

What Drives Clean Audits? Evidence From Philippine Cities (2022-2023)

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Received: 6 August 2025; Revised: 14 September 2025; Accepted: 25 September 2025;
Publication: 20 December 2025

Abstract: This study examines 262 Commission on Audit (COA) reports from Philippine city governments covering fiscal years 2022 and 2023 to understand what drives the issuance of unmodified (clean) audit opinions. Audit opinions are usually seen as technical judgments, but they also reflect how local governments behave, respond to oversight, and build their governance reputation over time. Using binomial logistic regression, the study tested seven possible factors: internal control findings, compliance findings, implementation of audit recommendations, total assets per capita, prior audit opinion, dependence on the Internal Revenue Allotment (IRA), and recognition through the Seal of Good Local Governance (SGLG). Implementation of audit recommendations, prior audit opinion, and SGLG recognition were statistically significant predictors of unmodified audit outcomes. Other variables showed no significant effect. These findings suggest that clean audit outcomes signal more than just compliance with accounting rules. They also capture an LGU's commitment to improvement, consistency in performance, and credibility with stakeholders. The study offers practical lessons for policymakers and oversight agencies, particularly on strengthening audit follow-up, designing better incentive systems, supporting the capacity of local governments, and interpreting audit findings within the broader context of institutional performance. This study contributes to the limited empirical research on Philippine LGU audit outcomes by applying accountability, path dependency, and signalling theories. It underscores the role of institutional behaviour in shaping financial reporting credibility.

To cite this paper:

Erap M. Gultian (2025). What Drives Clean Audits? Evidence From Philippine Cities (2022-2023). *International Journal of Auditing and Accounting Studies*. 7(3), 363-385. <https://DOI:10.47509/IJAAS.2025.v07i03.04>

Keywords: Audit Opinion, Public Financial Accountability, Local Government, Accountability Theory, Signalling Theory, Path Dependency Theory

1. INTRODUCTION

1.1. Background and Rationale

Audit opinions are intended to function as neutral assessments of financial compliance. Yet in practice, they have become contested indicators of governance quality. This tension is particularly evident in Philippine local governments, where the interplay between audit outcomes, political recognition, and institutional behaviour remains underexplored. Audit opinions issued by the Commission on Audit (COA) are ostensibly technical evaluations of whether government entities have fairly presented their financial positions in accordance with applicable standards such as the Philippine Public Sector Accounting Standards (PPSAS), Philippine Financial Reporting Standards (PFRS), and International Public Sector Accounting Standards (IPSAS). However, in public governance discourse, these opinions have come to represent more than financial accuracy.

Audit opinions function not only as assessments of compliance but also as symbolic indicators within public accountability regimes (Bovens, 2007). They serve both technical and reputational functions in the governance ecosystem, signalling to oversight agencies, development partners, and the public whether a local government unit (LGU) is transparent, responsible, and institutionally competent. Drawing on signalling theory (Spence, 1973), unmodified (clean) audit opinions are interpreted as credible cues of good governance and are often linked to eligibility for intergovernmental transfers or performance-based rewards. In the Philippines, this symbolic role is institutionalized in the Seal of Good Local Governance (SGLG), where audit outcomes are among the criteria for national recognition and funding support (Medina-Guce & Sanders, 2024).

The importance of audit credibility has intensified in the post-pandemic governance landscape. With the expansion of LGU responsibilities in health, social protection, and economic recovery—particularly under fiscal decentralization reforms such as the Mandanas-Garcia ruling—audit outcomes have become forward-looking signals of a city's institutional maturity and capacity to manage public resources. While unmodified audit opinions are often interpreted as evidence of sound financial governance, the processes behind their issuance may also be influenced by institutional inertia, audit

discretion, and resource asymmetries. These dynamics suggest that clean audit outcomes may not always reflect procedural compliance alone, but also underlying organisational behaviour, prior audit trajectories, and responsiveness to oversight (North, 1990; Bovens, 2007; Furqan *et al.*, 2020).

Despite the growing weight placed on audit outcomes, there remains limited empirical research on what drives favourable audit results across Philippine LGUs. Much of the existing literature treats audit opinions as static outputs or accountability markers, rather than examining the institutional and contextual factors that shape them (Llanto, 2009; Acevedo *et al.*, 2020; Alqooti, 2020). While international studies have linked audit quality to internal control systems, compliance levels, and fiscal health (Kesuma & Ritonga, 2020), localized and theory-informed evidence from Philippine cities remains scarce.

To address this gap, the present study investigates which factors significantly influence the likelihood of unmodified audit opinions among Philippine city governments. Specifically, it examines the role of internal control findings, compliance findings, implementation of audit recommendations, total assets per capita, prior audit opinion, Internal Revenue Allotment (IRA) dependency, and Seal of Good Local Governance (SGLG) recognition. By analyzing these variables through the lenses of accountability, path dependency, and signalling theories, the study aims to provide both empirical evidence and policy insights into the drivers of local government financial accountability.

1.2. Theoretical Framework and Hypotheses

This study adopts a multi-theoretical approach to explain variations in audit outcomes among Philippine local government units (LGUs). Three interrelated perspectives inform the analytical model: **accountability theory**, **path dependency theory**, and **signalling theory**. These frameworks help interpret how technical audit results are shaped not only by compliance and capacity but also by symbolic governance practices and institutional history.

1.2.1 Accountability Theory: Oversight and Responsiveness

Accountability theory positions financial audits as key instruments for enforcing responsibility in public administration. According to Bovens (2007), accountability involves the obligation of officials to justify the use of public resources to oversight institutions and the public. The audit process reflects this

dynamic by identifying internal control deficiencies, legal compliance violations, and the extent to which corrective recommendations are implemented.

First, **internal control findings** highlight weaknesses in financial management systems. When internal controls are ineffective or poorly enforced, audit risk increases and the likelihood of adverse opinions rises. Such deficiencies undermine transparency and weaken accountability structures (Kesuma & Ritonga, 2020; Alqooti, 2020).

Second, **compliance findings** reflect breaches of rules and regulations governing financial transactions. Persistent non-compliance signals weak rule enforcement, organizational laxity, or a lack of accountability culture (Alqooti, 2020). These findings are relevant not only to legality but also to the perceived integrity of the LGU's financial operations.

Third, the **implementation of audit recommendations** indicates whether an LGU actively responds to audit findings. High rates of implementation reflect a responsive and learning-oriented organization. Furqan *et al.* (2020) suggest that compliance with audit recommendations enhances institutional credibility and supports more favorable future audit outcomes.

These factors lead to the following hypotheses:

- **H1:** A higher number of internal control findings is negatively associated with the likelihood of receiving an unmodified audit opinion.
- **H2:** A higher number of compliance findings is negatively associated with the likelihood of receiving an unmodified audit opinion.
- **H3:** A higher rate of audit recommendation implementation is positively associated with the likelihood of receiving an unmodified audit opinion.

1.2.2 Path Dependency Theory: Institutional Inertia and Resource Constraints

Path dependency theory explains how past behaviour and established routines influence current outcomes. North (1990) argues that institutions often reproduce familiar patterns because of cognitive anchoring, embedded systems, and reputational lock-in.

Total assets per capita reflect the LGU's financial capacity. Resource-based theory (Barney, 1991) suggests that entities with more resources can develop stronger audit-compliant systems. Setiawan *et al.* (2022) found that LGUs with

stronger capacities in analytical, operational (including fiscal), and political areas tend to achieve better public service delivery because these capacities complement each other and enhance overall organizational performance. By extension, LGUs with higher combined capacities may also be better positioned to maintain robust internal controls and compliance systems, which can improve audit outcomes.

The **prior audit opinion** of an LGU is a strong predictor of current outcomes. LGUs that have previously received unmodified audit opinions are more likely to sustain that performance. This may be due to internalized routines, reputational effects, or auditor expectations shaped by historical patterns (Acevedo *et al.*, 2020).

In contrast, **IRA dependency** represents structural limitations in fiscal autonomy. LGUs that rely heavily on the Internal Revenue Allotment may lack the flexibility or motivation to invest in governance reforms and audit compliance systems (Llanto, 2009). Such LGUs may exhibit low audit resilience due to overdependence on national transfers.

These considerations lead to the following hypotheses:

- **H4:** Greater total assets per capita are positively associated with the likelihood of receiving an unmodified audit opinion.
- **H5:** An LGU's prior-year audit opinion is positively associated with its current audit opinion.
- **H6:** Higher dependency on the Internal Revenue Allotment (IRA) is negatively associated with the likelihood of receiving an unmodified audit opinion.

Although grounded in theory, hypotheses H4 and H6 warrant further discussion. While greater total assets per capita are expected to strengthen financial management capacity (Barney, 1991; Setiawan *et al.*, 2022), the relationship may be diluted if resources are not effectively translated into governance reforms or audit readiness. Conversely, although high IRA dependency is theorized to constrain fiscal autonomy (Llanto, 2009), some LGUs may still maintain sound audit practices through strict oversight or strong leadership. These nuances may explain why financial capacity (H4) and fiscal dependency (H6) do not consistently predict audit outcomes, suggesting that governance discipline and institutional behavior may be more influential than structural resource conditions.

1.2.3 Signalling Theory: Governance Credibility and External Recognition

Signalling theory highlights how organizations use observable indicators to convey unobservable qualities, such as competence and integrity, to external stakeholders (Spence, 1973). In the audit domain, unmodified opinions function as signals of financial discipline and administrative capacity. These signals influence how LGUs are perceived by national agencies, funders, and the public.

SGLG recognition reinforces this signalling function. The Seal of Good Local Governance includes audit outcomes as one of its criteria, but it also amplifies the LGU's public reputation. Medina-Guce and Sanders (2024) argue that SGLG-recognized LGUs benefit from both enhanced public legitimacy and improved internal governance. The relationship between SGLG status and audit opinion may be mutually reinforcing. LGUs that are recognized may have stronger systems, and their reputational standing could also shape audit expectations.

This signalling effect supports the following hypothesis:

- **H7:** LGUs with SGLG recognition are more likely to receive an unmodified audit opinion.

1.2.4 Summary Model

These theoretical perspectives provide a comprehensive framework for analyzing audit outcomes in local governments. Accountability theory highlights the role of oversight, compliance, and responsiveness. Path dependency theory explains how historical performance and fiscal conditions shape institutional behaviour. Signalling theory focuses on the reputational dynamics of audit outcomes and external validation. Together, these perspectives support a nuanced analysis of the factors influencing unmodified audit opinions among Philippine city governments.

Thus, the empirical model developed to test the research hypotheses can be seen in the following equation:

$$\text{Opinion} = \alpha + \beta_1 \text{ICF} + \beta_2 \text{CF} + \beta_3 \text{ARI} + \beta_4 \text{TApC} + \beta_5 \text{PRE_OPI} + \beta_6 \text{IRA_DEP} + \beta_7 \text{SGLG} + \varepsilon$$

Description: *Audit Opinion = City Governments Financial Statement Audit Opinions; α 1 = Constant structure value; β = regression coefficient of each variable; ε = error term; ICF = Internal Control Findings, CF = Compliance Findings, ARI =*

Audit Recommendations Implemented, TApC = Total assets per capita, PRE_OPI = Prior Year's Audit Opinion, IRA_DEP = IRA Dependency, SGLG =SGLG status.

Table 1: Summary of hypotheses on the determinants of unmodified audit opinions in Philippine city governments, showing expected direction of association and underlying theoretical basis

<i>Hypothesis</i>	<i>Variable</i>	<i>Expected Sign</i>	<i>Theoretical Basis</i>
H1	Internal control findings	Negative (-)	Accountability theory (Bovens, 2007); Kesuma & Ritonga, 2020
H2	Compliance findings	Negative (-)	Accountability theory; Alqooti, 2020
H3	Implementation of audit recommendations	Positive (+)	Accountability theory; Furqan <i>et al.</i> , 2020
H4	Total assets per capita	Positive (+)	Path dependency theory (North, 1990) ; Barney, 1991; Setiawan <i>et al.</i> , 2021
H5	Prior audit opinion	Positive (+)	Path dependency theory; Acevedo <i>et al.</i> , 2020
H6	Internal Revenue Allotment (IRA) dependency	Negative (-)	Path dependency theory; Llanto, 2009
H7	Seal of Good Local Governance (SGLG) recognition	Positive (+)	Signalling theory; Spence, 1973; Medina-Guce & Sanders, 2024

1.2.5. Conceptual Framework

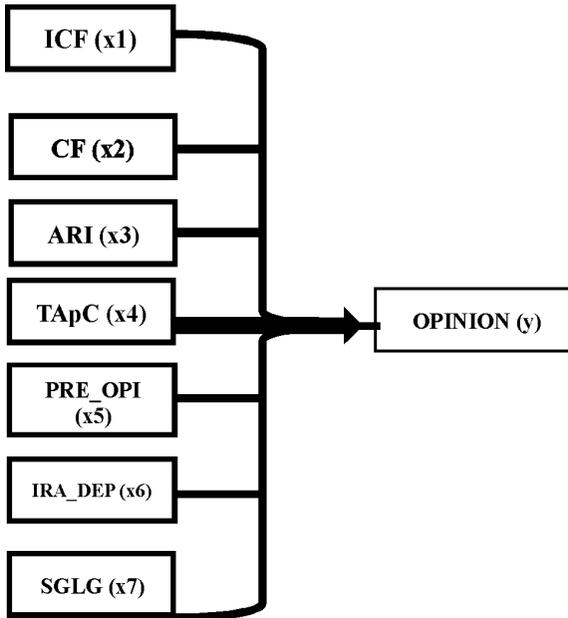


Figure 1: Factors Influencing Audit Opinions of Philippine Cities' Financial Statements

Figure 1 illustrates the conceptual framework used in this study, which examines the factors influencing the audit opinions of Philippine cities' financial statements. The model hypothesizes that Internal Control Findings, Compliance Findings, Audit Recommendations Implemented, Total Assets per Capita, Prior Audit Opinion, IRA Dependency, and SGLG Status, exert a direct influence on the current year's audit opinion. Regression analysis was employed to test these directional relationships, as indicated by the single-headed arrows.

2. METHODOLOGY

This study adopts a quantitative design to examine the factors associated with the issuance of unmodified audit opinions by the Commission on Audit (COA) to Philippine city governments. Similar approaches have been used in studies of audit outcomes in other developing country contexts, where public sector auditing plays a key role in ensuring financial accountability (Furqan *et al.*, 2020). The analysis covers fiscal years 2022 and 2023, focusing exclusively on cities due to their fiscal independence standardized financial reporting, and better data availability (Department of the Interior and Local Government [DILG], 2022; DILG, 2023; Commission on Audit [COA], 2022; COA, 2023). Compared to municipalities or provinces, cities were selected because their financial statements are less prone to gaps in classification, their fiscal autonomy allows for clearer analysis of financial capacity and dependency, and their audit reports are more systematically published and complete. These factors make cities the most reliable level of local government for an empirical study of audit outcomes.

From the total population of 149 Philippine cities, 18 were excluded due to incomplete audit data, missing city classification, or rarely occurring opinion types that could affect model reliability. The final sample includes 131 cities with complete data for two years, resulting in 262 total observations.

The dependent variable is the **audit opinion** issued by COA, categorized as either **unmodified (clean)** or **qualified**. Although COA issues four possible audit opinions (unmodified, qualified, adverse, and disclaimer), only unmodified and qualified opinions were sufficiently represented in the dataset. Therefore, a binary coding scheme was applied, and **binomial logistic regression** was used to assess the association between selected predictors and the likelihood of receiving an unmodified opinion (Agresti, 2010).

The independent variables were identified based on relevant literature and COA's audit framework. These are:

- **Internal Control Findings (ICF)** – total number of internal control weaknesses identified, reflecting internal governance conditions (Kesuma & Ritonga, 2020).
- **Compliance Findings (CF)** – number of audit observations related to violations of laws and regulations (Alqooti, 2020).
- **Audit Recommendations Implemented (ARI)** – measured as the **percentage of recommendations from prior audits that were acted upon**, calculated as:

$$\text{ARI} = (\text{Number of Implemented Recommendations} / \text{Total Recommendations}) \times 100$$

This operationalization captures the extent of institutional responsiveness rather than the absolute number of recommendations addressed, making it a more comparable measure across LGUs (Furqan *et al.*, 2020).

- **Total Assets per Capita (TApc)** – financial capacity, calculated as total reported assets divided by population (Setiawan *et al.*, 2022).
- **Prior Audit Opinion (PRE_OPI)** – the audit result received in the previous year, capturing path dependency (North, 1990; Acevedo *et al.*, 2020)
- **IRA Dependency (IRA_DEP)** – share of city income sourced from the Internal Revenue Allotment, indicating fiscal autonomy (Llanto, 2009).
- **SGLG Status** – a binary indicator showing whether the city received the Seal of Good Local Governance from the DILG (Medina-Guce & Sanders, 2024).

To account for potential year-to-year variation, a control variable (**Year**) was added. Although not theoretically central, it helps adjust for any differences in audit reporting between 2022 and 2023.

Data were obtained from official government sources. Audit reports were retrieved from the COA website, while population data came from the Philippine

Statistics Authority. SGLG awardees were confirmed through DILG-published lists. All financial and compliance data were extracted from the Statement of Financial Position and the “Observations and Recommendations” sections of the COA reports.

Data analysis was conducted using jamovi (The jamovi project, 2024, Version 2.6) and the R statistical computing environment (R Core Team, 2024, Version 4.4). Several R packages were employed to support data manipulation, visualization, and modeling. The MASS package was used for support functions and datasets (Ripley *et al.*, 2023), ROCR for visualizing the performance of scoring classifiers (Sing *et al.*, 2020), and car for companion tools in applied regression analyses (Fox & Weisberg, 2023). All R packages were retrieved from the CRAN repository. Descriptive statistics were used to summarize variables, and binomial logistic regression was applied to test the hypotheses.

This methodological approach allows for an empirical assessment of how audit, financial, and governance-related factors affect audit opinion outcomes among Philippine city governments.

Operationalization of Variables

The study employs several operational variables derived from previous literature and audit practice. Table 2 summarizes the variables, their labels, indicators, and measurement scales.

Table 2: Operational Definition of Variables Used in the Study

<i>Operational Variables</i>	<i>Variable Name</i>	<i>Indicator</i>	<i>Scale</i>
<i>Internal Control Findings</i>	ICF (X1)	Number of internal control issues raised in COA AOM or Management Letter	Ratio
Compliance Findings	CF (X2)	Number of non-compliance issues with laws, rules, or regulations	Ratio
Audit Recommendations Implemented	ARI (X3)	(Number Implemented / Total Recommendations) × 100	Ratio
Total Assets per Capita	TAPc (X4)	Total Assets ÷ Population	Ratio
Prior Year's Audit Opinion	PRE_ OPI(X5)	Scoring: Unqualified = 4; Qualified = 3; Adverse = 2; Disclaimer = 1	Ordinal
IRA Dependency	IRA_DEP (X6)	(Internal Revenue Allotment ÷ Total Revenue) × 100	Ratio
SGLG Status	SGLG (X7)	1 = Received SGLG; 0 = Not Received	Nominal
Year*	Year (X8)	Year (0 = 2022, 1 = 2023)	Nominal
Current Audit Opinion	Opinion (Y)	Scoring: Unqualified = 4; Qualified = 3; Adverse = 2; Disclaimer = 1	Ordinal

To account for potential temporal variation between fiscal years, the variable “Year” was included in the regression model as a control variable. Although “Year” does not have a theoretical role in this study and is not associated with any of the stated hypotheses, it was included to ensure the model adjusts for any differences in reporting practices or contextual factors across 2022 and 2023.

3. RESULTS

This section presents the descriptive statistics, model diagnostics, and regression findings for the 262 city-level audit observations from 2022 and 2023. The analysis aims to identify which financial, compliance, and governance-related factors are significantly associated with the likelihood of receiving an **unmodified (clean)** audit opinion from the Commission on Audit (COA).

3.1. Descriptive Statistics

Table 3 presents the summary statistics for all variables included in the analysis. A total of 262 observations were analyzed, covering two fiscal years (2022 and 2023) across Philippine city governments. The number of **Internal Control Findings (ICF)** ranged from 0 to 22, with a mean of 6.85 and a standard deviation of 3.90. **Compliance Findings (CF)** ranged from 0 to 50, with a mean of 7.88 and a standard deviation of 7.60. The variable for **Audit Recommendations Implemented (ARI)** had values between 0.0455 and 45.00, with a mean of 0.487 and a standard deviation of 2.76. **Total Assets per Capita (TApc)** showed a wide range, from PHP 17.80 to PHP 385,066, with a mean of PHP 23,868 and a standard deviation of PHP 39,812. The **Prior Year’s Audit Opinion (PRE_OPI)** was coded as 3 (qualified) or 4 (unmodified), with a mean of 3.00 and a standard deviation of 0.384. **IRA Dependency (IRA_DEP)** ranged from 0.00 to 1.47, with an average of 0.670 and a standard deviation of 0.242. The **SGLG Status** variable, coded as 0 (not awarded) or 1 (awarded), had a mean of 0.00 and a standard deviation of 0.492, indicating that a portion of the cities received the Seal of Good Local Governance. The **Fiscal Year (YEAR)** variable was evenly distributed across 2022 and 2023, with a mean of 0.500. The dependent variable, **Current Year’s Audit Opinion (Opinion)**, ranged from 3 to 4, with a mean of 3.21 and a standard deviation of 0.405.

Table 3: Descriptive Statistics

<i>Variable Code</i>	<i>Variable Description</i>	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Std. Dev.</i>
ICF (X1)	Internal Control Findings	262	0	22	6.85	3.90
CF (X2)	Compliance Findings	262	0	50	7.88	7.60
ARI (X3)	Audit Recommendations Implemented	262	0.0455	45.0	0.487	2.76
TApC (X4)	Total Assets per capita	262	17.8	385066	23868	39812
PRE_OPI (X5)	Prior Year's Audit Opinion	262	3	4	3.00	0.384
IRA_DEP (X6)	IRA Dependency	262	0.00	1.47	0.670	0.242
SGLG (X7)	SGLG status	262	0	1	0.00	0.492
YEAR (x8)	Fiscal Year	262	0	1	0.500	0.501
Opinion (Y)	Current Year's Audit Opinion	262	3	4	3.21	0.405
Valid N (listwise)		262				

3.2. Model Evaluation

A binomial logistic regression was conducted to estimate the probability of receiving an unmodified audit opinion. Presented in Table 4, the overall model was statistically significant ($\chi^2 = 126$, $df = 8$, $p < 0.001$). The pseudo R^2 values were: Cox & Snell $R^2 = 0.416$ and Nagelkerke $R^2 = 0.652$. The model's deviance was 126, and the AIC was 144. The receiver operating characteristic (ROC) curve showed strong model performance, with the area under the curve (AUC) estimated at above 0.85.

Table 4: Model Fit Measures

						<i>Overall Model Test</i>		
<i>Model</i>	<i>Deviance</i>	<i>AIC</i>	R^2_{McF}	R^2_{CS}	R^2_N	χ^2	<i>df</i>	<i>p</i>
1	126	144	0.529	0.416	0.652	141	8	<.001

Note: Models estimated using sample size of N=262

3.3. Regression Findings

Table 5 presents the results of the binomial logistic regression model estimating the likelihood of receiving an unmodified audit opinion (coded as 4) versus a qualified opinion (coded as 3). The model included eight predictor variables.

Table 5: Model Coefficients – Binomial Logistic Regression

<i>Predictor</i>	<i>Estimate</i>	<i>SE</i>	<i>Z</i>	<i>p</i>	<i>Odds ratio</i>
Intercept	-17.2593	2.6710	-6.462	<.001	3.19e-8
ICF (x1)	-0.0909	0.0674	-1.348	0.178	0.913

<i>Predictor</i>	<i>Estimate</i>	<i>SE</i>	<i>Z</i>	<i>p</i>	<i>Odds ratio</i>
CF (x2)	-0.0205	0.0473	-0.434	0.665	0.980
ARI (x3)	4.3612	1.4514	3.005	0.003	78.349
TApC (x4)	5.15e-6	6.88e-6	0.749	0.454	1.000
PRE_OPI (x5)	4.2514	0.5982	7.107	<.001	70.201
IRA_DEP(x6)	-0.5932	1.0481	-0.566	0.571	0.553
SGLG (x7)	1.1692	0.5066	2.308	0.021	3.219
YEAR (x8)	-0.2045	0.5119	-0.399	0.690	0.815

Note: Estimates represent the log odds of "OPINION (y) = 4" vs. "OPINION (y) = 3"

The regression model presented in Table 5 identifies three statistically significant predictors of unmodified audit opinions among Philippine city governments. Implementation of audit recommendations (x3) was positively associated with audit outcomes (Estimate = 4.3612, SE = 1.4514, $p = 0.003$), with an odds ratio of 78.35, indicating a strong effect on the likelihood of receiving a clean opinion.

Prior audit opinion (x5) also showed a significant positive relationship (Estimate = 4.2514, SE = 0.5982, $p < .001$), with an odds ratio of 70.20, suggesting that the audit outcome in the preceding year is a strong predictor of the current year's result.

Finally, SGLG recognition (x7) was significant at the 5% level (Estimate = 1.1692, SE = 0.5066, $p = 0.021$), with an odds ratio of 3.22, showing that cities with SGLG status were more likely to receive unmodified opinions.

The other predictors—internal control findings (x1) ($p = 0.178$), compliance findings (x2) ($p = 0.665$), total assets per capita (x4) ($p = 0.454$), IRA dependency (x6) ($p = 0.571$), and Year (x8) ($p = 0.690$)—did not reach statistical significance in the model.

Table 6: Collinearity Statistics

	<i>VIF</i>	<i>Tolerance</i>
ICF (x1)	1.10	0.909
CF (x2)	1.18	0.847
ARI (x3)	1.28	0.779
TApC (x4)	1.07	0.935
PRE_OPI (x5)	1.29	0.777
IRA_DEP(x6)	1.18	0.844
SGLG (x7)	1.10	0.906
YEAR (x8)	1.14	0.873

Table 6 reports the variance inflation factor (VIF) and tolerance values for all predictor variables included in the logistic regression model. Across all predictors, VIF values range from 1.07 to 1.29, well below the commonly accepted thresholds of 5.0 or 10.0 for indicating multicollinearity concerns. Correspondingly, tolerance values range from 0.777 to 0.935, all comfortably above the 0.20 cutoff typically used to flag problematic collinearity. These results indicate that no serious multicollinearity is present among the independent variables, and each predictor contributes unique information to the model. However, it remains possible that other unobserved factors—particularly political variables such as leadership characteristics, party affiliation, or electoral dynamics—may influence audit outcomes but were not included in this study due to data limitations. While the present model demonstrates robustness against collinearity, future research could expand the set of predictors to capture these institutional and political dimensions.

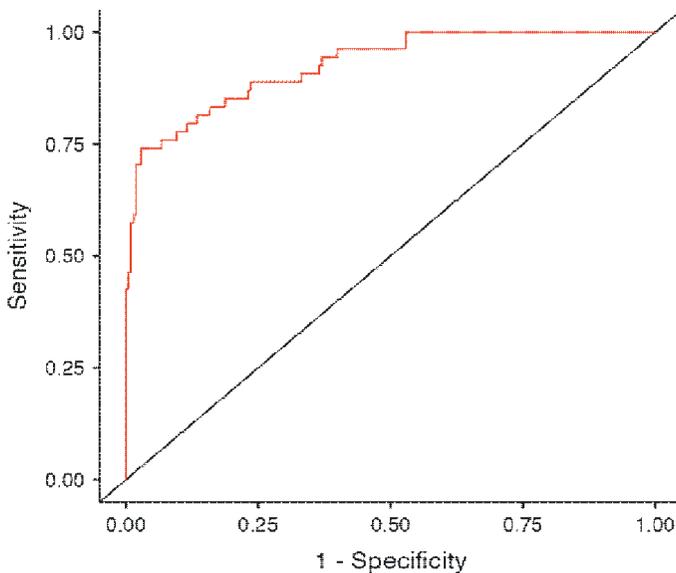


Figure 2: ROC Curve

The model's predictive performance was assessed using a Receiver Operating Characteristic (ROC) curve (see Figure 2). The curve demonstrates strong classification ability, as it bows toward the upper-left corner, indicating high sensitivity and specificity across classification thresholds. The area under the

curve (AUC), although not explicitly shown, is visually estimated to exceed 0.85, suggesting a high level of accuracy in distinguishing between unmodified and qualified audit opinions.

4. DISCUSSION

This study examined the determinants of audit opinion outcomes among Philippine city governments, focusing on the likelihood of receiving an unmodified audit opinion. Using binomial logistic regression on audit data from fiscal years 2022 and 2023, the results revealed that three variables were statistically significant: the implementation of audit recommendations (ARI), the prior year's audit opinion (PRE_OPI), and Seal of Good Local Governance (SGLG) status. Other variables that were theoretically expected to influence audit outcomes, including internal control findings (ICF), compliance findings (CF), total assets per capita (TApc), and IRA dependency (IRA_DEP), did not show significant effects.

The significant role of audit recommendations implemented suggests that institutional responsiveness is central to achieving favourable audit outcomes. Drawing from learning organization theory, this finding aligns with earlier studies indicating that agencies improve financial governance when they actively respond to audit feedback (Furqan *et al.*, 2020). The process of acting on audit observations strengthens internal controls and demonstrates accountability, which in turn improves audit quality. Similar results were observed in Indonesia, where Furqan *et al.* (2020) found that government units with high follow-up rates on audit recommendations were more likely to achieve unqualified opinions, and in Tanzania, where government responsiveness to audit findings significantly influenced oversight credibility (Mzenzi & Gaspar, 2015).

The positive association between the prior audit opinion and the current audit outcome supports the idea of audit opinion continuity. This reflects the concept of path dependency, where historical performance creates an institutional trajectory that influences future results (North, 1990). Local government units (LGUs) with a record of unmodified opinions may benefit from institutional memory, audit preparedness, and reputational capital that contribute to consistent audit outcomes. Comparable findings have been reported in Indonesian municipalities, where factors such as local government complexity, financial supervision, and size significantly influenced audit

opinions, suggesting that these institutional characteristics play a critical role in shaping audit outcomes in the region (Winarna *et al.*, 2021).

SGLG status, representing a national recognition of governance performance, also emerged as a significant predictor. Although the SGLG is not designed as an audit tool, its criteria—including transparency, financial administration, and rule of law—reflect practices that are consistent with strong financial management. According to Medina-Guce and Sanders (2024), the SGLG encourages institutional reforms that align with accountability and governance standards. This finding can be interpreted using signalling theory, where external recognition serves as a signal of internal reliability (Spence, 1973), which may influence audit outcomes. International parallels can be drawn with performance-based grant systems in Tanzania and Uganda, where external recognition and incentives for good governance have been shown to reinforce audit quality and accountability practices (United Nations Capital Development Fund [UNCDF], 2010).

By contrast, the non-significance of internal control and compliance findings in this study suggests that these variables, while theoretically relevant to audit risk, may not directly affect audit opinion outcomes under the standards applied by the Commission on Audit. According to COA (2022), audit opinions are issued based on materiality and the overall fairness of financial statements, rather than the number or frequency of audit observations. A local government unit may receive several findings related to compliance or internal control without these constituting material misstatements. Prior research has shown that while weak internal controls can increase audit risk, their impact on audit opinion depends on the severity, persistence, and materiality of the issues involved (Kesuma and Ritonga, 2020; Pakpahan *et al.*, 2022). Supporting this, Pamungkas *et al.* (2018) found that only specific forms of noncompliance, such as those resulting in financial losses or violations of governmental accounting standards, were significantly associated with adverse audit opinions. In Tanzania, Mzenzi and Gaspar (2015) found that compliance infractions were widespread, but only certain breaches (e.g., involving procurement or financial losses) carried weight in shaping audit outcomes. Taken together, this suggests that while internal control and compliance issues are important, their influence on audit opinions is conditional and context-specific, which may explain their non-significance in the present study.

Similarly, total assets per capita did not significantly predict audit outcomes. This contradicts expectations from resource-based theory, which holds that financial resources provide a foundation for stronger systems and better performance (Barney, 1991). Although well-resourced cities may have greater infrastructure and technical capacity, this does not automatically translate into improved audit readiness or compliance. Research has shown that the quality of financial reporting depends more on governance discipline than on resource levels alone (Winarna *et al.*, 2021).

The IRA dependency variable also did not show a significant relationship with audit opinion. While fiscal dependence on national transfers is commonly viewed as a constraint on local autonomy (Oates, 1972; Llanto, 2009), this study suggests that fiscal reliance does not necessarily weaken audit outcomes. Some LGUs may maintain sound internal controls and reporting standards even with limited own-source revenue, particularly if they are subject to effective oversight or adopt strong governance frameworks (Acevedo *et al.*, 2020).

The fiscal year variable was also non-significant, indicating that audit outcomes remained stable between 2022 and 2023. This finding supports the decision to pool two years of data and suggests that no major external changes affected COA's audit determinations during the study period.

Taken together, the findings of this study suggest that clean audit outcomes in Philippine cities are shaped more by institutional behaviour, prior audit history, and external recognition than by structural financial indicators or the number of audit observations alone. By comparing results with similar studies in Indonesia and Tanzania, this research strengthens its external validity and highlights the importance of responsiveness, continuity, and governance signalling across diverse developing country contexts.

5. CONCLUSION

This study contributes to ongoing discussions about the meaning and drivers of audit outcomes in public sector governance. By analyzing 2022 to 2023 COA audit reports for Philippine city governments using logistic regression, the research identifies three statistically significant predictors of unmodified audit opinions: the extent of audit recommendation implementation, the previous year's audit result, and recognition through the Seal of Good Local Governance (SGLG). These findings suggest that clean audit opinions may reflect more

than technical compliance. They may also indicate patterns of institutional responsiveness, reputational signalling, and performance continuity over time.

The results provide explicit empirical support for three theoretical perspectives. From an accountability lens, audit responsiveness is crucial, as implementing recommendations signals compliance and organizational learning. From a path dependency perspective, prior audit outcomes establish trajectories that shape subsequent results, reinforcing continuity in audit judgments. From a signalling standpoint, SGLG recognition reflects how external validation conveys credibility and may reinforce favorable audit evaluations. Together, these findings extend the literature by showing how audit outcomes operate at the intersection of technical compliance and institutional behavior in the Philippine context. Rather than being determined solely by the presence or absence of audit observations, favorable audit results appear to be shaped by how local government units respond to prior findings, how consistently they maintain audit quality, and whether they engage in external recognition programs. Internal control and compliance issues, although common, were not statistically significant predictors. This may imply that audit qualifications do not automatically result from reported issues. Instead, institutional follow-through and credibility may have a greater influence on opinion outcomes.

By focusing on city governments, a crucial level of administration within the Philippine decentralization system, this study offers insights into how institutional behavior, historical audit patterns, and governance signals interact to influence audit performance. These insights may be useful for oversight agencies, reform advocates, and local officials aiming to strengthen public financial accountability.

Several limitations should be noted. The analysis is limited to cities and uses a binary classification of audit opinions, which may overlook more subtle distinctions in audit quality. The data span only two fiscal years, and factors such as political dynamics, auditor discretion, or local context were not directly examined.

Future research could expand this study in several directions. First, extending the dataset to include municipalities and provinces, particularly those with limited fiscal capacity, would allow testing whether the same predictors hold across other types of LGUs. Second, adopting a longer time series could assess

the persistence of path dependency effects and detect shifts over time. Third, incorporating qualitative research on audit processes, auditor behavior, or political context could complement statistical analysis and explain why certain factors (e.g., compliance findings) do not consistently predict outcomes. Finally, exploring political and institutional variables such as leadership style, party affiliation, and intergovernmental relationships could provide a richer understanding of how audit opinions are shaped in practice.

5. RECOMMENDATIONS

Based on the findings of this study, several recommendations may be considered to strengthen public financial accountability, audit credibility, and institutional performance in Philippine city governments. These suggestions are grounded in the observed relationships among audit outcomes, organizational behaviour, and governance incentives, and draw on the theoretical frameworks of accountability, signalling, and path dependency.

1. Enhance Audit Follow-Up Mechanisms

The significant role of audit recommendation implementation suggests that national oversight agencies such as the Commission on Audit (COA) and the Department of the Interior and Local Government (DILG) may consider developing more structured monitoring systems to track LGU responsiveness. Establishing periodic progress reviews, standardized feedback loops, or digital audit compliance dashboards could support LGUs in following through on COA recommendations. Improved follow-up mechanisms might not only enhance the timeliness of audit response but also strengthen public confidence in audit processes as instruments of accountability.

2. Incorporate Audit Trajectories in Performance-Based Reviews

Given the predictive role of prior audit opinions, it may be useful for national agencies and development partners to include audit history as one criterion in performance-based evaluation frameworks. Audit opinion trends, when viewed over time, could offer insights into the institutional maturity and consistency of local governments. Recognizing LGUs with sustained unmodified opinions may serve as an incentive for long-term compliance and financial discipline. Conversely, cities with recurring qualifications might benefit from focused

support rather than penalization, acknowledging that audit improvement often occurs gradually.

3. Strengthen the Alignment Between SGLG Criteria and Audit Discipline

The observed association between Seal of Good Local Governance (SGLG) recognition and unmodified audit opinions suggests an opportunity to further integrate financial accountability into SGLG metrics. While the SGLG already includes financial administration indicators, making audit responsiveness a more explicit component may help reinforce alignment between national recognition programs and fiscal governance goals. This adjustment could enhance the signalling value of both SGLG awards and COA opinions in promoting trusted, accountable local institutions.

4. Contextualize Audit Findings in Oversight and Performance Assessment

The study found no statistically significant relationship between the number of internal control or compliance findings and audit opinion outcomes. This suggests that audit observations, when taken in isolation, may not reliably indicate the overall financial integrity of an LGU. Oversight bodies and evaluators might consider interpreting audit findings within the broader context of materiality, systemic risk, and corrective actions taken. Moving away from a purely quantitative reading of findings toward a more qualitative and trajectory-based assessment could help avoid misinterpretation and promote fairer evaluations.

5. Provide Targeted Technical Assistance to Strengthen Institutional Capacity

Local governments with repeated audit qualifications or low audit recommendation implementation rates may benefit from tailored capacity-building interventions. Programs focusing on audit readiness, internal control system design, risk-based compliance planning, and implementation tracking could be developed in partnership with regional offices of COA or civil society monitoring organizations. These efforts might help build institutional memory, encourage adaptive learning, and support sustainable improvements in audit performance over time.

6. Promote Peer Learning and Audit Knowledge Exchange

To support long-term improvement, mechanisms for peer learning among LGUs could be established. Cities with consistent unmodified audit opinions might share strategies, tools, and lessons learned through workshops, case studies, or inter-LGU mentoring arrangements. These peer-to-peer exchanges may foster a learning culture, reduce knowledge asymmetry, and diffuse best practices across varying institutional contexts.

AI Disclosure

The authors used an AI-based tool (ChatGPT by OpenAI) exclusively for grammar checking and language refinement. The authors reviewed and are fully responsible for the final content of this manuscript.

Acknowledgment

The author gratefully acknowledges the support of the Commission on Audit (COA) for making public audit reports accessible, which served as the primary data source for this study. Appreciation is also extended to academic colleagues and peer reviewers whose feedback helped refine the theoretical and methodological approaches. Any errors or interpretations remain the sole responsibility of the author.

Conflict of Interest

The author declares no conflicts of interest related to the conduct, authorship, or publication of this study.

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