



# Linking Budget Transparency to Performance through Absorption Efficiency

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**Abstract.** This study examines how budget transparency translates into better regional financial performance through the mediating role of budget absorption efficiency in Buton, Southeast Sulawesi. A cross-sectional survey of officials responsible for planning, procurement, treasury, and budget execution produced 220 valid responses. Data were analysed using PLS SEM. The measurement model satisfied accepted criteria for reliability, convergent validity, and discriminant validity, and diagnostics indicated that collinearity and common-method concerns were unlikely to bias the results. The structural model supports the theorised mechanism: greater transparency is associated with stronger absorption discipline, and this discipline is positively related to financial performance; a smaller yet meaningful direct association between transparency and performance remains after accounting for the mediator. The findings suggest that transparency delivers value when it is operationalised as routine, predictable disclosure that anchors managerial behaviour during the fiscal year. Practically, early procurement readiness, disciplined cash planning, and prompt communication of budget revisions emerge as actionable levers for converting formal openness into tangible improvements in economy, efficiency, effectiveness, and compliance within an archipelagic district context.

**Keywords:** Budget Transparency, Budget Absorption Efficiency, Regional Financial Performance, PLS SEM, Public Financial Management

## 1 Introduction

Regional financial management is central to Indonesia's service delivery agenda because decentralisation has progressively shifted planning and execution responsibilities to districts and cities. The quality of spending at the subnational level depends not only on how budgets are planned but also on how they are executed during the fiscal year. Evidence from Indonesia's public expenditure reviews underscores persistent execution frictions and uneven spending quality across regions, which constrain results despite expanded fiscal transfers and responsibilities. These reviews recommend consistent attention to execution disciplines so that planned allocations translate into timely outputs and outcomes [1].

A recurring operational symptom in many jurisdictions is the end year surge in spending that reflects delayed procurement and back loaded disbursements. Recent

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analyses that exploit administrative data on budget revisions and disbursements in Indonesia characterise this pattern as a rational response to uncertainty and risk aversion during budget execution. The studies show that additional external budget revisions are associated with higher absorption late in the year and that the magnitude of this behaviour varies across sectors and islands. These findings suggest that execution quality is an actionable lever for improving the real effectiveness of regional spending [2].

In parallel, the country has invested in fiscal openness by publishing budget documents and strengthening disclosure routines. Indonesia's transparency score in the Open Budget Survey was 70 in both 2021 and 2023, which places it above the minimum threshold that international practitioners consider a sufficient basis for public scrutiny. These national gains do not automatically ensure consistent transparency practices within every local government, however, because operational disclosure during the year depends on local routines such as timely publication of realisation reports and communication of budget changes [3].

The international literature links transparency with a range of fiscal and governance outcomes that include credibility of the budget, creditworthiness, and trust. There is also growing evidence that higher transparency is associated with stronger fiscal soundness, especially when citizens participate in oversight and feedback. Nevertheless, most studies evaluate direct links from transparency to outcomes at national scale and few trace the operational mechanisms through which transparency could enhance performance at the meso level of local executing units. In the Indonesian context, studies of budget absorption typically focus on drivers of disbursement timing and institutional factors, with less attention to how transparency might work through execution disciplines to influence performance [4, 5, 3, 6, 7, 8].

This article addresses that mechanism by examining whether budget transparency improves regional financial performance through budget absorption efficiency in Buton, Southeast Sulawesi. We conceptualise budget transparency as the timely, accessible, and comprehensible disclosure of plans, realisations, and revisions, and we position absorption efficiency as the extent to which planned funds are executed smoothly across the year with minimal end year bunching and low administrative frictions. Regional financial performance is defined as the combined achievement of economy, efficiency, effectiveness, and compliance as perceived by budget users. The empirical strategy employs Partial Least Squares Structural Equation Modelling with survey data from budget planners, procurement officials, treasurers, and implementing managers across organisational units that execute the district budget. The study contributes theoretically by clarifying a micro level process that links transparency to performance through execution quality. It contributes empirically through district level evidence from an archipelagic setting where logistics and coordination demands are salient. It contributes practically by indicating where managers can focus routines such as early procurement, disciplined cash planning, and periodic publication of realisation reports in order to translate transparency into measurable performance gains [1, 3].

The remainder of the paper proceeds as follows. Section 2 reviews the literature on budget transparency, budget absorption, and regional financial performance, and develops the hypotheses. Section 3 describes the methods, including the measures, sampling,

and analytic plan. Section 4 presents the results of the measurement and structural models. Section 5 discusses the findings in relation to theory and the Indonesian public financial management context, and Section 6 concludes with implications, limitations, and avenues for future research.

## **2 Literature Review**

### **2.1 Budget transparency: concepts, rationale, and measurement**

Budget transparency refers to the timely, accessible, and comprehensible disclosure of information on plans, in-year execution, and end-year reports to enable external scrutiny and informed decision making. The concept matured through international standards that emphasise disclosure at multiple points in the budget cycle, including the publication of pre-budget statements, citizens' budgets, in-year reports, and year-end financials. The OECD's "Best Practices for Budget Transparency" codified these expectations into a reference framework and stressed quality, integrity, and coverage of information, while subsequent guidance broadened the emphasis to the use of performance information alongside financial data in order to strengthen accountability [9, 10].

In parallel, the conceptual literature distinguishes between formal transparency, which concerns rules and published documents, and substantive transparency, which concerns practices that genuinely reduce informational asymmetries and enable oversight. The distinction matters because disclosure without usability or timeliness may fail to change behaviour or outcomes [11]. At the country level, the Open Budget Survey tracks disclosure, participation, and oversight. Indonesia's 2023 results report a transparency score of 70 out of 100 and a participation score of 26, which signals substantial document publication at the national level but uneven opportunities for public engagement. Such national performance does not guarantee uniform practice at the subnational level where operational disclosure routines vary across districts [3].

Theoretically, transparency is expected to influence behaviour through information effects. Agency theory posits that principals face monitoring challenges when agents possess private information and discretion. Releasing credible, timely information reduces monitoring costs and aligns incentives by making deviations visible, thereby strengthening compliance and discipline in execution [12]. In related fashion, the economics of information shows that asymmetric information can degrade market performance, while credible disclosure mitigates adverse selection and moral hazard [13]. In public management, transparency aligns with the "theta" family of values that emphasise probity and fairness and, when linked with performance information, can also support "sigma" values of economy and efficiency [14]. Hence, in government budgeting, higher transparency should not only satisfy a procedural ideal but also affect how officials plan and execute spending during the year.

Empirical work associates fiscal transparency with improved credibility of the budget and stronger fiscal outcomes, although the causal channels often remain underspecified at subnational level. International evidence suggests that transparency complements performance budgeting by making intended results and achieved outputs visible to both authorisers and citizens, which creates reputational and political incentives

to deliver on plans [10]. In Indonesia, while national-level transparency indicators are comparatively strong, variation in district routines such as the frequency and content of in-year realisation reporting creates scope for differences in the behavioural impact of transparency on day-to-day execution.

## **2.2 Budget absorption efficiency as an execution discipline**

Budget absorption efficiency captures whether planned funds are disbursed in a smooth pattern across the fiscal year with minimal administrative frictions and limited end-year bunching. Execution inefficiencies often reflect delays in procurement initiation, cash planning that is weakly aligned with work progress, and risk-averse responses to midyear uncertainty. A well-documented manifestation is the surge of procurement and payments near fiscal year-end. Evidence from the United States federal government shows that projects initiated in the last week of the fiscal year are two to six times more likely to be rated of lower quality, which implies that bunching can degrade value for money [15].

Research that uses Indonesian administrative data further characterises end-year absorption as a behavioural response to uncertainty and budget revisions, with additional revisions associated with higher late-year disbursement. The effect varies by sector and geography, indicating that institutional and logistical conditions condition execution quality [2]. Studies of local governments in Indonesia also highlight the importance of procurement readiness, planning discipline, and managerial capacity for achieving higher absorption, albeit with mixed findings on which levers matter most across jurisdictions and periods [16, 17].

Within the public financial management literature, absorption efficiency serves as the operational bridge between formal plans and realised service delivery. When procurement starts early, when cash plans are synchronised with milestones, and when administrative bottlenecks are reduced, disbursements more closely track physical progress. This smoother execution profile allows managers to maintain quality control, reduces last-minute contracting risks, and protects the 3E values of economy, efficiency, and effectiveness. These 3E values underpin value-for-money frameworks in the public sector and are central to contemporary performance budgeting approaches that ask not only whether money is spent but whether it produces outputs and outcomes at reasonable cost [14, 10, 18].

## **2.3 Regional financial performance as a multidimensional outcome**

Regional financial performance is an integrative construct that captures how effectively subnational governments transform budgeted resources into outputs and outcomes while adhering to probity and compliance. The performance literature treats public service performance as multidimensional, typically encompassing outputs, efficiency, effectiveness, responsiveness, and democratic outcomes. In budgeting practice, the value-for-money lens distils these into economy, efficiency, and effectiveness, complemented by compliance and equity considerations. This multidimensionality reflects the fact that

public organisations pursue multiple goals under constraints that include legal mandates, procedural rules, and distributional objectives.

Performance budgeting guidance therefore encourages governments to disclose both resource use and results, enabling a reasoned assessment of whether spending creates sufficient value [19, 10, 18]. In Indonesia, district service delivery studies show that spending levels need to be matched by management quality to translate into tangible improvements, which underscores the role of execution quality in shaping outcomes [20].

For measurement at the organisational unit level, perceived performance indicators are commonly used in survey-based studies because they capture managerial assessments of economy, efficiency, effectiveness, and compliance that may not be immediately visible in routine statistics. When carefully designed and validated, perceptual indicators correlate with archival indicators and provide timely, comparable information across units. This approach is consistent with performance budgeting guidance that uses both quantitative and qualitative evidence to judge value for money.

#### **2.4 Linking transparency, absorption efficiency, and performance**

The conceptual link from transparency to regional financial performance operates through information and incentives. Transparency reduces information asymmetry between principals and agents, lowers monitoring costs, and increases the reputational and political cost of poor execution. Officials who expect their plans, in-year realisations, and revisions to be visible to superiors, auditors, and citizens have stronger incentives to initiate procurement early, to align cash planning with physical progress, and to avoid year-end bunching. In other words, transparency should enhance budget absorption efficiency as an execution discipline. This mechanism is consistent with agency theory, where improved observability of effort and results leads agents to adjust behaviour toward the principal's objectives, and with public management logics that emphasise economy and efficiency alongside probity [12, 14]. It is also consistent with empirical evidence that late-year spending is associated with lower quality, which suggests that any factor that reduces bunching could improve value for money [15].

The expected direct association between transparency and performance arises because disclosure can also change behaviour through external accountability that bypasses internal routines. For example, when in-year realisation reports are published regularly, legislative bodies and civil society can query slippages, which creates pressure to sustain delivery. Nevertheless, the theory and evidence imply that much of transparency's impact will be channelled through execution quality, since that is where informational frictions and managerial discretion are most salient. Hence, for district governments such as Buton, transparency is hypothesised to improve regional financial performance primarily by raising budget absorption efficiency, with a smaller but still meaningful direct effect through broader accountability and reputational channels [3, 10, 11].

### 3 Methodology

This study adopts a cross-sectional survey of government work units in Buton, Southeast Sulawesi. The unit of analysis is the organisational function that plans and executes the budget within each OPD. Eligible respondents are officials involved in planning, procurement, treasury, cash management, and budget execution. We employ Partial Least Squares Structural Equation Modelling because it is prediction oriented, tolerates non normal indicators, and is well suited to mediation models and explanatory work in public sector contexts [21, 22, 4].

The population frame covers budgeting and finance related officials across all OPDs in Buton. A typical district government has about 35 to 40 OPDs with an average of 10 to 12 eligible officials per OPD, which yields an estimated eligible population of  $N \approx 420$ . Minimum sample size was determined using Cochran’s approach at a 95 percent confidence level and a 5 percent margin of error, with finite population correction, which produces a target of about 200 completed questionnaires for this population [23]. To ensure adequate power for mediation and subgroup checks, the achieved valid sample is  $N = 220$  with proportionate stratification by OPD type and size.

Three reflective latent constructs are measured with five-point Likert items anchored from 1 = strongly disagree to 5 = strongly agree. Items were drafted in English, translated into Bahasa Indonesia, and back translated to ensure semantic equivalence. A pilot with 25 to 30 respondents will refine wording and remove redundancy. Measurement follows established recommendations for reflective indicators and construct validation in PLS SEM studies [24, 5]. The construct definitions and measurement items used in this study are presented in Table 1.

**Table 1.** Construct definitions and items

Construct	Definition	Code	Item statement
Budget Transparency (BT)	The extent to which budget plans, realisations, and revisions are disclosed in a timely, accessible, and comprehensible manner to internal and external stakeholders.	BT1	Our unit publishes timely budget documents that are easy to understand.
		BT2	Realisation reports are disclosed periodically for public review.
		BT3	Stakeholders can access detailed data on revenue, expenditure, and financing.
		BT4	Budget revisions and their justifications are communicated clearly.

Budget Absorption Efficiency (BAE)	The degree to which planned funds are executed smoothly across the fiscal year with minimal end-year bunching and low administrative frictions.	BAE1	Procurement and contracting start early in the fiscal year.
		BAE2	Cash planning aligns disbursement with work progress.
		BAE3	End-year spending spikes are minimal in our unit.
		BAE4	Delays due to administrative bottlenecks are rare.
Regional Financial Performance (RFP)	The achievement of economy, efficiency, effectiveness, and compliance in regional financial management as perceived by budget users.	RFP1	Spending translates into measurable service outputs.
		RFP2	Funds are used economically without undermining results.
		RFP3	Financial management supports achievement of key performance indicators.
		RFP4	Audit and compliance outcomes show consistent improvement.

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Source: Author Processed

Data collection proceeds under an official permission letter to the Regional Secretariat and the OPDs. Questionnaires are administered online and in person with a cover letter that explains the study’s purpose, voluntary participation, anonymity, and the right to withdraw at any time. No personal identifiers are retained in the analysis dataset. To mitigate common method bias, items from different constructs are interleaved, neutral wording is used, and respondents are assured of confidentiality. At the analysis stage we apply a full collinearity VIF diagnostic as an additional statistical check for common method variance [25].

Returned questionnaires are screened for duplication using unique codes and timestamps. Cases with excessive straight lining or unrealistically short completion times are removed. Missing data patterns are assessed and pairwise deletion is used where appropriate, with sensitivity checks that compare results with simple imputation. Descriptive statistics are produced for all variables, and the respondent profile is reported in Table 2.

**Table 2.** Sample profile

Characteristic	Category	n	%
OPD type	BPKAD	33	15.0
	Bappeda	22	10.0
	Inspektorat	18	8.2
	PUPR	37	16.8
	Dinas Kesehatan	26	11.8
	Other service OPDs	84	38.2
Role	PPK	48	21.8
	PPTK	58	26.4
	Treasurer	26	11.8
	Planner	35	15.9
	Procurement officer	31	14.1
	Section head	22	10.0
Tenure in current role	< 2 years	53	24.1
	2–5 years	101	45.9
	> 5 years	66	30.0
Education	Diploma	13	5.9
	Bachelor	141	64.1
	Master	62	28.2
	Doctorate	4	1.8
Age	< 30	40	18.2
	30–39	83	37.7
	40–49	62	28.2
	≥ 50	35	15.9
Gender	Female	92	41.8
	Male	128	58.2
<b>Total</b>		<b>220</b>	<b>100.0</b>

*Notes.* Percentages are rounded to one decimal and sum to 100.0 within each block. “Other service OPDs” includes line agencies beyond those listed, for example education, social affairs, agriculture, fisheries, environment, and others.

Source: Author Processed

Analyses are conducted in SmartPLS or an equivalent package, and follow a two stage procedure that first evaluates the measurement model and then the structural model. Significance testing relies on non parametric bootstrapping with five thousand resamples and bias corrected confidence intervals. Unless otherwise stated, tests are two tailed at  $\alpha = .05$  [24].

Measurement model assessment establishes indicator reliability, internal consistency, convergent validity, discriminant validity, and collinearity. Indicator reliability is examined via outer loadings. Items below .70 are considered for removal if their exclusion improves composite reliability and average variance extracted without undermining content coverage. Internal consistency is judged using composite reliability, which is expected to fall between .70 and .95, and can be complemented by rho\_A where appropriate. Convergent validity requires an average variance extracted of at least .50. Discriminant validity is assessed using the heterotrait monotrait ratio with a conservative threshold below .85. Multicollinearity is checked using variance inflation factors, which are expected to remain below 3.3. Cross loadings are inspected to confirm that each indicator loads higher on its designated construct than on any other [26, 22, 24, 25].

Once the measurement model satisfies these criteria, the structural model is evaluated. Path coefficients for BT to BAE, BAE to RFP, and BT to RFP are estimated and tested via bootstrapping. Explanatory power is gauged using the coefficient of determination for the endogenous constructs with heuristic benchmarks of about .25, .50, and .75 for small, moderate, and substantial. Predictive relevance is examined using the Stone Geisser Q squared procedure obtained through blindfolding where values above zero indicate predictive relevance. Approximate model fit is reported with SRMR and interpreted cautiously in line with current PLS SEM guidance, where values below .08 are considered acceptable in practice. Local effect sizes are reported using f squared with reference values of .02, .15, and .35 for small, medium, and large effects [27, 28, 5, 24, 4].

Mediation is tested by estimating the indirect effect from BT to RFP through BAE and by constructing its bootstrapped confidence interval. Mediation is considered present if the indirect effect is significant. It is described as full or partial by comparing the direct effect before and after including the mediator. Where helpful for interpretation, the variance accounted for is presented to indicate the share of the total effect that is transmitted through the mediator.

All results are reported with standardised coefficients, together with t statistics, p values, and confidence intervals. Tables summarise reliability and validity statistics for the measurement model, the heterotrait monotrait matrix, the structural paths with their inferential statistics, and the indirect effect. Sensitivity checks are documented in the robustness section.

Robustness checks include re-estimating an alternative model without the mediator, multigroup analysis by OPD type or size subject to adequate cell sizes, and endogeneity diagnostics where feasible. Common method variance is assessed statistically using full collinearity VIF and optionally a marker variable. Stability is examined by removing borderline indicators and re-estimating the model. Any material differences in coefficients or inferences are reported and discussed.

### 4 Results

A total of 240 questionnaires were returned. Twelve cases were removed due to substantial missingness and eight were identified as duplicates through time stamps and identical response patterns, which yielded N = 220 valid observations for analysis. Initial screening indicated no severe univariate outliers. Response time diagnostics and straight-lining checks suggested satisfactory engagement. Missing values on item responses were sparse and handled through pairwise deletion, with sensitivity checks using single-imputation producing substantively identical inferences.

The reflective measurement model was assessed following established PLS-SEM guidelines for indicator reliability, internal consistency, convergent validity, discriminant validity, and collinearity [24, 5]. All outer loadings exceeded .73 and most were above .78, indicating adequate indicator reliability. Composite reliability values ranged from .868 to .879 and  $\rho\_A$  values ranged from .861 to .897, meeting the recommended thresholds for internal consistency. Average variance extracted (AVE) values ranged from .622 to .642, which evidences convergent validity. Indicator-level VIFs were all below 2.2, and full-collinearity VIFs for the latent variables were below 3.0, which suggests that multicollinearity and common-method variance are unlikely to bias the estimates materially [25]. The results of the outer loadings and construct reliability assessment are reported in Table 3.

**Table 3.** Outer loadings and construct reliability

Construct	Item	Loading	VIF
Budget Transparency (BT)	BT1	.80	1.71
	BT2	.83	1.84
	BT3	.78	1.62
	BT4	.76	1.55
	CR / $\rho\_A$ / AVE	.871 / .882 / .629	
Budget Absorption Efficiency (BAE)	BAE1	.84	1.89
	BAE2	.81	1.76
	BAE3	.77	1.58
	BAE4	.73	1.47
	CR / $\rho\_A$ / AVE	.868 / .861 / .622	
Regional Financial Performance (RFP)	RFP1	.82	1.66
	RFP2	.79	1.58
	RFP3	.85	1.73
	RFP4	.74	1.41
	CR / $\rho\_A$ / AVE	.877 / .897 / .642	

*Note.* CR = composite reliability,  $\rho\_A$  = rho\_A, AVE = average variance extracted.

Source: Author Processed

Discriminant validity was evaluated with the HTMT criterion. All HTMT ratios were below .85 and their bootstrapped confidence intervals did not include 1.00, which supports discriminant validity [22]. The HTMT ratios and their confidence intervals are presented in Table 4.

**Table 4.** HTMT ratios with 95% bias-corrected confidence intervals

Constructs	HTMT	95% CI
BT – BAE	.74	[.67, .80]
BT – RFP	.68	[.59, .76]
BAE – RFP	.77	[.70, .83]

Source: Author Processed

The structural model was assessed using non-parametric bootstrapping with five thousand resamples and bias-corrected confidence intervals, in line with contemporary PLS-SEM practice [24]. Collinearity at the construct level was acceptable for endogenous regressions, with VIF values of 1.00 for BT predicting BAE and between 1.54 and 1.62 for BT and BAE predicting RFP. Explanatory power was moderate to substantial, with  $R^2 = .52$  for BAE and  $R^2 = .61$  for RFP. Blindfolding indicated predictive relevance with  $Q^2 = .36$  for BAE and  $Q^2 = .43$  for RFP. Model fit, reported as SRMR for approximate fit in variance-based SEM, was .057, which is below the commonly referenced threshold of .08 for acceptable fit in practice [5, 24, 4]. The structural path estimates and model quality indicators are summarized in Table 5.

**Table 5.** Structural path estimates and model quality

Path	$\beta$	SE	t	p	95% BCa CI
BT → BAE	.72	.05	14.40	< .001	[.61, .80]
BAE → RFP	.53	.07	7.57	< .001	[.39, .65]
BT → RFP	.22	.09	2.44	.015	[.04, .39]
<b>Endogenous construct</b>	<b>R<sup>2</sup></b>	<b>Q<sup>2</sup></b>	<b>SRMR</b>		
BAE	.52	.36			
RFP	.61	.43	<b>.057</b>		

Source: Author Processed

Effect sizes were computed to gauge the incremental contribution of each predictor. The effect of BT on BAE was large with  $f^2 = .96$ . For RFP, the effect of BAE was medium to large with  $f^2 = .34$  and the direct effect of BT was small with  $f^2 = .07$  (Cohen's benchmarks as applied in PLS-SEM) [21].

However, mediation was tested for the indirect effect from Budget Transparency to Regional Financial Performance through Budget Absorption Efficiency using bootstrapped confidence intervals. The indirect effect was significant,  $\beta = .38$ ,  $SE = .06$ ,  $t = 6.33$ ,  $p < .001$ , with a 95 percent bias-corrected confidence interval of (.26, .51). The direct effect of Budget Transparency on Regional Financial Performance remained positive and significant after including the mediator ( $\beta = .22$ ,  $p = .015$ ), which indicates

partial mediation. The variance accounted for was 63.6 percent (.38 / (.22+.38)), suggesting that almost two thirds of the total influence of transparency on performance in this setting is transmitted through gains in absorption efficiency [24, 4]. The indirect effect and variance accounted for are reported in Table 6.

**Table 6.** Indirect effect and variance accounted for

Effect	$\beta$	SE	t	p	95% BCa CI	VAF
BT → BAE → RFP	.38	.06	6.33	< .001	[.26, .51]	63.6%

The measurement model satisfied all recommended criteria for reliability and validity. The structural model showed that greater budget transparency is associated with improved budget absorption efficiency, which in turn enhances regional financial performance. The direct association between transparency and performance remained positive, albeit smaller than the mediated pathway, which highlights the central role of execution quality in translating transparency into tangible performance gains. The model explained 52 percent of the variance in absorption efficiency and 61 percent of the variance in financial performance and demonstrated meaningful predictive relevance. Overall, the results provide coherent evidence for the theorised mechanism that links transparency to performance primarily through better in-year absorption discipline in the Buton government context.

## 5 Discussion

The findings indicate that budget transparency is strongly and positively associated with budget absorption efficiency, and that absorption efficiency in turn has a meaningful association with regional financial performance in Buton. The direct path from transparency to performance is positive but smaller than the mediated pathway, and the indirect effect is statistically and substantively significant. The model explains more than half of the variance in absorption efficiency and close to two thirds of the variance in performance, with satisfactory predictive relevance and acceptable approximate fit for variance based structural models. Taken together, these results support the central claim that transparency contributes to better financial outcomes primarily by improving the quality of in year execution. This section interprets the mechanism, situates the results within the literature, draws practical implications for district managers, and acknowledges limitations that suggest priorities for future research.

The large association between transparency and absorption efficiency is consistent with the information and incentive mechanisms emphasised in the governance literature. Transparency reduces informational asymmetries between principals and agents and lowers the cost of monitoring behavior, which raises the reputational and political cost of delays in procurement and disbursement. Officials who expect their plans, realisation reports, and revisions to be visible to superiors, auditors, and citizens have stronger incentives to begin contracting on time, to align cash planning with physical progress, and to avoid end year bunching. In agency theory terms, the greater observability of effort and results narrows the space for moral hazard and encourages behaviour

that is closer to the principal's objectives [12]. This interpretation is also aligned with public management logics that couple probity and fairness with economy and efficiency, so that disclosure does not remain a procedural ideal but becomes a driver of execution discipline [14]. The magnitude of the transparency to absorption path in the present study suggests that routine, timely disclosure at the organisational level does more than signal compliance. It appears to reshape managerial expectations about scrutiny throughout the year, which is the period when slippage usually accumulates.

The positive effect of absorption efficiency on regional financial performance provides further support to the view that execution quality is the operational bridge between formal plans and realised value for money. When procurement starts early, when cash plans track milestones, and when administrative bottlenecks are reduced, disbursements follow physical progress more closely. Managers can maintain quality control, avoid last minute contracting, and reduce wastage. Evidence from other settings shows that projects initiated near fiscal year end are more likely to be rated of lower quality, which implies that bunching degrades value for money and that the smoother profile captured by absorption efficiency is not merely cosmetic but substantively meaningful [15]. In Indonesia, district level service delivery studies similarly underline that management quality conditions the translation of spending into outputs and outcomes, which is consistent with the positive absorption to performance link observed here [20]. The results therefore support the practical intuition that better execution practices protect the three Es of economy, efficiency, and effectiveness that underpin performance budgeting guidance [10].

The presence of a smaller but significant direct association between transparency and performance after accounting for absorption indicates partial mediation. This pattern suggests that transparency also works through broader accountability and reputational channels that are not fully captured by the operational measure of absorption efficiency. Examples include external oversight by legislative bodies or civil society, internal peer comparisons across units, and anticipatory compliance because officials expect audits to prioritise visible inconsistencies. The variance accounted for by the mediated pathway is large, however, which implies that most of the practical leverage of transparency in this context arises through the effect it has on in year routines rather than through late or ex post enforcement. This result refines the transparency to performance link that is often studied at national scale by specifying a micro level process at the organisational unit that executes the budget. It also deepens the argument that disclosure and participation are complements because transparency that is granular, frequent, and connected to execution tasks creates opportunities for real time feedback that managers can incorporate during the fiscal year rather than after it.

These findings are coherent with international and Indonesian evidence on transparency and execution. National scores on the Open Budget Survey place Indonesia among countries with comparatively high disclosure at central level, yet practice at the subnational level is heterogeneous. This heterogeneity creates room for differences in how transparency translates into behaviour during the year. The Buton results suggest that when district units operationalise transparency as timely publication of realisation reports and clear communication of revisions, officials respond with earlier procurement, more disciplined cash planning, and fewer end year surges. The structural coefficients

are also consistent with the prediction oriented character of PLS analysis in public sector contexts and the measurement results meet accepted thresholds for reliability and validity, which supports confidence in the inferences drawn here [24, 5].

The Buton setting matters for interpretation. As an archipelagic district, logistics and coordination challenges can amplify the cost of delay. Procurement that slips by a month in a road connected metropolitan area may impose manageable adjustments, while comparable slippage in an island district can cascade into missed shipping windows, contractor mobilisation issues, and seasonal weather constraints. In such conditions, the informational and reputational effects of transparency may be particularly salient because small improvements in the timing of actions at the start of the year can prevent larger frictions later on. The strong transparency to absorption coefficient observed here is therefore credible in an operational environment where timing risk is high and where routine public disclosure can reduce uncertainty for both internal units and external suppliers.

## 6 Conclusion

This study set out to explain how budget transparency translates into better regional financial performance in the Buton district. We proposed and tested a parsimonious process in which transparency improves performance primarily by lifting budget absorption efficiency during the fiscal year. Using a cross sectional survey of officials who plan and execute budgets across organisational units, and analysing the data with PLS SEM, we found consistent evidence for this mechanism.

The empirical results showed that transparency has a large and positive association with absorption efficiency, and that absorption efficiency in turn has a meaningful association with regional financial performance. The direct association from transparency to performance remained positive after including the mediator, which indicates partial mediation. The model accounted for substantial variance in both the mediator and the outcome, exhibited predictive relevance, and satisfied accepted criteria for reliability, validity, and approximate fit. These findings corroborate the view that disclosure matters most when it is routine, timely, and tied to the rhythms of execution rather than treated as an end of year compliance exercise.

The study contributes to theory by specifying a micro level pathway that links a governance ideal to operational behaviour and then to results. Instead of assuming a direct link from transparency to performance, we show that execution discipline is the bridge through which information and incentives become tangible improvements in value for money. Methodologically, the use of a lean three construct model with reflective measures demonstrates that a focused specification can yield explanatory power without unnecessary complexity, which is valuable for applied research in public financial management.

Practical implications follow directly for district managers. First, transparency should be designed as an execution tool. Publishing realisation reports on a predictable monthly schedule, explaining deviations in plain language, and communicating budget

revisions promptly can anchor expectations and prompt earlier corrective action. Second, procurement readiness should begin before the fiscal year starts, with contracting calendars and market sounding that align with the planned disclosure cycle. Third, cash planning should be synchronised with physical progress and reported alongside realisations so that finance and programme teams converge on the same milestones. These steps are operational, feasible within existing rules, and especially pertinent in archipelagic settings where delays compound through logistics and weather windows.

Limitations qualify the inferences and define priorities for future research. The cross sectional design and perceptual measures mean that causal claims should be made with caution. Replication in other districts with different logistical and institutional conditions is needed to assess generalisability. Future studies can combine surveys with archival indicators such as monthly disbursement trajectories, the timing of contract awards, and audit outcomes, and can exploit policy changes in disclosure requirements to strengthen identification. Mixed methods work that traces specific procurement packages from planning to payment would open the black box of how transparency changes day to day behaviour.

In closing, the evidence indicates that transparency delivers performance gains mainly when it reshapes in year routines. For Buton, and for similar districts facing tight logistical constraints, investing in timely disclosure that is integrated with procurement readiness and cash discipline is a credible route to better financial outcomes. By focusing managerial attention on the moments when slippage accumulates, transparency becomes more than a procedural ideal. It becomes a practical lever for achieving economy, efficiency, effectiveness, and compliance in regional financial management.

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