

How Audit Factors and Information Technology Affect Audit Report Lag: The Moderating Role of Firm Size?

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Abstrak

Penelitian ini menganalisis pengaruh faktor audit dan penerapan teknologi informasi terhadap keterlambatan laporan audit dengan ukuran perusahaan sebagai variabel moderasi pada perusahaan sektor energi yang terdaftar di BEI periode 2020–2024. Dengan pendekatan deskriptif kuantitatif dan data sekunder, diperoleh 100 sampel melalui *purposive sampling*. Analisis dilakukan menggunakan statistik deskriptif, uji asumsi klasik dan regresi termoderasi dengan SPSS 25. Hasil menunjukkan bahwa hanya Opini Audit yang berpengaruh negatif dalam memperpanjang keterlambatan laporan audit. Pergantian Auditor, Masa Perikatan audit, dan Teknologi Informasi tidak berpengaruh, dan ukuran perusahaan tidak memoderasi hubungan tersebut. Temuan ini menegaskan peran audit dalam mereduksi asimetri informasi dan konflik kepentingan antara prinsipal dan agen, di mana ketepatan waktu pelaporan audit lebih ditentukan oleh karakteristik hasil audit dibandingkan faktor struktural dan dukungan teknologi.

Kata kunci: keterlambatan laporan audit, opini audit, pergantian auditor, masa perikatan audit, teknologi informasi, ukuran perusahaan.

Abstract

This study examines the effects of audit-related factors and the adoption of information technology on audit report lag, with firm size as a moderating variable, in energy sector companies listed on the Indonesia Stock Exchange during the 2020–2024 period. Using a descriptive quantitative approach and secondary data, 100 samples were obtained through purposive sampling. Data analysis was conducted using descriptive statistics, classical assumption tests, and moderated regression analysis with SPSS 25. The results indicate that only audit opinion has a negative effect on the length of audit report lag, while auditor switching, audit tenure, and information technology adoption show no significant effect. Furthermore, firm size does not moderate these relationships. These findings underscore the role of auditing in reducing information asymmetry and agency conflicts between principals and agents, with audit timeliness being more strongly influenced by audit outcome characteristics than by structural audit factors or technological support.

Keywords: : *audit report lag, audit opinion, auditor switching, audit tenure, information technology, firm size.*

INTRODUCTION

Financial statements are a way for companies to share important financial information and show they are responsible for managing resources properly to their stakeholders (Goncalves & Imoniana, 2022). These reports help ensure transparency by giving a complete picture of a firm's financial health and performance. They are used by managers to make decisions, predict future outcomes, and plan economically (Judijanto, 2024). Key qualities of financial information—such as relevance, reliability, ease of understanding, and comparability—are closely tied to the timeliness of the information. If reports are delayed, the information becomes less useful, harder to act on, and can lead to more uncertainty and unfair advantages for some people (Jamithireddy, 2025).

In Indonesia, regulatory provisions governing the timeliness of financial reporting have undergone several revisions. Under Financial Services Authority Regulation No. 14/POJK.04/2022, publicly listed entities are required to submit audited financial statements no later than 90 days after the close of the fiscal year. Although this deadline was temporarily relaxed to 150 days under specific conditions, it was subsequently reinstated to 90 days through Indonesia Stock Exchange Decree No. Kep-00057/BEI/03-2023 (Abbet, 2025; Bursa Efek Indonesia, 2020).

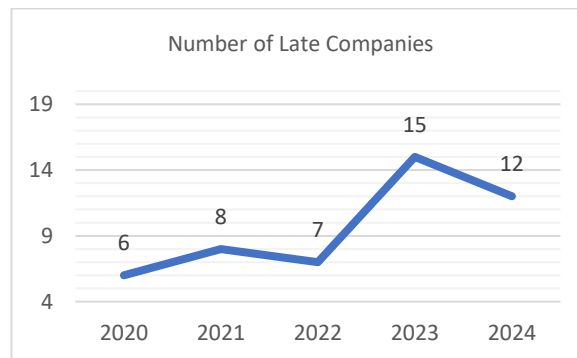


Figure 1. Number of Late Companies Energy Sector

Figure 1 shows that in 2023, there was a big increase in the number of energy sector companies that delayed their annual financial reports, going from 7 companies to 15. The reversion to stricter deadlines created substantial compliance challenges, particularly in the energy sector, where audit report lags increased by 114% in 2023. This surge reflects a structural strain in corporate adaptive capabilities and indicates potential weaknesses in internal control impactiveness and audit readiness. Within the theoretical lens of agency theory, such audit report lags constitute manifestations of heightened information asymmetry and inImpactive monitoring mechanisms between principals and agents.

The academic discourse on audit report lag highlights several determinants that influence the timeliness of audit completion. Prior studies identify audit opinion Ariyani,(2024) auditor switching Yuliastina et al.,(2023), and audit tenure as key factors. However, the findings across these studies remain inconclusive. Some evidence suggests that modified opinions extend audit duration, while other studies find no significant association. Similar inconsistencies are evident in research examining the role of auditor switching and audit tenure. These contradictions give rise to a research gap, indicating the need for a more integrative examination of audit characteristics, particularly in sectors subject to intense regulatory scrutiny and operational complexity.

Beyond the differences in what studies have found, there's a gap in understanding how digital changes affect auditing. Even though technology like ERP systems is thought to make audits more efficient by automating tasks, using standard processes, and making data easier to access Birrohmah, (2019); Pratikno, (2022), there isn't much research on how this actually affects the length of time required to complete prepare audit reports in Indonesia(W. G. Putri, 2023). Also, the size of a firm, which is believed to influence how well controls work, how many resources are available, and how complex an audit is, hasn't been well studied as a factor that can either make or break the connection between audit factors and the duration required to finish an audit report (Asmedi, 2022; Maharsa et al., 2021; Salsabilla et al., 2023; Wibowo, 2022). Understanding these two issues is important for figuring out the bigger picture of why audits take certain amounts of time.

The unique part of this research is combining information technology and firm size into one complete system According to agency theory to explain why audit report delays happen. Most earlier studies looked at audit factors on their own, but this research adds in how much technology a firm has and how big the firm is, giving a more complete picture. The research focuses on the energy industry, which is highly regulated, has complex operations, and has seen the biggest increase in audit report delays. This makes the research's findings more relevant to this specific area. The goals of this research are: (1) to look at how audit opinions, changing auditors, how long an auditor has worked with a firm, and the use of information technology affect audit report delays; and (2) to check if the size of a firm changes how these factors influence audit report delays in energy companies listed on the Indonesia Stock Exchange. The results are expected to improve our understanding of the topic, fix problems in previous research, and offer practical help to regulators, auditors, and firm leaders to make audits faster and better manage financial reporting.

LIBRARY REVIEW

Agency Theory

Agency Theory, as developed by Jensen and Meckling in 1976, describes a type of agreement where the owners of a firm, known as principals, give control of the business to managers, called agents, to run the firm for them(Jensen & Meckling, 1976). This delegation inherently creates a divergence of interests, potentially leading to agency conflicts and information asymmetry, as management may prioritize personal utility over shareholder wealth maximization(Herry, 2021). Within this framework, the independent audit function serves as a critical governance mechanism to align these incongruent interests(Goncalves & Imoniana, 2022). The timeliness of this verification process, materially manifested as the audit report lag, becomes a significant indicator of monitoring Impactiveness (Bhuiyan et al., 2025). Prolonged delays in audit completion can exacerbate information asymmetry, undermining the principal's ability to exercise timely oversight.

Audit report lag

Audit report lag is the period between a company's fiscal year-end and the release of its audit report (Al., 2024). According to agency theory, this delay happens because there is an imbalance in information between the firm's management (agents) and its shareholders

(principals)(Mardjono, 2022). A longer lag can occur when audits become more complicated due to these issues between management and shareholders (Herry, 2021; Wati, 2023).

The Impact of Audit Opinion on Audit Report Lag

An audit opinion is the professional statement of an independent auditor regarding the fairness of financial statement presentation in accordance with applicable accounting standards. From an agency theory perspective, the issuance of a modified audit opinion indicates reporting or governance issues that prompt auditors to perform additional examination procedures, potentially extending audit completion time and increasing audit report delay. This finding is supported by Karima et al., (2025); Oktavia, (2025), who state that a qualified audit opinion positively influences audit report lag. However W. A. Putri & Kusumawati, (2025) suggest that the type of audit opinion does not significantly affect audit report delay, as auditors remain bound by established reporting deadlines.

H1: Audit Opinion affects Audit Report Lag

The Impact of Auditor Switching on Audit Report Lag

Auditor change means replacing the accounting firm that checks a firm's financial reports for a certain time. From the idea of agency theory, this is seen as a way to keep the auditor independent. But changing auditors also brings some costs, because the new auditor needs time to learn about the firm's systems, how it works, and its main features. This can make the audit less efficient at first. Studies like Abbet, (2025); W. A. Putri & Kusumawati, (2025) show that changing auditors can lead to longer delays in preparing audit reports. However Puspitasari & Sudjiman, (2022) found that changing auditors doesn't greatly affect the length of time required to complete finish the audit reports, because new auditors often plan more carefully to meet deadlines.

H2: Auditor Switching affects Audit Report Lag

The Impact of Audit Tenure on Audit Report Lag

Audit tenure is the amount of time an auditor works with a client during an audit. From the viewpoint of agency theory, when an audit lasts longer, the auditor learns more about operational activities of the client, which lowers the cost of gathering information and makes the audit work more efficient. As the auditor becomes more familiar with the firm's processes, they can perform their checks more impactively, which may help speed up the duration required to finish the audit report. This idea matches the findings in Karima et al., (2025); Oktavia, (2025) which show that longer audit tenure is linked to shorter audit report delays. However, W. A. Putri & Kusumawati, (2025) suggest that a long association does not always lead to faster audit reports, because the auditor might become less cautious over time.

H3: Audit Tenure affects Audit Report Lag

The Impact of Information Technology on Audit Report Lag

Information technology serves a critical function in enhancing the efficiency and quality of financial information processing. Within the framework of agency theory, the adoption of technologies such as enterprise resource planning (ERP) systems and integrated information platforms can mitigate information asymmetry among stakeholders. These systems enable auditors to obtain audit evidence in a more timely and accurate manner. Empirical evidence reported in studies Birrohmah, (2019); Judijanto, (2024); Pratikno, (2022), indicates that the

utilization of information technology influences the duration required to complete an audit report. Conversely, research Bani-Khaled & Pinho, (2024) argues that when such technological systems are not Impactively utilized by auditors and clients, their adoption may not result in a meaningful decrease in the time required to complete the report.

H4: Information Technology affects Audit Report Lag

The Moderating Impact of Firm Size on Audit Opinion and Audit Report Lag

Firm size represents the scale of the scope of a firm's business activities and its economic resources. In this study, firm size functions as a moderating variable in the association between audit opinion and audit report delay. From the perspective of agency theory, larger firms generally have stronger internal controls and greater resources, enabling them to address audit issues more efficiently, even when receiving a modified opinion. As a result, the Impact of audit opinion on audit report delay tends to be weaker in larger firms. This finding is consistent with research Asmedi, (2022), although research Salsabilla et al., (2023) suggests that firm size may not significantly influence this association due to the greater operational complexity of large companies, which can prolong the audit process.

H5: Firm Size moderates the impact of Audit Opinion on Audit Report Lag

The Moderating Impact of Firm Size on Auditor Switching and Audit Report Lag

Firm size affects how much changing auditors or having longer audit periods influences the duration required to prepare an audit report. From an agency theory point of view, bigger companies usually have clear processes, good records, and skilled finance teams. This makes it easier for new auditors to get up to speed and lessens the negative impact of changing auditors on the duration required to finish the audit report. This matches what Kim, (2023), found, but other studies Maharsa et al., (2021) suggest that the complexity of big companies might keep the audit delay at the same level.

H6: Firm Size moderates the impact of Auditor Switching on Audit Report Lag

The Moderating Impact of Firm Size on Audit Tenure and Audit Report Lag

Firm size affects how audit tenure relates to audit report delays by increasing operational complexity, which makes the auditor's accumulated knowledge more valuable. In bigger companies, the specific experience auditors gain over a long time becomes very important for dealing with complex transactions, which makes the impact of longer audit tenure more impactful in reducing delays in audit reports. This idea is supported by Wiedjaja & Eriandani, (2021), although some studies Serial et al., (2020) suggest that the complexity of large companies might actually lower audit efficiency.

H7: Firm Size moderates the impact of Audit Tenure on Audit Report Lag

The Moderating Impact of Firm Size on Information Technology and Audit Report Lag

Firm size acts as a factor that affects how information technology influences the duration required to prepare an audit report. Larger companies have benefits that let them use advanced information technology systems and properly assign resources, which makes technology-based audit processes more impactful and speeds up the audit work. This idea is supported by

Rahmadani et al., (2023); but other research W. G. Putri, (2023) suggests that the advantages of using information technology may not always be clear if the systems become too complicated.

H8: Firm Size moderates the impact of Information Technology on Audit Report Lag

Conceptual Framework

Based on the preceding discussion of the research background, theoretical perspectives, and supporting arguments, the conceptual framework illustrates the associations through which the independent variables influence the dependent variable. In particular, it examines the effect of audit-related factors and information technology on audit report lag, with firm size serving as a moderating variable. This conceptual model is described as follows:

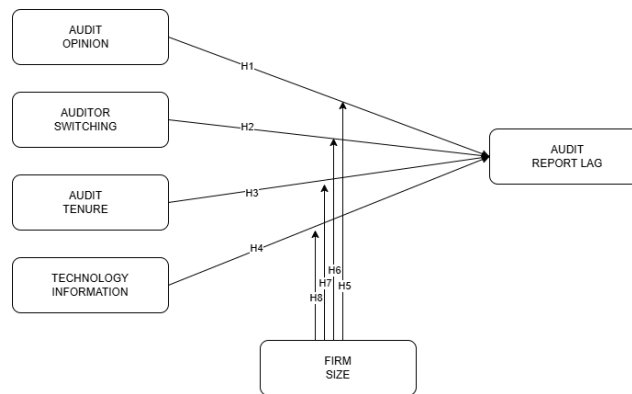


Figure 2. Conceptual Framework

METHOD

Table 1 outlines the purposive sampling criteria applied to select energy sector companies listed on the Indonesia Stock Exchange (IDX) for the 2020-2024 research period. The initial population consisted of 91 companies each year. The sample was refined by excluding companies that 1) Energy sector companies listed on the Indonesia Stock Exchange (IDX), 2) Companies that have never experienced delays in submitting annual financial statements, and 3) Companies that did not publish audited financial statements ending December 31. The final eligible samples varied annually, resulting in a total of 100 company-year observations for data analysis. The following criteria were applied in the sampling process:

Table 1. Sample Selection Criteria

Sample Criteria	Companies
Companies in the Energy Sector whose shares are listed on the Indonesia Stock Exchange (IDX) for the 2020–2024 period	91
Companies that have never experienced delays in the submission of financial reports for the 2020–2024 period	-69
Companies that have not published the financial statements ending December 31, which have been fully audited for the 2020–2024 period	-2
Final sample size	20
Observation year	5
Total research sample (20 x 5)	100

Source: Author's analysis (2025)

This research uses secondary data from the official website of the Indonesian Stock Exchange and the websites of the companies involved. The data was collected through documentation methods, using sources like annual reports that are available on both the IDX website and the companies' official portals. Once the data were gathered, they were calculated and processed to determine the values of the variables being studied. The research uses several data analysis methods, including descriptive statistics, testing for multicollinearity, moderated regression analysis, and hypothesis testing with SPSS version 25. These techniques are used to look at how Audit Opinion, Auditor Switching, Audit Tenure, and Information Technology affect Audit Report Lag. The research also considers Firm Size as a moderating variable, and it focuses on energy sector companies listed on the Indonesia Stock Exchange between 2020 and 2024. The data analysis and hypothesis testing procedures involve several stages: descriptive statistics, classical assumption tests (normality, multicollinearity, autocorrelation, and heteroscedasticity), followed by moderated regression analysis, partial testing (t-test), and coefficient of determination testing (R^2). The moderated regression analysis model can be expressed as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 (X_1 * Z) + \beta_6 (X_2 * Z) + \beta_7 (X_3 * Z) + \beta_8 (X_4 * Z) + \varepsilon$$

Variable Notation:

Y	= Audit Report Lag (ARL)
X1	= Audit Opinion (AO)
X2	= Auditor Switching (AS)
X3	= Audit Tenure (AT)
X4	= Information Technology (IT)
α	= Constant Coefficient
β_1 - β_8	= Regression Coefficients
Z	= Firm Size (FS)
ε	= Error Term

Variable Measurement

Operational definition refers to the explanation of how research variables are defined and measured in practice. It delineates the characteristics of research objects into observable elements that enable concepts to be quantified and operationalized within the research framework. Operational definitions provide precise guidelines for measuring variables, ensuring consistency and replicability in data collection and analysis processes.

Table 2. Variable Measurement

Variable	Operational Definition	Measurement Scale	Source
Audit Opinion	This assesses the disparity in information between management and auditors. Modified audit opinions serve as an indicator of elevated audit risk, consequently leading to an extended audit report lag.	Dummy 1 = Unqualified opinion 0 = Qualified ; Adverse ; Disclaimer of Opinion	(Uly & Julianto, 2022)

Auditor Switching	This creates a learning phase for new auditors as they adapt to the client's workflow, widening the knowledge gap and increasing the time required to finally complete the audit report.	Dummy 1 = Auditor switching occurred 0 = No auditor switching	(Puspitasari & Sudjiman, 2022)
Audit Tenure	A longer time spent on an audit helps reduce the difference in knowledge between the auditor and the client, as the auditor becomes more familiar with operational activities of the client. This makes the audit process more efficient and helps decrease the duration required to complete the audit report.	Measured in years	(Saputri, 2025)
Information Technology	The utilization of information technology decreases information asymmetry between management and auditors by accelerating data access and verification, thus reducing the audit report lag.	Dummy 1 = Presence of IT Division/ERP System 0 = No IT Division/ERP System	(Birrohmah, 2019; Pratikno, 2022)
Firm Size	Representing both organizational intricacy and informational clarity, this variable moderates how audit-related factors influence report delay. It does so by shaping the extent of the information gap between company management and the external audit team.	Natural logarithm of total assets	(Ningsih & Shanti, 2025; Purwantoro & Suhartono, 2023)
Audit Report Lag	The metric captures the elapsed period between the conclusion of a fiscal year and the audit report's release date. It functions as an indicator of financial reporting promptness, a quality affected by both the degree of information imbalance and the efficiency of the audit engagement.	Number of days between fiscal year-end and audit report date	(Al., 2024; Mardjono, 2022)

Source: Author's analysis (2025)

RESULTS AND DISCUSSION

Descriptive Statistical Analysis Results

Table 3. Descriptive Statistical Analysis Results

	N	Minimum	Maximum	Mean	Std. Deviation
Audit Opinion	100	0	1	.79	.409
Auditor Switching	100	0	1	.70	.461
Audit Tenure	100	1	5	1.45	.821
Technology Information	100	0	1	.44	.499

Audit Report Lag	100	53	766	132.41	90.883
Valid N (listwise)	100				

Source: Author's analysis (2025)

Table 3 presents the descriptive statistics for 100 observations. The mean value of Audit Opinion is 0.79 (SD = 0.409), indicating that the majority of firms in the sample received unqualified audit opinions. Auditor Switching shows a mean of 0.70 (SD = 0.461), suggesting a relatively high incidence of auditor changes among the observed firms. Audit Tenure has an average value of 1.45 years (SD = 0.821), reflecting generally short auditor–client engagement periods. The mean of Information Technology adoption is 0.44 (SD = 0.499), implying that less than half of the firms have implemented information technology–based audit support systems. Furthermore, Audit Report Lag ranges from 53 to 766 days, with an average of 132.41 days (SD = 90.883), indicating substantial variability in the timeliness of audit reporting. Overall, these descriptive statistics provide an initial overview of the data distribution and serve as a foundation for subsequent regression analysis.

Classical Assumption Test Results

In the present analysis, the required classical linear regression assumptions were evaluated through an examination of the association linking the dependent variable to the independent variables.

Normality test results

Table 4. Normality test results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.04705764
Most Extreme Differences	Absolute	.087
	Positive	.087
	Negative	-.087
Test Statistic		.087
Asymp. Sig. (2-tailed)		.057 ^c

Source: Author's analysis (2025)

As shown in the table, the Asymptotic Significance (2-tailed) value is 0.057, which exceeds the conventional alpha threshold of 0.05. Therefore, the null hypothesis for normality is retained, leading to the conclusion that the data in this study follow a normal distribution.

Multicollinearity Test Results

Table 5. Multicollinearity Test Results

		Collinearity Statistics	
Model		Tolerance	VIF
1	Audit Opinion	.956	1.046
	Auditor Switching	.281	3.564
	Audit Tenure	.281	3.562
	Technology Information	.904	1.106

a. Dependent Variable: Audit Report Lag

Source: Author's analysis (2025)

The multicollinearity test results presented in Table 5 indicate that all independent variables—Audit Opinion, Auditor Switching, Audit Tenure, and Information Technology—exhibit tolerance values above the critical threshold of 0.10 and variance inflation factor (VIF) values well below the cut-off value of 10. Specifically, Audit Opinion shows a tolerance value of 0.956 with a VIF of 1.046, suggesting a very low level of collinearity. Auditor Switching records a tolerance of 0.281 and a VIF of 3.564, while Audit Tenure demonstrates a similar tolerance level of 0.281 with a VIF of 3.562, indicating moderate but acceptable correlations among these variables. Furthermore, Information Technology exhibits a tolerance value of 0.904 and a VIF of 1.106, confirming minimal multicollinearity. Overall, these results confirm that the regression model is free from multicollinearity problems, thereby satisfying the classical linear regression assumption and supporting the reliability and validity of the estimated regression coefficients..

Autocorrelation Test Results

Table 6. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.355 ^a	.126	.089	86.727	2.088

Source: Author's analysis (2025)

According to the Durbin–Watson value of 2.088, it can be concluded that there is no indication of autocorrelation in the regression model. This value falls within the acceptable range of 1.7582 to 2.2418, suggesting that the residuals are independent from one another. Therefore, the regression model meets the autocorrelation assumption and can be considered reliable for further analysis..

Heteroscedasticity Test Results

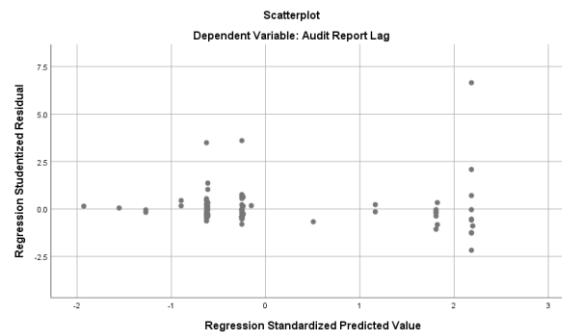


Figure 2. Heteroscedasticity Test Results

Looking at the scatterplot above, the points are scattered randomly both above and below the zero line without forming any obvious pattern. This shows that the data does not have heteroscedasticity. So, the regression model satisfies the assumption of homoscedasticity, which means the spread of the residuals stays the same across all predicted values.

Moderated Regression Analysis (MRA)

Table 7. Moderated Regression Analysis Result

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	214.290	84.493	2.536	.013
	Audit Opinion	-83.958	26.013	-.378	.002
	Auditor Switching	1.092	49.718	.006	.983
	Audit Tenure	-6.132	35.166	-.055	.862
	Technology Information	-11.966	21.333	-.066	.576
	Firm Size	7.450E-12	.000	3.701	.493
	X1Z	2.213E-13	.000	.060	.943
	X2Z	-4.084E-12	.000	-1.979	.594
	X3Z	-3.504E-12	.000	-1.894	.642
	X4Z	-2.091E-13	.000	-.057	.946

a. Dependent Variable: Audit Report Lag

Source: Author's analysis (2025)

The output of the Moderated Regression Analysis (MRA) suggests the following moderated regression model:

$$Y = 214.290 - 83.958X_1 + 1.092X_2 - 6.132X_3 - 11.966X_4 + 2.213E-13 (X_1 \cdot Z) - 4.084E-12 (X_2 \cdot Z) - 3.504E-12 (X_3 \cdot Z) - 2.091E-13 (X_4 \cdot Z) + \epsilon$$

The intercept of 214.290 days represents the estimated Audit Report Lag when all independent and moderating variables are zero. The analysis reveals that only Audit Opinion (X_1) has a statistically significant impact, showing a negative association with Audit Report Lag (coefficient: -83.958). This indicates that a more favorable opinion is associated with a shorter reporting delay. The other independent variables—Auditor Switching (X_2), Audit Tenure (X_3), and Information Technology (X_4)—do not show statistically significant impacts, meaning their measured associations with report lag are negligible in this model. Furthermore, Firm Size (Z) does not function as a moderating variable. Its direct impact and all interaction terms with the independent variables (X_1Z , X_2Z , X_3Z , X_4Z) are statistically insignificant. Therefore, Firm Size neither strengthens nor weakens the associations between the predictors and Audit Report Lag.

Hypothesis Test Results

T-Test (Partial Test) Results

Table 8. T-Test (Partial Test) Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	214.290	84.493		2.536	.013
	Audit Opinion	-83.958	26.013	-.378	-3.228	.002
	Auditor Switching	1.092	49.718	.006	.022	.983
	Audit Tenure	-6.132	35.166	-.055	-.174	.862
	Technology Information	-11.966	21.333	-.066	-.561	.576
	Firm Size	7.450E-12	.000	3.701	.493	.623
	X1Z	2.213E-13	.000	.060	.071	.943
	X2Z	-4.084E-12	.000	-1.979	-.534	.594
	X3Z	-3.504E-12	.000	-1.894	-.466	.642
	X4Z	-2.091E-13	.000	-.057	-.068	.946

a. Dependent Variable: Audit Report Lag

Source: Author's analysis (2025)

According to the comprehensive statistical results, the findings of this research reveal a distinct pattern regarding the factors influencing Audit Report Lag. Among all the independent variables tested, only Audit Opinion (X_1) demonstrates a statistically significant and negative impact on Audit Report Lag, as confirmed by its p-value below the 0.05 threshold and a corresponding t-statistic exceeding the critical value. In contrast, Auditor Switching (X_2), Audit Tenure (X_3), and Technology Information (X_4) show no statistically significant influence, with their p-values well above 0.05 and t-statistics falling within the non-significant range. Furthermore, the analysis of interaction impacts indicates that Firm Size does not function as a moderating variable in this model. All interaction terms between Firm Size and the independent variables—namely X_1Z , X_2Z , X_3Z , and X_4Z —are statistically insignificant. This consistent lack of significance across all

moderation tests conclusively shows that Firm Size neither strengthens nor weakens the associations between the predictors and Audit Report Lag in the context of this research.

Coefficient of Determination Test Results

Table 9. Determination Test Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.367 ^a	.135	.048	88.658

Source: Author’s analysis (2025)

According to the results of the goodness-of-fit test, the Adjusted R Square value of 0.048 indicates that the independent and moderating variables included in the model jointly explain only 4.8% of the variation in Audit Report Lag, while the remaining 95.2% is attributable to other factors not captured in this study. This relatively small Adjusted R Square value explains why only one research hypothesis is empirically supported. Nevertheless, this level of explanatory power remains theoretically acceptable, particularly in audit and financial reporting research, where Audit Report Lag is influenced by a wide range of institutional, organizational, and contextual factors that are not easily accommodated within a single empirical model. Accordingly, the low Adjusted R Square does not necessarily reflect a methodological deficiency but rather underscores the inherently complex and multifaceted nature of Audit Report Lag.

Research Findings Discussion

The findings of this research reveal how audit-related factors and information technology influence audit report lag (ARL) in Indonesian energy sector firms, interpreted within the framework of Agency Theory and the broader concept of ethical and sustainable accounting practices. The results are discussed below for each hypothesis.

H1: The Impact of Audit Opinion on Audit Report Lag

The regression results demonstrate that Audit Opinion has a significant negative Impact on Audit Report Lag ($\beta = -83.958$; $p = 0.002$). This finding aligns with the significant associations reported by (Abbet, 2025; Karima et al., 2025; Oktavia, 2025; Rahmadani et al., 2023). From an Agency Theory perspective, a favorable audit opinion may signal lower audit risk and reduced information asymmetry, allowing the audit process to conclude more efficiently. This significant result suggests that the type of opinion issued acts as a powerful communicative signal that directly influences the timeline of audit completion in this context(Abbet, 2025).

H2: The Impact of Auditor Switching on Audit Report Lag

Contrary to the initial discussion, the analysis reveals that Auditor Switching doesn’t exert a statistically significant Impact on Audit Report Lag ($\beta = 1.092$; $p = 0.983$). This outcome supports the findings of Puspitasari & Sudjiman,(2022), who reported an insignificant relationship. According to Agency Theory, while switching auditors may introduce a short-term learning curve, this model indicates that such a change does not materially prolong the audit reporting timeline

for the firms in this sample(Saputri, 2025). The result implies that transition processes or client-specific factors may mitigate potential delays.

H3: The Impact of Audit Tenure on Audit Report Lag

The results indicate that Audit Tenure has an insignificant Impact on Audit Report Lag ($\beta = -6.132$; $p = 0.862$). This supports the conclusion of (W. A. Putri & Kusumawati, 2025). While Agency Theory posits that longer tenure increases auditor familiarity and potential efficiency, the lack of significance here suggests that, in this setting, the duration of the auditor-client relationship is not a primary driver of reporting speed. Other factors, such as audit complexity or internal controls, may play more substantial roles(Sobhan et al., 2025).

H4: The Impact of Information Technology on Audit Report Lag

The analysis shows that Information Technology doesn't exert a statistically significant Impact on Audit Report Lag ($\beta = -11.966$; $p = 0.576$). This finding aligns with studies by (Bani-Khaled & Pinho, 2024; W. G. Putri, 2023). Although Agency Theory suggests that IT adoption should reduce information asymmetry and enhance process efficiency, the insignificant result indicates that, for these firms, the implementation of information technology has not yet translated into a statistically measurable reduction in audit report lags(Scarton et al., 2025). This may point to suboptimal utilization, integration challenges, or that benefits are offset by other procedural complexities(Rajabalizadeh & Schadewitz, 2025).

H5 : The Moderating Impact of Firm Size on Audit Opinion and Audit Report Lag

The results from the research show that the size of a firm does not affect how audit opinions influence the duration required to issue an audit report. This is because the interaction between audit opinion and firm size was not statistically significant. This means that the size of a firm does not change how much audit opinions impact the timing of audit reports. From the perspective of Agency Theory, even though bigger companies are usually thought to have better internal systems and more resources to handle audit risks, these benefits don't seem to reduce the impact of audit opinions on how quickly audit reports are issued in the companies studied. This matches what Asmedi, (2022); Salsabilla et al., (2023) found, who said that just being a larger firm doesn't automatically mean audits are more efficient. The research suggests that the influence of audit opinions on report timing is more about the structure and outcomes of the audit process, rather than the size of the firm.

H6: The Moderating Impact of Firm Size on Auditor Switching and Audit Report Lag

The analysis shows that the size of a firm does not affect how switching auditors influences the duration required to complete an audit report. The connection between auditor changes and the delay in audit reports is not significantly affected by firm size, as the interaction impact is not statistically meaningful. This means that having more resources in larger companies doesn't really help or hurt the duration required to finish an audit after switching auditors. According to Agency Theory, large firms are expected to have better systems and records, making it easier to switch auditors. However, the findings show that these benefits do not significantly impact how quickly an audit is completed. This result matches previous research that shows the impact of switching auditors depends on the situation and isn't always linked to firm size(Maharsa et al., 2021). So, in

the energy sector, changing auditors doesn't create a bigger risk of delays in audit reports According to how big the firm is.

H7: The Moderating Impact Of Firm Size On Audit Tenure And Audit Report Lag

The results of the regression analysis show that the size of a firm does not affect the length of time required to complete an audit report According to how long the auditor has been working with the firm. This is because the interaction term, which would show this impact, is not significant. According to Agency Theory, having an auditor for a longer time should lead to more efficiency, especially in bigger and more complicated companies. However, this expected impact was not found in the data. The results suggest that having more experience does not make the audit process faster, regardless of the firm's size. This supports the idea that the benefits of longer audit tenure might be canceled out by the added complexity in larger firms, making firm size irrelevant in determining how long the audit takes (Serial et al., 2020). Therefore, the duration of an auditor's engagement works with a firm does not have a different impact on the audit report delay According to the firm's size in this research.

H8: The Moderating Impact of Firm Size on Information Technology and Audit Report Lag

The results show that the size of a firm does not affect how information technology influences the duration required to prepare an audit report. The connection between using information technology and firm size is not statistically significant. According to Agency Theory, bigger companies should be better at using technology to reduce information gaps and make audits more efficient. However, the research shows that being a larger firm does not make these technology benefits stronger. This matches what Bani-Khaled & Pinho, (2024); W. G. Putri, (2023) found, which is that how well technology is used and integrated into the audit process matters more than the size of the firm. The conclusion is that just having technology, no matter how big the firm is, isn't enough to greatly improve how quickly audits are completed.

CONCLUSIONS AND SUGGESTIONS

Conclusion

According to the empirical analysis conducted, this research concludes that Audit Opinion is the sole factor among the tested variables that exerts a significant influence on Audit Report Lag within the sampled Indonesian energy sector companies. In particular, the provision of a modified audit opinion is linked to an extended duration of the audit completion process. This finding aligns with the agency theory perspective, where a qualified opinion signals heightened audit risk and information asymmetry, necessitating extended verification procedures. In contrast, the other independent variables—Auditor Switching, Audit Tenure, and Information Technology implementation—demonstrate no statistically significant impact on the timeliness of audit reporting. Furthermore, Firm Size does not function as a significant moderating variable in any of the examined associations, indicating that organizational scale does not alter the impact of the core audit factors or IT adoption on audit report lag within this specific context.

Suggestion

1. **For Future Research:** Include variables like operational complexity and internal control Impactiveness. Consider using panel data or qualitative methods.
2. **For Practice (Management/Auditors):** Focus on improving financial reporting quality year-round to secure favorable audit opinions and indirectly reduce ARL. Strategically implement advanced audit technologies rather than just basic IT adoption.

3. **For Regulators/Audit Committees:** Recognize that audit opinion is a key efficiency indicator. Oversight should emphasize processes that lead to timely, unmodified opinions.

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