Analyzing the Effect of Tax Risk on Audit Report Timeliness: Evidence of Audit Committee Moderation

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ARTICLE INFO	ABSTRACT
	Timeliness in audited financial reporting is a critical element of credible corporate disclosure. However, heightened tax-related uncertainty can increase audit complexity and extend the completion period of audit procedures. This study investigates whether tax risk contributes to audit report lag and assesses the moderating role of audit committees in this association. Using panel data from 925 firm-year observations of non-financial companies listed on the Indonesia Stock Exchange between 2019 and 2023, the hypotheses were examined through moderated regression analysis. The empirical results reveal that firms exposed to greater tax risk experience significantly longer audit delays, suggesting that auditors require more extensive verification and judgment when auditing aggressive or uncertain tax positions. In contrast, an effective audit committee is found to mitigate this effect by strengthening monitoring functions, improving communication with external auditors, and ensuring the availability of reliable information during the audit process. This study contributes to the governance and auditing literature by providing evidence from an emerging market that emphasizes the role of tax risk in shaping reporting timeliness and highlights the governance mechanisms that can reduce delays. The findings have practical implications for regulators and corporate boards to improve audit committee effectiveness in supporting higher transparency and reporting credibility. Keywords: Tax Risk, Audit Report Lag, Audit Committee Effectiveness, Corporate Governance, Financial Reporting Timeliness

INTRODUCTION

Audit report lag undermines the timeliness of financial reporting and reduces the usefulness of accounting information for investors and regulators (Bhuiyan et al., 2024). Recent evidence indicates that strong governance mechanisms, particularly the presence of an effective audit committee, tend to shorten audit completion time, suggesting that oversight bodies play a critical role in accelerating the audit process (Sobhan et al., 2024; Wahjono & Danardono, 2024). Audit

delays are often exacerbated by firms' exposure to tax risk, as uncertainties surrounding tax positions can lengthen the procedures required for verification and resolution during the audit (Abernathy et al., 2021; Suwardi & Saragih, 2023). Preventing such delays remains essential for maintaining the reliability and timeliness of financial information delivered to stakeholders. Tax risk refers to the potential for unexpected financial losses arising from changes in tax types, rules, rates, or administrative procedures embedded in tax regulation (Artemenko et al., 2017). During an audit, practitioners must identify, validate, and assess tax-related exposures that may threaten audit quality or damage the auditor's reputation (Suwardi & Saragih, 2023). Prior studies demonstrate that volatility in the effective tax rate (ETR) signals uncertainty about future tax obligations and is closely associated with elevated corporate risk (Guenther et al., 2017). From an agency theory perspective, heightened tax risk increases the demand for monitoring to mitigate conflicts of interest, which in turn can extend audit duration (Jensen & Meckling, 1976).

Audit report lag remains a prominent global issue in accounting research and practice, given its implications for the timeliness and relevance of financial reporting (Bhuiyan et al., 2024). Across jurisdictions, factors such as audit complexity, firm size, audit opinions, and various auditor-related characteristics have been shown to influence the time required to complete audits (Durand, 2019; Habib et al., 2019). Beyond these determinants, tax risk has emerged as an additional driver of audit delay, as auditors must address potential uncertainties or contentious tax positions before issuing an opinion (Abernathy et al., 2021). In Indonesia, audit delays continue to surface, particularly among firms with high operational complexity and substantial tax exposure. Suwardi and Saragih (2023) further document that tax risk carries broad economic consequences, including a prolonged audit reporting timeline. Prior studies show that the audit committee's competence and independence play an important role in shortening audit report lag (Aldoseri et al., 2021; Ghafran & Yasmin, 2018). Knechel and Payne (2001) argue that complex tax issues demand greater auditor judgment and effort, which can ultimately delay the release of audit reports. An effective audit committee helps mitigate information asymmetry and uncertainty that may hinder the audit process (Khalil & Ozkan, 2016). Consistent with this view, Ika and Ghazali (2012) report a significant negative association between audit committee effectiveness and audit report lag, indicating that stronger oversight tends to accelerate audit completion.

Prior studies on the impact of tax risk on audit report delays have yielded incongruous findings. Certain studies indicate that elevated tax risk prolongs audit completion time due to heightened complexity and the necessity for supplementary testing (Belnap et al., 2024; Chyz et al., 2023; Filosa et al., 2025), whereas other research reveals an inconsequential relationship between the two variables (Suwardi & Saragih, 2023a). The variability of these data indicates that the empirical evidence on the correlation between tax risk and audit report lag remains inadequate. Furthermore, the majority of prior research was conducted in established nations; the applicability of their findings to emerging economies remains constrained. Variations in institutional environments, tax systems, and corporate governance processes in developing nations such as Indonesia may significantly affect tax risk dynamics and the audit process (Suwardi & Saragih, 2023b; Umbet et al., 2025). Consequently, empirical research on the Indonesian environment is essential to enrich the literature. Moreover, while the audit committee is acknowledged as a crucial governance instrument for enhancing oversight quality and the promptness of financial reporting (Anaba et al., 2025; Rosly et al., 2024), research explicitly investigating the audit committee's role as a moderating variable in the relationship between tax risk and audit report lag remains comparatively scarce. Certain studies prioritize the audit committee as a direct factor influencing audit report lag, while neglecting its role in mitigating specific risks, notably tax risk (Abdalla et al., 2025; Behnampour & Momeni, 2025). Consequently, a study vacuum persists regarding the extent to which the audit committee's effectiveness might mitigate the impact of tax risk on audit reporting delays, especially in emerging markets.

Evidence regarding the influence of tax risk on audit delay remains mixed. Suwardi and Saragih (2023) find no significant relationship between tax risk and audit report lag, suggesting that the magnitude of tax-related uncertainty does not necessarily affect audit duration. In contrast, Gontara and Khlif (2020) document that tax avoidance is positively associated with longer audit delays, suggesting that aggressive tax positions may prolong the audit process. These conflicting findings highlight the need for further investigation into how tax risk shapes audit timeliness. This study, therefore, examines whether the audit committee can strengthen or moderate the relationship between tax risk and audit report lag. This research advances the accounting literature by analyzing the effect of tax risk on audit report lag while incorporating the moderating role of the audit committee. The study provides a theoretical contribution by reaffirming the audit committee's role in enhancing transparency, accountability, and audit effectiveness, particularly when firms face tax-related uncertainties that may delay audit completion. Empirically, this study fills a gap in the Indonesian context, where research examining audit delays driven by tax risk and conditioned on audit committee oversight remains limited. The findings are expected to offer practical insights for managers and investors on optimizing audit committee functions to ensure timely audit reporting and foster confidence in the quality of financial information.

THEORETICAL FRAMEWORK AND HYPOTHESES

Audit Report Lag

Audit report lag remains a persistent issue in many developing economies, including Indonesia. Data from the Indonesia Stock Exchange show that in 2023, 129 of the 950 listed firms failed to submit their audited annual reports on time (Indonesia Stock Exchange, 2024). Although the number of listed firms rose to 992 in 2024, only 78 companies experienced audit delays, indicating improvement but underscoring that compliance with reporting deadlines remains suboptimal (Indonesia Stock Exchange, 2025). Audit report lag represents the elapsed time between the firm's fiscal year-end and the completion date of the external auditor's report (Blankley et al., 2014; Habib & Bhuiyan, 2011). This time frame is critical because it affects the relevance and usefulness of financial information for investors, regulators, and other stakeholders (Durand, 2019; Whitworth & Lambert, 2014). Longer delays often heighten market concerns about potential issues in the firm's financial statements and diminish the timeliness of the information available to investors (Bhuiyan et al., 2024). As the time lag increases, the informational value of financial reports declines, reducing their ability to support effective decision-making (Zheng, 2020). To address this concern, the Financial Services Authority (OJK) mandates timely financial reporting through regulations such as POJK No. 14/POJK.04/2022 and imposes administrative sanctions for late submissions.

Factors influencing audit report lag generally fall into three broad categories: audit complexity and auditor effort, corporate governance, and firm characteristics (Habib et al., 2019). Knechel and Payne (2001) note that declines in audit productivity—often reflected in higher auditor workload—lengthen audit completion time. Similarly, Tanujaya and Vaustine (2023) emphasize that greater tax complexity requires more extensive audit procedures, which may further delay the issuance of the audit report. Firms with numerous subsidiaries or poor financial conditions also tend to experience longer audit delays (Rusmin & Evans, 2017). Errors in financial reporting reflect weaknesses in the audit process, making it essential for auditors, audit committees, regulators, and investors to understand the factors that signal potential undetected misstatements (Blankley et al., 2014). Empirical evidence from Indonesia supports this view, showing that audit complexity, firm size, capital structure, profitability, and ownership concentration significantly affect audit report lag (Hendi & Sitorus, 2023). The expertise and oversight capacity of the audit committee chair can accelerate audit completion and help ensure timely financial reporting (Ghafran & Yasmin, 2018). However, audit committee effectiveness is not always consistent; Jesni and Yopie (2023) report that

more frequent audit committee meetings may actually prolong the audit process. The relationship between tax risk, audit committees, and audit report lag can be understood through the lens of agency theory. Jensen and Meckling (1976) argue that conflicts of interest may give rise to opportunistic behavior that complicates the audit process, potentially extending audit duration. In this context, the audit committee functions as a governance mechanism that mitigates such agency problems and promotes timely audit reporting.

Tax Risk
According to Artemenko et al. (2017), tax risk is a form of financial uncertainty arising from unexpected losses resulting from changes in tax regulations, including the introduction of new tax rules, adjustments to tax rates, or modifications to payment procedures. The complexity and aggressiveness of corporate tax activities can lengthen reporting timelines (Crabtree & Kubick, 2014). Complex tax behavior may generate agency costs and heighten managerial risk, ultimately impairing firm performance and value (Chen et al., 2016).
Prior research generally suggests a positive association between tax risk and audit report lag (Abernathy et al., 2021; Knechel & Payne, 2001). Higher tax risk requires auditors to conduct more extensive evaluations of transactions and tax compliance, which prolongs the audit process (Suwardi & Saragih, 2023). Audit effort tends to rise when firms engage in aggressive tax strategies, as complex, high-risk tax positions require additional procedures, deeper investigation, and consultation with tax specialists to ensure that reported financial information is reasonable and compliant (Donohoe & Knechel, 2014). Based on this reasoning, the following hypothesis is proposed:
    H1: Tax risk has a positive effect on audit report lag.

Audit Committee Effectiveness as a Moderator of the Relationship Between Tax Risk and Audit Report Lag
External auditors play a critical role in safeguarding the effectiveness of internal controls, which in turn supports the integrity of financial reporting (Krishnan & Visvanathan, 2007). The audit committee oversees the financial reporting process by ensuring sound internal controls, appropriate accounting policies, and the credibility and timeliness of financial statements (Felo et al., 2005). It also serves as an important communication channel between the auditor and management, helping maintain auditor independence and facilitating the resolution of complex audit issues (Spira, 1999). Tax risk encompasses uncertainties related to corporate transactions, operations, financial reporting, and reputational exposure, including the interpretation of tax rules, potential tax authority inspections, and the reliability of accounting information underlying tax decisions (Hutchens et al., 2015). Conceptually, tax risk reflects uncertainty regarding future tax outcomes stemming from current actions or omissions (Neuman et al., 2020). An effective audit committee can support auditors in addressing complex audit matters, thereby improving audit timeliness (Salleh & Stewart, 2012). Thus, a strong audit committee can mitigate the impact of tax risk on audit report lag, although its effectiveness depends on its structure and oversight quality (Jesni & Yopie, 2023).

Well-functioning audit committees are expected to reduce audit delays by enhancing oversight of the financial reporting process (Jesni & Yopie, 2023). Felo et al. (2005) show that audit committee independence and expertise strengthen financial reporting credibility. The presence of committee members with accounting expertise has been associated with higher-quality financial reporting and shorter audit completion times (Hassan, 2016; Kusnadi et al., 2016). Diverse expertise within the audit committee also helps deter financial reporting fraud and improve the quality of external audits (Kusnadi et al., 2016). Consequently, an effective audit committee is expected to weaken the positive effect of tax risk on audit report lag, thereby enhancing the timeliness and transparency of financial reporting (Sultana et al., 2015).

H2: The audit committee effectiveness moderates the relationship between tax risk and audit report lag.

METHODS

This study employs a quantitative research approach to assess the effect of tax risk on audit report lag and the moderating role of the audit committee. The empirical setting covers non-financial companies listed on the Indonesia Stock Exchange from 2019 to 2023. A purposive sampling design was applied with the following criteria:
1. Firms consistently publishing audited financial statements over the observation period,
2. Firms disclosing complete variable data required for analysis, and
3. Firms reporting non-negative effective tax rates to avoid distortions in tax-risk measurement.

Banking, insurance, investment, and other financial institutions were excluded due to their distinct regulatory frameworks.

Table 1. Research Sample

No	Criteria	Total
1	Research Population	938
2	Banking companies and financial institutions (investment companies, financial intermediaries, holding companies, and financing/leasing companies)	(103)
3	Companies with a negative Effective Tax Rate (ETR)	(298)
4	Incomplete data in company financial reports	(352)
	Total Research Sample	185

Sample Source: Processed Data (2025)

After applying all criteria, the final sample consisted of 185 firms (925 firm-year observations). Financial information was collected from annual reports available through the official IDX database. The outcome variable, audit report lag, was measured as the number of days it took external auditors to complete the audit after the fiscal year-end. To normalize distributional patterns, the natural logarithm transformation was applied. Tax risk was captured using the volatility of the effective tax rate over the prior five years, as fluctuations in the effective tax rate reflect uncertainty in firms' tax positions, instability in tax planning outcomes, and potential exposure to regulatory scrutiny. Prior literature suggests that higher ETR volatility signals greater tax-related uncertainty, which increases audit complexity and necessitates additional auditor judgment and verification procedures (Guenther et al., 2017; Neuman et al., 2020). Accordingly, this measure is theoretically aligned with the concept of tax risk, which is uncertainty surrounding future tax obligations.

The moderating variable, audit committee attributes, was operationalized through the number of audit committee members serving in each firm-year. From a corporate governance perspective, a larger audit committee is associated with greater capacity, broader expertise, and more effective oversight of the final reporting and audit process. Agency theory posits that enhanced monitoring mechanisms reduce information asymmetry between management and auditors, thereby improving audit efficiency and mitigating delays arising from complex or risky transactions, including tax-related issues (Jensen & Meckling, 1976; Sultana et al., 2015). Consequently, the size of the audit committee provides a theoretically grounded proxy for its ability to moderate the effect of tax risk on audit report lag. Hypothesis testing was performed using Moderated Regression Analysis (MRA) with robust standard errors to account for heteroscedasticity. A two-model specification was estimated:
Model I examined the direct effect of tax risk and audit committee characteristics on audit report lag, while Model II introduced the interaction term to capture the moderating effect. To further validate the robustness of the main regression, the study conducted Coarsened Exact Matching

(CEM) to balance covariates between firms with lower and higher tax risk. This additional test minimizes potential selection bias and strengthens causal interpretability across governance settings.

Model I:
ARLit= β0 + β1TRit + β2ACit + β3SAit + β4PBit + β5LEVit + β6BIGit + β7CCEit + β8EPSit + β9SGit + β10ROEit + β11FSit +β12SICit + єit

Model II:
ARLit= β0 + β1TRit + β2ACit + β3TR*ACit + β4SAit + β5PBit + β6LEVit + β7BIGit + β8CCEit + β9EPSit + β10SGit + β11ROEit + β12FSit +β13SICit + єit

Table 2. Operational Variables

Variable	Measurement	Source
ARL	Logarithm of the number of days from the end of the fiscal year to the date of the auditor's report.	(Suwardi & Saragih, 2023c)
TR	Standard deviation formula for ETR over the last 5 years.	(W. Chen, 2021)
AC	Number of audit committee members.	(Ha, 2022)
SA	Sales divided by total assets.	(Suwardi & Saragih, 2023c)
PB	Ratio of after-tax profit to total assets.	(Ebire et al., 2024)
LEV	Long-term debt to total assets ratio.	(Guedrib & Marouani, 2023a)
BIG	Dummy variable that is 1 if the company is audited by the Big 4 and 0 if not.	(Suwardi & Saragih, 2023c)
CCE	Cash and cash equivalents divided by total assets.	(Suwardi & Saragih, 2023c)
EPS	Earnings per share.	(Suwardi & Saragih, 2023c)
SG	Difference between current year sales and previous year sales, divided by previous year sales.	(Bhuiyan et al., 2024)
ROE	Net income divided by equity.	(Guedrib & Marouani, 2023b)
FS	Logarithm of total assets.	(Suwardi & Saragih, 2023c)

Sample Source: Processed Data (2025)

RESULT AND DISCUSSION

Descriptive Statistics
Descriptive statistics are used in this study to provide an overview of the data characteristics. The mean, standard deviation, minimum, and maximum values of each research variable can be determined using descriptive statistics.

Table 3. Descriptive Statistics

ARL	925	1.9200	0.1160	1.4620	2.3050
TR	925	0.0940	0.2640	0.0000	4.5760
AC	925	4.2170	1.9030	2.0000	16.0000
SA	925	0.9850	0.9260	0.0090	6.9490
PB	925	0.0770	0.0770	-0.0200	0.6160
LEV	925	0.1370	0.1320	0.0000	0.6750
BIG	925	0.3980	0.4900	0.0000	1.0000
CCE	925	0.1070	0.1020	0.0010	0.9300

EPS	925	465.1900	3485.7210	-110.7550	60656.0000
SG	925	0.1160	0.5720	-0.8280	13.7280
ROE	925	1.7770	9.2670	-0.3150	143.3570
FS	925	12.6850	0.7100	10.8790	14.6490
Frekuensi	**Frekuensi**	0	0	1	1
BIG	BIG	60.22%	60.22%	39.78%	39.78%

Sample Source: Processed Data (2025)

Based on Table 2, a total of 925 data samples were analyzed. The average ARL of 1.9200 indicates that the delay in audit reports is relatively moderate. ARL measurement uses the logarithm of the number of days from the end of the fiscal year to the date of the auditor's report to stabilize the variation in audit duration between companies. The average TR value of 0.0940 indicates that the company's tax risk is relatively low, while AC has an average of 4.2170, indicating that the number of audit committee members exceeds 4. The control variables show that SA averages 0.9850, PB 0.0770, and LEV 0.1370. In addition, CCE has an average of 0.1070, EPS 465.1900, SG 0.1160, ROE 1.7770, and FS has an average of 12.6850. Meanwhile, for the BIG variable, 39.78% of companies are audited by the Big 4, while the remaining 60.22% are audited by non-Big 4 firms.

Table 4. Regression Results for Model I

Variabel	Koefisien	Robust std. err.	t	P>|t|
TR	0.0194	0.0091	2.1200	0.0034
AC	-0.0101	0.0024	-4.2100	0.0000
SA	0.0122	0.0037	3.2600	0.0010
PB	-0.2056	0.0633	-3.2300	0.0010
LEV	0.0834	0.0330	2.5300	0.0112
BIG	-0.0328	0.0032	-3.9400	0.0000
CCE	-0.0799	0.0338	-2.3700	0.0180
EPS	0.0000	0.0000	1.9500	0.0510
SG	0.0186	0.0052	3.6000	0.0000
ROE	0.0002	0.0004	0.5400	0.5930
FS	-0.0058	0.0074	-0.7800	0.4340
_cons	2.0427	0.0890	22.9400	0.0000

Sample Source: Processed Data (2025)

Table 5. Regression Results for Model II

Variabel	Koefisien	Robust std. err.	T	P>|t|
TR	0.0769	0.0328	2.3400	0.0190
AC	-0.0089	0.0025	-3.5600	0.0000
TRAC	-0.0156	0.0091	-1.7200	0.0850
SA	0.0120	0.0038	3.2000	0.0010
PB	-0.2091	0.0635	-3.2900	0.0010
LEV	0.0845	0.0329	2.5700	0.0100
BIG	-0.0323	0.0083	-3.8800	0.0000
CCE	-0.0824	0.0338	-2.4400	0.0150
EPS	0.0000	0.0000	1.9700	0.0500
SG	0.0185	0.0051	3.6100	0.0000
ROE	0.0002	0.0004	0.5300	0.5970
FS	-0.0060	0.0074	-0.8100	0.4190
_cons	2.0413	0.0890	22.9500	0.0000

Sample Source: Processed Data (2025)

The results show that tax risk has a statistically significant effect on the audit report lag, with a p-value of 0.0190 and a regression coefficient of 0.0769. This indicates that firms facing higher tax risk are more likely to experience longer audit delays. Elevated tax risk often reflects uncertainty, aggressive tax positions, or complex tax-related activities, which require auditors to expand the scope of their procedures. In such cases, auditors must perform additional substantive testing, reassess tax reconciliations, evaluate potential tax disputes, and verify compliance with tax regulations. These expanded procedures increase the time needed for verification and heighten the level of professional judgment required, ultimately extending the audit completion timeline. Accordingly, the evidence supports H1, which predicts a positive association between tax risk and audit report lag.

The interaction effect between tax risk and the audit committee on audit report lag yields a p-value of 0.0850 and a negative regression coefficient of –0.0156. Although the significance level slightly exceeds the conventional 0.05 threshold, the result may still be interpreted as marginally significant. This suggests that the audit committee exerts a weakening effect on the relationship between tax risk and audit delay. In other words, firms with more effective audit committees tend to experience a smaller increase in audit report lag when tax risk is high. By strengthening monitoring, improving reporting quality, and enhancing coordination between management and external auditors, the audit committee can help streamline the audit process. However, the marginal nature of the result suggests that this moderating effect is neither particularly strong nor consistently observable across firms.

Table 6. F-Test Results

Description	Value
R-squared	0.1585
Adjusted R-squared	0.1440
S.E. of regression	0.1074
F-statistic	10.1600
Prob(F-statistic)	0.0000

Sample Source: Processed Data (2025)

Based on Table 5, the F-Statistic value of 10.1600 with Prob(F-Statistic) 0.0000 indicates that the regression model is simultaneously significant, meaning that all independent variables collectively influence the dependent variable. The Adjusted R-squared value of 0.1440 indicates that approximately 14.40% of the variation in the dependent variable is explained by the independent variables in this study, while the remaining variation is influenced by factors outside the model. Although the adjusted R² of 14.4% may appear relatively modest, this magnitude is consistent with prior audit report lag studies, which document that audit timeliness is influenced by a wide range of observable and unobservable factors. The audit process is inherently complex and affected not only by firm risk and governance characteristics, but also by elements that are difficult to capture empirically, such as internal control quality, auditor workload, accounting estimate complexity, the intensity of auditor–management communication, and office-level auditor characteristics (Durand, 2019; Habib et al., 2019; Whitworth & Lambert, 2014).

Moreover, institutional and regulatory factors, particularly in emerging markets—such as tax enforcement intensity, regulatory scrutiny, and variations in audit practice environments may further affect audit report lag but are not fully observable within the scope of this model. Therefore, the moderate adjusted R² reflects the multifaceted nature of audit report timeliness rather than model misspecification, and it does not undermine the validity of the main empirical findings. Future research may incorporate additional governance mechanisms, internal audit functions, auditor

office-level attributes, or qualitative approaches to provide a more comprehensive understanding of the determinants of audit report lag.

Correlation Analysis

The Pearson correlation results in Table 6 show that tax risk is positively correlated with audit report lag, with a coefficient of 0.087 and significance at the 5% level (p = 0.008). In contrast, the audit committee exhibits a significant negative correlation with audit report lag, with a coefficient of0.238 and significance at the 1% level (p = 0.000). These findings suggest that audit committees help reduce audit delays, likely by strengthening oversight quality and limiting risky managerial behavior. Overall, the results reinforce the audit committee's role as an important governance mechanism capable of mitigating audit report lag.

Table 7. Correlation Test Results

	ARL	TR	AC	SA	PB	LEV
ARL	**1.000**					
TR	0.087***	1.000				
	(0.008)					
AC	-0.238***	-0.001	1.000			
	(0.000)	(0.967)				
SA	0.029	-0.083**	-0.099***	1.000		
	(0.371)	(0.012)	(0.003)			
PB	-0.222***	-0.151***	0.071**	0.156***	1.000	
	(0.000)	(0.000)	(0.032)	(0.000)		
LEV	0.089***	0.242***	0.119***	-0.310***	-0.266***	1.000
	(0.007)	(0.000)	(0.000)	(0.000)	(0.000)	
BIG	-0.216***	0.051	0.267***	0.124***	0.219***	0.065**
	(0.000)	(0.122)	(0.000)	(0.000)	(0.000)	(0.050)
CCE	-0.130***	-0.086***	0.029	0.251***	0.287***	-0.185***
	(0.000)	(0.008)	(0.374)	(0.000)	(0.000)	(0.000)
EPS	-0.010	-0.021	0.003	0.060*	0.112***	-0.046
	(0.770)	(0.530)	(0.919)	(0.067)	(0.001)	(0.160)
SG	0.073**	0.021	-0.046	0.024	0.110***	0.019
	(0.027)	(0.524)	(0.160)	(0.474)	(0.001)	(0.568)
ROE	0.056*	-0.024	-0.153***	-0.009	-0.047	-0.128***
	(0.087)	(0.466)	(0.000)	(0.785)	(0.154)	(0.000)
FS	-0.162***	0.000	0.511***	-0.213***	0.021	0.393***
	(0.000)	(0.995)	(0.000)	(0.000)	(0.519)	(0.000)

	BIG	CCE	EPS	SG	ROE	FS
BIG	1.000					
CCE	0.125***	1.000				
	(0.000)					
EPS	0.110***	0.024	1.000			
	(0.001)	(0.457)				
SG	-0.038	-0.001	0.017	1.000		
	(0.246)	(0.982)	(0.612)			
ROE	-0.077**	-0.032	-0.019	-0.013	1.000	
	(0.019)	(0.335)	(0.561)	(0.700)		
FS	0.364***	-0.034	0.004	0.038	-0.313***	1.000
	(0.000)	(0.297)	(0.915)	(0.248)	(0.000)	

Sample Source: Processed Data (2025)

Regression Analysis

A robustness test was performed using the Coarsened Exact Matching (CEM) method to address potential endogeneity concerns. CEM works by temporarily coarsening variables into meaningful groups to enable exact matching before analysis, thereby reducing model dependence, minimizing causal estimation bias, improving covariate balance, and producing more consistent analytical results without requiring additional post-matching adjustments (Blackwell et al., 2009). In this study, the matching procedure included all control variables, yielding eight successfully matched strata. A total of 921 firm-year observations were retained for the analysis. The CEM-based regression results in Table 7 indicate that tax risk has a significantly positive effect on audit report lag, whereas the audit committee has a significantly negative effect. Moreover, the audit committee significantly moderates the relationship between tax risk and audit report lag. These findings are consistent with the main regression results, indicating that endogeneity is not a concern in this study.

Table 8. Test Result *Coarsened Exact Matching* (CEM)

TR	0.020**	0.076**
	(2.18)	(2.31)
AC	-0.010***	-0.009***
	(-4.15)	(-3.52)
SA	0.012***	0.012***
	(3.15)	(3.09)
PB	-0.195***	-0.200***
	(-2.94)	(-3.00)
LEV	0.085**	0.086**
	(2.53)	(2.57)
BIG	-0.034***	-0.033***
	(-4.02)	(-3.95)
CCE	-0.077**	-0.079**
	(-2.24)	(-2.32)
EPS	0.000**	0.000**
	(2.22)	(2.19)
SG	0.013	0.013
	(0.95)	(0.95)
ROE	0.000	0.000
	(0.55)	(0.54)
FS	-0.006	-0.006
	(-0.79)	(-0.82)
TRAC		-0.015*
		(-1.67)
_cons	2.043***	2.042***
	(22.80)	(22.80)
Year FE	Yes	Yes
F	9.148	9.151
r2_a	0.133	0.134
N	921	921

Sample Source: Processed Data (2025)

The empirical findings indicate that tax risk plays a meaningful role in shaping audit report timeliness. The positive and significant association between tax risk and audit report lag suggests that firms facing heightened uncertainty over their tax positions tend to experience slower audit completion. This outcome aligns with prior research showing that ambiguous or aggressive tax

arrangements compel auditors to intensify their scrutiny, expand substantive testing, and apply additional professional judgment (Abernathy et al., 2021; Donohoe & Knechel, 2014). When auditors confront inconsistencies in tax accounts or potential exposure to tax disputes, they must engage in extended analyses and often involve tax specialists, which naturally increases the time needed to finalize the audit. In this context, tax risk is a source of operational complexity that impedes audit efficiency.

Although agency theory serves as the primary theoretical foundation, the empirical findings can be more explicitly interpreted through the lens of agency costs and monitoring mechanisms. The positive association between tax risk and audit report lag suggests that higher tax-related uncertainty intensifies agency problems between managers and shareholders. When firms adopt complex or aggressive tax positions, information asymmetry increases, prompting auditors to expand verification procedures to mitigate potential misstatements and reputational risk. This additional audit effort increases monitoring costs, resulting in longer audit completion times. Furthermore, the audit committee's moderating role can be understood as a governance mechanism that mitigates agency costs. An effective audit committee enhances monitoring quality by strengthening oversight of tax-related disclosures, facilitating communication between management and external auditors, and ensuring the timely availability of reliable information. As a result, the audit committee reduces information asymmetry and constrains managerial opportunism, thereby limiting the incremental audit effort required in high tax-risk environments. This monitoring function helps attenuate the impact of tax risk on audit report lag, providing empirical support for agency theory's prediction that stronger governance mechanisms reduce monitoring costs and improve reporting efficiency.

The results further reinforce the conceptual argument that tax-related uncertainty functions as a corporate risk factor that may impair the flow of reliable information between management and auditors. According to agency theory, greater uncertainty amplifies monitoring costs, thereby slowing down the audit process (Jensen & Meckling, 1976). Firms with unstable effective tax rates or unclear tax strategies may inadvertently exacerbate information asymmetry, leading auditors to adopt a more conservative and time-consuming audit approach. The present study's evidence thus contributes to the literature by demonstrating that tax risk, beyond being a financial reporting issue, directly affects audit timeliness within the Indonesian regulatory environment. The moderating analysis offers additional insight into the role of corporate governance, particularly the audit committee. Although the interaction effect is only marginally significant, its negative coefficient suggests that a more effective audit committee can attenuate the adverse influence of tax risk on audit report lag. This moderating pattern is consistent with the view that audit committees strengthen the quality of internal oversight, facilitate auditor–management communication, and ensure that relevant documentation is prepared promptly (Ghafran & Yasmin, 2018; Salleh & Stewart, 2012). In firms where the audit committee is more established or possesses greater expertise, auditors may rely on clearer, more organized information, thereby reducing delays even when tax issues are complex. Nonetheless, the marginal nature of the moderation effect indicates that the audit committee's influence may vary across firms and is not uniformly strong. Differences in committee independence, expertise, meeting frequency, or involvement in tax-related matters could account for this variation, a notion supported by prior studies highlighting inconsistencies in audit committee effectiveness (Jesni & Yopie, 2023). The audit committee's moderating effect on the relationship between tax risk and audit report lag is only marginally significant ($p = 0.085$), suggesting that its influence should be interpreted with caution. Rather than indicating a strong or pervasive moderating role, this finding suggests that the audit committee's ability to mitigate audit delays arising from tax risk is limited and may be contingent on specific organizational or institutional conditions. While the negative interaction coefficient is directionally consistent with agency theory, the statistical weakness of the effect indicates that audit committee oversight does not uniformly offset the additional monitoring costs associated with heightened tax uncertainty.

This marginal effect may reflect heterogeneity in audit committee effectiveness across firms, as differences in member expertise, independence, meeting intensity, and involvement in tax-related oversight can substantially influence monitoring quality. In some firms, audit committees may play a more symbolic or compliance-oriented role, which limits their capacity to actively intervene in complex tax issues during the audit process. Consequently, although audit committees may help reduce information asymmetry in certain contexts, their moderating role appears conditional rather than robust. These findings suggest that governance mechanisms alone may not be sufficient to fully alleviate audit delays driven by tax risk, underscoring the need for future research to examine qualitative dimensions of audit committee effectiveness and contextual factors that shape their monitoring capacity. In addition, the results confirm the relevance of several firm-level characteristics in determining audit timeliness. Factors such as leverage, profitability, sales activity, and auditor type behave in expected directions and are consistent with the broader audit literature (Habib et al., 2019; Rusmin & Evans, 2017). These relationships emphasize that audit delay is a multifaceted phenomenon driven by both internal risk conditions and governance structures. The regression model's relatively moderate explanatory power also suggests that other determinants, such as internal control quality, auditor workload, or industry-specific complexities, may warrant consideration in future studies. Several control variables, including return on equity (ROE) and firm size, do not exhibit statistically significant associations with audit report lag in this study.

The insignificant effect of ROE suggests that short-term profitability may not materially influence audit completion time once firm risk characteristics and governance mechanisms are taken into account. In the Indonesian context, auditors may place greater emphasis on compliance risk, financial complexity, and governance quality rather than on contemporaneous performance measures when determining audit effort. Similarly, the non-significant effect of firm size indicates that larger firms do not necessarily experience shorter audit delays after controlling for tax risk, auditor type, and other firm-specific attributes. While larger firms are often associated with stronger internal controls and greater reporting sophistication, they may also face higher operational and tax complexity that offsets potential efficiency gains. Consequently, the net effect of firm size on audit report lag becomes indistinct in this setting. These findings are consistent with prior studies that document mixed evidence on the roles of profitability and firm size in explaining audit timeliness, particularly in emerging markets. Collectively, the findings contribute to ongoing discussions regarding transparency and regulatory compliance in emerging markets. By demonstrating that tax risk can prolong audit processes and that governance mechanisms can help mitigate this delay, the study provides meaningful evidence relevant to regulators, boards of directors, and practitioners. Strengthening the audit committee's capabilities, particularly in tax oversight, may be a practical avenue for improving the timeliness and credibility of financial reporting in Indonesia.

CONCLUSION

This study examines the effect of tax risk on audit report lag and evaluates whether the audit committee moderates this relationship. Using 925 firm-year observations from publicly listed companies in Indonesia between 2019 and 2023, the regression results reveal that tax risk is positively associated with audit report lag, while audit committee effectiveness is negatively associated with it. These findings suggest that higher tax risk requires auditors to devote more time to additional procedures to verify tax compliance and the reasonableness of tax-related accounts. In contrast, an effective audit committee helps accelerate audit completion by enhancing oversight quality, improving communication with external auditors, and providing more transparent information throughout the audit process.

The results further indicate that governance characteristics and firms' internal financial conditions remain critical determinants of timely audit reporting. Consistent with agency theory, strong

monitoring mechanisms and high-quality financial information help reduce information asymmetry between management and auditors. Moreover, effective audit committee oversight and financial stability contribute to a more efficient audit process and enhance the credibility of financial statements. These insights offer valuable implications for regulators seeking to strengthen transparency, supervisory quality, and the effectiveness of Indonesia's financial reporting system.

This study is subject to several limitations. First, the proxy used to measure tax risk may not fully capture all dimensions of tax-related uncertainty. Second, the analysis is restricted to Indonesian firms, which may limit generalizability. Future research may benefit from adopting more comprehensive measures of audit report lag, incorporating additional moderating variables such as internal audit functions or institutional ownership, and exploring cross-country settings or qualitative approaches to deepen understanding of audit dynamics and corporate governance practices.

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