods

This study utilizes secondary data that already exists and is obtained from public sources, such as records, books, and company reports. Specifically, the secondary data employed consists of the financial statements and annual reports of energy companies listed on the Indonesia Stock Exchange (IDX) for the 2021–2023 period. This data is publicly accessible via the IDX website (www.idx.co.id) and will be used to examine the influence of various factors on audit report delays.

The population for this study consists of all companies in the energy sub-sector listed on the Indonesia Stock Exchange (IDX) during the 2021-2023 period. Of the 88 companies that met the initial criteria, only 42 companies were selected for the study. To obtain a relevant sample, a purposive sampling technique was employed based on the following criteria:

a. Energy sector companies listed on the IDX.
b. Energy sector companies listed on the IDX continuously throughout the 2021-2023 period.
c. Energy sector companies that published complete annual financial reports on the IDX during the 2021–2023 period.

d. Energy sector companies that were not under special monitoring by the IDX during the 2021-2023 period.
e. Energy sector companies that did not incur losses during the 2021–2023 period.
f. Companies that did not present their financial statements in Indonesian Rupiah.
g. Companies that had subsidiaries during the 2021-2023 period

Based on Khamisah et al (2023) audit report lagrefers to the duration of the audit process, calculated as the number of days between the financial year-end (book-closing date) and the date the audit report is completed. It is measured as: Audit Report Date Fiscal Year-End Date. Financial distress refers to a condition in which a company experiences a significant decline in its ability to meet its financial obligations whether current or long-term indicating an increasing risk to its liquidity and solvency (Nurquran & Ardianto, 2023). It is measured using the Debt-to-Equity Ratio (DER). According to Stiawan (2021), operational complexity is characterized by the number of subsidiaries owned; this indicates the volume of operational units that must be audited during each transaction and its associated record-keeping, thereby requiring additional time to complete the audit. It is measured by the number of subsidiaries. The size of a company can be measured by the value of its assets, which is often used as an indicator to assess the company's overall performance (Saputra et al., 2024). It is measured using Ln(Total Assets). Profitability levels can be determined by calculating various relevant financial ratios. one of the metrics used is a financial ratio known as ROA (Napisah & Soeparyono, 2024).

This study employs statistical methods with the aid of EViews 12 software. A panel data approach was selected because the study covers a span of several years and includes multiple companies. Time-series data are utilized as the study encompasses a three-year period, while cross-sectional data are incorporated because the sample consists of 42 companies as shown in **Table 1**. In the context of panel data, the model can be determined through three primary approaches: the Common Effect Model (CEM), the Fixed Effect Model (FEM), and the Random Effect Model (REM).

Table 1. Sample selection

No.	Company Selection Criteria	Number
1	Energy sector companies listed on the Indonesia Stock Exchange (IDX)	88
2	Energy sector companies not continuously listed on the IDX during the 2021–2023 period	(17)
3	Energy sector companies that did not publish complete annual financial statements on the IDX throughout the 2021–2023 period	(9)
4	Energy sector companies placed under special monitoring by the IDX during the 2021–2023 period	(8)
5	Energy sector companies that incurred losses during the 2021–2023 period	(10)
6	Companies that did not present their financial statements in Indonesian rupiah (IDR)	(0)
7	Companies that did not have subsidiaries during the 2021–2023 period	(2)
	Total Number of Sample Companies	42
	Research Period	3 years
	Total Observations	126

Source: Processed data (2024)

4. Results and Discussion

From the 42 companies (**Table 1**) that met the criteria mentioned, a total of 126 data were obtained for this research as shown in **Table 2**.

Table 2. Statistic descriptive

Statistic	FD	KOP	UK	ARL	P
Mean	1.025	17.556	29.493	85.206	13.900
Median	0.731	7.000	29.437	87.000	8.396
Maximum	5.869	308.000	32.754	160.000	61.635
Minimum	0.021	1.000	25.659	52.000	0.017
Std. Dev.	1.072	37.902	1.689	15.885	14.761
Skewness	2.464	5.190	-0.028	0.725	1.556
Kurtosis	10.142	34.862	2.183	6.298	4.762
Jarque-Bera	395.287	5895.270	3.524	68.133	67.176
Probability	0.000	0.000	0.172	0.000	0.000
Sum	129.132	2212.000	3716.169	10736.000	1751.419
Sum Sq. Dev.	143.691	179569.100	356.796	31540.630	27236.520
Observations	126	126	126	126	126

Source: Processed data (2024)

The analysis results show that the mean value of the financial distress (FD) variable was 1.025, with a maximum value of 5.867, a minimum value of 0.021, and a standard deviation of 1.072. These results indicate considerable variation in the financial distress conditions among companies during the 2021–2023 period.

The Chow test results in the **Table 3** show that the probability (prob.) value for the Cross-section F test is 0.0039, which is less than the 5% (0.05) significance level. Therefore, the appropriate model to use is the Fixed Effects Model (FEM). Having determined that the FEM is more suitable, the next step is to conduct the Hausman test.

Table 3. Chow test

Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed effects			
Effects Test	**Statistic**	**d.f.**	**Prob.**
Cross-section F	2.008755	(41,80)	0.0039
Cross-section Chi-square	89.180652	41	0.0000

Source: Processed data (2024)

Based on the results of the Hausman test in the **Table 4**, a probability (prob.) value of 0.0113 was obtained. In this test, the decision is made by comparing this probability value against a significance level of 5% (or 0.05). Since the probability value of 0.0113 is less than 0.05, the Fixed Effects Model (FEM) is the more appropriate model to use (Basuki & Prawoto, 2021).

Based on the results of the estimation model selection tests, it can be concluded that the regression model used in this study is the Fixed Effect Model (FEM). This conclusion is drawn from the results of the Chow test and the Hausman test, which, in sequence, have eliminated the Common Effect Model (CEM) and the Random Effect Model (REM).

Table 4. Hausman test

Correlated Random Effects - Hausman Test Equation: Untitled Test cross-section random effects			
Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	12.988857	4	0.0113
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.

Source: Processed data (2024)

Based on **Table 5**, The probability value resulting from this test is 0.2718, which indicates that the Financial Distress variable does not have a significant effect on Audit Report Lag, as the probability value is greater than the significance level of 0.05 (0.2718 > 0.05). Consequently, hypothesis H1 in this study is rejected. The probability value for the operational complexity variable is 0.7992, which indicates that Operational Complexity does not have a significant effect on Audit Report Lag, as the probability value is greater than the significance level of 0.05 (0.7992 > 0.05). Therefore, hypothesis H2 in this study is rejected. Based on the test results, the probability value obtained is 0.0032, which indicates that Firm Size has a significant effect on Audit Report Lag, as the probability value is less than the significance level of 0.05 (0.0032 < 0.05). Therefore, hypothesis H3 in this study is accepted.

Based on the **Table 6**, the probability value for the interaction between Financial Distress and Profitability (FDP) is 0.0003, which is less than 0.05 (0.0003 < 0.05). This indicates that profitability moderates the relationship between financial distress and audit report lag. Consequently, it can be concluded that hypothesis H4 is accepted. The probability value for the interaction between Operational Complexity and Profitability (KOPP) is 0.8452, which is greater than 0.05 (0.8452 > 0.05). This indicates that profitability does not moderate the relationship between operational complexity and audit report lag. Therefore, it can be concluded that hypothesis H5 is rejected. The probability value for the interaction between Firm Size and Profitability (UKP) is 0.0959, which is also greater than 0.05 (0.0959 > 0.05). Thus, it can be concluded that profitability does not moderate the relationship between firm size and audit report lag; therefore, hypothesis H6 is also rejected.

Table 5. T test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	516.3740	142.5939	3.621292	0.0005
FD	2.497805	2.257515	1.106440	0.2718
KOP	0.011174	0.043783	0.255221	0.7992
UK	-14.71257	4.843148	-3.037811	0.0032

Source: Processed data (2024)

Table 6. MRA test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	783.0674	166.6579	4.698652	0.0000
FD	6.687192	2.398782	2.787745	0.0067
KOP	0.003359	0.075515	0.044482	0.9646
UK	-23.83462	5.663495	-4.208465	0.0001
FDP	-0.968185	0.256039	-3.781401	0.0003
KOPP	-0.000788	0.004021	-0.195881	0.8452
UKP	0.273030	0.161970	1.685688	0.0959

Source: Processed data (2024)

4.1. Discussion

Based on the hypothesis testing results, the financial distress variable was found to have no significant effect on audit report lag (ARL), with a probability value of 0.2718—exceeding the 5% (0.05) significance level. Statistically, this indicates insufficient evidence to conclude that the level of financial distress experienced by a company influences the time required to complete an audit. From the perspective of Compliance Theory, external pressures such as regulations or reporting requirements can compel companies to remain compliant, even under difficult conditions. This theory underscores the vital role of compliance in upholding the integrity and timeliness of financial reporting. Companies experiencing financial distress may recognize that timely reporting is crucial for preserving their reputation and maintaining access to financing. Consequently, despite facing resource limitations and operational constraints, these companies strive to meet reporting deadlines as a form of regulatory compliance. This may explain the absence of a significant relationship between financial distress and ARL; companies under financial pressure might, in fact, exercise greater discipline to ensure adherence to financial reporting requirements. These findings align with studies by Khamisah et al. (2023), Rahayu et al. (2021), and Saputra et al., (2024), which also concluded that financial distress does not significantly affect ARL. These studies highlight that the success of an audit is not solely determined by a company's financial condition, but also by the auditor's capabilities, the efficiency of the technology employed, and the consistent application of standardized audit procedures. Furthermore, research by Parahyta (2020) suggests that financial distress does not necessarily extend the audit duration, as most auditors employ systematic approaches and structured audit timelines particularly when dealing with large companies accustomed to regular audit processes.The level of financial distress experienced by a company influences the time required to complete an audit (Habib, Bhuiyan, Huang, 2018).

From an agency theory perspective, operational complexity can create greater information asymmetry between management and shareholders. This asymmetry has the potential to increase the need for auditors to carry out more in-depth testing, thereby lengthening the audit process. However, in the context of the results of this research, it is likely that complex companies have anticipated this potential asymmetry through the implementation of strong corporate governance, reporting transparency, and active 57 communication with auditors. This means that the presence of good managerial and governance systems can reduce potential delays, so that complexity is no longer a significant factor in audit report lag. Apart from that, compliance theory also provides an important perspective. Companies that operate in a complex manner, especially public companies, generally pay close attention to compliance with regulations that require timely submission of financial reports. For example, the provisions in OJK Regulation no. 14/POJK.04/2022 concerning the submission of annual financial reports encourages companies to ensure the audit process is completed according to the deadline. Compliance with these regulations plays a role external encouragement that directs management to be better prepared for the audit process, even though the company faces challenges in terms of complexity. The findings of this research are supported by (Damayanti, 2024) study, which shows that

companies with high operational complexity can still complete audits on time if they have an efficient reporting system and a competent management team. In addition, Khamisah et al. (2023) also found that the influence of complexity on audit delays can be minimized with the support of information technology and active collaboration between internal and external audit teams. Auditors also tend to develop a risk-based audit approach that is more adaptive in dealing with complex companies, so that they are still able to complete the audit within the specified time limit.

The hypothesis testing results indicate that the third hypothesis (H3) is accepted, as firm size is shown to have a significant effect on audit report lag (ARL). Theoretically, these findings align with perspectives from agency theory and compliance theory. According to agency theory, large firms are assumed to face greater pressure to submit audit reports in a timely manner due to widely dispersed share ownership and more intensive oversight from owners and external parties. This pressure encourages management to expedite the completion of the audit to maintain public trust and the firm's reputation. Meanwhile, compliance theory suggests that large firms are more adherent to regulations, driven by stricter supervision from capital market authorities and higher accountability expectations from stakeholders. With greater resources, large firms are generally better positioned to provide information promptly and facilitate the auditor's work, enabling more efficient completion of the audit process. These results are further supported by previous research that has identified a significant influence of firm size on ARL. For instance, Prabowo et al. (2024) found that large firms tend to complete audits more quickly, thanks to superior reporting systems and more competent finance staff. Studies by Rahayu et al., (2021), Sunersa et al. (2022) and Putra et al. (2021) also demonstrate a significant negative relationship between firm size and ARL, arguing that large firms possess more established accounting infrastructure and are better prepared for the audit process. Furthermore, in an international context. Fujianti & Satria, (2020) also found that large firms exhibit a statistically significantly shorter audit report lag compared to smaller firms.

The higher a company's profitability, the more the negative impact of financial distress on audit delay tends to be minimized. This result supports the fourth hypothesis (H4), which is therefore accepted. Theoretically, this finding can be explained through the lens of agency theory. Within this framework, high profitability serves as a positive signal of management performance, which can reduce conflicts of interest between managers and company owners. Companies with high profitability tend to demonstrate a commitment to transparency and accountability, thereby maintaining auditor trust and facilitating a more timely completion of the audit, even under financial pressure. Furthermore, profitability provides auditors with greater assurance regarding the company's going concern status, which can reduce the level of caution required and accelerate the audit process. This finding is also consistent with research conducted by Adam et al. (2022) who found that profitability can mitigate the negative impact of financial distress on audit report lag. This reinforces the evidence that, within the energy sector, profitability acts as a buffer or safeguard during difficult financial situations, as it indicates that the company's performance remains strong despite such pressures.

Profitability does not serve as a significant moderating variable in the relationship between operational complexity and audit report lag. This finding indicates that highly profitable companies do not automatically possess a greater capacity to accelerate the audit process when their operational activities are highly complex. This suggests that the primary challenge in an audit is not merely the level of a company's profit, but rather its intricate internal structure and activities. Within the framework of agency theory, high operational complexity creates the potential for significant agency conflicts and information asymmetry; this, in turn, necessitates a more in-depth audit that requires more time, regardless of the company's level of profitability. Furthermore, based on compliance theory, high profitability does not guarantee that a company will submit its financial statements in a timely manner if it lacks effective internal control systems and structures. Companies in the energy sector, in particular, often exhibit diverse and complex operational characteristics—such as the presence of numerous subsidiaries, widespread business lines, and fixed assets distributed across various geographical locations. This complexity necessitates a more extensive audit, thereby extending the time required for auditors to complete their reports. These results are supported by the findings of Ekuitas et al. (2022), who state that the more complex a company's activities, the greater the likelihood of delays in the audit process. Operational complexity emerges as a dominant factor that cannot be fully offset by profitability.

Profitability tends to strengthen the positive relationship between firm size and audit report lag (ARL); however, as the results are not statistically significant, this influence is not clearly evidenced. From the perspective of agency theory, large firms often experience higher levels of agency conflict due to the separation between ownership and management. Consequently, auditors must perform more comprehensive audit procedures to ensure the fairness of financial statements. High profitability does not automatically reduce agency risk, and thus, it is not sufficiently robust to shorten the audit duration. Within the context of compliance theory, factors such as a firm's corporate culture regarding financial reporting, internal coordination, and the quality of documentation also influence audit report lag. Even if high profitability reflects strong financial performance, it does not necessarily indicate an efficient reporting process or high-quality internal controls. If a large firm lacks a strong culture of compliance with audit deadlines, delays will still occur. These findings align with research by Soeparyono (2024) and Adam et al. (2022) which suggest that while profitability may directly reduce audit report lag, it does not significantly moderate the relationship between firm size and ARL. Furthermore, firm size itself is not necessarily a dominant factor unless supported by robust internal systems and strong management compliance.

5. Conclusion

This study concludes that financial distress and operational complexity do not have a significant impact on audit report lag (ARL). In other words, neither financial pressure nor the level of operational intricacy within a company necessarily slows down the audit process. Conversely, company size is shown to have a significant effect on ARL. This suggests that larger companies tend to have shorter audit completion times, likely due to more adequate resources and more structured reporting systems. Regarding the role of profitability as a

moderating variable, the findings indicate that profitability significantly moderates the relationship between financial distress and ARL. However, profitability does not appear to moderate the relationship between either operational complexity or company size and ARL. Future research should expand the scope of industrial sectors so that the findings can better reflect general conditions across various business fields. By incorporating multiple sectors, researchers can compare the distinct characteristics of each industry and how they influence audit report lag.

Authors' Declaration

Authors' contributions and responsibilities

The authors made substantial contributions to the conception and design of the study. The authors took responsibility for data analysis, interpretation and discussion of results. The authors read and approved the final manuscript.

Funding

No funding information from the authors.

Availability of data and materials

All data are available from the authors.

Competing interests

The authors declare no competing interest.

Additional information

No additional information from the authors.

References

Adam, W. B., Purnamasari, P., & Hartanto, R. (2022). Pengaruh Kondisi Keuangan , Kompleksitas Operasi dan Umur Perusahaan terhadap Audit Report Lag. *Jurnal Riset Akuntansi*, *2*(2), 143–152. https://doi.org/10.29313/jra.v2i2.1495

Al-Faruqi, R. A., Samrotun, Y. C., & Wijayanti, A. (2021). Determinan Audit Report Lag dengan Profitabilitas Sebagai Variabel Moderasi. *FINANSIA: Jurnal Akuntansi Dan Perbankan Syaria*, *4*(2). https://doi.org/10.32332/finansia.v4i2.2667

Basuki, A. T. (2021). *Analisis Data Panel Dalam Penelitian Ekonomi Dan Bisnis*.

Damayanti, R. (2024). Analisis Audit Report Lag: Dampak Pergantian Manajemen, Kompleksitas Operasional, dan Ukuran Perusahaan pada Consumer Non-Cyclicals di BEI (2019-2022). *Scientific Journal of Reflection: Economic, Accounting, Management and Business*, *7*(3), 739–747. https://doi.org/10.37481/sjr.v7i3.896

Downey, D. H., & Bedard, J. C. (2019). Coordination and Communication Challenges in Global Group Audits. *Auditing: A Journal of Practice & Theory*, *38*(1), 123–147. https://doi.org/10.2308/ajpt-52016

Doyle, J., Ge, W., & McVay, S. (2007). Determinants of weaknesses in internal control over financial reporting. *Journal of Accounting and Economics*, *44*(1–2), 193–223. https://doi.org/10.1016/j.jacceco.2006.10.003

Febria Amanda, David Pangaribuan, & Panata Bangar Hasioan Sianipar. (2025). Pengaruh Kompleksitas Operasi, Ukuran Perusahaan dan Komite Audit terhadap Kualitas Audit dengan Audit Delay sebagai Moderasi. *Jurnal Riset Ekonomi Dan Akuntansi*, *3*(1), 283–

301. https://doi.org/10.54066/jrea-itb.v3i1.3072

Fenti Nurlen, Agus Sutarjo, A. B. (2021). The effect of konvergency ifrs, profitability, size, complexity of the operation and audit opinion to the selection on timeliness of financial statement to manufacturing sub sector food and baferage on indonesian stock exchange period 2014-2018. *Pareso Jurnal*, *3*(1), 37–56.

Fujianti, L., & Satria, I. (2020). Firm Size , Profitability , Leverage as Determinants of Audit Report Lag : Evidence From Indonesia. *International Journal of Financial Research*, *11*(2). https://doi.org/10.5430/ijfr.v11n2p61

Habib, A., Bhuiyan, M. B. U., Huang, H. J., & Miah, M. S. (2019). Determinants of audit report lag: A meta-analysis. *International Journal of Auditing*, *23*(1), 20–44. https://doi.org/10.1111/ijau.12136

Hari, S., Syarifudin, S., & Mundiroh, S. (2022). Pengaruh Pengaruh Audit Effort dan Kompleksitas Operasi Perusahaan Terhadap Audit Delay dengan Audit Tenure Sebagai Variabel Moderasi. *Ekonomi, Keuangan, Investasi Dan Syariah (EKUITAS)*, *4*(1), 326–332. https://doi.org/10.47065/ekuitas.v4i1.2088

Hari Stiawan, F. E. N. (2021). Pengaruh Financial Distress Dan Leverage Terhadap Audit Delay. *Jurnal Akuntansi, Ekonomi, Dan Manajemen*, *1*(2), 92–110. https://doi.org/10.55606/jaem.v1i2.124

Jannah, S. R., Z, M. R. H., Hilmi, M. F., & Situmeang, J. P. (2024). Pengaruh Kompleksitas Operasi, Solvabilitas dan Profitabilitas Terhadap Audit Report Lag Pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia Tahun 2019-2020. *Owner*, *8*(1), 803–812. https://doi.org/10.33395/owner.v8i1.1742

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

Khamisah, N., Nurullah, A., & Kesuma, N. (2023). Pengaruh Agresivitas Penghindaran Pajak , Kompleksitas Operasi Perusahaan , Audit Fee , dan Financial Distress terhadap Audit Report Lag. *Reviu Akuntansi Dan Bisnis Indonesia*, *7*(1). https://doi.org/10.18196/rabin.v7i1.18005

Liputan6.Com,25 August. Available at: Https://Www.Liputan6.Com/Hot/Read/6140626/Format-Daftar-Pustaka-Apa-Mla-Chicago-Dan-Harvard-Untuk-Karya-Ilmiah (Accessed: 22 October 2026).

Napisah, N., & Soeparyono, R. D. (2024). Pengaruh Financial Distress, Kompleksitas Operasi dan Auditor Switching Terhadap Audit Report Lag Dengan Ukuran Perusahaan Sebagai Pemoderasi. *Owner*, *8*(3), 2546–2564. https://doi.org/10.33395/owner.v8i3.2191

Nurianti, R. P., Sosiady, M., & Ermansyah. (2024). Pengaruh Ukuran Perusahaan , Kompleksitas Operasi Perusahaan , Reputasi Auditor dan Financial Distress Terhadap Audit Delay. *Jurnal Rumpun Ilmu Ekonomi*, *2*(3), 234–244. https://doi.org/10.5281/zenodo.13895860

Nurquran, P. D., & Ardianto, A. (2023). The Way Financial Distress Affects Financial Reporting Delay. *Jurnal Manajemen Teori Dan Terapan| Journal of Theory and Applied Management*, *16*(1), 81–94. https://doi.org/10.20473/jmtt.v16i1.41174

Parahyta, C., & Herawaty, V. (2020). Pengaruh Financial Distress, Profitabilitas Dan Audit Tenure Terhadap Audit Report Lag dengan Ukuran Perusahaan Sebagai Variabel Moderasi. *KOCENIN Serial Konferensi*, *1*(1), 1–9.

Pasupati, B., & Husain, T. (2022). Determinants of Audit Report Lag during the Covid-19 Pandemic : A Study on Companies Conducting IPOs and Indexed LQ-45. *JIA (Jurnal Ilmiah Akuntansi)*, *7*(June), 19–38. https://doi.org/10.23887/jia.v7i1.30835

Prabowo, P., & Zulfikar. (2024). Pengaruh Faktor-Faktor Keuangan Terhadap Audit Report Lag Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Periode Tahun 2020. *Jurnal Revenue*, *5*(1), 181–199. https://doi.org/10.46306/rev.v5i1.409

Rahayu, P., Khikmah, S. N., & Dewi, V. S. (2021). Pengaruh Ukuran Perusahaan, Profitabilitas, Solvabilitas, Ukuran KAP dan Financial Distress Terhadap Audit Report Lag. *4th Prosiding Business and Economics Conference In Utilizing of Modern Technology 2021*, 467–486.

Rosharlianti, Z., & Hanifah, E. L. N. (2023). Peran Spesialisasi Auditor dalam Memoderasi Financial Distress dan Komite Audit Terhadap Audit Report Lag. *Jurnal Akuntansi Dan Governance*, *4*(1), 73. https://doi.org/10.24853/jago.4.1.73-86

Saputra, F., Muchlish, M., Bastian, E., Sultan, U., Tirtayasa, A., & Yang, C. S. (2024). Pengaruh Ukuran Perusahaan, Profitabilitas, Dan Solvabilitas Terhadap Audit Report Lag Dengan Reputasi Kap Sebagai Variabel Moderasi. *Jurnal Locus: Penelitian Dan Pengabdian*, *3*(1), 67–78. https://doi.org/10.58344/locus.v3i1.2421

Sasvinorita, A., & Meini, Z. (2023). The Effect Of Profitability, Leverage, And Company Size On Audit Delay With Kap's Reputation As A Moderating Variable. *Jurnal Ekonomi*, *12*(01). https://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/1039

Sunersa, A. N., Bukit, R. B., & Sadalia, I. (2022). The Effect of Auditor Switching, Audit Tenure, Audit Firm Size, Profitability, Business Risk, and Operational Complexity on Audit Report Lag with the Committee Audit as a Moderating Variable. *International Journal of Research and Review*, *9*(8), 117–129. https://doi.org/10.52403/ijrr.20220809

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License