International Journal of Economics and Management Research

E-ISSN: 2830-2508
P-ISSN: 2830-2664

(Research/Review) Article

The Effect of Key Audit Matters, Auditor Workload, and Operational Complexity on Audit Report Lag

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Abstract: This study examines the effect of Key Audit Matters (KAM), auditor workload, and operational complexity on audit report lag in companies listed on the Indonesia Stock Exchange during the 2022–2024 period. Audit timeliness is an important indicator of financial reporting quality and determines the usefulness of accounting information for stakeholders. The research uses secondary data obtained from the official websites of the Indonesia Stock Exchange, the Financial Services Authority, and the Indonesian Institute of Public Accountants. Samples were selected using a purposive sampling technique, resulting in 55 companies that met the predetermined criteria. Data were analyzed using multiple linear regression with the assistance of SPSS version 30. The results show that Key Audit Matters (KAM) do not have a significant effect on audit report lag, indicating that the number of KAM disclosures does not influence audit completion time. Auditor workload has a negative effect on audit report lag, suggesting that higher workloads are associated with shorter reporting delays. In contrast, operational complexity has a positive effect on audit report lag, implying that companies with more complex operations require more extensive audit procedures, which lengthen audit completion time. Overall, operational complexity plays a more dominant role in determining audit timeliness than KAM disclosure and auditor workload.

Keywords: Audit Report Lag; Audit Timeliness; Auditor Workload; Key Audit Matters; Operational Complexity.

1. Introduction

Timeliness of audit completion is one of the most important factors in ensuring the availability of relevant audited financial report information to stakeholders (Amrizal & Damayanti, 2022). Based on Financial Services Authority Regulation No. 29/POJK.04/2016, companies are required to publish annual reports containing audited financial statements no later than four months after the end of the fiscal year. A lengthy audit process that falls behind schedule may result in delays in the issuance of the audit report.

Audit report lag occur when the auditor takes longer than scheduled to complete the audit, resulting in a longer gap between the end of the reporting period and the date the audit report is issued. This period plays a role in determining the availability of audited financial reports to the public, as the financial reports can be published once the audit process has been completed (Pratama & Lusiani, 2024).

According to data from the Indonesia Stock Exchange (IDX), a number of companies experienced delays in submitting audited financial reports between 2022 and 2024. In 2022, there were 61 companies, 129 in 2023, and 128 in 2024. 2023 was the year with the highest number of companies experiencing late financial reports. For a more detailed overview, companies experiencing late submissions of audited financial reports can be classified by sector, as shown in Figure 1.

Received: August 21, 2025
Revised: October 15, 2025
Accepted: December 18, 2025
Online Available: February 9, 2026
Curr Ver: February 9, 2026

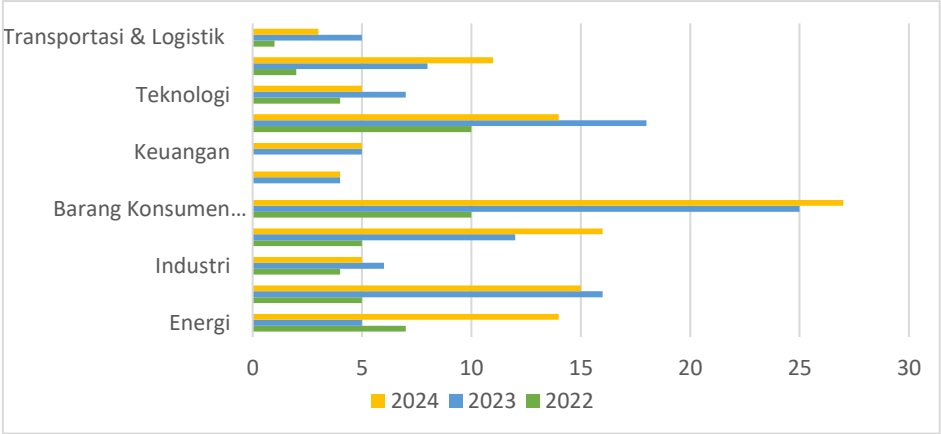

Figure 1. Industrial Sectors that are late in submitting Audited Financial Reports
Source: IDX yearly statistics, 2022-2024.

Figure 1 shows that the cyclical consumer sector is the sector with the largest number of companies experiencing delays in submitting financial reports, reflecting operational dynamics that make the audit process take longer. Just below it is the property and real estate sector, which experienced significant delays, indicating that this sector has business characteristics and transaction complexity that can prolong the financial report audit process.

Based on the resource-based view theory explains that every organization relies on internal resource management to achieve efficient performance (Barney et al., 2001). This framework emphasizes that resource capacity limitations, including the auditor's professional resources, can impact the effectiveness of the audit process. When auditors are faced with a high workload, such as increased audit demands, particularly when they identify and assess companies with high levels of operational complexity, this can significantly increase the risks that must be analyzed, leading to audit requirements exceeding available resource capacity. Consequently, audit completion times become longer.

This explanation is reinforced by the Architecture of Complexity theory clarifies the reasons behind this condition. This theory explains that the diversity of activities, the number of operational units, and the relationships between subsystems create a complex organizational structure (Simon et al., 1962). This complexity can increase the volume of information and processes that auditors must navigate. The more complex a company's operations, the longer it will take to complete an audit.

Audit reports lag can lead to negative perceptions from stakeholders and regulators regarding the company's financial, operational and governance conditions, as audited financial reports can only be published after the audit process is completed (Widiana Putra et al., 2021). This condition not only affects investor confidence and the company's credibility, but can also reflect the efficiency and effectiveness of the audit process.

In researchAbernathy et al. (2017) the determining factors for audit report lag can be divided into two broad categories, namely company characteristics and auditor characteristics. These findings encourage researchers to identifyfactors that influence the in audit report lag, but the results obtained have not shown any inconsistencies. Alawadhi et al. (2024)in showing that the more key audit matters are disclosed, the longer the time required to complete the audit. Similar findings were produced by Ciğer et al. (2025) Key audit matters have a positive influence on increasing audit report lag, this occurs because the large number of key audit matters will increase the additional efforts that auditors must make, both in terms of procedures and in preparing reports. These findings align with the Resource Based View, suggesting that audit performance depends on the availability and capability of professional resources. The disclosure of Key Audit Matters increases audit resource demands, while auditor capacity remains limited, as their communication involves identification, evaluation, and reporting stages to ensure materiality and relevance. Therefore, key audit matters tend to have a positive influence on reporting delays. Perdana & Raharja, (2024), Dewi, (2025), and Rahaman & Bhuiyan, (2025) found that Key Audit Matters do not affect audit report lag, as their disclosure merely explains significant audit work already performed. Kumaunang et al., (2024) and Anggia et al., (2025) similarly concluded that Key Audit Matters do not influence

audit delays because they represent communication of significant areas that were already planned and executed during the audit process.

In addition, auditor workloads still result in research inconsistencies regarding audit report lag. Wiedjaja & Eriandani, (2021)and Singh et al. (2022)shows that auditor workload has a positive effect on audit report lag. Both studies explain that auditors who have a heavy workload, such as a large number of clients, will exceed their maximum limit in completing audit reports on time. this finding supports the Resource Based View, as high workload may reduce efficiency and increase time pressure. On the other hand, the results of the study Meilinda, (2020) and Utami & Rani, (2025)shows a negative influence between auditor workload and audit report lag, because auditors who carry out good initial audit planning are able to increase time efficiency and reduce the risk of reporting delays.

Furthermore, testing the complexity of operations against audit report lag has not shown consistent results. This level of complexity, such as the number of operating segments, business lines, and so on, can potentially pose a risk of material misstatement in financial statements, which is in accordance with the theory. *The Architecture of Complexity* which explains that the companyd oes not stand as a simple unit, but is composed of many parts that work at different levels. This condition requires auditors to carry out more in-depth audit procedures aimed at ensuring the reliability of the information presented, which ultimately has the potential to extend the audit report lag. Khan et al., (2023) in his research, he explained that operational complexity significantly influences audit report lag, as auditors tend to exert more effort in complex companies. Nugraha & Herawaty, (2024) shows that the complexity of operations has a positive effect on the audit report lag, because the more complex the operation, the more thorough, in-depth the auditor's examination of financial reports becomes and requires more time.However, different results were found in the study.H. Astuti, (2021)that the complexity of operations has a negative impact on the audit report lag. Because companies with complex structures generally have better information systems and internal controls and tend to be more mature in reporting management, so the financial consolidation process can be carried out effectively and efficiently. Research results Balqis & Erinos, (2023)shows the same results that operational complexity does not affect the audit report lag because companies with high levels of complexity tend to appoint highly reputable and experienced auditors, thus reducing the possibility of reporting delays.

Several previous studies have shown inconsistent empirical evidence for each variable. This situation necessitates further in-depth research into the factors that contribute to audit report lag. This study uses the property & real estate sector as the object of observation. This sector was chosen because companies have a high level of complexity due to the presence of subsidiaries, long-term projects, and a variety of projects that require more in-depth audit examinations. This complexity makes audit delays in this sector more relevant for analysis. Furthermore, this sector is highly susceptible to external factors such as government regulations and the national and global economy because this sector is affected by economic growth, inflation rates, and so on. In accordance with the explanation above, the study will be conducted under the title "The Influence of Key Audit Matters, Auditor Workload, and Operational Complexity on Audit Report Lag (Study of Property & Real Estate Companies Listed on the Indonesia Stock Exchange 2022-2024)".

2. Literature Review

Resource-Based View Theory

The resource-based view theory was first introduced by Wernerfelt (1984) and further developed by Barney et al. (2001). This theory views a company as a collection of tangible and intangible resources managed to carry out operational activities. A company's excellence and performance are determined by how effectively these resources are allocated and utilized (Barney et al., 2001).

In the context of auditing, the resource-based view theory explains that the audit process is influenced not only by external conditions but also by the auditor's internal resource limitations, such as knowledge, experience, professional judgment, and analytical skills (Abernathy et al., 2017). These resources are intangible and have limited capacity, so auditor effectiveness is greatly influenced by the level of audit demands faced.

Key audit matters represent areas of the financial statements that pose significant risks and require greater allocation of the auditor's professional resources. Auditors must allocate additional time and effort to identify, evaluate, and report key audit matters to the public (Aulia et al., 2024). The more complex the key audit matter, the greater the auditor's resource requirements. When these demands exceed the capacity of available resources, the audit process can be lengthened and delays in the audit report can occur.

The increase in the number of key audit matters also impacts auditor workload. Workload reflects the extent to which auditor resources are utilized to meet audit demands. During busy periods, auditors face pressure to complete audits on time with a high volume of clients, which can compromise resource capacity and potentially extend audit completion times (Aulia et al., 2024).

The Architecture of Complexity Theory

The Architecture of Complexity theory was proposed by Simon et al. (1962), which states that organizations are multilevel systems composed of various subsystems with varying levels of interaction. A company does not exist as a single, simple entity, but rather consists of many operational units operating at different levels.

The first principle of this theory explains that relationships between components are strong within subsystems and weak between subsystems. This structure describes a company with many operating segments, business units, and varied activities as having a layered organizational structure (Simon et al., 1962). This condition increases operational complexity because auditors must understand the relationships between units and their impact on financial reporting and internal control.

The second principle asserts that hierarchy allows complexity to grow and function. The more operational levels and the greater the variety of activities, the greater the volume of information and processes the auditor must analyze (Simon et al., 1962). This increased complexity requires auditors to perform broader and more in-depth audit procedures, thus resulting in longer audit durations and increased delays in audit reports.

Audit Report Lag

Audit report lag is the time required for the external auditor to complete the audit process until the audit report is signed. Knechel & Payne (2001) in Agustina & Jaeni (2022) state that audit report lag is the time required for the external auditor to complete the field audit before the audit report date.

Nutrisya & Ratmono (2022) define audit report lag as the time interval calculated from the end of a company's fiscal year to the date the audited financial statements are signed. Similar definitions are put forward by Bagaskara et al. (2023) and Anrizal et al. (2024), who emphasize that audit report lag reflects the efficiency and effectiveness of the audit process.

Audit report delay is generally measured using the proxy difference between the fiscal year-end date and the date the audit report is signed. This measure is widely used in previous research because it reflects the length of the audit process without management intervention (Balqis & Erinos, 2023; Rahaman & Bhuiyan, 2025; April et al., 2025).

Key Audit Matters

Key audit matters are the most significant aspects encountered by auditors during the financial statement audit process and require special attention based on the auditor's professional judgment (Aulia et al., 2022). Key audit matters reflect high-risk areas that explain how auditors address significant issues during the audit process (Pratama & Lusiani, 2024; Anggia et al., 2025).

The implementation of key audit matters is required based on OJK Regulation No. 30 of 2023 and is in line with Auditing Standard (SA) 701 which has been in effect since January 1, 2022. Disclosure of key audit matters aims to increase audit transparency, reduce information asymmetry, and encourage better corporate governance (Alqam et al., 2021).

Key audit matters generally involve significant accounting estimates and areas requiring a high degree of professional judgment, increasing the complexity and duration of the audit (Velte & Issa, 2019). The more complex the issues raised, the more intensive the audit procedures and communications required, potentially extending the audit completion time.

Measurement of key audit matters is carried out through the number of key audit matters disclosed as well as the number of words in the description of the key audit matters, which reflects the extent of the auditor's explanation of high-risk areas (Nugraha & Herawaty, 2024; Rahaman & Bhuiyan, 2025).

Auditor Workload

Auditor workload describes the number of tasks, volume of work, and responsibilities an auditor must complete within a given period (April et al., 2025). This concept is known as audit capacity stress, which is a condition where an auditor faces pressure due to capacity constraints and a high number of clients (Setiawan & Fitriany, 2011).

Auditors' workloads increase during busy seasons, when they must complete numerous assignments under tight deadlines. This can reduce audit efficiency and extend audit completion times.

Auditor workload is measured using several approaches, including the busy season, the ratio of clients to auditors, and the ratio of clients to KAP partners (Marlina, 2025; Aurumita & Laksito, 2025; Utami & Rani, 2025). The higher the auditor's workload, the greater the potential for audit report lag.

Operation Complexity

Operational complexity describes the level of complexity of a company's activities resulting from the separation of work into various departments, business segments, and subsidiaries (Wildan Bani Adam et al., 2022; Siti et al., 2022). This separation aims to improve management effectiveness, but at the same time increases the complexity of coordination between units (Watini et al., 2024).

Operational complexity is measured by the number of subsidiaries, the number of business segments, and the variety of a company's operational activities (H. Astuti, 2021; Napisah & Soeparyono, 2024; Loughran & McDonald, 2019). The more complex a company's operations, the broader the audit scope the auditor must perform.

Companies with high levels of operational complexity tend to have longer audit processes because auditors must review transactions and consolidated financial statements from various operational units. This increases the audit duration and potentially leads to delays in audit reports (H. Astuti, 2021).

3. Research and Method

This study uses a quantitative approach with a causal-comparative (ex post facto) design to analyze the influence of key audit matters, auditor workload, and operational complexity on audit report lag. The research subjects were property and real estate companies listed on the Indonesia Stock Exchange for the 2022–2024 period. The study population included all companies in the sector, with purposive sampling based on the availability of complete annual reports and independent auditor reports during the study period.

The data used are secondary data obtained through documentation methods from annual reports, independent auditor reports, and official publications of the Indonesia Stock Exchange. The dependent variable in this study is the audit report lag, measured by the time difference between the end of the fiscal year and the date the audit report is signed. Independent variables include key audit matters, measured by the number of key audit matters disclosed, auditor workload, measured by the ratio of the number of clients to the number of public accountants in a Public Accounting Firm, and operational complexity, measured by the number of the company's business segments.

Data analysis was performed using multiple linear regression analysis with the aid of SPSS software. The analysis stages included descriptive statistics, classical assumption tests, and hypothesis testing using simultaneous tests, partial tests, and coefficients of determination to determine the effect of independent variables on audit report lag.

4. Results and Discussion

Research result

Table 1. Research Sample Selection List.

Source: Secondary Data Processed 2025

Research Sample Companies	Number of Companies	Number of Observations
Property & real estate sector companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period	92	276
The company did not experience delisting during the 2022–2024 research period.	92	276
Companies whose fiscal year does not ends on December 31	(1)	(3)
The Company did not publishes annual reports and independent auditors' reports in a complete and consistent manner during the 2022–2024 period.	(17)	(51)
Public Accounting Firm information and data on the number of public accountants cannot be accessed and verified through official sources (OJK and the Indonesian Institute of Public Accountants).	(19)	(57)
Number of companies that meet the research criteria and are used as research samples	55	165

Based on table 1, companies that meet the research criteria and areA sample of 55 companies was selected from 2022 to 2024. The research data was obtained from the official website of the Indonesia Stock Exchange.www.idx.co.id, Financial Services Authority ojk.go.id, Indonesian Institute of Public Accountants iapi.or.id and each company in the property real estate sector. During the observation period, no companies in the sector experienced delisting, but there was one company that did not have a fiscal year ending on December 31st. In addition, as many as 17 companies did not report complete financial statements and independent auditor reports during the study period, this was due to the presence of newly listed companies. As many as 19 companies did not have accessible information regarding the number of public accountants at the Public Accounting Firm (KAP). Accordingly, a total of 55 companies met the research sample criteria, resulting in 165 observations over the three-year observation period.

Data Description and/or Research Overview

Table 2. Descriptive Statistics Results.

Source: Results of data processing using SPSS 30, 2026.

	n	Minimum	Maximum	Mean	Standard Deviation
Key Audit Matters	165	0	3	1,22	0,519
Auditor Workload	165	0,02	1,00	0,2702	0,18904
Operation Complexity	165	0	5	2,48	1,198
Audit Report Lag	165	41	249	87,93	22,032

Based on Table 2, descriptive statistics show that the key audit matter variable has a minimum value of 0 and a maximum of 3, with a mean value of 1.22 and a standard deviation of 0.519. The minimum value indicates that there are companies that do not disclose key audit matters, especially at the beginning of the implementation of the provisions of SA 701, while the maximum value indicates that auditors face several high-risk audit areas in one period. A standard deviation value smaller than the mean indicates that the variation in disclosure of key audit matters between companies is relatively low.

The auditor workload variable has a minimum value of 0.02 and a maximum of 1.00, with a mean value of 0.2702 and a standard deviation of 0.18904. These results indicate that during the observation period, auditor workload in the sample companies was at a moderate level and was not concentrated at extreme values. A standard deviation smaller than the mean value indicates that variations in auditor workload were relatively homogeneous across companies in the study sample.

The operational complexity variable has a minimum value of 0 and a maximum of 5, with a mean of 2.48 and a standard deviation of 1.198. The minimum value reflects companies with simple operational structures without business segmentation, while the maximum value indicates companies with a high level of operational diversification and complexity. The relatively concentrated distribution of data around the mean indicates that most companies have a medium level of operational complexity.

The audit report lag variable has a minimum value of 41 days and a maximum of 249 days, with an average of 87.93 days and a standard deviation of 22.032. These results indicate that in general, auditors need approximately three months to complete the audit of the financial statements of companies in the property & real estate sector. The standard deviation value is smaller than the average, indicating that the level of audit report lag between companies is relatively controlled, although there are differences in the speed of audit completion. Results of Analysis and Hypothesis Testing.

Classical assumptions

Normality Test

Table 3. Normality Test Results.

Source: Results of data processing using SPSS 30, 2026.

N	Test-Statistic	*Monte Carlo Sig. (2-tailed)*	Results
165	0,285	0,000	Abnormal

Based on the test results in table 3 The results of the normality test on 165 observations show an Unstandardized residual value of 0.285 and a Monte Carlo Sig. (2-tailed) of 0.000, which means that the value is smaller than the significance level of 0.05. So it can be concluded that the regression model is not normally distributed. Nevertheless, linear regression analysis remains appropriate based on the Central Limit Theorem, which states that when the number of observations exceeds 30 (n > 30), the sampling distribution of the mean will approximate a normal distribution.(Islam, 2018).

Multicollinearity Test

Table 4. Multicollinearity Test.

Source: Results of data processing using SPSS 30, 2026

Variables	N	Collinearity Statistics		Information
		Tolerance	VIF	
Key Audit Matters	165	0,879	1,138	FreeMulticollinearity
Auditor Workload	165	0,945	1,058	FreeMulticollinearity
Operation Complexity	165	0,913	1,096	FreeMulticollinearity

Based on table 4, it shows that the results of the multicollinearity test on all independent variables, namely main audit matters, auditor workload and operational complexity have a tolerance value above 0.10 and a VIF value below 10. Thus, it can be concluded that there is no multicollinearity between independent variables in the regression model.

Heteroscedasticity Test

Table 5. Heteroscedasticity Test Results.

Source: Results of data processing using SPSS 30, 2026

Variables	t	Sig.	Information
(Constant)	0,992	0,145	
Key Audit Matters	-0,009	0,760	Free of Heteroscedasticity
Auditor Workload	-0,886	0,830	Free of Heteroscedasticity
Operation Complexity	2,200	0,026	Affected by Heteroscedasticity

Based on table 5, the results of the heteroscedasticity test show that all independent variables, namely Main Audit Matters, Auditor Workload, and have a significance value above 0.05, however, the complexity of operations experiences heteroscedasticity with a significance value below 0.026. Thus, it can be concluded that the regression model used in this study contains heteroscedasticity problems. To overcome the problem of heteroscedasticity and obtain more valid estimates, this study uses the Weighted Least Squares (WLS) method. WLS is used to give different weights to each observation based on error variance, thus producing more efficient parameter estimates and overcoming the problem of heteroscedasticity in the regression model.

Autocorrelation

Table 6. Autocorrelation Test Results.

Source: Results of data processing using SPSS 30, 2026

Test results before transformation					
n	**K**	**DW**	**dL**	**dU**	**Information**
165	3	1,461	1,7085	1,7825	Autocorrelation occurs
After transformation using Occrane Occrut step one					
N	**K**	**DW**	**dL**	**dU**	**Information**
165	3	2,005	1,7085	1,7825	Not autocorrelation occurs

Based on the results of the autocorrelation test in table 6, the Durbin Watson value was 1,461 with a sample size of 165 and three independent variables. The lower limit (dL) value was 1.7085 and the upper limit (dU) value was 1.7825. Thus, the test results showed positive autocorrelation, fulfilling the DW < dL criteria.

To address this issue, a second test was conducted using the Cochrane Occrut method. The results of the second test showed that the Durbin Waston value increased to 2,005 with a lower limit (dL) of 1.7085 and an upper limit (dU) of 1.7825. The Durbin Watson value falls within the range of dU < DW < 4 − dU, indicating that the model does not experience either positive or negative autocorrelation. Therefore, the regression model is considered appropriate to proceed.

Hypothesis Testing Results

Table 7. Hypothesis Testing Regression Test Results.

Source: Results of data processing using SPSS 30.2026

Variables	Coef.B	t	Sig.	Information
(Constant)	118,397	6,133	0,001	
Key Audit Matters	-0,099	-0,007	0,994	H1 Rejected
Auditor Workload	-80,027	-2,724	0,009	H2 Rejected
Operation Complexity	21,735	4,434	0,001	H3 Accepted
R Square			0,425	
Adj R Square			0,392	
F			12,830	
Sig			0,001	

Based on the results of the model significance test (F-Test), a significance value of <0.001 was obtained, which is smaller than 0.05, so the regression model is declared significant and suitable for use. This indicates that the main audit matters, auditor workload, and operational complexity simultaneously influence audit report lag. The Adjusted R^2 value of 0,392 indicates that the three independent variables are able to explain 39,2% of the variation in audit report lag, while the remaining 60,8% is influenced by other variables outside the research model.

The partial test results indicate that key audit matters have a negative but insignificant regression coefficient, meaning that the level of disclosure of key audit matters does not necessarily affect the timeliness of the financial statement audit completion process; therefore, the hypothesis stating a positive effect is rejected. Auditor workload has a negative and significant regression coefficient, indicating that each increase in auditor workload tends to reduce audit report lag, thereby potentially accelerating the completion of the financial statement audit; thus, the hypothesis proposing a positive effect is rejected. Meanwhile, operational complexity shows a positive and significant regression coefficient, suggesting that the higher the company's operational complexity, the greater the audit report lag; accordingly, the third hypothesis is accepted.

Discussion

The Influence of Key Audit Matters on Audit report lag.

The test results indicate that key audit matters do not affect audit report lag. This finding suggests that the number of key audit matters disclosed does not hinder auditors in completing the audit process efficiently. Conceptually, key audit matters are the result of risk identification and assessment conducted since the audit planning stage. Based on the audit risk model (Skerrat & Woodhead, 1992), audit risk consists of inherent risk, control risk, and detection risk. These three components serve as the basis for auditors in adjusting audit procedures by evaluating inherent and control risks and determining an appropriate level of detection risk. Thus, key audit matters represent significant risk areas that have been anticipated within the audit strategy, rather than additional consequences that extend the audit duration.

Consistent with this, audit planning theory (Arens et al., 2014) explains that auditors identify significant risk areas from the outset and integrate them into the audit strategy, including the allocation of time, resources, and the involvement of necessary specialists. The determination of key audit matters is therefore part of a structured risk response embedded in the audit design from the initial planning stage. Accordingly, the disclosure of key audit matters does not necessarily prolong audit completion time. This finding is in line with studies by Kumaunang et al., (2024) and Anggia et al., (2025), which state that auditors' professionalism in completing audits on time does not depend on the number of key audit matters disclosed, as such disclosure helps focus audit procedures on significant areas and reduces uncertainty at the final stage of the audit.

The Effect of Auditor Workload on Audit report lag.

The test results indicate that auditor workload has a negative and significant effect on audit report lag. This finding suggests that an increase in workload does not prolong the audit completion process; instead, it reduces audit delay, as auditors are able to maintain reporting timeliness despite facing relatively high workloads. Based on Production Theory in auditing, as applied in the economic model of auditing by (Keefe et al., 1994), auditing is viewed as a professional service production process in which auditors function as the primary input in producing the audit report as output. The efficiency and timeliness of audit completion are strongly influenced by the auditor's ability to manage audit inputs, including time allocation, workload, and workflow arrangements. Effective workload management enhances audit efficiency, indicating that a high workload does not necessarily extend audit duration but can be managed optimally without delaying completion.

This finding is further supported by learning curve theory Argote, (1999), as cited in Beckman, (2014), which explains that increased frequency and intensity of audit engagements enable auditors to gain continuous experience and learning. The more frequently auditors handle diverse audit assignments, the greater their understanding of risk patterns, audit procedures, and problem resolution. As a result, experienced auditors can work more quickly and efficiently, with stronger adaptive capacity to complete audits on time. Moreover, a high workload may motivate auditors to maintain performance quality in order to preserve their professional reputation, which constitutes a valuable asset requiring integrity and timely service delivery.

Furthermore, the Judgment and Decision-Making Research framework in accounting Bonner, (1999) explains that auditors' decisions are influenced by their ability to manage task complexity and process information under constrained conditions, such as time pressure. Auditors with sufficient competence and experience are better able to exercise professional

judgment in prioritizing audit procedures and avoiding unnecessary over-auditing. Under high workload conditions, effective judgment and decision-making capabilities enable auditors to complete the audit process more efficiently, thereby minimizing audit report lag. Overall, these findings demonstrate that despite resource constraints, auditors' professional competence, experience, operational efficiency, and decision-making quality allow them to manage workload optimally and complete audits without causing reporting delays.

The Effect of Operational Complexity on Audit report lag

Testing the third hypothesis indicates that operational complexity has a significant positive effect on audit report lag. This finding suggests that the higher the company's operational complexity such as a greater number of business segments and operating units the longer the time required by auditors to complete the audit. From the perspective of the architecture of complexity, a company is viewed as a hierarchical system composed of various interdependent subsystems. This layered structure increases the volume of information, the diversity of transactions, and the risk of material misstatement, thereby requiring auditors to perform broader and more in-depth risk assessments and audit procedures. This finding aligns with research by Muna & Lisiantara, (2021), Nugraha & Herawaty (2024) and Utami & Rani (2025).

5. Comparison

This study employs Resource-Based View theory and The Architecture of Complexity theory to explain the relationship between the independent and dependent variables in the context of audit report lag. This theoretical approach differs from much of the prior research, which predominantly relies on agency theory, compliance theory, and signaling theory to explain audit report lag. In addition, studies examining the relationship between auditor workload and audit report lag remain relatively limited, as most prior research has focused on the impact of auditor workload on audit quality. Consequently, the effect of auditor workload on audit report lag has not been extensively explored in the existing literature. The findings of this study provide practical implications for auditors and company management by highlighting that effective audit resource management and the complexity of the audit process play an important role in ensuring the timeliness of audit report issuance.

6. Conclusion

Based on the data processing conducted previously, it can be concluded that this research successfully addressed the problem formulation and achieved its research objectives. The results indicate that key audit matters do not affect audit report lag, suggesting that the number of key audit matters disclosed does not prolong the audit process and allows audits to be completed efficiently and in a timely manner. Furthermore, auditor workload has a negative effect on audit report lag, indicating that despite resource constraints, auditors' professional competence, experience, operational efficiency, and quality of decision making enable them to manage their workload effectively through appropriate time management, effort allocation, and organization of work processes. In addition, the complexity of a company's operations has a significant positive effect on audit report lag. Companies with higher operational complexity require longer audit completion times due to the broader scope of audit procedures, such as the presence of multiple operating segments, subsidiaries, and diverse business activities that increase audit risk. Auditors must conduct more comprehensive examinations of each unit or entity prior to consolidation, which extends the time needed for testing and evaluating audit evidence and increases the likelihood of delays in issuing audit reports.

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