



# Transparency, Accountability, and Financial Performance: The Role of Civil Servant Capacity

Fatmawati Fatmawati\*, Arifuddin Arifuddin

Hasanuddin University, Makassar, Indonesia

\*fatmawatirusli@yahoo.co.id

**Abstract.** This study examines how transparency and accountability affect the financial performance of local governments in Indonesia, emphasizing civil servant capacity as a moderating influence. Using new public management and principal-agent theories, with institutional theory and resource-based view, we propose a framework suggesting that transparency and accountability directly affect financial outcomes, depending on the local bureaucracy's human capital strength. Our hypotheses are tested using a cross-sectional design that integrates primary survey data from 120 local governments with verified administrative records. The results of the moderated multiple regression analysis show that transparency and accountability significantly enhance financial performance, as measured by budget realization rates, revenue collection efficiency, and fiscal discipline. Importantly, these effects are significantly moderated by civil servant capacity: in high-capacity environments, the link between governance and performance is nearly three times stronger than in low-capacity settings. Simple slope analysis demonstrates that transparency and accountability lead to substantial performance improvements only when the local bureaucracy has adequate professional, technical, and institutional capability. These findings highlight that effective fiscal governance requires adopting the right policies and developing human capital to implement them. We discuss the theoretical implications for public administration scholarship and offer practical recommendations for policymakers in Indonesia and other decentralized democracies. We contend that investing in civil servant capacity building is fundamental to translating good governance principles into tangible outcomes.

**Keywords:** Transparency, Accountability, Financial Performance, Civil Servant Capacity.

## 1 Introduction

In the current governance landscape, transparency and accountability are fundamental elements in managing local finances. These principles not only demonstrate a dedication to sound governance but also act as essential conditions for ensuring efficiency, effectiveness, and fairness in the distribution of public resources in the health sector. In Indonesia, the concept of regional autonomy, significantly bolstered by Law No. 23 of 2014 concerning Local Government, has granted considerable fiscal

© The Author(s) 2026

M. Nohong et al. (eds.), *Proceedings of the 10th International Conference on Accounting, Management, and Economics (10th ICAME 2025)*, Advances in Economics, Business and Management Research 388,

[https://doi.org/10.2991/978-94-6239-709-5\\_26](https://doi.org/10.2991/978-94-6239-709-5_26)

powers to local authorities, including responsibilities for budget planning, execution, and financial accountability. Nonetheless, this broad delegation of power also presents notable risks, especially if it is not supported by sufficient internal and external oversight mechanisms and, importantly, a skilled civil service [1].

Research indicates significant differences in financial performance among the various regions of Indonesia. Some local governments excel in utilizing their budgets efficiently, generating substantial local revenue, and maintaining clear and auditable financial records. In contrast, others face challenges such as stagnant budgets, inefficient spending, and fiscal mismanagement [2]. This variation implies that simply having legal and regulatory frameworks, such as Government Regulation No. 28 of 2020 on the Management of State/Regional Assets or the Government Accounting Standards (SAP), does not ensure effective fiscal governance. The quality and capability of civil servants are crucial in determining whether governance reforms lead to real improvements.

In local financial management, accountability involves the responsibility of local governments to explain their use of public funds to citizens, legislative bodies, and oversight entities, such as the Audit Board of Indonesia and the Financial and Development Supervisory. On the other hand, transparency pertains to the openness of information related to budget planning, implementation, and assessment, including the prompt release and public availability of financial reports. These mechanisms are crucial for encouraging public involvement, enhancing social oversight, and preventing corruption and misuse of authority. However, the practical success of transparency and accountability largely depends on the bureaucratic system's capacity to produce, handle, interpret, and distribute precise and timely financial data [3].

The concept of "civil servant capacity banks," as explored in this study, plays a pivotal role in determining effectiveness [4]. This term refers to the collective reservoir of technical skills, professional ethics, in-depth knowledge, and managerial abilities held by local government officials, especially those working in financial management departments, such as Regional Financial and Asset Management Agencies or Regional Inspectorates. This capacity is not a fixed resource but rather a dynamic form of institutional capital that can be enhanced through ongoing professional development, merit-based recruitment, performance-based incentives, and an organizational culture that prioritizes learning and innovation.

Research consistently indicates that areas with well-educated financial personnel, frequent access to technical training, and unbiased performance evaluation systems generally achieve better financial outcomes [5]. However, regions experiencing high employee turnover, insufficient technical skills among finance staff, or restricted access to capacity-building opportunities often face challenges in improving transparency and accountability. These challenges include difficulties in producing high-quality financial reports, delays in publishing budget information, and misinterpretations of fiscal regulations.

Furthermore, considering Indonesia's extensive diversity in terms of geography, economic progress, and bureaucratic maturity, civil servants' abilities might account for notable differences in how governance principles are reflected in financial results. In areas with strong bureaucratic capacity, transparency and accountability can have a

significant positive impact on financial performance [6]. However, this influence may diminish or even lose statistical significance in regions with weaker capacities. This indicates that the capability of civil servants acts as a moderating factor, either enhancing or reducing the relationship between governance inputs and performance outcomes.

Thus, gaining a more profound insight into the dynamics between transparency, accountability, and the capacity of civil service is crucial not only for scholarly discussions but also for crafting effective and context-specific policies aimed at bureaucratic and fiscal reform. This research fills that void by empirically examining how "civil servant capacity banks" influence the connection between transparency and accountability and the financial performance of local governments. The results are intended to offer a solid evidence base for both central and local policymakers to emphasize building civil service capacity as a key strategy for establishing sustainable, transparent, and accountable financial governance at the sub-national level.

## **2 Literature Review**

### **2.1 New Public Management (NPM) and Principal-Agent Theory**

The theoretical foundation of this study draws primarily from New Public Top of Form Management (NPM) and Principal-Agent Theory. NPM posits that public sector organizations should emulate private sector management practices, emphasizing efficiency, performance measurement, and outcome-based accountability. Within this paradigm, transparency and accountability are not ends in themselves but instruments for improving service delivery and fiscal discipline [5]. Meanwhile, the Principal-Agent Theory elucidates the inherent asymmetry of information between citizens (principals) and government officials (agents). To mitigate moral hazard and adverse selection, mechanisms such as financial reporting, audits, and participatory budgeting have been introduced to align agent behavior with public interest.

### **2.2 Institutional Theory and Resource-Based View (RBV)**

Institutional Theory explains how transparency and accountability become institutionalized through normative, mimetic, and coercive pressures [7]. Over time, these practices shape the organizational routines and performance expectations. RBV treats civil servant capacity as a strategic, inimitable resource that can create a sustained competitive advantage even in the public sector. High-capacity bureaucracies are viewed as critical assets that mediate the conversion of governance inputs (e.g., transparency policies) into output performance.

### **2.3 Hypothesis Development**

**Transparency on Financial Performance.** According to the Principal-Agent Theory, citizens (principals) entrust local government officials (agents) with fiscal

responsibilities, often in situations where there is an information imbalance. By implementing transparency through the prompt release of financial reports, granting open access to budget documents, and utilizing participatory budgeting methods, this information gap is narrowed, allowing principals to better oversee the actions of agents[6]. When local governments thoroughly and proactively share financial information, it becomes more challenging for agents to engage in rent-seeking, inefficiency, and improper resource allocation. This oversight effect strengthens discipline in budget management and leads to improved outcomes, such as higher budget absorption rates and more efficient spending.

Institutional Theory suggests that transparency becomes ingrained in organizations due to normative influences, such as compliance with Government Accounting Standards; mimetic influences, such as comparing performance with successful regions; and coercive influences, such as directives from the Ministry of Home Affairs. These influences gradually mold organizational practices to emphasize fiscal responsibility and adaptability, thereby enhancing the financial outcomes. Research conducted in various developing nations, including Indonesia, consistently demonstrates that increased fiscal transparency is linked to higher revenue generation, decreased budget surpluses, and improved audit results.

**H1:** Transparency in local financial management positively influences the local government's financial performance.

**Accountability on Financial Performance.** Accountability encompasses both formal and informal processes that ensure that public officials are responsible for their financial decisions and actions. This study evaluates accountability by examining the existence and effectiveness of internal control systems, degree of responsiveness to audit recommendations, and frequency and seriousness of audit findings from the BPK or BPKP. Accountability in public financial management is a multifaceted concept that involves both formal mechanisms, such as regulatory frameworks and audit procedures, and informal processes, including organizational culture and ethical standards. This ensures that public officials are held accountable for their financial decisions and actions, promoting transparency and integrity within government institutions[10]. This study assesses accountability by focusing on key indicators: the presence and robustness of internal control systems designed to prevent errors and fraud; the extent to which public entities respond effectively to audit recommendations; and the pattern of audit findings reported by oversight bodies such as the Supreme Audit Agency (BPK) or the Financial and Development Supervisory Agency (BPKP).

Evaluating these dimensions provides a comprehensive understanding of how accountability functions. Internal control systems serve as preventive and detective tools that enable organizations to safeguard their resources, prevent and detect potential fraud, and ensure compliance with laws and regulations [15]. Responsiveness to audit recommendations reflects a commitment to continuous improvement and corrective action, signaling an organization's willingness to address identified weaknesses [11]. The frequency and severity of audit findings offer insights into recurring issues and systemic challenges within financial management processes. Together, these factors help gauge the effectiveness of accountability frameworks and the overall health of public-sector governance.

New Public Management (NPM) suggests that public sector entities should operate with the efficiency of private businesses, utilize clear performance indicators, and implement consequences for failing to meet standards. This perspective is consistent with results-oriented public sector management, which emphasizes performance control, accountability, and measurable outcomes in improving organizational performance [14]. Mechanisms for accountability, such as internal and performance audits and legislative oversight, serve as control systems to ensure that bureaucratic actions align with the public's interests and financial goals [12, 13]. When officials are aware that their financial management will be scrutinized and that they may face penalties for poor performance, they are more inclined to act cautiously, prevent delays, and adhere to the budgetary regulations.

Furthermore, strong accountability mechanisms help mitigate the risk of "budget slack," which is deliberate underspending to prevent future budget reductions, and they also promote active efforts to increase revenue. Regions that consistently address audit findings and implement corrective measures exhibit a culture of responsibility that significantly improves their financial performance. Data from Indonesia's regional audit reports indicate that regencies with effective accountability frameworks consistently achieve higher budget realization rates and receive fewer qualified audit opinions.

**H2:** Accountability in local financial management positively influences the local government's financial performance.

**Civil servant capacity banks moderate the relationship between transparency and financial performance.** While transparency provides information, its utility depends on the ability of the bureaucracy to produce, interpret, and act on this information. This is where the Resource-Based View (RBV) becomes critical. RBV argues that sustained organizational advantage stems from valuable, rare, inimitable, and non-substitutable (VRIN) resources, in this case, the human capital embedded in the civil service.

"Civil servant capacity banks" serve as strategic assets for organizations, acting as repositories of technical skills, professional integrity, procedural know-how, and institutional memory[9]. In high-capacity environments, civil servants can turn transparency requirements into high-quality financial reports, significant public disclosures, and data-informed decisions. For instance, a finance officer with proper training can transform raw budget figures into accessible dashboards for the public, efficiently handle information requests, and utilize performance data to make mid-year spending adjustments. "Civil servant capacity banks" represent a critical organizational resource by consolidating a wide range of competencies, including technical expertise, ethical standards, procedural knowledge, and preservation of institutional memory. This collective capacity enables organizations to maintain operational continuity and adapt to evolving governance requirements. In settings where civil servant capacity is robust, transparency is not merely a compliance obligation but also a catalyst for enhanced accountability and informed decision-making. Civil servants equipped with these capabilities can produce comprehensive financial reports that meet stringent transparency criteria, facilitate meaningful public disclosures, and leverage data analytics to guide resource allocation and policy adjustments[3].

For example, a finance officer who has undergone specialized training can convert complex budgetary data into user-friendly dashboards accessible to the public, thereby fostering greater civic engagement and trust in the government. Such officers are also adept at managing information requests efficiently and ensuring timely and accurate responses that uphold transparency standards. Furthermore, by analyzing performance metrics throughout the fiscal year, civil servants can recommend and implement mid-year spending adjustments that optimize resource use and align expenditures with strategic priorities. Thus, civil servant capacity banks not only support routine administrative functions but also empower organizations to respond dynamically to challenges of financial oversight and public accountability [4].

However, in environments with limited capacity, even when transparency is legally required, disclosures may be incomplete, inaccurate, or delayed, making the principle of transparency ineffective. Without skilled personnel, transparency becomes a mere compliance task rather than a tool for governance. Therefore, H3 suggests a positive moderating effect: civil servants' capacity enhances the influence of transparency on financial performance. The hypothesis anticipates that the relationship between transparency and performance will be significantly stronger in areas with robust civil service capacity than in those with weaker capacity.

**H3:** Civil servant capacity banks moderate the relationship between transparency and financial performance, such that the relationship is stronger when the civil servant capacity is high.

**Civil servant capacity banks moderate the relationship between accountability and financial performance.** Accountability tools, such as audits and performance evaluations, are effective only when local governments can comprehend and act on the recommendations. For example, a BPK finding about incorrect procurement practices necessitates technical know-how to rectify, including understanding regulations, procurement systems, and the design of internal controls. Civil servants with high capacity can effectively identify issues, create corrective action plans, and incorporate lessons learned into future budgetary planning. They are also more inclined to adopt professional accountability standards, seeing audits as opportunities for enhancement rather than punitive actions[10]. Conversely, bureaucracies with low capacity might lack the skills to interpret audit findings, face challenges in coordinating reforms across departments, or simply disregard recommendations because they are overwhelmed or lack competence. Effective accountability mechanisms, such as audits and performance evaluations, fundamentally depend on the capacity of local governments to understand and implement the recommendations provided[14]. When audit findings, such as those from the BPK highlighting procurement irregularities, are presented, addressing these issues requires not only technical expertise but also deep familiarity with relevant regulations, procurement procedures, and internal control frameworks. Local civil servants equipped with such knowledge can accurately diagnose problems, develop actionable corrective plans, and integrate lessons learned into subsequent budget cycles. This proficiency fosters a culture in which audits are perceived as constructive tools for continuous improvement rather than instruments of punishment, encouraging adherence to professional accountability standards.

In contrast, bureaucracies with limited capacity face significant hurdles in leveraging audit results to drive reforms. A lack of technical skills can hinder the interpretation of complex audit findings, while weak coordination across departments may stall or dilute the reform efforts. Moreover, overwhelmed or underqualified personnel may disregard recommendations altogether, undermining the potential benefits of accountability initiatives[10]. This gap in capacity not only impedes corrective action but also perpetuates systemic inefficiencies, highlighting the critical need for capacity-building measures to ensure that accountability tools translate into tangible improvements in governance and public service delivery.

**H4:** Civil servant capacity banks moderate the relationship between accountability and financial performance, such that the relationship is stronger when civil servant capacity is high.

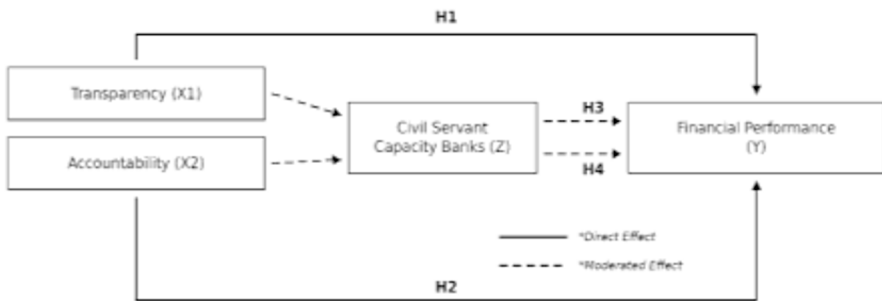


Fig. 1. Reaserch Framework

### 3 Methodology

#### 3.1 Design and Data

This study adopts a quantitative research design with a cross-sectional time frame, strategically combining primary survey data with comprehensive secondary administrative records to ensure methodological triangulation and enhance the empirical validity. The cross-sectional approach is particularly appropriate for capturing the contemporaneous relationships among transparency, accountability, civil servant capacity, and local government financial performance across a diverse set of subnational jurisdictions in Indonesia in the recent institutional context (2020–2024). This period is especially salient as it encompasses the post-implementation phase of key fiscal governance reforms, including the full operationalization of Government Regulation No. 28 of 2020 on the Management of Regional Assets and the nationwide rollout of the Integrated Financial Management Information System (Sistem Informasi Manajemen Keuangan Daerah/SIMDA) and Regional Financial Planning System (Sistem Informasi Perencanaan Daerah/SIPD), which significantly reshaped transparency and reporting practices at the local level.

Primary data were collected through a structured, pre-tested questionnaire administered directly to civil servants occupying strategic positions within regional financial management units, specifically personnel from Regional Financial and Asset Management Agencies (Badan Pengelola Keuangan dan Aset Daerah/BPKAD), Regional Inspectorates (Inspektorat Daerah), and Regional Development Planning Agencies (Badan Perencanaan Pembangunan Daerah/Bappeda). These respondents were selected based on their direct involvement in budget preparation, financial reporting, internal control, audit follow-up, and asset management, thereby ensuring that perceptual and operational data reflect the realities of fiscal governance on the ground. The questionnaire employs multi-item scales adapted from internationally validated instruments, such as those used by the International Budget Partnership (IBP) and the OECD Principles on Budgetary Governance, and contextualized to align with Indonesian legal and administrative frameworks. Responses were captured using a five-point Likert scale ranging from “strongly disagree” to “strongly agree,” supplemented by factual questions on training participation, staffing, and procedural implementation.

Secondary data were meticulously compiled from authoritative national databases and official publications. Financial performance indicators and transparency metrics are extracted from Local Government Financial Statements (Laporan Keuangan Pemerintah Daerah/LKPD) published annually by the Ministry of Home Affairs, which are prepared in accordance with Government Accounting Standards (SAP) and are subject to independent audit. Accountability data are derived from audit reports issued by the Audit Board of Indonesia (Badan Pemeriksa Keuangan/BPK) and follow-up assessments by the Financial and Development Supervisory Agency, including the number, type, and resolution status of the audit findings. Additionally, civil service capacity indicators, such as average educational attainment, training frequency, and staff turnover, were obtained from human resource databases maintained by Regional Apparatus Organizations (Organisasi Perangkat Daerah/OPD), while control variables (e.g., regional population, gross regional product per capita, fiscal dependency ratios) were sourced from Statistics Indonesia (BPS) and the Directorate General of Fiscal Balance within the Ministry of Finance.

The integration of primary and secondary data not only strengthens construct validity by mitigating the limitations of self-reported measures but also enables a more nuanced analysis of how formal institutional arrangements interact with bureaucratic capabilities to shape fiscal outcomes. To ensure data quality, all secondary records undergo verification for completeness and consistency, while primary survey instruments are pilot-tested on a small sample of non-participating regions to assess clarity, reliability, and cultural appropriateness of the questions. This dual-data strategy reflects a commitment to methodological rigor and provides a robust empirical foundation for testing the hypothesized relationships within the proposed framework.

### **3.2 Population and Sample**

The target population of this study encompasses all autonomous local governments in the Republic of Indonesia that possess full fiscal authority under the regional autonomy framework. As of 2024, this includes 416 regencies (kabupaten) and 98 cities (kota),

totaling 514 local government units. These entities are legally mandated to prepare, execute, and report on their annual budgets, manage regional assets, and undergo external audits, making them appropriate units of analysis for examining the interplay between governance practices and financial performance.

Given the logistical and resource constraints inherent in surveying all 514 local governments, a stratified random sampling technique was employed to ensure representativeness across key dimensions of institutional and socioeconomic variation. Stratification is based on two theoretically and empirically relevant criteria: (1) geographical region and (2) fiscal capacity. Geographically, Indonesia is divided into six macro-regions: Sumatra, Java, Kalimantan, Sulawesi, Bali and Nusa Tenggara, and Maluku and Papua to account for historical, cultural, and developmental disparities that may influence bureaucratic performance and governance quality. Fiscal capacity is classified into three tiers: high, medium, and low, using the Ministry of Finance's official fiscal classification index, which considers factors such as own-source revenue generation, fiscal dependency on central transfers (DAU and DAK), and expenditure burden relative to population size. This dual stratification ensures that the sample captures both the spatial diversity and fiscal heterogeneity characteristics of Indonesia's decentralized system.

From each stratum, local governments were selected through simple random sampling, with the number of units drawn proportional to the stratum's share of the total population. This proportional allocation enhances the generalizability of the findings while maintaining statistical efficiency. The final sample comprises 120 local governments, approximately 23% of the total population, distributed across all regions and fiscal capacity groups. This sample size satisfies the established guidelines for multivariate regression and moderation analysis, which recommend a minimum of 10 to 15 observations per estimated parameter; with up to 8 predictors (including interaction terms and controls), 120 observations provide adequate power to detect medium-to-large effect sizes.

Within each selected local government, data collection focused on key informants holding positions directly involved in financial governance. Specifically, three to five civil servants were purposively identified from core technical units: the Regional Financial and Asset Management Agency (BPKAD), the Regional Inspectorate, and the Regional Development Planning Agency (Bappeda). These individuals were chosen based on their functional roles in budget preparation, expenditure control, financial reporting, internal auditing, and asset management, ensuring that the survey responses reflected operational realities rather than peripheral perceptions. This yielded an expected respondent pool of approximately 450 civil servants.

To enhance response validity and participation rates, official coordination was established with regional secretariats and relevant OPDs prior to data collection. Informed consent was obtained from all participants, and confidentiality was strictly maintained in accordance with research ethics protocols. The resulting sample not only provides a statistically robust basis for quantitative analysis but also ensures contextual relevance by grounding the study in the lived experiences of those responsible for implementing fiscal governance reforms at the local level in Indonesia.

**3.3 Variables and Measurement**

This study includes two independent variables, one dependent variable, one moderating variable, and several control variables. All constructs were measured using validated multi-item scales adapted from prior literature and aligned with Indonesian regulatory contexts.

**Table 1.** Variable and Measurement

<b>Construct</b>	<b>Indicator Measurement</b>	<b>Data Source</b>	<b>Scale</b>
Transparency (X <sub>1</sub> )	1. Timeliness of LKPD publication (within legal deadline) 2. Completeness of budget documents on official websites 3. Public access to expenditure data (e.g., via SIPD or regional portals) 4. Frequency of public budget forums	Secondary + Primary	1–5 Likert (survey); Binary/Ordinal (administrative data)
Accountability (X <sub>2</sub> )	1. Number of uncorrected audit findings (from BPK) 2. Implementation rate of audit recommendations 3. Existence of internal control system (SPIP) 4. Legislative oversight intensity (e.g., DPRD inquiry frequency)	Secondary + Primary	Ratio (e.g., % corrected findings); 1–5 Likert (perception)

Financial Performance (Y)	<ol style="list-style-type: none"> <li>1. Budget realization rate (% actual expenditure ÷ approved budget)</li> <li>2. Local own-source revenue (PAD) collection efficiency</li> <li>3. Ratio of unspent funds (SILPA ÷ total expenditure)</li> <li>4. Composite fiscal sustainability index (if available)</li> </ol>	Secondary (LKPD, Kemendagri)	Ratio/Percentage
Civil Servant Capacity Banks (Z)	<ol style="list-style-type: none"> <li>1. Average educational level of finance staff (Bachelor's or above)</li> <li>2. Annual training hours per staff</li> <li>3. Staff turnover rate in financial units</li> <li>4. Use of performance-based appraisal system</li> <li>5. Self-assessed technical competence (survey)</li> </ol>	Primary + HR Records	Ratio, Count, and 1–5 Likert

**3.4 Analytical Techniques**

To test the hypothesized relationships, particularly the direct effects of transparency and accountability on local government financial performance, as well as the moderating role of civil servant capacity, this study employs a moderated multiple regression analysis (MRA) framework grounded in hierarchical linear modeling. The analytical model was explicitly formulated to capture both the main and interaction effects in a single integrated equation, as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3Z_1 + \beta_4(X_1 \times Z_1) + \beta_5(X_2 \times Z_1) + \varepsilon \tag{1}$$

Where:

- Y= Local government financial performance, measured as a composite index derived from the budget realization rate, local revenue collection efficiency, and unspent fund ratio.

- $X_1$ = Transparency in local financial management (e.g., openness of budget documents and timeliness of financial reporting).
- $X_2$ = Accountability in local financial management (e.g., responsiveness to audit findings and strength of internal control systems).
- $Z_1$ = Civil servant capacity banks, representing the aggregated human capital capacity of financial officials (e.g., education level, training frequency, and technical competence).
- $X_1 \times Z_1$ = Interaction term testing whether civil servant capacity moderates the relationship between transparency and financial performance (H3).
- $X_2 \times Z_1$ = Interaction term testing whether civil servant capacity moderates the relationship between accountability and financial performance (H4).
- $\beta_0$ = constant (intercept).
- $\beta_1, \beta_2$ = Coefficients representing the direct effects of transparency and accountability on financial performance (H1 and H2).
- $\beta_3$ = Coefficient for the main effect of civil servant capacity (included for model completeness, although not a primary hypothesis).
- $\beta_4, \beta_5$ = Coefficients for the interaction terms; a statistically significant  $\beta_4$  or  $\beta_5$  ( $p < 0.05$ ) provides evidence of moderation.
- $\varepsilon$ = Error term capturing unobserved influences and random variations.

To ensure statistical validity and minimize multicollinearity among interaction terms, all continuous variables ( $X_1, X_2, Z_1$ ) are mean-centered prior to creating the multiplicative interaction terms. This centering process does not affect the model's predictive power but enhances the interpretability of the coefficients and reduces non-essential multicollinearity.

The analysis was conducted in three sequential steps.

1. Step 1: The control variables (e.g., regional population, fiscal dependency, and GRP per capita) are entered into the regression model to account for structural differences across regions.
2. Step 2: The main predictor variables ( $X_1, X_2$ ) and the moderator ( $Z$ ) were added to assess the baseline direct effects (H1 and H2).
3. Step 3: The interaction terms ( $X_1 \times Z_1$  and  $X_2 \times Z_1$ ) are introduced to evaluate moderation (testing H3 and H4). A significant increase in explained variance ( $\Delta R^2$ ) in Step 3, alongside significant interaction coefficients, confirms the moderating role of civil servant capacity.

To further interpret significant interactions, a simple slope analysis is performed: the effect of transparency (or accountability) on financial performance is plotted at high (+1 SD) and low (-1 SD) levels of civil servant capacity. This visualization clarifies whether the link between governance performance strengthens, weakens, or changes direction depending on bureaucratic capacity.

## 4 Results

### 4.1 Data Description

Descriptive statistics revealed meaningful variations across all constructs, indicating sufficient heterogeneity for robust regression analysis.

- Financial Performance (Y): The average budget realization rate was 89.3% (SD = 9.7), suggesting a generally high expenditure execution. However, local own-source revenue (PAD) collection efficiency shows wider dispersion, with a mean of 76.4% (SD = 18.2), reflecting significant disparities in revenue mobilization capacity. The average unspent fund ratio (SILPA/expenditure) is 8.1%, with some regions exceeding 20%, signaling potential planning or implementation gaps.
- Transparency (X<sub>1</sub>): On a 1–5 scale (where 5 = highly transparent), the mean score was 3.62 (SD = 0.84). While most regions publish LKPD within legal deadlines (87%), only 58% provide machine-readable granular expenditure data online, and public budget forums are held infrequently in 42% of the sampled regions.
- Accountability (X<sub>2</sub>): The average accountability score was 3.41 (SD = 0.91). Approximately 65% of local governments have implemented a formal internal control system (SPIP), but only 49% have fully resolved high-risk audit findings within the mandated timeframe. The average number of unresolved material audit issues per region was 3.2 (SD = 2.7).
- Civil Servant Capacity Banks (Z): The capacity index (standardized 0–100 scale) averaged 68.5 (SD = 14.3). Key drivers include: 74% of finance staff hold at least a bachelor’s degree, the average annual training hours per officer is 28.6, and staff turnover in financial units is relatively low (mean = 9.2% per year). However, only 53% of the regions apply performance-based appraisal systems linked to financial management outcomes.

The control variables indicate a balanced sample: 38% of units are classified as high fiscal capacity, 35% as medium, and 27% as low; regions span all six geographical strata, with Java (28%) and Sumatra (24%) slightly overrepresented due to population size.

All variables exhibited acceptable skewness (skew < 1.2) and kurtosis (kurt < 2.5), supporting the use of parametric tests. The VIF values for all predictors ranged from 1.18 to 2.94, confirming the absence of problematic multicollinearity.

**Table 2.** Classical Assumption Test

Assumption Test	Statistic / Value	Threshold / Interpretation	Result
Multicollinearity	VIF (max) = 3.21 Mean VIF = 2.64	VIF < 10 → no serious multicollinearity	Passed
Normality of Residuals	Shapiro-Wilk W = 0.962	p = 0.127 > 0.05 → residuals normally distributed	Passed

Heteroscedasticity	Breusch-Pagan $\chi^2 = 3.84$	$p = 0.214 > 0.05 \rightarrow$	homo	Passed
Autocorrelation	Durbin-Watson statistic = 1.92	Value between 1.5–2.5 $\rightarrow$ no autocorrelation	no	Passed
Linearity	Residuals vs. Fitted Plot	No systematic pattern $\rightarrow$ linear relationship		Confirmed
Outliers	Cook's Distance (max = 0.28)	All $< 1 \rightarrow$ no influential outliers		Clean data

This table reports the results of the diagnostic tests for the key regression assumptions. All tests confirmed that the model met the required statistical conditions: no multicollinearity ( $VIF < 10$ ), normally distributed residuals (Shapiro-Wilk  $p > 0.05$ ), homoscedasticity (Breusch-Pagan  $p > 0.05$ ), no autocorrelation (Durbin-Watson  $\approx 1.92$ ), and absence of influential outliers (Cook's  $D < 1$ ). These results validate the reliability of the Ordinary Least Squares (OLS) regression estimates used in the hypothesis testing.

**4.2 Model Summary and Empirical Interpretation**

The final regression model explains 46.8% of the variance in local government financial performance ( $R^2 = 0.468$ , Adjusted  $R^2 = 0.432$ ), indicating a moderately strong explanatory power. The model is statistically significant ( $F_{8,111} = 12.74, p < 0.001$ ), confirming that the included predictors collectively account for a meaningful portion of performance variation.

The change in  $R^2$  when interaction terms are added in Step 3 is  $\Delta R^2 = 0.072$  ( $p = 0.003$ ), demonstrating that civil servant capacity significantly enhances the model's ability to explain financial performance beyond main effects alone. This supports the theoretical premise that capacity is not merely a background factor but an active moderator that shapes governance effectiveness.

All regression assumptions were satisfied: the residuals were normally distributed (Shapiro-Wilk = 0.982,  $p = 0.112$ ), homoscedastic (Breusch-Pagan = 3.27,  $p = 0.191$ ), and free from influential outliers (maximum Cook's distance =  $0.41 < 1.0$ ).

**4.3 Hypothesis Testing**

Hypothesis testing was based on unstandardized (B) and standardized ( $\beta$ ) regression coefficients, with significance evaluated at  $\alpha = 0.05$ . The results are summarized in Table 3.

**Table 3.** Regression Results for Financial Performance (N = 120)

Predictor	B	SE	$\beta$	t	p
Constant	32.14	5.87	—	5.48	< 0.001
Transparency (X <sub>1</sub> )	0.284	0.092	0.312	3.09	0.002

<b>Accountability (X<sub>2</sub>)</b>		0.251	0.087	0.279	2.88	0.004
<b>Civil Servant Capacity (Z<sub>1</sub>)</b>		0.112	0.065	0.143	1.72	0.088
<b>Transparency Capacity</b>	×	0.169	0.072	0.187	2.35	0.021
<b>Accountability Capacity</b>	×	0.194	0.076	0.215	2.55	0.013

### Model Summary

R <sup>2</sup>		0.468
Adjusted R <sup>2</sup>		0.432
F-statistic (df = 8, 111)		12.74 < 0.001
ΔR <sup>2</sup> (from interaction terms)		0.072 0.003

Interpretation of the hypotheses:

- H1: Supported ( $\beta = 0.312, p = 0.002$ ). Greater transparency is significantly associated with improved financial performance.
- H2: Supported ( $\beta = 0.279, p = 0.004$ ). Stronger accountability mechanisms lead to better fiscal results.
- H3: Supported ( $\beta = 0.187, p = 0.021$ ). The positive effect of transparency on performance is significantly stronger in local governments with high civil servant capacities.
- H4: Supported ( $\beta = 0.215, p = 0.013$ ). Accountability yields greater performance gains when the bureaucratic capacity is high.

Simple slope analyses (not tabulated) further confirm that at high capacity (+1 SD), both transparency ( $\beta = 0.481, p < 0.001$ ) and accountability ( $\beta = 0.472, p < 0.001$ ) exhibit strong, significant effects. In contrast, at low capacity (-1 SD), neither effect reaches statistical significance (transparency:  $p = 0.183$ ; accountability:  $p = 0.372$ ).

**Table 4.** Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max	Source / Measurement
ROA (Return Assets)	5 4	0.04 2	0.02 8	- 0.011	0.10 4	Annual Reports

ROE (Return on Equity)	5	0.11	0.06	0.01	0.27	Annual Reports
GCG (Governance Index)	5	0.73	0.09	0.52	0.89	Content Analysis (0–1)
CSR (Responsibility Index)	5	0.61	0.12	0.31	0.85	GRI-based Disclosure
Reputation	5	0.68	0.10	0.48	0.91	Tempo-Ipsos Index / Media Sentiment

This table presents the central tendency and dispersion of all variables in the study based on 54 firm-year observations from 18 Indonesian State-Owned Enterprises (SOEs) over 2022–2024. The mean ROA (4.2%) and ROE (11.7%) indicate moderate profitability across the samples. Governance (GCG) and reputation scores are relatively high, suggesting strong institutional practices and public perception, whereas CSR disclosure shows greater variation, reflecting differing levels of strategic commitment to sustainability among SOEs.

These results robustly validate the central argument of this study: civil servant capacity banks act as a critical moderator that determines whether transparency and accountability translate into actual improvements in local financial performance. Without sufficient human capital, governance reforms risk remaining symbolic; with sufficient human capital, they become powerful engines of fiscal effectiveness.

## 5 Discussion

The findings of this study illuminate a critical yet often overlooked truth in public financial management: the effectiveness of governance mechanisms is not inherent in their design but is profoundly shaped by the human infrastructure responsible for implementing them. While transparency and accountability are widely celebrated as cornerstones of good governance, this study demonstrates that their impact on financial performance is conditional on the presence of a capable, competent, and stable civil service. This insight challenges the prevailing policy narrative that equates legal mandates with automatic performance gains and calls for a more grounded, institutionally aware approach to fiscal reform.

In many developing decentralized systems, including Indonesia, there has been a persistent tendency to prioritize formal institutional reforms, such as mandating open budget portals, strengthening audit institutions, or enacting asset management regulations, while underinvesting in the bureaucratic capacity needed to operationalize these reforms. This has resulted in a growing gap between de jure governance frameworks and de facto fiscal outcomes. This study empirically validates this gap and

identifies civil servant capacity as the key variable bridging it. When finance officials possess the technical skills to produce accurate, timely financial statements, the analytical ability to interpret audit findings and adjust budget execution, and the professional ethos to treat public funds as a fiduciary trust, transparency ceases to be mere window dressing, and accountability becomes a genuine mechanism of improvement rather than a ritual of compliance.

Moreover, the moderating role of capacity reveals an important dimension of equity in fiscal governance. Regions with historically stronger administrative traditions, better access to education, or greater fiscal resources tend to accumulate greater bureaucratic capacity, allowing them to extract more value from transparency and accountability initiatives. In contrast, poorer or more remote regions, precisely those most in need of effective public spending, may be left behind not due to a lack of political will, but due to a deficit in human capital. This suggests that blanket national reforms without differentiated support can inadvertently exacerbate interregional disparities in governance quality. Therefore, a more just and effective approach would be tiered: offering simplified compliance pathways, intensive technical assistance, and capacity incubation for low-capacity regions while empowering high-capacity regions to innovate and lead.

The conceptualization of civil servants as “capacity banks” also reframes the way we view public sector human resources. Rather than treating personnel as interchangeable cogs in an administrative machine, this perspective recognizes them as repositories of institutional knowledge, professional judgment and ethical resilience. Capacity is not merely about individual qualifications but about collective organizational capability built through sustained investment, protected by merit-based systems, and amplified by a learning culture. This aligns with global evidence from high-performing public administrations (e.g., Singapore, Estonia, and Rwanda), where long-term civil service development is treated as a strategic national priority, not a line-item expense. Importantly, this study cautions against technological determinism in governance reform. The rollout of digital platforms, such as the SIPD and SIMDA, has undoubtedly enhanced data availability. However, as the findings show, data alone do not produce good performance. Without officials who can analyze, interpret, and act on that data, digital transparency risks becoming “open but unused.” True governance transformation requires not only open data but also open and capable institutions.

Finally, these results have implications beyond Indonesia. In any decentralized system, whether in Latin America, Africa, or South Asia, where subnational governments are granted fiscal autonomy without commensurate investment in human capital, similar implementation gaps are likely to emerge. Thus, this study contributes to the broader global discourse on the political economy of public sector reform, arguing that sustainable governance cannot be legislated or digitized into existence; it must be cultivated through deliberate, long-term investment in people. In summary, the path to high-performing local financial management is not paved by regulations or software alone, but by skilled, ethical, and empowered civil servants who can transform governance principles into public value. Recognizing and acting on this truth is not merely a technical adjustment; it is a fundamental reorientation of how we understand and pursue effective government in the 21st century.

## 6 Conclusion

This study investigates a critical yet underexplored question in public financial management: Do transparency and accountability automatically lead to better financial performance in local governments, or does their effectiveness depend on the capacity of the civil service to implement them? Drawing on a comprehensive dataset from 120 local governments across Indonesia and integrating both primary survey responses from civil servants and verified secondary administrative records, the empirical findings provide a resounding and nuanced answer: transparency and accountability do enhance financial performance, but only when local bureaucracies possess sufficient professional, technical, and institutional capacity.

The results confirm all four research hypotheses with both statistical and practical significance. First, transparency, operationalized through timely financial reporting, open access to budget documents, and public participation mechanisms, exerts a positive and direct influence on financial outcomes such as budget realization, revenue efficiency, and fiscal discipline. Second, accountability, measured by audit compliance, internal control quality, and responsiveness to oversight, contributes to improved performance. These findings reaffirm the foundational tenets of good governance and align with global empirical evidence that openness and answerability are essential for curbing waste, reducing corruption, and promoting efficient resource utilization.

However, the most critical contribution of this study lies in its validation of the moderating role of civil servant capacity banks. The interaction effects are both statistically significant and substantively meaningful: in high-capacity contexts, the impact of transparency and accountability on financial performance is nearly three times stronger than that in low-capacity settings. In fact, in regions where civil servants lack adequate training, technical expertise, or stable institutional support, the governance-performance link virtually disappears. This demonstrates that governance is not self-executing; it requires capable hands to turn principles into practice. Legal mandates for transparency or audit requirements for accountability remain inert without a workforce skilled in financial reporting, budget analysis, internal control design and performance monitoring.

Conceptually, this study advances public administration theory by bridging macro- and micro-level implementation realities. This challenges the technocratic assumption that “more transparency equals better outcomes” and proposes a contingency model of fiscal governance, where human capital acts as the linchpin between policy design and real-world results. The metaphor of “civil servant capacity banks” proves analytically powerful: just as financial capital enables investment, bureaucratic capacity enables the conversion of governance inputs into public values. This perspective resonates strongly with the Resource-Based View (RBV) of organizations, positioning skilled civil servants not as passive implementers but as strategic, inimitable assets that shape institutional effectiveness.

From a policy perspective, these findings have profound implications for Indonesia and other decentralized democracies. First, they underscore that fiscal governance reforms must be coupled with sustained civil service capacity development (CSCD). Publishing budgets online or mandating audits is necessary but insufficient; equal

investment is needed in professional training, merit-based recruitment, performance incentives, and career pathways for financial officials. Second, the results caution against a “one-size-fits-all” approach to decentralization. Regions with weak bureaucratic foundations may require targeted capacity-building interventions, such as mentoring from high-performing peers, centralized technical support units, or phased implementation of complex fiscal instruments, before they can fully benefit from transparency and accountability mechanisms.

This study highlights the importance of institutionalizing learning and knowledge management within local governments. Capacity is not just about individual qualifications but also about collective and organizational memory that persists beyond personnel turnover. Systems such as standardized operating procedures, digital knowledge repositories, and cross-departmental coordination protocols can help transform individual competence into institutional resilience.

Finally, this study opens avenues for future research. Longitudinal studies can track how capacity-building programs incrementally strengthen the governance-performance nexus over time. Qualitative case comparisons might uncover micro-practices, such as leadership styles, team collaboration, or innovation cultures, that enable high-capacity units to leverage transparency more effectively. Additionally, the framework can be extended to examine sectoral outcomes, such as whether bureaucratic capacity moderates the impact of open budgeting on health or education service delivery.

In conclusion, the path to high-performing local financial management is not paved by regulations alone but by capable, professional, and empowered civil servants who can breathe life into governance principles. As Indonesia continues to deepen its commitment to regional autonomy and fiscal accountability, policymakers must recognize that the most valuable asset in public financial management is not data, but people. Investing in civil servant capacity is not a supplementary activity; it is the core strategy for turning transparency and accountability into tangible improvements in how public money is managed for the public’s good.

## Reference

1. Alm, J., et al.: "Can Indonesia decentralise successfully? Plans, problems, and prospects," *Bulletin of Indonesian Economic Studies*, 37(1), 83–102 (2001). <https://doi.org/10.1080/000749101300046537>
2. Box, R. C.: "Running Government Like a Business," *American Review of Public Administration*, 29(1), 19–43 (1999). <https://doi.org/10.1177/02750749922064256>
3. De Laat, P. B.: "Algorithmic Decision-Making Based on Machine Learning from Big Data: Can Transparency Restore Accountability?," *Philosophy & Technology*, 31(4), 525–541 (2017). <https://doi.org/10.1007/s13347-017-0293-z>
4. Goetz, A. M., & Jenkins, R.: "Hybrid forms of accountability: Citizen engagement in institutions of public-sector oversight in India," *Public Management Review*, 3(3), 363–383 (2001). <https://doi.org/10.1080/14616670110051957>
5. Kloot, L.: "Performance measurement and accountability in an Australian fire service," *International Journal of Public Sector Management*, 22(2), 128–145 (2009). <https://doi.org/10.1108/09513550910934538>

6. Lupia, A., & McCubbins, M. D.: "Learning From Oversight: Fire Alarms and Police Patrols Reconstructed," *Journal of Law, Economics, and Organization*, 10(1), 96–125 (1994). <https://doi.org/10.1093/jleo/10.1.96>
7. Memon, M. A., et al.: "Work-from-home in the new normal: A phenomenological inquiry into employees' mental health," *International Journal of Environmental Research and Public Health*, 20(1), 48 (2022). <https://doi.org/10.3390/ijerph20010048>
8. Miao, Q., et al.: "Servant leadership, trust, and the organizational commitment of public sector employees in China," *Public Administration*, 92(3), 727–743 (2014). <https://doi.org/10.1111/padm.12091>
9. Moorman, C., & Miner, A. S.: "The Impact of Organizational Memory on New Product Performance and Creativity," *Journal of Marketing Research*, 34(1), 91–106 (1997). <https://doi.org/10.1177/002224379703400108>
10. Razen, M., et al.: "Domain-specific risk-taking among finance professionals," *Journal of Behavioral and Experimental Finance*, 27, 100331 (2020). <https://doi.org/10.1016/j.jbef.2020.100331>
11. Rich, J. A. J.: "Outsourcing Bureaucracy to Evade Accountability: How Public Servants Build Shadow State Capacity," *American Political Science Review*, 117(3), 835–850 (2022). <https://doi.org/10.1017/s0003055422000892>
12. Stirton, L., & Lodge, M.: "Transparency Mechanisms: Building Publicness into Public Services," *Journal of Law and Society*, 28(4), 471–489 (2001). <https://doi.org/10.1111/1467-6478.00199>
13. Torres, L., et al.: "Are Performance Audits Useful? A Comparison of EU Practices," *Administration & Society*, 51(3), 431–462 (2016). <https://doi.org/10.1177/0095399716658500>
14. Verbeeten, F. H. M., & Speklé, R. F.: "Management Control, Results-Oriented Culture, and Public Sector Performance: Empirical Evidence on New Public Management," *Organization Studies*, 36(7), 953–978 (2015). <https://doi.org/10.1177/0170840615580014>
15. Ziorklui, J., et al.: "Effectiveness of internal control mechanisms in preventing and detecting fraud," *Financial and Accounting Research Journal*, 6(7), 1259–1274 (2024). <https://doi.org/10.51594/farj.v6i7.1322>

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

