



Relationship between Public Budget and the Quality of Public Spending in the Regional Government of San Martín

Relación entre el presupuesto público y la calidad del gasto en el Gobierno Regional de San Martín

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ABSTRACT

This study aimed to determine the relationship between public budgeting and the quality of public spending in the Regional Government of San Martín during the period 2021–2024. The research adopted a quantitative approach, applied type, with a non-experimental, cross-sectional, and correlational design. The population consisted of staff members from the Planning and Budget Management Office, from which a probabilistic sample of 82 participants was selected. Data collection was carried out through structured surveys using a five-point Likert scale, along with documentary analysis of official budgetary information. Data processing was conducted using descriptive and inferential statistics, applying Spearman's rho correlation coefficient due to the non-normal distribution of the data. The results revealed a very high and statistically significant positive correlation between public budgeting and the quality of public spending ($\rho = 0.809$; $p < 0.01$), indicating that higher levels of budget execution and appropriate budget composition are associated with improved quality of public spending. It is concluded that budgetary management constitutes a key determining factor in enhancing the quality of public spending at the regional government level.

Keywords: regional public administration; institutional performance; spending efficiency; budget execution, public financial management

RESUMEN

El presente estudio tuvo como objetivo determinar la relación entre el presupuesto público y la calidad del gasto en el Gobierno Regional de San Martín durante el periodo 2021–2024. La investigación fue de enfoque cuantitativo, tipo aplicada, con diseño no experimental, corte transversal y nivel correlacional. La población estuvo conformada por trabajadores de la Gerencia de Planeamiento y Presupuesto, seleccionándose una muestra probabilística de 82 participantes. La recolección de datos se realizó mediante encuestas estructuradas con escala Likert y análisis documental de información presupuestaria oficial. El procesamiento de los datos se efectuó mediante estadística descriptiva e inferencial, utilizando el coeficiente Rho de Spearman debido a la no normalidad de los datos. Los resultados evidenciaron una correlación positiva muy alta y estadísticamente significativa entre el presupuesto público y la calidad del gasto ($\rho = 0,809$; $p < 0,01$), lo que demuestra que una mayor ejecución y adecuada composición presupuestal se asocian con mejores niveles de calidad del gasto público. Se concluye que la gestión presupuestaria constituye un factor determinante para mejorar la calidad del gasto en el ámbito del gobierno regional.

Palabras clave: administración pública regional; desempeño institucional; eficiencia del gasto; ejecución presupuestal; gestión financiera pública



1. INTRODUCTION

The public budget constitutes a fundamental tool of public management aimed at the efficient allocation of public resources and the achievement of strategic regional development objectives, as it enables the integration of planning, resource allocation, and the provision of public goods and services (OECD, 2023). Within this framework, several studies have indicated that adequate budget execution is directly associated with improvements in the quality of public spending, particularly in subnational contexts where spending efficiency is essential to ensure the timely and effective provision of public services (Gómez R., 2021; Vargas Merino & Zavaleta Chávez, 2020; Borja-Vasquez et al., 2024).

Recent empirical research has demonstrated that efficient public budget execution is a key factor in improving the quality of spending and institutional performance in subnational governments. Studies conducted in different regional contexts show that results-oriented budget management makes it possible to optimize resource allocation, strengthen public spending efficiency, and improve the impact of public policies on territorial development (Masduki et al., 2022; Ismailova et al., 2024; Borja-Vasquez et al., 2024). Complementarily, comparative analyses across different public management systems show that the quality of spending is significantly influenced by institutional capacity for budget planning, execution, and control, thereby reinforcing a direct relationship between budget execution and the generation of public value (Espitia et al., 2018; Vasyunina et al., 2024).

From an international perspective, research conducted in regional governments indicates that higher levels of budget execution are associated with greater achievement of institutional targets and a more efficient allocation of public resources. However, these studies also highlight the persistence of limitations related to technical capacities, administrative processes, and weaknesses in financial management, which constrain the actual impact of public spending on territorial development (Borja-Vasquez et al., 2024; Vasyunina et al., 2024).

In Latin America, empirical evidence shows that deficiencies in the planning, execution, and control of public spending continue to limit the impact of public policies, affecting both the efficiency of resource use and the generation of public value (Espitia et al., 2018; Masduki et al., 2022; Eslava Zapata et al., 2019). In this context, several studies emphasize that the quality of spending depends not only on the volume of resources allocated, but also on institutional capacity to execute those resources in a timely and effective manner and in alignment with development objectives, as well as on the adoption of performance-oriented evaluation and fiscal sustainability tools (Ismailova et al., 2024; Goodman & Chapman, 2023; Madsen, 2025).

In the Peruvian context, the implementation of a results-based budgeting approach has been promoted as a key strategy for improving the efficiency and effectiveness of public spending by directing resource allocation toward the achievement of measurable outcomes aligned with public policy priorities (Chunga Ticse & Huaylinos Antezana, 2024; Lupa Quisocala et al., 2024; Toledo Meza, 2023; Figueroa et al., 2024; Gutierrez et al., 2024). Studies conducted at different levels of government indicate that this approach contributes positively to the quality of spending when accompanied by appropriate mechanisms for monitoring, evaluation, and control of budget execution, although gaps related to technical capacities and operational management persist (Noemí Carla & Torres Casas, 2023; Vincent et al., 2022; Vargas Merino & Zavaleta Chávez, 2020).

At the regional level, San Martín plays a strategic role in the economic and social development of the Peruvian Amazon due to its productive dynamics, territorial diversity, and growing demand for public services. In this context, the Regional Government of San Martín manages resources allocated to key sectors such as education, health, infrastructure, and productive development, while facing challenges related to the efficiency of public budget allocation and execution. Territorial heterogeneity, persistent social gaps,

and the need to improve the outcomes of public interventions make regional budget management a critical factor in generating public value and strengthening sustainable development in the region (Gobierno Regional de San Martín, 2026b; Gobierno Regional de San Martín, 2026a).

Despite the advances reported in the literature, there remains a need to generate empirical evidence at the regional level that specifically examines the relationship between the public budget and the quality of spending in subnational contexts. In this regard, the Regional Government of San Martín represents a relevant case study given its strategic role in the management of public resources and the implementation of policies aimed at territorial development. Therefore, the present study aims to analyze the relationship between the public budget and the quality of public spending in the Regional Government of San Martín during the 2021–2024 period, thereby contributing to the strengthening of results-based public management.

2. MATERIALS AND METHODS

The research was applied in nature, with a descriptive-correlational scope and a non-experimental, cross-sectional design. The study was conducted at the Regional Government of San Martín, Peru, and covered the 2021–2024 period. This design made it possible to analyze the relationship between the public budget and the quality of public spending without deliberately manipulating the variables, observing them as they occurred in their natural context.

The study population consisted of 152 employees from the Planning and Budget Management Office of the Regional Government of San Martín. A probability sample was selected through simple random sampling, resulting in a total of 82 participants. The sample size was calculated using the finite population formula, ensuring statistical representativeness.

The variables analyzed were the public budget and the quality of public spending. The public budget was evaluated based on its composition, considering dimensions related to the type of expenditure and funding sources. In turn, the quality of public spending was measured through dimensions associated with the economic and social impacts generated by budget execution.

Two techniques were used for data collection. First, a survey was administered through two structured questionnaires using a five-point Likert scale: one designed to measure the public budget variable and the other to assess the quality of public spending. The public budget questionnaire included items organized according to expenditure composition and funding sources, while the quality of public spending questionnaire assessed aspects related to the economic and social impacts resulting from budget execution. Second, documentary analysis was conducted using a structured data collection form to gather official budget information from the Economic Transparency Portal of the Ministry of Economy and Finance.

The data collection instruments underwent content validation through expert judgment, with experts assessing the relevance, clarity, and consistency of the items in relation to the study variables. In addition, questionnaire reliability was evaluated using Cronbach's alpha coefficient, obtaining values of 0.83 for the public budget instrument and 0.88 for the quality of public spending instrument, indicating an adequate level of internal consistency for their application in the study.

Data collection was conducted after obtaining institutional authorization, ensuring the confidentiality and anonymity of participants. The data obtained were coded and organized in a database for subsequent statistical analysis.

Data processing and analysis were performed using SPSS statistical software, version 25. Descriptive statistics, including frequencies and percentages, were used to characterize the study variables. Inferential statistics were also applied, using the Kolmogorov–Smirnov test to assess data normality. Since the

assumption of normality was not met, Spearman's Rho coefficient was used to determine the relationship between the public budget and the quality of public spending, considering a significance level of 0.01.

3. RESULTS AND DISCUSSION

3.1. Public budget

The results show that the public budget of the Regional Government of San Martín exhibited a predominantly favorable performance during the 2021–2024 period. Overall, 42.7% of respondents rated budget performance as good, while 34.1% considered it regular and 23.2% rated it as poor, indicating that budget execution was mostly adequate.

Regarding budget composition by type of expenditure, 37.8% of participants rated it as good, 37.8% as regular, and 24.4% as poor, reflecting a relatively balanced distribution of expenditure, although there remains room for improvement in the efficient allocation of resources.

With respect to budget composition by funding source, 42.7% rated it as regular, 35.4% as good, and 22.0% as poor, suggesting moderate dependence on certain funding sources and the need to strengthen the diversification and sustainability of regional public financing.

Overall, these results show that although the public budget of the Regional Government of San Martín presents acceptable levels of execution, challenges remain in optimizing its internal structure, both in the distribution of expenditure and in funding sources, which are key aspects for improving the quality of public spending.

Table 1. Performance of the public budget and its components in the Regional Government of San Martín (2021–2024)

Dimension evaluated	Rating	Range	Frequency	%
Public budget (overall)	Poor	11–25	19	23.2
	Regular	26–40	28	34.1
	Good	41–55	35	42.7
Composition by type of expenditure	Poor	6–14	20	24.4
	Regular	15–23	31	37.8
	Good	24–30	31	37.8
Composition by funding source	Poor	5–11	18	22
	Regular	12–19	35	42.7
	Good	20–25	29	35.4

These results are consistent with Gómez R. (2021) and Borja-Vasquez et al. (2024), who indicate that efficient budget execution in subnational governments constitutes a determining factor in strengthening institutional performance and ensuring the achievement of strategic objectives. Likewise, Vargas Merino and Zavaleta Chávez (2020) argue that adequate levels of budget execution make it possible to optimize the use of public resources and improve the operational capacity of public entities.

3.2. Quality of public spending

Regarding the quality of public spending, the results show that this variable reached predominantly high levels in the Regional Government of San Martín during the study period. As shown in Table 2, 50.0% of respondents rated the quality of spending as good, while 19.5% considered it regular and 30.5% rated it as poor. These results suggest that although a significant proportion of executed resources was directed toward achieving institutional objectives, prioritizing criteria of efficiency, effectiveness, and relevance in public spending, limitations remain that affect the overall perception of its impact on the population.

Table 2. Performance of the quality of public spending

Rating	Range		Freq.	%
	From	To		
Poor	13	30	25	30.5%
Regular	31	48	16	19.5%
Good	49	65	41	50.0%
Total			82	100%

These findings are consistent with the studies of Lupa Quisocala et al. (2024) and Noemí Carla & Torres Casas (2023), who state that adequate budget management, accompanied by monitoring and control mechanisms, contributes significantly to improving the quality of public spending. Similarly, Chunga Ticse and Huaylinos Antezana (2024) emphasize that directing spending toward concrete results promotes a better allocation of public resources, particularly in strategic sectors and subnational governments.

3.3. Relationship between the public budget and the quality of public spending

The statistical analysis identified a positive and statistically significant relationship between the public budget and the quality of public spending in the Regional Government of San Martín during the 2021–2024 period. As shown in Table 3, Spearman's Rho correlation coefficient reached a value of 0.809, with a two-tailed significance of $p < 0.01$, indicating a very high positive correlation between the two variables. This result indicates that higher levels of public budget execution are associated with better quality of spending, confirming the existence of a direct and consistent relationship between budget management and public spending outcomes in the institution analyzed.

Table 3. Relationship between the public budget and the quality of public spending

			Quality of public spending
Spearman's Rho	Public budget	Correlation coefficient	.809**
		Sig. (two-tailed)	0.000
		N	82

** . Correlation is significant at the 0.01 level (two-tailed).

This finding is consistent with empirical evidence reported internationally, which indicates that efficiency in budget execution directly affects the quality of spending and the generation of public value (Masduki et al., 2022; Ismailova et al., 2024). Likewise, studies conducted in Latin American contexts emphasize that adequate budget management strengthens the achievement of institutional targets and improves the quality of spending, particularly when results-oriented approaches and performance evaluation systems are implemented (Espitia et al., 2018; Vasyunina et al., 2024).

The results confirm the existence of a very high positive relationship between the public budget and the quality of spending in the Regional Government of San Martín, consistent with previous studies conducted in subnational contexts. In particular, international and Latin American research has indicated that efficient budget execution translates into greater effectiveness of public spending by enabling better resource allocation and greater achievement of institutional objectives (Masduki et al., 2022; Ismailova et al., 2024; Espitia et al., 2018). In this regard, the correlation coefficient obtained in the present study reinforces the existing empirical evidence, showing that the budget is not only a financial instrument but also a strategic factor that directly influences the quality of public spending.

Likewise, the findings showed that although higher levels of budget execution were associated with better quality of spending, this did not automatically guarantee sustainable economic and social impacts. This is consistent with Borja-Vasquez et al. (2024) and Vasyunina et al. (2024), who warned that institutional

limitations, weaknesses in strategic planning, and the absence of robust performance evaluation systems may restrict the benefits of public spending. In the case of the Regional Government of San Martín, these results suggest that strengthening budget management should be accompanied by improvements in project formulation, continuity of public investment, and monitoring of results, so that increased resources effectively translate into tangible improvements in regional development and the generation of public value.

CONCLUSIONS

The study findings indicate that there is a positive and statistically significant relationship between the public budget and the quality of public spending in the Regional Government of San Martín during the 2021–2024 period. The correlation coefficient obtained shows that higher and more effective levels of budget execution are associated with better levels of public spending quality, thereby confirming the general hypothesis proposed in the study.

Likewise, the performance of the public budget was predominantly perceived at a high level, reflecting progress in expenditure programming and execution processes. However, the presence of ratings at regular and poor levels indicates that limitations in budget management persist and need to be addressed in order to optimize the use of public resources.

Regarding budget composition, both by type of expenditure and funding source, the results show a heterogeneous distribution, with ratings predominantly at regular and good levels. This suggests that, although efforts are being made to improve resource allocation, the technical and strategic criteria guiding the structure of regional public spending need to be strengthened.

With respect to the quality of public spending, it was concluded that this variable predominantly reached a good level, indicating that the resources executed were directed toward achieving institutional objectives. Nevertheless, the results also reveal weaknesses in economic and social impacts, demonstrating that budget execution alone does not guarantee substantial improvements in population well-being.

Overall, the findings confirm that budget management constitutes a determining factor in the quality of public spending at the regional level. Consequently, strengthening budget planning, execution, and evaluation processes is essential to improve spending efficiency and enhance the outcomes of public policies in the Regional Government of San Martín.

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CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest related to the subject matter of this study.

AUTHOR CONTRIBUTIONS

Conceptualization, data curation, formal analysis, investigation, methodology, supervision, writing – original draft, and writing – review and editing: Ilatoma-Díaz, J. S., Nolasco-Trigoso, G. S., Verona-Guerrero, J. K., Arévalo-Cueva, O. A., and Rebollo-Alvarado, W. R.

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