

THE INFLUENCE OF INTERNAL CONTROL SYSTEM, FOLLOW-UP ON AUDIT RECOMMENDATIONS, AND GOVERNMENT ACCOUNTING STANDARDS IMPLEMENTATION ON AUDIT OPINION WITH REGIONAL LOSS AS MEDIATOR

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Abstract

This study analyses the influence of the effectiveness of the Internal Control System (ICS), follow-up on audit recommendations, and the implementation of Government Accounting Standards (GAS) on local government audit opinions, with regional losses as a mediating variable. The study is motivated by a contradictory phenomenon. While the quality of audit opinions has generally improved, regional losses have significantly increased over the past six years, peaking at IDR 2,457,241.66 million in 2023. The research utilises secondary data from the Audit Board of Indonesia (BPK), covering 1,012 observations from city and regency governments during 2022–2023. The data analysis using Partial Least Squares Structural Equation Modeling (SEM-PLS). The study finds that (1) ICS effectiveness significantly affects regional losses but not audit opinions, (2) follow-up on audit recommendations has no significant effect on either audit opinions or regional losses, (3) GAS implementation significantly affects both audit opinions and regional losses, and (4) regional losses do not mediate the relationships between the independent variables and audit opinion. These findings highlight the theoretical relevance of Agency Theory and provide practical and policy implications for improving local government financial accountability and audit outcomes.

Keywords: Internal Control System, Audit Recommendation, Government Accounting Standards, Audit Opinion, Regional Loss

JEL Classification: H83, M42, H72

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INTRODUCTION

Financial statements are essential instruments for demonstrating public financial governance by government entities. Their preparation follows the Government Accounting Standards as mandated by Law No. 17 of 2003 and

Government Regulation No. 71 of 2010. At the regional government level, financial statements serve as a form of accountability for budget implementation and provide strategic information for planning and performance evaluation (Suwanda, 2015). Furthermore, they play a vital role

in supporting transparency and public sector accountability (Wisdom & Oyebisi, 2017). To ensure the reliability and compliance of financial statements with applicable standards, audits are conducted by the Supreme Audit Board of Indonesia (BPK), an independent institution established under Law No. 15 of 2006. The audit process is systematic and aims to provide assurance on the fairness of financial reports and to detect material misstatements, including errors and fraud (Arens et al., 2015; Rezaee, 2002). BPK is authorised to carry out financial audits, performance audits, and special-purpose audits. The BPK operates independently and is free from political interference to maintain the credibility and objectivity of the audit process (Mir et al., 2017).

One of the key outcomes of the regional government financial audit is the audit opinion issued by BPK, which reflects the quality of financial management and reporting. Audit opinions are classified into four types: Unqualified Opinion, Qualified Opinion, Adverse Opinion, and Disclaimer of Opinion. These opinions are based on a thorough assessment of financial information, including compliance with accounting standards, the adequacy of disclosures, and the effectiveness of internal controls. [Figure 1](#) illustrates the trend of audit opinions between 2018 and 2023. Between 2018 and 2023, there has been a notable increase in the number of local governments receiving Unqualified Opinions, indicating improvements in accountability and financial management. The number of Unqualified Opinions rose from 443 in 2018 to 500 in 2021, although it experienced a slight decline in the following years. This trend suggests a growing commitment among regional governments to enhance the transparency and sustainability of public financial management.

The Audit Report (LHP) issued by the Supreme Audit Board (BPK) not only includes the audit opinion but also

evaluates the effectiveness of the Internal Control System (ICS) and compliance with applicable laws and regulations. The ICS assessment highlights any control weaknesses found in audited entities, while compliance evaluations document violations such as misuse of funds, which impact transparency and accountability. These findings form the basis for recommendations and, when applicable, recovery of losses. BPK also ensures ongoing monitoring of the implementation of recommendations and reports criminal indications to the appropriate authorities in accordance with legal provisions.

Non-compliance with laws and regulations in financial management can result in serious consequences, including regional losses, potential losses, and loss of income. Common irregularities include fictitious procurement, incomplete projects, and price mark-ups, all of which increase inefficiencies and damage public accountability. According to Law No. 1/2004 on State Treasury, regional loss refers to any reduction in money, securities, or assets—whether actual or measurable, caused by unlawful acts, whether intentional or due to negligence. BPK reports such losses in quantitative terms based on audits of regional financial management. [Figure 2](#) illustrates the increasing trend of regional financial losses between 2018 and 2023, peaking at over 2.4 trillion rupiah in 2023. While there was a temporary improvement in 2019, the overall six-year trend reflects growing concern over the effectiveness of local financial governance. This is especially troubling considering the simultaneous improvement in audit opinions over the same period. The contrast between better audit opinions and rising losses raises a critical question: Why does improved audit quality not correspond with reduced financial loss? This contradiction calls for further investigation into the relationship between audit opinions and regional losses, and the factors that may influence this dynamic.

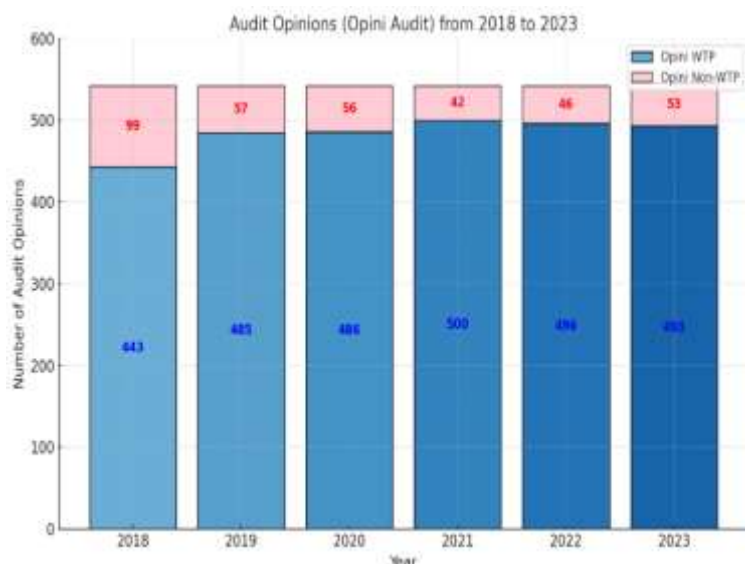


Figure 1. The trend of audit opinions

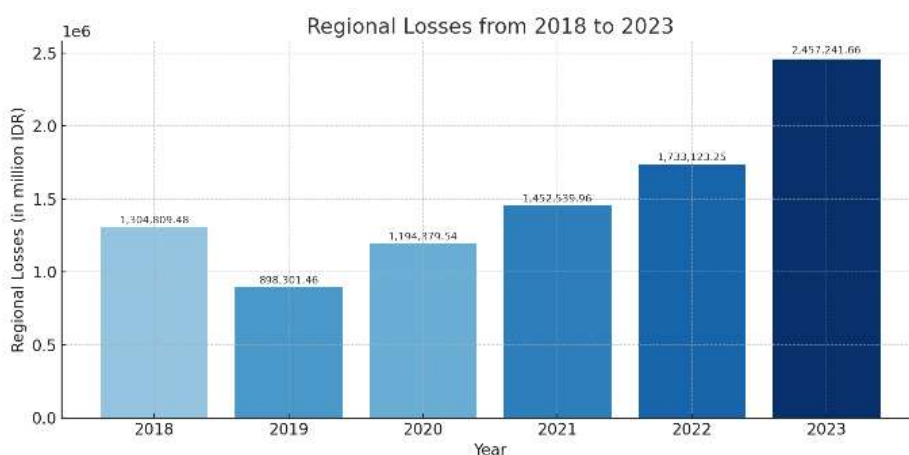


Figure 2. The increasing trend of regional financial losses

Previous studies have shown that audit opinions on government entities are influenced by several factors, including the effectiveness of internal control systems (ICS), the follow-up of audit recommendations, and compliance with Government Accounting Standards (GAS). Ineffectiveness in implementing these three aspects is suspected to contribute to the increase in regional losses, even when the entities formally receive favorable audit opinions. Therefore, further research is needed to examine whether improving the effectiveness of ICS, audit follow-up, and GAS compliance can significantly reduce regional losses and strengthen the quality of public financial governance.

Several studies, such as those by Hamidayanti & Wardani, (2018), Khabibah & Aryati, (2024), Pratiwi & Aryani, (2016), confirm that optimal follow-up on audit findings can enhance audit opinions, particularly increasing the likelihood of receiving an unqualified opinion. Din et al., (2017) further demonstrate that effective follow-up can directly reduce financial losses and indirectly improve audit opinions. Meanwhile, Furqan et al., (2020) add that a higher number of audit findings negatively affects the quality of financial statements and public services; however, this can be reversed through effective implementation of audit follow-ups. The role of external auditors is crucial in providing constructive

and actionable recommendations, while internal auditors must be proactive in monitoring their implementation.

The study by Furqan et al., (2020) provides evidence that, in addition to the follow-up on audit recommendations, audit findings also influence audit opinions, but with a negative effect. Research conducted by Kesuma & Ritonga, (2020) shows that improvements in the effectiveness of the Internal Control System (ICS) tend to correlate with better audit opinions. Their study also found significant differences in the average ICS effectiveness across various levels of audit opinions. Furthermore, interview results indicated an indirect relationship in which the effectiveness of ICS is considered when determining audit planning materiality (PM) and assessing the impact of ICS weaknesses on the fairness of financial statements.

The findings of Hamidayanti & Wardani, (2018) demonstrate that the better the quality of the ICS, the greater the likelihood of a local government obtaining an unqualified audit opinion, reflecting stronger financial management. Similarly, Khabibah & Aryati, (2024) confirm that weaknesses in the implementation of ICS contribute to the decline in the quality of audit opinions received by local governments. The more audit findings related to ICS deficiencies, the lower the quality of the audit opinion. These findings are supported by several other studies (Bandiyono, 2021; Kusumawati & Ratmono, 2017; Oktaria & Herliansyah, 2019; Prasetyaningsih et al., 2014; Rosadi & Okfitasari, 2019; Sabella & Mutmainah, 2022; Setiyawati, 2016; Siregar & Rudiansyah, 2019; Surya & Suparno, 2019; Syahputra et al., 2019; Widodo & Sudarno, 2017), which also support the relationship between ICS effectiveness and the quality of audit opinions.

The implementation of Government Accounting Standards (GAS) plays a crucial role in producing credible financial statements. The study by I. P. U.

Mahaputra & Rama Putra (2014) found that GAS implementation is positively and significantly correlated with the improvement of financial statement quality in the Regional Work Units (SKPD) of Gianyar Regency. Therefore, it is recommended to continue the proper application of GAS to enhance audit opinions from qualified with exceptions to unqualified in the future. Conversely, Pamungkas et al., (2018) revealed that non-compliance with GAS hurts the audit opinion received. It can be concluded that GAS is a key factor influencing the audit opinion issued by the Audit Board of Indonesia (BPK). Compliance with GAS not only improves the quality of financial statements but also supports obtaining favourable audit opinions. On the other hand, non-compliance may result in less favourable audit opinions.

Previous studies have extensively examined the direct effects of internal control system strength, the implementation of audit recommendation follow-up, and the application of government accounting standards (GAS) on the quality of audit opinions issued for local governments. In addition, regional losses have also been identified as a factor influencing audit opinions, with such losses having a negative impact on the opinions issued by the Audit Board of Indonesia (BPK) (Din et al., 2017; Pamungkas et al., 2018; W & Probahudono, 2015). The level of financial loss also serves as a partial mediating variable in the relationship between audit follow-up and audit opinions (Din et al., 2017). Thus, regional losses not only directly affect audit opinions but also mediate the influence of other factors, such as the implementation of audit recommendation follow-up, on the audit opinion.

This study contributes by identifying other factors that influence regional losses and their impact on audit opinions, by integrating two dimensions: the effectiveness of the Internal Control System (ICS) and the implementation of Government

Accounting Standards (GAS). Unlike the study by Din et al., (2017), which focused solely on audit follow-up, this research also considers additional factors that affect regional losses. It reveals that the effectiveness of the ICS plays a key role in reducing the likelihood of regional losses, which in turn indirectly improves audit opinion quality. Furthermore, poor GAS implementation is identified as a factor that may exacerbate regional losses, thereby negatively affecting the audit opinion. Therefore, this study not only enriches the existing literature but also offers a more holistic analytical framework for understanding the dynamics of audit opinions in the public sector. The phenomenon of increasing unqualified opinions accompanied by growing regional losses presents a paradox. Ideally, better audit opinions should reflect more reliable financial reporting; however, in reality, regional losses continue or even increase. This study addresses this research gap by including several factors that influence regional losses and, ultimately, audit opinions. It further tests whether these factors have not only a direct effect on audit opinions but also an indirect effect through regional losses as a mediating variable.

Based on the background of the problem, this study aims to comprehensively analyze the influence of the effectiveness of the Internal Control System (ICS), follow-up on audit recommendations, and the implementation of Government Accounting Standards (GAS) on the audit opinion of local governments, while considering regional losses as a mediating variable. This study raises ten key research questions that examine the direct relationships between the independent variables and both the audit opinion and regional losses, as well as the mediating role of regional losses in strengthening or weakening the impact of those variables on the audit opinion. This is crucial, as the audit opinion not only reflects the quality of financial reporting but also serves as an

indicator of the overall effectiveness of local financial governance.

Theoretically, this study is expected to contribute to academic literature by expanding the understanding of the determinants of audit opinions and regional losses, particularly from the perspective of non-compliance with GAS, weaknesses in the ICS, and the effectiveness of audit follow-ups. Moreover, the study proposes a new conceptual model that illustrates how these three main factors affect audit opinions through regional losses. Practically, the findings of this research can be utilized by local governments as a foundation for formulating policies that strengthen internal control systems, enhance compliance with GAS, and improve the effectiveness of audit follow-up processes, ultimately aiming to increase financial transparency, accountability, and the likelihood of obtaining a more favorable audit opinion.

LITERATURE REVIEW

Agency Theory

Agency theory explains the relationship between the principal, who delegates authority, and the agent, who is entrusted to carry out tasks on the principal's behalf, assuming that the interests of both parties are not always aligned (Jensen & Meckling, 1976). In the public sector, this relationship is reflected in the interaction between the people (represented by the Regional House of Representatives or DPRD) as the principal, and the local government as the agent, who is given the mandate to manage public finances (Bergman & Lane, 1990). This delegation of authority creates an information asymmetry, where the agent possesses more information than the principal, creating opportunities for opportunistic behavior that may harm public interests.

Information asymmetry gives rise to agency costs, which are expenses incurred to mitigate potential misalignments of interest. These costs include monitoring costs (incurred by the principal to super-

vise the agent), bonding costs (expenses borne by the agent to assure the principal of their alignment), and residual loss (inevitable losses that remain even after control mechanisms are in place). In the context of local government financial management, such agency costs emerge due to the imbalance of information between the DPRD and the local government, requiring the implementation of robust control mechanisms to minimize associated risks.

This study categorizes Internal Control Systems, follow-up on audit recommendations, and the implementation of Government Accounting Standards (GAS) as forms of bonding costs. These elements represent the local government's commitment to building public trust and ensuring accountable financial management. A strong internal control system reduces the risk of financial mismanagement, effective follow-up on audit findings reflects continuous improvement in governance, and compliance with GAS ensures that financial reports are prepared according to established standards.

On the other hand, monitoring costs in the public sector are reflected in the audit process conducted by the Supreme Audit Board. Although audit costs are not directly borne by the DPRD, the audit opinion serves as a crucial external monitoring tool to assess the accountability of the local government. The audit opinion reflects the fairness of financial reporting and indicates the effectiveness of oversight mechanisms. When internal controls and audit follow-ups are effective, the risk of material misstatements is reduced, allowing the auditor to limit extensive audit procedures, thereby lowering monitoring costs.

However, when residual losses remain high, evident from significant financial losses due to non-compliance, the auditor must increase the scope of their procedures to obtain reasonable assurance, which in turn raises monitoring costs and may result in a lower audit opinion.

Therefore, in the framework of agency theory, the three bonding elements examined in this study are essential in reducing residual loss and supporting higher-quality audit outcomes. When these mechanisms are effectively implemented, agency conflicts can be minimized, and public financial governance becomes more transparent and accountable.

Government Audit Opinions

Government audit opinions serve as the auditor's professional assessment regarding the fairness of a government's financial statements in reflecting its true financial condition. According to Law No. 15 of 2004, there are four types of audit opinions: Unqualified Opinion, Qualified Opinion, Adverse Opinion, and Disclaimer of Opinion. An Unqualified Opinion indicates that the financial statements comply with accounting standards and are free from material misstatements, while a Qualified Opinion is issued when there are minor deviations that do not significantly affect the overall fairness. An Adverse Opinion signals significant material misstatements that render the financial statements unreliable, and a Disclaimer of Opinion occurs when the auditor cannot obtain sufficient evidence to form an opinion.

The determination of audit opinions depends on factors such as conformity to accounting standards, completeness of information, compliance with regulations, and the effectiveness of internal control systems. These audit opinions are crucial as they influence public trust and stakeholder confidence in government financial management. Changes in opinions, such as improvements from Qualified to Unqualified or declines to lower opinions, reflect either progress or challenges in regional financial governance, impacting the transparency and accountability of public financial administration.

Government's Internal Control System

The Government Regulation No. 60 of 2008 establishes a comprehensive framework for the Government's Internal Control System (ICS) to support effective and efficient governance at both central and regional levels. Government's Internal Control System aims to achieve organisational goals, ensure reliable financial reporting, safeguard state assets, and comply with laws and regulations. Its implementation involves all employees under accountable leadership, with oversight by government internal supervisory agencies such as BPKP and regional inspectorates to guarantee effectiveness.

GICS consists of five interrelated components: control environment, risk assessment, control activities, information and communication, and monitoring. The control environment serves as the foundation, where leadership fosters integrity, ethics, competence, and professionalism to build a culture that supports internal control. Risk assessment identifies and analyses both internal and external risks based on clear organisational objectives, enabling appropriate mitigation measures aligned with the institution's risk tolerance. Control activities include policies and procedures to ensure operations align with objectives, such as performance evaluation, capacity building, segregation of duties, transaction approvals, data accuracy, and asset protection.

Information and communication systems are essential for timely and relevant data flow to support decision-making. Leadership must ensure effective communication channels and continuous information system improvements to meet evolving organisational needs. Monitoring is critical to evaluate the ongoing effectiveness of GICS through continuous daily supervision, periodic evaluations, and follow-up on audit findings and recommendations. Local governments are mandated to act on audit recommendations, supervised by BPK, to address weaknesses and prevent recurring

problems. This dual focus on prevention through effective internal controls and corrective actions through follow-up responses is vital for achieving accountable financial governance, as emphasized by recent studies.

Government Accounting Standards

Government Regulation No. 71 of 2010 governs the implementation of the Government Accounting Standards (GAS) in Indonesia, which set the principles for preparing and presenting public sector financial reports to ensure transparency and accountability in government financial management. GAP applies to all government entities, both central and regional, based on accrual accounting principles. It consists of 12 Statements of Government Accounting Standards, each regulating specific aspects of financial reporting such as overall presentation, budget realisation reports, cash flow statements, and notes to financial statements. Additionally, GAP covers detailed guidelines for asset and liability management, including inventories, investments, fixed assets, construction in progress, recognition and measurement of liabilities, changes in accounting policies, consolidated financial reporting, and operational performance reporting. Together, these standards aim to produce reliable, transparent, and accountable financial statements that meet applicable accounting principles.

Regional Losses

Regional losses occur due to local governments' non-compliance with regulations, which leads to waste, misappropriation, and potential corruption that harm public interests. Since local government finances originate from the state budget and community contributions through taxes and levies, regional losses are essentially state losses. These losses often arise from activities such as fictitious procurement, work not meeting specifications, budget misuse, and price

inflation, worsened by weak internal controls that increase the risk of fraud. According to the Association of Certified Fraud Examiners (ACFE), fraud can be categorized into three main areas: corruption, asset misappropriation, and financial statement fraud, all of which are primary causes of financial losses in local governments (Din et al., 2017).

From a legal perspective, regional losses are classified based on criminal law, administrative law, and civil law viewpoints. Under criminal law, losses refer to the reduction of state assets caused by corruption as regulated by Law No. 31/1999 jo. Law No. 20/2001. In administrative law, losses arise from deviations in state financial management that violate legal norms, with the condition that the loss amount can be precisely calculated and there is a clear causal relationship (Miller & Sheikh, 2023). Meanwhile, civil law defines losses broadly to include incurred costs, property damage, and lost profits, aiming to restore the injured party to the position they would have been in had the loss not occurred (Mehaga S, 2022; Seregig et al., 2019). Regarding auditing, the Audit Board of Indonesia (BPK) and the Financial and Development Supervisory Agency (BPKP) have the authority to calculate state losses based on Law No. 15 of 2006 and Government Regulation No. 60 of 2008 as the legal basis for financial oversight.

Hypothesis Development

From the perspective of agency theory, the local parliament (DPRD) acts as the principal, while the regional government serves as the agent responsible for managing public resources. The information asymmetry between these two parties necessitates a monitoring mechanism such as an effective internal control system (ICS) and external audit. A well-functioning ICS can reduce the risk of misstatements or fraud, thereby improving the quality of financial reporting and increasing the likelihood of receiving a

favorable audit opinion. Previous studies Bandiyono, (2021), Kusumawati & Ratmono, (2017) have shown that weaknesses in ICS are associated with unfavorable audit opinions. Therefore, the first hypothesis is proposed:

H1: Lower effectiveness of the internal control system has a negative effect on the audit opinion of local governments.

In the framework of agency theory, the follow-up of audit recommendations reflects the agent's accountability in addressing issues identified by the auditor, who serves as an extension of the principal. The more committed a regional government is to responding to audit findings, the higher the credibility of its financial management. Prior research Amyulianthy et al., (2020), Hamidayanti & Wardani, (2018) indicates that effective follow-up actions increase the chance of obtaining a favorable audit opinion. Hence, the second hypothesis is formulated as follows:

H2: Follow-up on audit recommendations has a positive effect on the audit opinion of local governments.

According to agency theory, compliance with Government Accounting Standards reflects the agent's effort to meet the principal's expectations for transparency and accountability in financial reporting. Failure to adhere to these standards increases information asymmetry and decreases the trustworthiness of financial reports. Pamungkas et al., (2018) found that non-compliance with GAS negatively affects audit opinions. Thus, the following hypothesis is proposed:

H3: Inappropriate implementation of Government Accounting Standards negatively affects the audit opinion of local governments.

Within the agency theory framework, an internal control system functions as a key instrument for the principal to ensure

the agent performs in accordance with organizational objectives. Weak ICS increases the opportunity for opportunistic behavior by the agent, which may result in regional financial losses. Research by Ratmono et al., (2021) confirms that ICS deficiencies are correlated with increased corruption and financial losses in the public sector. Therefore:

H4: Low effectiveness of the internal control system has a positive effect on regional losses.

Follow-up actions represent the agent's accountability in addressing audit findings. In agency theory, this reflects the agent's commitment to reducing information asymmetry and financial risk. Din et al., (2017) observed that proper follow-up on audit recommendations helps prevent financial losses in local governments. Therefore, the fifth hypothesis is proposed:

H5: Follow-up on audit recommendations has a negative effect on regional losses.

From the lens of agency theory, adherence to GAS helps ensure that agents

present accurate and reliable financial information. Non-compliance increases the risk of budgeting errors and inefficiencies, which can lead to regional losses. Thus, the sixth hypothesis is stated as follows:

H6: Inappropriate implementation of Government Accounting Standards has a positive effect on regional losses.

In the context of agency theory, regional financial losses are indicators of the agent's failure to manage public resources effectively, undermining public trust and the quality of financial statements. Such failures are likely to be reflected in less favorable audit opinions. Studies by Din et al., (2017) and Pamungkas et al., (2018) show a negative relationship between regional losses and audit opinion. Therefore, the seventh hypothesis is proposed:

H7: Regional losses have a negative effect on the audit opinion of local governments.

The research model is developed based on the theoretical framework, previous studies, and the hypotheses presented in [Figure 3](#).

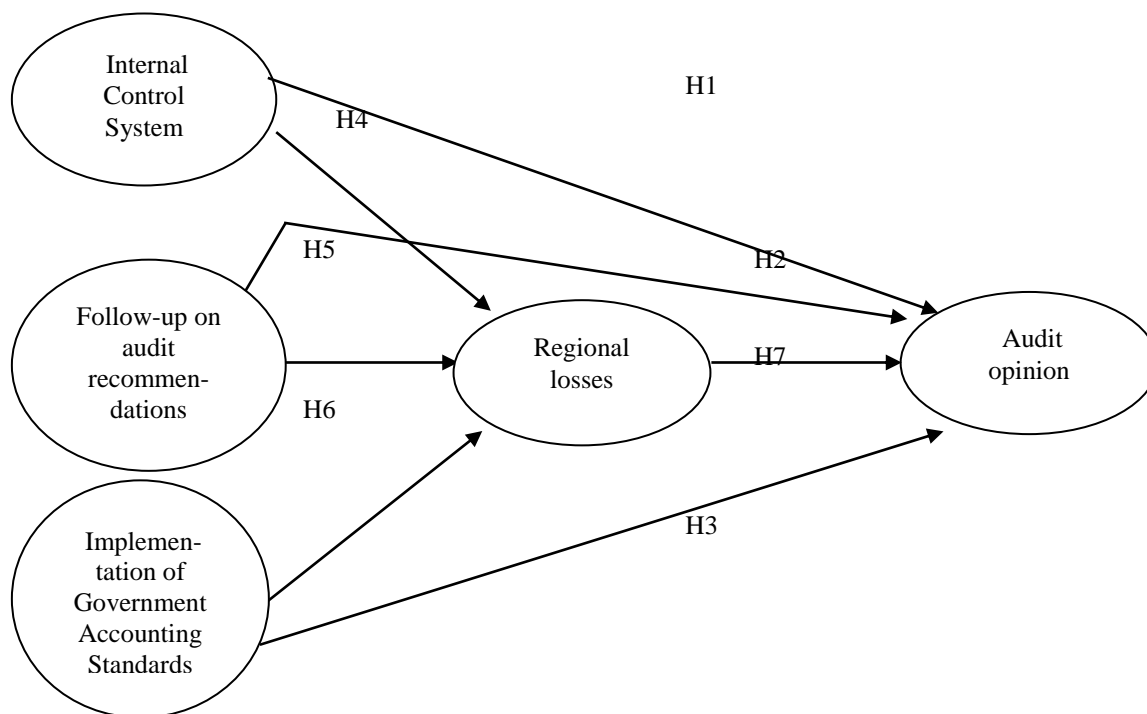


Figure 3. Conceptual Framework

RESEARCH METHODS

Population and Sample

This study employs a quantitative causal research design using secondary data sourced from financial reports and audit summaries released by the Audit Board of Indonesia (BPK) for the period 2022-2023. The focus is on analyzing the relationships between the effectiveness of the internal control system, the follow-up on audit recommendations, non-compliance with government accounting standards, and audit opinions, with regional losses serving as a mediating variable. The analysis uses path analysis to test the influence of independent variables on audit opinions and regional losses, while also measuring the mediating role of regional losses. This longitudinal and fundamental research aims to deepen theoretical understanding of factors affecting accountability in local government financial reporting amid new regulations promoting transparency and improved financial management.

The study population consists of all local governments in Indonesia during 2022-2023, with the sample selected through purposive sampling focused specifically on regency/city governments that have complete data for the variables analyzed. Provincial governments are excluded due to differences in characteristics and scale of financial management that could affect the validity of the findings. The chosen period aligns with significant regulatory changes, including Minister of Home Affairs Regulation No. 19 of 2020 and Law No. 1 of 2022, which govern financial transparency and the distribution of funds between central and local governments. Selecting samples that meet the complete data criteria ensures the validity, reliability, and integrity of the study's results.

Measurement

Audit Opinion denotes the professional auditor's assessment of the fairness and accuracy of financial statement presen-

tation. This variable is operationalized by assigning quantitative scores corresponding to the type of audit opinion granted to local governments: 4 for Unqualified Opinion, 3 for Qualified Opinion, 2 for Adverse Opinion, and 1 for Disclaimer of Opinion, with higher scores reflecting superior financial statement quality (Pamungkas et al., 2018). The Effectiveness of the Internal Control System (ICS) is measured by the number of deficiencies identified within various internal control domains, including accounting controls, budgeting controls, and the overall internal control framework. An increased number of deficiencies results in a higher ICS score, which indicates diminished effectiveness of the internal control system (Oktaria & Herliansyah, 2019; Prasetyaningasih et al., 2014; Ratmono et al., 2021; Setiyawati, 2016).

Moreover, the Follow-up on Audit Recommendations variable captures the extent to which local governments comply with auditors' recommendations, operationalized through the ratio of implemented recommendations to the total recommendations issued. A higher ratio signifies greater compliance and more effective follow-up actions (Amyulianthy et al., 2020; Furqan et al., 2020; Kusumawati & Ratmono, 2017). Additionally, the Implementation of Government Accounting Standards (GAS) is evaluated by the degree of non-compliance in financial reports, as indicated by the number of accounts found to be inconsistent with GAS principles in audit findings (Pamungkas et al., 2018). Lastly, Regional Losses quantify the magnitude of financial losses arising from regulatory violations and inefficiencies in local government financial management. This variable is calculated as the ratio of total losses to actual expenditures, with higher values indicating more significant financial losses (Din et al., 2017; Ziegenfuss, 2001).

Data Analysis

To achieve the research objectives, the data analysis consists of descriptive and inferential statistical methods. Descriptive statistics summarize the main characteristics of the sample data, including measures such as mean, standard deviation, variance, and range, which help in understanding the data structure without making conclusions (Ghozali, 2014; Sugiyono, 2016). Following this, the research employs Structural Equation Modeling (SEM) using the Partial Least Squares (PLS) approach, which is suitable for modeling complex relationships involving multiple latent variables, handling non-normal data distributions, and working effectively with relatively small sample sizes (Ghozali, 2014).

The data analysis includes evaluating the Coefficient of Determination (R^2), which indicates how well the independent variables explain the variance in the dependent variable, with values ranging from 0 to 1; according to Hair et al., (2014), R^2 values of 0.75, 0.50, and 0.25 represent strong, moderate, and weak explanatory power, respectively, although interpretation depends on the research context. To assess the model's fit and variable contributions, the F Square (effect size) test measures changes in R^2 when each independent variable is removed, with effect sizes classified by Cohen (1988) as large ($f^2 \geq 0.35$), medium ($0.15 \leq f^2 < 0.35$), or small ($0.02 \leq f^2 < 0.15$) (Hair et al., 2014). The Q Square test, using blindfolding, evaluates the predictive relevance of the model where $Q^2 > 0$ indicates solid predictive ability (Hair et al., 2014; Henseler et al., 2009). Additionally, direct effect testing uses path coefficients and bootstrapping-derived t-statistics to determine the significance of the direct relationship between variables (Hair et al., 2014), while indirect effect testing assesses mediation based on the product of path coefficients along with Baron & Kenny,(1986) criteria. The Variance Accounted For (VAF) method

then quantifies the extent of mediation, where $VAF \geq 80\%$ indicates full mediation, $20\% \leq VAF < 80\%$ partial mediation, and $VAF < 20\%$ no significant mediation effect.

RESULT AND DISCUSSION

Result

This study analyzes data from 1,012 local governments (regencies/cities) in Indonesia for the fiscal years 2022–2023. The data were collected using purposive sampling, considering completeness and relevance to the research objectives. Out of 1,088 available LKPD (Local Government Financial Report) data points, 76 were excluded due to incompleteness or being from provincial governments. Therefore, only data from regencies and cities were included in the final analysis. The sample reflects the real conditions of local financial management, particularly regarding the effectiveness of the Internal Control System, follow-up on audit recommendations, GAS compliance, audit opinions, and regional losses.

The average score for the effectiveness of the Internal Control System was 9.848, with a maximum of 32, indicating that some regions still experienced significant challenges, such as Sidoarjo Regency in FY 2022 and Waropen Regency in FY 2023. Conversely, several regions reported no issues, indicating highly effective control systems, such as Blora Regency (FY 2022), Boyolali Regency (FY 2022), and Sukoharjo Regency (FY 2023). The average follow-up on audit recommendations was 47.5%, indicating varying levels of response among regions. A total of 85 regions did not follow up on audit recommendations at all, while 16 regions fully implemented them, reflecting different levels of commitment to addressing audit findings.

Most regions (91%) did not report accounts that violated GAS; however, Waropen Regency recorded 10 accounts non-compliant with GAS for two

consecutive years, indicating weak accountability. The average level of regional losses was relatively low (0.002), with a maximum value of 0.062, recorded by Pulau Taliabu Regency. Several regions reported zero losses. The majority of regions received unqualified opinions, but some, such as Waropen and Kepulauan Meranti, received disclaimer opinions, indicating significant issues in financial reporting in certain areas.

The R Square values indicate the extent to which the independent variables explain the variability of the dependent variables in the model, ranging from 0 to 1, with higher values reflecting greater explanatory power. In this study, the R Square for Audit Opinion (Y) is 0.777, signifying that 77.7% of its variability is explained by the model, which, according to Hair et al., (2011), represents a very strong explanatory capability. Conversely, the R Square for Regional Losses (Z) is only 0.164, indicating a weak explanatory power with 83.6% of variability influenced by factors outside the model.

The F Square (f^2) analysis reveals that the Effectiveness of Internal Control

System (X1) and Follow-up on Audit Recommendations (X2) have negligible effects on both Audit Opinion and Regional Losses, while the Implementation of Government Accounting Standards (GAS) (X3) exhibits a dominant influence, especially on Audit Opinion ($f^2 = 2.666$) and a moderate effect on Regional Losses ($f^2 = 0.168$). Furthermore, Regional Losses have a small effect on Audit Opinion ($f^2 = 0.011$). The Q Square (Q^2) values confirm the model's strong predictive relevance for Audit Opinion (0.766) and moderate relevance for Regional Losses (0.150). Overall, the results demonstrate that GAS is the primary factor influencing Audit Opinion, whereas other variables contribute minimally. Despite this, the model maintains strong predictive power for Audit Opinion, suggesting that while the effectiveness of internal controls and follow-up actions may not directly affect Audit Opinion, they potentially impact broader aspects of regional financial governance. [Figure 4.](#) illustrates the results of the bootstrapping method applied to test the significance of both direct and indirect effects.

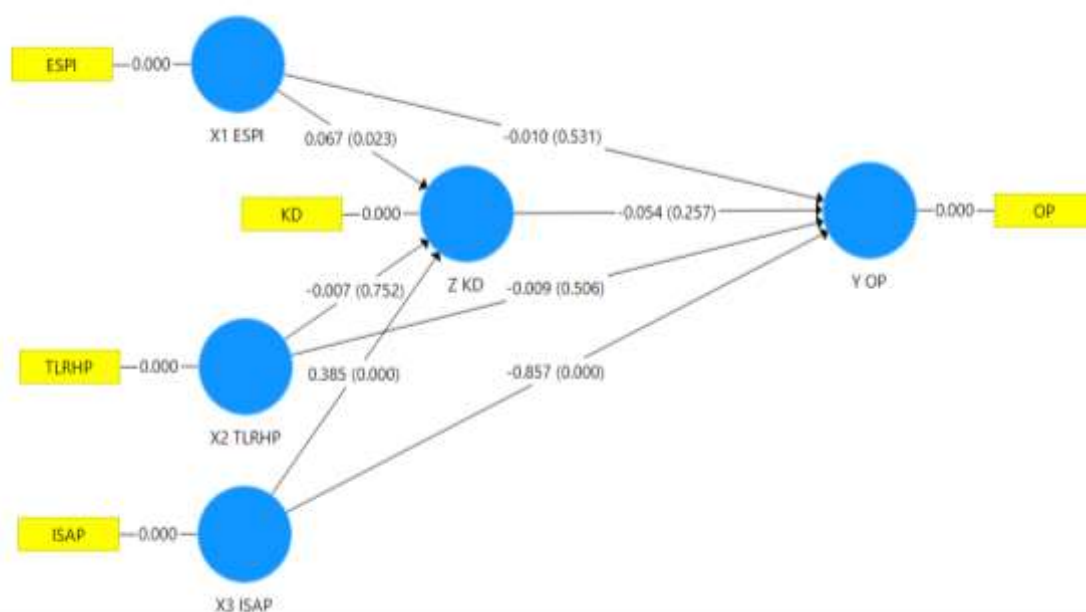


Figure 4. Result Of Bootstrapping Structural Model
Source: data processed by researchers (2025)

Table 1. Results of Hypothesis-testing

Hypothesis	Relationship	Original Sample	T-stat	P-value	Conclusion
H ₁	Effectiveness of the Internal Control System (X1) → Audit Opinion (Y)	-0.010	0.626	0.531	rejected
H ₂	Follow-up on Audit Recommendations (X2) → Audit Opinion (Y)	-0.009	0.665	0.506	rejected
H ₃	Implementation of Government Accounting Standards (X3) → Audit Opinion (Y)	-0.857	25.323	0.000	accepted
H ₄	Effectiveness of the Internal Control System (X1) → Regional Losses (Z)	0.067	2.272	0.023	accepted
H ₅	Follow-up on Audit Recommendations (X2) → Regional Losses (Z)	-0.007	0.316	0.752	rejected
H ₆	Implementation of Government Accounting Standards (X3) → Regional Losses (Z)	0.385	4.489	0.000	accepted
H ₇	Regional Losses (Z) → Audit Opinion (Y)	-0.054	1.133	0.257	rejected

Table 1 explains the details of the hypothesis testing, showing that the effectiveness of the Internal Control System (ICS) and the follow-up on audit recommendations do not have a significant effect on the regional government audit opinion, resulting in the rejection of the hypotheses related to these two variables. However, the improper implementation of Government Accounting Standards (GAS) is proven to have a significant negative effect on the audit opinion and contributes to an increase in regional losses, thus supporting the acceptance of the hypothesis related to GAS. Additionally, low ICS effectiveness has a significant positive effect on regional losses, while regional losses do not significantly affect the audit opinion. These findings emphasize that non-compliance with GAS is a key factor influencing the quality of audit opinions and the level of regional losses, highlighting the importance of proper GAS implementation to enhance accountability and transparency in regional financial management.

Table 2 presents the results of the indirect effect test, which evaluates the

mediating role of regional losses between the independent variables and audit opinion. The findings show no significant indirect effects, preventing mediation effect calculations such as Variance Accounted For (VAF). Following mediation analysis procedures by Hair et al. (2021), the relationships were classified as No-Effect Non-Mediation for both ICS effectiveness and follow-up recommendations, as their direct and indirect effects on audit opinion were not significant. In contrast, Government Accounting Standards (GAS) implementation exhibited a highly significant direct effect on audit opinion (original sample = -0.857, p = 0.000), while its indirect effect through regional losses was not significant, indicating a Direct-Only Non-Mediation. These results suggest that regional losses do not mediate the influence of the independent variables on audit opinion, with GAS implementation playing a dominant direct role. The large effect size of GAS (f² = 2.666) further underscores its critical impact on audit opinion quality within the model.

Table 2. Results of Mediation-testing

Relationship	Original Sample	T-stat	P-value	Conclusion
Effectiveness of Internal Control System (X1) → Regional Losses (Z) → Audit Opinion (Y)	-0.004	0.799	0.425	rejected
Follow-up of Audit Recommendations (X2) → Regional Losses (Z) → Audit Opinion (Y)	0.000	0.224	0.823	rejected
Implementation of Government Accounting Standards (X3) → Regional Losses (Z) → Audit Opinion (Y)	-0.021	1.207	0.228	rejected

Discussion

Hypothesis 1 assumes that the low effectiveness of the internal control system (ICS) would negatively affect the audit opinion of local governments. However, the statistical analysis showed that this relationship was not significant, with an original sample value of -0.010, a t-statistic of 0.626, and a p-value of 0.531. Since the p-value is greater than 0.05, the hypothesis is rejected. This finding is consistent with previous studies by Mainingrum et al., (2023), Pamungkas et al., (2018), Safitri & Darsono, (2015), which concluded that weaknesses in the internal control system do not significantly impact audit opinions. However, it contrasts with studies by Kusumawati & Ratmono, (2017), Setiyawati, (2016), Widodo & Sudarno, (2017), which found a negative influence of ICS weaknesses on audit opinion quality.

From the perspective of Agency Theory, the Internal Control System (ICS) serves as a mechanism to ensure transparency and compliance, helping reduce information asymmetry between local governments (agents) and stakeholders such as the local parliament and the public (principals). However, this study does not confirm the assumption that ineffective ICS directly leads to negative audit opinions. In several cases, local governments with a high number of ICS findings, such as Sidoarjo and Polewali Mandar, which had 32 and 31 findings, respectively, still received unqualified audit opinions, indicating that numerous findings do not automatically result in a negative opinion. Meanwhile, other regions like Waropen and Seram Bagian Barat, despite having a similar number of findings (32 and 31), received disclaimer opinions, suggesting that factors beyond the quantity of findings, such as the materiality and severity of issues, significantly influence the audit outcome. In contrast, regions with zero or very few ICS findings, such as Blora, Boyolali, and Sukoharjo, also received unqualified audit

opinions, reinforcing the idea that the audit opinion is more closely tied to the nature and material impact of findings, rather than their mere number. This highlights the role of auditor judgment and professional assessment in determining the fairness of financial statements.

The insignificant relationship between the effectiveness of the Internal Control System (ICS) and audit opinion can be explained by the relatively homogeneous data characteristics, with a standard deviation of 5.422 smaller than the average ICS weakness value of 9.848, which limits ICS's predictive power in statistically differentiating audit opinion quality. In this model, the Implementation of Government Accounting Standards (GAS) variable shows a substantial and dominant effect on audit opinion with an effect size (f^2) of 2.666 compared to other independent variables. The implication is that although ICS's influence on audit opinion is not statistically significant in this model, ICS remains an important factor in financial governance by enhancing accountability and reducing the risks of inefficiency or fraud in local government financial management.

Hypothesis 2 assumes that the follow-up of audit recommendations would have a positive influence on the audit opinion of local governments. However, the results of the analysis revealed that this relationship is statistically insignificant, with an original sample value of -0.009, a t-statistic of 0.665, and a p-value of 0.506. Since the p-value exceeds the threshold of 0.05, the hypothesis is rejected, indicating that follow-up actions do not have a strong or significant impact on audit opinion. This finding contrasts with the results of earlier studies such as Amyulianthy et al. (2020), Din et al. (2017), Kusumawati & Ratmono (2017), and Pratiwi & Aryani (2016), which suggested a significant and positive relationship between audit follow-up and the achievement of better audit opinions.

From the viewpoint of Agency Theory, follow-up on audit recommenda-

tions is part of the agent's (local government's) responsibility to demonstrate accountability to their principals—the Regional People's Representative Council (DPRD) and the public. The assumption that a more thorough follow-up of audit findings leads to a better audit opinion is not fully supported by the data in this study. Among 85 local governments that had a 0% follow-up rate, 69 received Unqualified Opinions, 12 received Qualified Opinions, and 4 received Adverse Opinions. This distribution indicates that even without implementing any recommendations from previous audit findings, most of these governments were still able to obtain the highest audit opinion. In contrast, a region such as Pematang Rejang Regency in Fiscal Year 2022 achieved 100% follow-up on prior audit recommendations but still received only a Qualified Opinion. These examples demonstrate that the level of follow-up on audit recommendations is not necessarily a determining factor in the final audit opinion, as auditors consider a broader range of factors when forming their judgment.

The insignificant relationship between follow-up on audit recommendations and audit opinion can be explained by the relatively homogeneous data characteristics, with a standard deviation of 0.277 smaller than the average follow-up value of 0.475, which limits the ability of this variable to statistically differentiate audit opinion quality. In this model, the Implementation of Government Accounting Standards (GAS) variable shows a substantial and dominant effect on audit opinion with an effect size (f^2) of 2.666 compared to other independent variables. The implication is that although follow-up on recommendations does not significantly affect audit opinion, it remains crucial for improving financial governance, enhancing transparency, and strengthening public trust as an important element of the Government Internal Control System (ICS).

Hypothesis 3 assumes that the inappropriate implementation of Government Accounting Standards negatively affects the audit opinion of local governments. The analysis results confirmed this relationship to be statistically significant, with an original sample value of -0.857, a t-statistic of 25.323, and a p-value of 0.000. Since the p-value is less than 0.05, the hypothesis is accepted, indicating that deviations from GAS implementation significantly and negatively affect the audit opinions received by local governments. This finding is consistent with the research conducted by Pamungkas et al., (2018).

From the perspective of Agency Theory, noncompliance with GAS can worsen the information asymmetry between the local government (agent) and local parliament or the public (principal), potentially weakening accountability and transparency in public financial management. The assumption that improper GAS implementation negatively influences audit opinion is validated by the findings of this study. Government Accounting Standards (GAS) serve as a core reference in the preparation of local government financial statements; therefore, noncompliance can lead to material misstatements that ultimately impact the fairness and reliability of those financial reports. This aligns with Law Number 15 of 2004, which states that one of the criteria used in determining audit opinions is the degree to which financial statements comply with GAS.

The implication is that local governments must enhance compliance with GAS in order to obtain favorable audit opinions. This, in turn, strengthens trust from principals, particularly the DPRD. Beyond enhancing the confidence of the DPRD and the public, proper GAS implementation also contributes to the overall quality of financial statements, thereby supporting transparent and accountable public financial reporting. As noted by Sukma & Hidayah, (2023), optimal implementation of GAS plays a

critical role in ensuring the production of high-quality financial reports that uphold the principles of accountability and transparency in government.

Hypothesis 4 assumes that the low effectiveness of the internal control system has a positive effect on regional losses. The results of the analysis confirm this relationship as statistically significant, with an original sample value of 0.067, a t-statistic of 2.272, and a p-value of 0.023. Since the p-value is less than 0.05, the hypothesis is accepted, indicating that a less effective internal control system contributes to higher levels of financial loss at the regional level.

From the perspective of Agency Theory, an ineffective internal control system increases the risk of information asymmetry between local governments (agents) and the local parliament and the public (principals), potentially weakening accountability and transparency in financial management. Weak internal controls can lead to decreased supervision, thus increasing the likelihood of irregularities, inefficiencies, and fraud. Inadequate compliance with procedures, poor accountability mechanisms, and weak oversight can open opportunities for unauthorized expenditures, fictitious transactions, and misuse of funds. These findings align with Ratmono et al., (2021), who suggest that ineffective internal controls are positively associated with higher levels of corruption in regional governments.

The implication is that although the internal control system may not have a direct influence on the audit opinion, its effectiveness is crucial in minimizing financial losses. Strengthening internal controls plays a key role in safeguarding public funds, improving budget implementation, and ensuring that financial resources are managed properly. Therefore, local governments must prioritize the improvement of internal control mechanisms as a strategic effort to enhance

financial governance and prevent potential losses.

Hypothesis 5 assumes that the follow-up of audit recommendations has a negative effect on regional losses. However, the analysis results show that this relationship is not statistically significant, with an original sample value of -0.007, a t-statistic of 0.316, and a p-value of 0.752. Since the p-value exceeds the 0.05 threshold, the hypothesis is rejected, indicating that the follow-up actions taken by local governments are not strong enough to significantly reduce financial losses. These findings contrast with Din et al., (2017), who argued that higher follow-up rates on audit findings tend to be associated with lower levels of financial loss.

From the lens of Agency Theory, audit recommendations should serve as a mechanism for local governments (agents) to correct financial management weaknesses in order to meet the interests of the local parliament and the public (principals). However, the assumption that follow-up implementation negatively affects financial loss is not confirmed in this study. Although several regional governments reported 100% completion of follow-up actions across fiscal years 2022 and 2023, financial losses still occurred. For example, out of 16 local governments that fully implemented audit follow-ups, 13 experienced losses below the regional average of 0.002, while 3 exceeded it. This indicates that full implementation alone does not automatically eliminate the potential for financial losses.

This finding supports the statistical test results, which indicate that the follow-up of audit recommendations has no significant effect on regional losses. One possible explanation is that the implementation of follow-up actions may require a longer time frame or may not yet address the root causes of financial losses, so the impact is not immediately visible. The implication is that although audit follow-ups aim to improve financial governance

and prevent or reduce losses, their effectiveness depends on being complemented by strengthened internal control systems and enhanced compliance with regulations.

Hypothesis 6 assumes that the inappropriate implementation of Government Accounting Standards has a positive effect on regional losses. The analysis results indicate a statistically significant relationship, with an original sample value of 0.385, a t-statistic of 4.489, and a p-value of 0.000. Since the p-value is less than 0.05, the hypothesis is accepted. This means that higher levels of non-compliance with GAS are associated with an increase in financial losses at the regional government level.

From the perspective of Agency Theory, non-compliance with GAS exacerbates information asymmetry between local governments (agents) and stakeholders such as the local parliament and the public (principals). Such non-compliance undermines transparency and accountability in financial management. Errors in GAS implementation may include incorrect recording of revenues and expenditures, inaccurate asset recognition, or misclassification of transactions. These issues compromise the reliability of financial reports and increase the risk of budget misuse and inefficiency, which directly contribute to regional losses.

Empirical data further supports this finding. For instance, Kabupaten Seram Bagian Barat and Kabupaten Mamberamo Raya, both of which had six non-compliant accounts, recorded regional losses of 0.00946 and 0.00454, respectively, well above the national average of 0.002. Even more striking, Kabupaten Waropen, which had ten non-compliant accounts, reported losses of 0.04776 in 2022 and 0.02827 in 2023. These figures confirm that greater deviations from GAS standards are associated with higher financial losses. Thus, strengthening compliance with GAS is essential to improve the quality of

financial reporting and reduce the risk of regional financial losses in the future.

Hypothesis 7 assumes that regional losses have a negative influence on local government audit opinions. However, the analysis results show that this relationship is not statistically significant, with an original sample value of -0.054, a t-statistic of 1.133, and a p-value of 0.257. Since the p-value is greater than 0.05, the hypothesis is rejected, indicating that the level of regional loss does not significantly affect the audit opinion. This contrasts with previous studies such as Din et al., (2017); Pamungkas et al., (2018); W & Probohudono, (2015), which found that regional losses negatively impact audit opinions.

From the perspective of Agency Theory, regional losses may reflect poor financial management and worsen information asymmetry between the government (agent) and stakeholders such as the local parliament and the public (principals). Nevertheless, such losses do not automatically affect the audit opinion if the financial statements are still presented fairly in accordance with applicable accounting standards. The lack of a significant effect can be explained through the concept of materiality in auditing, where auditors evaluate whether the losses are materially significant enough to influence the fairness of the financial statements as a whole.

Moreover, the model shows that the variable Implementation of Government Accounting Standards (GAS) has an f^2 value of 2.666, indicating a very large and substantial impact on audit opinions. This implies that GAS is the most influential factor in the model, contributing more significantly than other independent variables. As a result, even when an Unqualified Opinion is issued, it does not necessarily reflect optimal financial management. Therefore, enhanced supervision is needed to minimize financial losses in the future, ensuring that accountability and transpa-

rency in public sector finance are maintained.

The mediation test results indicate that regional losses do not serve as a mediating variable in the relationship between internal control effectiveness, follow-up of audit recommendations, and the implementation of government accounting standards (GAS) with audit opinions. All indirect effect pathways through regional losses were statistically insignificant, as reflected in p-values greater than 0.05. Although theoretically, poor internal control, weak implementation of recommendations, or non-compliance with GAS could increase financial risks and losses, these losses do not significantly influence the audit opinion via an indirect path.

This finding can be explained by the auditor's focus when evaluating local government financial reports. Auditors prioritize the fair presentation of financial statements in accordance with Government Accounting Standards (GAS) rather than the magnitude of financial losses or the effectiveness of internal controls. In practice, a local government may still receive an unqualified opinion as long as the financial statements are free from material misstatements and comply with GAS, even if there are notable weaknesses in control systems or significant losses. This suggests that compliance with accounting standards holds more weight in the audit evaluation process than the actual financial outcomes.

The implication of these findings is that while internal control systems, GAS implementation, and follow-up actions remain important, they do not exert an indirect effect on audit opinions through regional losses. From the perspective of Agency Theory, weaknesses in these areas may increase the risk of information asymmetry and financial mismanagement by the agent (local government), yet do not directly impact the principal's (DPRD/public) perception as long as financial reporting standards are met. Therefore,

continued efforts to strengthen internal controls, enhance compliance with GAS, and improve follow-up on audit recommendations are essential for better risk management and accountability, even if they do not immediately affect audit opinion outcomes.

CONCLUSION AND RECOMMENDATION

This study concludes that the effectiveness of the Internal Control System (ICS) significantly influences regional losses but does not have a significant effect on the audit opinion of local governments. This indicates that although weak internal controls increase the risk of financial loss, auditors prioritize the fair presentation of financial statements in forming their audit opinion. Meanwhile, the follow-up on audit recommendations has no significant effect on either audit opinion or regional losses, suggesting that follow-up actions alone are insufficient unless supported by strong control systems and consistent compliance.

The implementation of Government Accounting Standards (GAS) was found to significantly impact both the audit opinion and regional losses. Noncompliance with GAS reduces the quality of financial reporting and increases the risk of misstatements and financial losses. This highlights the critical importance of compliance with GAS to obtain better audit opinions and to reduce financial risk. However, regional losses do not significantly affect audit opinions and do not mediate the relationship between ICS effectiveness, audit follow-up, and GAS implementation on audit opinions.

Theoretically, these findings reinforce the Agency Theory perspective, where poor governance increases the risk of losses but does not necessarily affect audit opinions, as long as financial statements are fairly presented. This study contributes to the literature by emphasizing that governance factors such as internal controls and audit follow-ups are more

closely related to risk mitigation than to the formation of audit opinions themselves.

From practical and policy perspectives, local governments should continue improving ICS effectiveness, compliance with audit recommendations, and consistent GAS implementation to reduce financial risks and strengthen accountability. However, to obtain better audit opinions, improving the quality of financial statement presentation remains essential. For the Supreme Audit Agency (BPK) and other oversight institutions, this research offers a foundation to develop more comprehensive evaluation policies, focusing not only on financial reporting but also on the effectiveness of financial management and follow-up actions, thus enhancing transparency and accountability in local government financial governance.

This study has some limitations that future research should consider. First, the low ability of the current model to explain regional losses suggests that other factors, such as financial governance, transparency, and external influences, may play a role. Second, regional losses were not proven to mediate the relationship between internal control, audit follow-up, GAS implementation, and audit opinions, indicating that other variables may be more relevant. Therefore, local governments are encouraged to keep improving internal controls, audit follow-up, and GAS implementation to strengthen financial accountability. Audit institutions like BPK are also advised to assess not only the fairness of financial reports but also how well internal controls and audit recommendations are implemented. Future research should explore other factors that might affect regional losses and audit opinions to gain a better understanding of financial management in local governments.

REFERENCES

Amyulianthy, R., Anto, A. S. U., & Budi, S. (2020). Temuan dan Tindak Lanjut Hasil Pemeriksaan Terhadap Opini Audit (Studi Pada Pemerintah

Provinsi di Indonesia). *Jurnal Penelitian Akuntansi*, 1(1), 14–27.

Arens, A. A., Elder, R. J., & Beasley, M. S. (2015). Auditing dan Jasa Assurance. In 2 (15th ed.). Penerbit Erlangga.

Bandiyono, A. (2021). Good Government Governance in The Internal Control System and Audit Opinion. *Jurnal Akuntansi*, XXV(01), 120–137. <https://doi.org/http://dx.doi.org/10.24912/ja.v24i2.699>

Baron, R. M., & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.

<https://doi.org/10.3390/su13084349>

Bergman, M., & Lane, J. (1990). Public Policy in a Principal-Agent Framework. *Journal of Theoretical Politics*, 2(3), 339–352. <https://doi.org/10.1177/095169289002003005>

Din, M., Munawarah, Ghozali, I., & Achmad, T. (2017). The Follow Up of Auditing Results, Accountability of Financial Reporting and Mediating Effect of Financial Loss Rate: An Empirical Study in Indonesian Local Governments. *European Research Studies Journal*, XX(4A), 443–459.

Furqan, A. C., Wardhani, R., Martani, D., & Setyaningrum, D. (2020). The effect of audit findings and audit recommendation follow-up on the financial report and public service quality in Indonesia. *International Journal of Public Sector Management*, 33(5), 535–559. <https://doi.org/10.1108/IJPSM-06-2019-0173>

Ghozali, I. (2014). *Structural Equation Modeling Metode Alternatif dengan Partial Least Square (PLS)* (4th ed.). Universitas Diponegoro.

Hair, J. F., Ringle, C. M., Sarstedt, M., Hair, J. F., Ringle, C. M., & Sarstedt,

- M. (2011). PLS-SEM : Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–151. <https://doi.org/10.2753/MTP1069-6679190202>
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hamidayanti, L., & Wardani, M. K. (2018). Faktor-Faktor Yang Mempengaruhi Opini Audit Laporan Keuangan Pemerintah Daerah. *Jurnal SIKAP (Sistem Informasi, Keuangan, Auditing Dan Perpajakan)*, 2(2), 96. <https://doi.org/10.32897/sikap.v2i2.79>
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). *The Use Of Partial Least Squares Path Modeling In International Marketing*. 20, 277–319. [https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)
- Jensen, M. C., & Meckling, W. H. (1976). Racial diversity and its asymmetry within and across hierarchical levels: The effects on financial performance. *Human Relations*, 72(10), 1671–1696. <https://doi.org/10.1177/0018726718812602>
- Kesuma, I., & Ritonga, I. T. (2020). Analysis of Relationship between Effectiveness of Internal Control System and Audit Opinions on Local Government Financial Statements. *The Indonesian Journal of Accounting Research*, 23(03), 467–490. <https://doi.org/10.33312/ijar.497>
- Khabibah, N., & Aryati, T. (2024). The Influence of The Internal Control System , Follow-up Recommendations , and Regional Characteristics on Audit Opinion. *Jurnal Indonesia Sosial Sains*, 5(8), 1882–1895.
- Kusumawati, D., & Ratmono, D. (2017). Determinan Pengungkapan Laporan Keuangan Pemerintah Daerah Di Indonesia. *Diponegoro Journal of Accounting*, 6(1), 1–15. <https://ejournal3.undip.ac.id/index.php/accounting/article/view/18283>
- Mahaputra, I. P. U., & Rama Putra, I. W. (2014). Analisis Faktor-Faktor Yang Memengaruhi Kualitas Informasi Pelaporan Keuangan Pemerintah Daerah. *E-Jurnal Akuntansi Universitas Udayana*, 8(2), 230–244.
- Mainingrum, R., Sylvia, Oktaviani, A. R., & Meuthia, R. F. (2023). The Effect of Audit Findings , Follow-Up Audit Recommendations , And BPK Opinions from The Previous Year on The Determination of Opinions in Local Government Financial Statements. *Economics, Business, Accounting & Society Review*, 2, 58–73. <https://doi.org/https://doi.org/10.55980/ebasr.v2i1.56>
- Mehaga S, M. H. (2022). Pengakhiran Kontrak Sebelum Terjadi Wanprestasi Oleh Pihak Yang Mengantisipasi Kegagalan Pelaksanaan Kewajiban. *Dharmasiswa*, 2(2), 981–994.
- Miller, S. M., & Sheikh, A. (2023). *New Evidence on The Substitution Between Accrual Earnings Management and Real Earning Management in US Firms*. 15(2).
- Mir, M., Fan, H., & Maclean, I. (2017). Public sector audit in the absence of political competition. *Managerial Auditing Journal*, 32(9), 899–923. <https://doi.org/10.1108/MAJ-03-2016-1357>
- Oktaria, D., & Herliansyah, Y. (2019). Analysis of Weakness of the Internal Control System , Non Compliance with Statutory Provisions and Follow-Up Recommendations Results On the Audit Opinion of Bpk Ri. *International Journal of Business and Management Invention (IJBMI)*, 8(05), 51–57.

- Pamungkas, B., Ibtida, R., & Avrian, C. (2018). Factors influencing audit opinion of the Indonesian municipal governments' financial. *Cogent Business & Management*, 5(1), 1–18. <https://doi.org/10.1080/23311975.2018.1540256>
- Prasetyaningsih, E., Yuhalfiyah, G., & Susanto, H. (2014). Internal Control System Weakness and Non-Compliance to the Provision of Legislation in Practicing Audit of Local Government in Indonesia. *Open Journal of Political Science*, 4, 257–264.
- Pratiwi, R., & Aryani, Y. A. (2016). Pengaruh Karakteristik Pemerintah Daerah, Kepala Daerah, Tindak Lanjut Temuan Audit Terhadap Opini. *Jurnal Akuntansi*, 20(2), 167. <https://doi.org/10.24912/ja.v20i2.52>
- Ratmono, D., Cholbyah, A., Cahyonowati, N., & Darsono, D. (2021). The problem of corruption in government organizations: Empirical evidence from indonesia. *Problems and Perspectives in Management*, 19(4), 29–39. [https://doi.org/10.21511/ppm.19\(4\).2021.03](https://doi.org/10.21511/ppm.19(4).2021.03)
- Rezaee, Z. (2002). *Financial Statement Fraud Prevention and Detection*. John Wiley & Sons, Inc.
- Rosadi, S., & Okfitasari, A. (2019). Pengaruh Karakteristik Pemerintah Daerah dan Waktu Penyampaian Laporan Keuangan terhadap Opini Audit BPK. *Jurnal Akuntansi Dan Pajak*, 19(2), 148. <https://doi.org/10.29040/jap.v19i2.326>
- Sabella, R. F., & Mutmainah, I. (2022). The Role Of Timeliness in Providing Audit Opinions of Local Government Financial Report. *SAR (Soedirman Accounting Review): Journal of Accounting and Business*, 07(02), 98–110. <https://doi.org/10.32424/10.32424/1.sar.2022.7.2.6427>
- Safitri, N. L. K. S. A., & Darsono. (2015). Pengaruh Sistem Pengendalian Internal Dan Temuan Kepatuhan Terhadap Opini Audit Pada Pemerintah Daerah. *Diponegoro Journal of Accounting*, 4(1), 122–133.
- Seregig, I. K., Hartono, B., & Riagung. (2019). Authority Analysis of Counting the State Financial Loss in the Investigation of Criminal Act of Corruption in Indonesia (Study at the BPK Representative Office and BPKP Lampung Province). *International Journal of Sociological Jurisprudence*, 2(1), 46–57.
- Setiyawati, H. (2016). Effect of Weaknesses of the Internal Control Systems and Non-Compliance with Statutory Provisions on The Audit opinion of The Audit Board of The Republic of Indonesia. *International Journal of Engineering Research and Application*, 6(9), 1–6.
- Siregar, M. I., & Rudiansyah, J. (2019). Pengaruh Jumlah Temuan Audit Terhadap Opini Audit Kabupaten/Kota Se-Sumatera. *Jurnal Ecoment Global*, 4(1), 101. <https://doi.org/10.35908/jeg.v4i1.576>
- Sugiyono. (2016). *Metode penelitian kuantitatif, kualitatif, dan R & D* (Ke-23). Alfabeta.
- Sukma, A., & Hidayah, N. (2023). The Effect Of Application Of Government Accounting Standards, Implementation Of Internal Control Systems, And Completion Of Audit Findings On The Quality Of Financial Reports With Human Resources Competency As A Moderating Variable (Survey of Regional App. *International Journal of Education & Social Sciences (IJESS)*, 4(3), 2754–2793. www.ijess.org
- Surya, J., & Suparno. (2019). Pengaruh Peran Masyarakat Madani dan Sistem Pengendalian Internal Terhadap Opini Audit Laporan Keuanagnb Pemerintah Daerah (Studi Pada Kabupaten/Kota Di Provinsi Aceh).

Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi (JIMEKA), 4(2), 259–269.

- Suwanda, D. (2015). Factors Affecting Quality of Local Government Financial Statements to Get Unqualified Opinion (WTP) of Audit Board of the Republic of Indonesia (BPK). *Research Journal of Finance and Accounting*, 6(4), 139–157.
- Syahputra, T., Hasan, A., & Rasuli. (2019). Pengaruh Pengungkapan Kinerja Keuangan Pemerintah, Temuan Pemeriksaan Badan Pemeriksa Keuangan terhadap Opini Audit dengan Tindak Lanjut Hasil Pemeriksaan sebagai Variabel Pemoderasi. *Jurnal Ekonomi*, 27(2), 112–123.
- W, R. S. A. A., & Probohudono, A. N. (2015). Analisis Audit BPK RI Terkait Kelemahan SPI, Temuan Ketidapatuhan dan Kerugian Negara. *INTEGRITAS Jurnal Anti Korupsi*, 1(1), 81–110.
- Widodo, O. P., & Sudarno. (2017). Pengaruh Temuan Kelemahan Sistem Pengendalian Intern dan Temuan Ketidapatuhan terhadap Ketentuan Peraturan Perundang-undangan terhadap Opini Bpk Atas Laporan Keuangan Pemerintah Daerah. *Diponegoro Journal of Accounting*, 6(1), 153–161.
- Wisdom, O., & Oyeibisi, O. (2017). Impact Of Public Sector Auditing In Promoting Accountability And Trasparency In Nigeria. *Journal of Internet Banking and Commerce*, 22(3).
<http://www.icommercentral.com>
- Ziegenfuss, D. E. (2001). The role of control environment in reducing local government fraud. *Journal of Public Budgeting, Accounting & Financial Management*, 13(3), 312–324.
<https://www.proquest.com/scholarly-journals/role-control-environment-reducing-local/docview/205008671/se-2?accountid=49069>