



## Assessment of treasury efficiency in the municipal governments in San Martin

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### ABSTRACT

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#### Keywords

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The objective of the study is to evaluate the performance of these entities in essential aspects, such as financial planning, payment and collection methods, mechanisms for ensuring that everything is in order, the skills of the personnel involved, and the transparency with which they carry out their activities. To address this issue, a non-experimental, descriptive design with a quantitative approach was chosen, based on the responses of 228 officials from the treasury departments of municipalities in the San Martin region. The empirical study was conducted using surveys analyzed with SPSS. The findings revealed that 58.3% of treasuries operate with average efficiency. However, there are areas that need urgent attention. Financial planning and transparency lag, with 25.0% and 24.1% respectively at low levels. The execution of payments and collections is acceptable, although there is room for improvement. Internal control and staff capacity also require additional effort. These deficiencies not only limit the optimal use of resources but also hinder responses to community demands. The study's contribution lies in providing empirical evidence regarding the efficiency of municipal treasury management in a rural region of Peru. It highlights deficiencies in financial planning, staff capacity, and transparency, while proposing practical improvements such as training and process digitization. The conclusions offer guidance to policymakers seeking stronger municipal financial governance.

**Contribution/Originality:** This study provides one of the first empirical assessments of municipal treasury efficiency in a rural Peruvian region, integrating financial planning, execution, internal control, staff capabilities, and transparency. It offers evidence from San Martín, a context rarely examined in public financial management research.

## 1. INTRODUCTION

Public administration faces structural difficulties and inequality, which is why municipal treasury management and how it affects the way public resources are managed are receiving increasing attention in academic studies. Municipal treasury management is understood to be the combination of decisions, processes, and strategies that complement each other to properly administer a municipality's public resources. It is not just a matter of generating monetary income but also of ensuring that the money is available, used wisely, and complies with regulations, all with the aim of meeting the real needs of the population (Nakpodia, Sakariyahu, Fagbemi, Adigun, & Dosumu, 2024). There is research that focuses on how financial practices, transparency, and internal control can impact the way local

governments respond to community needs. This study begins by presenting some key manuscripts that provide theoretical support for the present research, reviewing what they offer us and what we still need to better understand the picture holistically. However, clarity is still lacking because there are gaps in our understanding of the specific nature of the phenomenon in question, namely, holistic treasury management in rural municipalities, where limitations in staff skills, internal controls, and technological practices interact with financial planning and transparency. For this reason, this study addresses this gap by analyzing the municipal treasuries in the region under study.

In Peru, Acevedo-De-los-Rios, Jones-Perez, and Rondinel-Oviedo (2025) focused on how to make informal settlements in Metropolitan Lima more sustainable. They proposed a way to decide what to do first, using financial and sustainability indicators. What they found is that planning public money well prevents projects from ending up as pipe dreams, something that could also happen in San Martín if treasuries are unclear about what residents need. Apparently, such studies do not focus on how staff skills or technology affect the functioning of this planning, and there is a gap that this study aims to fill through a detailed analysis of the treasuries of a rural region such as San Martín, Peru. A study was conducted abroad, specifically in the United Kingdom, which analyzed how accounting practices and public financial management help to meet the Sustainable Development Goals (SDGs) in 96 countries. It concluded that a well-managed treasury with strict controls not only keeps money available but also improves aspects such as quality of life and environmental care, which is important. A municipality that pays its water and electricity suppliers on time not only keeps everything in order but also gains the trust of its population. In Germany, Wehrle, Wiens, and Schultmann (2024), on the other hand, conducted a study on how to finance infrastructure with specific funds and whether people are willing to contribute, which is important. It was found that if citizens are clearly shown what their money is being used for, they are more favorable. However, in Peru, where it is sometimes not even clear where to start with municipal reports, this could change the landscape of transparency. The study focuses on physical aspects, such as roads and bridges, and does not address how technology or skilled personnel could streamline day-to-day financial operations, something that is greatly needed in the San Martín region.

Another study conducted in Italy, Santopietro, Solimene, Lucchese, Di Carlo, and Scorza (2024) reviewed how the Covenant of Mayors affected energy expenditures in municipalities in Basilicata. They found that proper financial planning leads to greater investment in areas such as sustainable lighting. It makes sense that an accounting expert in the San Martín region would control and adjust the budget so that the streets are lit without overspending. The authors' contributions focus on how to execute the budget well, but they do not say much about how control or accountability prevents embezzlement, something that is extremely important here in the region, where corruption is always lurking. This gap inspires us to investigate these details in the region's treasuries. In Iran, studies by Rahban, Ghahramani, Yusefzadeh, Harirchi, and Alinia (2024) investigated honesty and transparency in healthcare pricing. They found that when everything is transparent, prices fall and people trust each other more, something a municipal treasurer would understand when publishing a report that everyone can read. Municipal accountability is associated with better performance, but it remains healthy and does not address how training or technology could boost public management.

So far, state-of-the-art studies have shed more light on how to plan, be transparent, and control public revenues. However, they do little to examine how a municipal treasury ultimately works, especially in rural areas such as some municipalities in the region under study. Each research project stands out in its own field or country, but they do not tell us how staff skills, technology, and the specific characteristics of a place like San Martín combine to make the financial aspects work properly. For this reason, the present project aims to fill these gaps by providing a current perspective on the region.

San Martín is not exempt from the problems affecting the world. Municipal treasury management also faces issues that ultimately impact citizens' well-being. Sometimes, there are delays in payments to suppliers, while revenue collection does not meet expectations, and financial planning seems disconnected from the actual needs of

municipalities. This situation not only causes citizens to distrust the government but also hampers local development, as improperly used funds result in unfinished basic services such as education, health, and roads. Therefore, this research aims to understand the efficiency of management in the region and identify necessary adjustments to ensure resources are used transparently and sensibly in the region.

The rationale for the study focuses on an essential aspect of public life because it addresses a sensitive issue: how the money that sustains communities is managed. It is well known that, in Peru, municipalities are the first point of contact between the state and the population. If the treasuries fail, it is not just a matter of numbers; unfortunately, it becomes a human problem. Solving this issue can mean that a school has pencils and notebooks on time or that a health center does not run out of medicines. That is the plain truth. In this sense, the impact of the study is that by reviewing how budgets are prepared, bills are paid, revenues are collected, and expenditures are monitored, we can find ways to make treasuries more reliable and agile.

The theoretical contribution of the study lies in enhancing understanding of how concepts such as internal control, financial planning, and transparency are applied in a real context, specifically in the San Martín Region. It tests theories on financial management within the daily operations of Peruvian jungle municipalities, demonstrating whether these theories are effective or require adjustments. Essentially, it offers a local perspective on ideas that are often confined to academic literature.

In terms of practical contribution, this study offers concrete insights by describing tools and recommendations to improve the region's treasuries. It can serve as a guide for municipal officials to adjust processes, enhance team training, or adopt technologies that streamline work. Thanks to this study, it may be possible to find simpler ways to track payments or prevent errors that previously went unnoticed.

The socioeconomic contribution is equally valuable because an efficient treasury not only manages public money but also stimulates the local economy by ensuring resources circulate effectively. When payments are made on time, suppliers can continue operations; proper revenue collection provides more funds for projects that benefit everyone. It is a virtuous circle that begins with good management and results in more prosperous communities.

Finally, the beneficiaries of this study are municipal officials, who will be able to make more informed decisions; the citizens of San Martín, who will see improvements in public services and greater transparency; and even future researchers, who will have a solid basis for further exploration of this topic. But above all, it benefits ordinary people: the neighbor who pays their taxes hoping they will be used wisely, the mother who wants a better school for her children, or the entrepreneur who needs the municipality to fulfill its commitments. This work is, in essence, an effort to make their expectations a reality.

The overall purpose of the research is to determine the level of efficiency in managing the Municipal Treasury in handling public resources in the San Martín Region, Peru. The specific objectives are: to evaluate how financial planning is carried out in the Municipal Treasury of the San Martín Region; to analyze the level of compliance with payments and collections made in the Municipal Treasury; to identify the internal control mechanisms used in the management of the Municipal Treasury; to determine how staff capabilities influence the efficiency of Municipal Treasury management; and to evaluate the extent to which transparency and accountability affect Municipal Treasury management.

## **2. THEORETICAL FRAMEWORK**

### *2.1. Municipal Treasury Management*

For the purposes of this research, municipal treasury management is defined as the set of actions and plans developed by a municipality for the purpose of managing its public financial resources in a responsible and efficient manner, always in compliance with the country's current legislation. This covers everything from preparing budgets that calculate income and expenses to ensuring that payments to suppliers are made on time and that local taxes are collected without problems. It is an essential mechanism that ensures that money is available when needed, whether

to cover salaries, maintain basic services such as street lighting, or promote projects that improve the quality of life of residents (Oliveira & Oliveira, 2023). It also involves establishing systems to oversee that everything is done correctly, avoiding errors or waste, training those who manage these funds, and clearly explaining to citizens how each dollar is used. In essence, it is the art of balancing public finances so that they respond to the demands of the community without losing sight of transparency and sustainability, transforming cold numbers into actions that impact real lives (Oliveira & Oliveira, 2023).

La Torre, Leo, Palma, and Zapata (2024) assert that the five dimensions of Municipal Treasury Management, Financial Planning, Payment and Collection Execution, Internal Control, Staff Capabilities, and Transparency and Accountability are like the pillars of a house: each one supports an essential part, and if one fails, the roof collapses. Financial Planning is the foundation, the blueprint that tells us where we are going and what we must work with; without it, everything else is improvisation. Payment and Collection Execution is the movement, the act of making that blueprint a reality, ensuring that money flows where it should and when it should, like a river that does not stagnate. Internal Control acts as the walls, protecting what is inside, ensuring that not a penny is lost through carelessness or malice. Staff Capabilities are the soul of the house, the people who keep it alive, because plans and walls are useless if those who manage them do not know how to do so. Finally, Transparency and Accountability are the windows, letting light in and allowing everyone to see what is happening inside, building trust between those who live in that house and those who take care of it. In addition, La Torre et al. (2024) conduct a systematic review of sustainable finance in European public administrations, addressing how planning, execution, control, capabilities, and transparency interact to optimize public resources, with no spelling or grammar errors.

In San Martín, this suggests that comprehensive treasury management, combining these dimensions, could not only improve efficiency but also align funds with real needs, such as sustainability and local development. These dimensions are not just concepts; they are the daily reality of a treasurer who struggles against the rain to pay on time, an accountant learning new software, or a neighbor wondering why their street remains unpaved. Together, they form a living system that, when finely tuned, can transform a municipality into a place where people feel their contributions are worthwhile.

### *2.1.1. Financial Planning*

Financial planning, according to Coccorese (2024), is like putting together a map for a long trip: if you don't have a clear plan, you can get lost or run out of gas in the middle of the road. In a municipal treasury, this means sitting down to calculate how much money will come in from taxes or transfers and deciding how it will be spent so that it is truly worthwhile, such as fixing a school that is falling apart or bringing clean water to a neighborhood. It's not just about adding and subtracting, but about choosing what matters most.

The research by Nakpodia et al. (2024) made this clear in their study of 96 countries. They say that when public management plans finance properly, big things can be built, such as the Sustainable Development Goals. What they found is that if local governments put together budgets with real goals in mind, people's lives really improve. In San Martín, that could mean having schools with the basics to teach or health centers that don't run out of supplies. Their point is that planning is not just playing with numbers but making those numbers mean something to people. From another angle, Santopietro et al. (2024) studied how Italian municipalities in Basilicata planned their energy expenditures after joining the Covenant of Mayors. Their research showed that good financial forecasting allowed for increased investment in energy efficiency, such as sustainable public lighting. This could inspire a treasurer to prioritize funding for projects that benefit in the long term, such as renewable energy in rural communities, demonstrating that planning well is also thinking about the future.

In the study by Acevedo-De-los-Rios et al. (2025) on urban regeneration in Lima, Peru, they provide a local perspective. They proposed a methodology for prioritizing financial interventions in informal settlements, highlighting that diagnosing real needs before allocating funds avoids projects disconnected from the community. In

the San Martín Region, this suggests that effective financial planning should start by listening to citizens, not just reviewing balance sheets, so the budget reflects what people really need.

Finally, Coccoresse (2024) in his analysis of Italian provinces found that provincial structural funds generated greater economic growth when planned with the support of developed local banking systems. This leads us to believe that in San Martín, planning that coordinate with banks or financial institutions could optimize municipal resources, ensuring that every sol yields maximum results. Taken together, these studies reveal a clear picture: financial planning is the first step toward an efficient treasury that responds to its people.

### *2.1.2. Execution of Payments and Collections*

Payment and collection execution is when the treasury moves from theory to action. Paying a supplier on time means that they can continue working and that the municipality does not lose their trust; collecting taxes without delay ensures that there are funds for the next emergency (Karol, Hryshchuk, Kalanj, & Parii, 2023). Wehrle et al. (2024) studied how to finance waterways in Germany and found that proper collection depends on the trust of the inhabitants. If citizens feel that their money is being used as it should be, they are less reluctant to spend it. On the other hand, Karol et al. (2023) reviewed how a DRG (Diagnosis-Related Group)-based payment system worked in Ukraine. Not everything went well, but they made it clear that paying on time requires good coordination and streamlined processes. In San Martín, this could be a wake-up call for treasuries: if there is no clear system, payments to suppliers pile up, and that hurts small businesses that depend on that money.

Similarly, Okorie, Adedeji, and Ifionu (2025) in Nigeria explored digitization, finding that automating payments and collections speeds processes, reduces costs, and boosts revenue. They suggest technology could be the key to preventing treasuries from missing deadlines, emphasizing its strategic importance in financial management. And then there is Yang, Gu, and Albitar (2024), who investigated how digital transformation helps governments. The study states that departments with automated systems manage their budgets more efficiently. In San Martín, that could mean fewer endless queues to pay taxes and quick responses to urgent matters, such as repairing a bridge after a storm. All these studies point to the same thing: if payments and collections move quickly and smoothly, the treasury works better.

### *2.1.3. Internal Control*

Internal control is like a guardian that prevents things from going awry. It is like someone who is there, checking every invoice, every receipt, making sure that public money is not spent carelessly or abusively. In a treasury, this means conducting audits to detect errors before they become a disaster and establishing clear rules so that no one does anything improper (Berg, Larsen, Klakegg, & Welde, 2025). In San Martín, where money is tight and people's trust is fragile, this control is like a lock that protects everyone's efforts. Without it, a wrong payment or a missing income can cause a big problem and, incidentally, make people view the municipality with suspicion. It is a job that requires patience and attention to detail, but without it, nothing works honestly.

Hawkins, Kasekamp, van Ginneken, and Habicht (2023) saw this clearly when studying health purchasing agencies in Eastern Europe; they said that having strong internal controls is what allows budgets to be managed strategically. Similarly, Bourdin and Jacquet (2025), looking at the circular economy in France, pointed out that breaking the unavailability of organizations requires effective internal control. In a San Martín treasury, this means monitoring every transaction and stopping fraud, not only to prevent money from being lost but also to enable the team to work more orderly, which is very important when resources are scarce.

Then there is Berg et al. (2025), who analyzed how to estimate costs in public projects in Norway. They found that well-implemented internal controls help to deal with the unknown and refine budgets. They mention that control is not just about putting out fires but preventing them from starting in the first place. Similarly, Rocha, Costa, Figueira, Ferreira, and Marques (2021) evaluated Portuguese hospitals; a multi-criteria decision model was used to

measure the quality of internal control. They found that constant reviews and clear protocols increase efficiency. In San Martín, this could inspire treasuries to establish strict rules for each transaction, ensuring that public money is always safeguarded. These studies reveal that internal control is a key factor every treasury needs.

#### *2.1.4. Staff Capabilities*

Staff capabilities are the soul behind the numbers. You can have the best system in the world, but if those who use it don't know how, everything falls apart. In a municipal treasury, this means that accountants must know how to read balance sheets, use modern software, and understand the laws governing public money (Mulyana, Rusu, & Perjons, 2024). In San Martín, where technology can be a luxury and regulations change rapidly, a well-trained team makes the difference between an efficient process and chaotic errors. But training is not just about giving courses; it is about ensuring that everyone has the tools and knowledge to do their job well, from the person who collects taxes to the person who signs the checks.

In this regard, Voorwinden, van Bueren, and Verhoef (2023), analyzing Urban Living Labs in Amsterdam, highlighted that staff skills influence organizational flexibility. In a San Martín treasury, this could translate into accountants capable of adapting to changes, such as a new tax law, without system collapse, a crucial point in developing regions. For their part, Rahban et al. (2024), studying transparency in the Iranian health system, noted that well-trained staff not only perform better but also generate public trust. Their study suggests that investing in training in San Martín could close the gap between the treasury and the community.

Ammar (2025), exploring cloud-ERP in organizations, shows that collaboration between accountants and systems specialists depends on their technical skills. In San Martín, this suggests a team where some handle numbers and others handle technology, working together to improve treasury efficiency. These studies reinforce that people, with the right tools and knowledge, are the lifeblood of efficient management. Similarly, Mulyana et al. (2024) in their case study on digital transformation in an Indonesian bank, found that training staff in technological tools and updated standards improves organizational performance. In San Martín, this could mean workshops for treasurers to master digital systems, making processes faster and more accurate.

#### *2.1.5. Transparency and Accountability*

Transparency and accountability are like opening the doors of the treasury so that everyone can see what is going on inside. It is not just a matter of complying with the law but of showing neighbors that their taxes were spent on something tangible: a new street, a clean park (Sneideriene & Legenzova, 2025). In this regard, Cárcaba, Arrondo, and González (2022), studying well-being in Spain, found that accountability does not always have an immediate impact, but its long-term effects are profound. In San Martín, this encourages treasuries to be patient: a detailed report may not change opinions tomorrow, but it can build trust over time. These studies agree that being transparent is not only a duty but also a tool for connecting with people. Similarly, Amiraslani (2021), analyzing a community project in the Asia-Pacific, highlighted that publishing financial data encourages citizen participation. Imagine a resident of San Martín reviewing a website with the municipal budget; his study suggests that such openness could motivate people to become more involved in local decisions.

Del Valle, Mejía, Zabal, Girault, and González (2024), in their survey on digital currencies in Latin America, showed that transparency in public management educates the population and reduces fears. In San Martín, a treasury that explains its expenses could reassure taxpayers concerned about where their taxes are going, strengthening the relationship with the community. Finally, Sneideriene and Legenzova (2025), in their review of ESG (Environmental, Social, and Governance) reports, found that transparency combats and strengthens trust in financial information. In San Martín, this could mean clear reports that prevent rumors about misuse of funds, making residents feel part of the process.

### 3. METHODOLOGY

#### 3.1. Methodological Design

The methodological design of this study is non-experimental, descriptive, and quantitative in approach. The variables were not manipulated; rather, the functioning of municipal treasuries was simply observed as it is, in its natural state. The descriptive approach has made it possible to characterize a clear picture of the level of efficiency in the management of public resources, while the quantitative approach helped to measure and compare specific data, such as payment terms and audit frequency (Nakpodia et al., 2024).

#### 3.2. Sample Design

The target population for this study is the administrative staff of the treasury departments of the municipalities in the San Martín Region. According to INEI, on March 31, 2019, there were a total of 3,577 employees in all areas (National Institute of Statistics and Informatics, 2019). However, as it is not possible to contact everyone, a non-probability convenience sample was used. Those willing to participate in completing the questionnaire were selected.

The sample size was 228 subjects, taken from various municipalities that responded, but the objective was to ensure it was representative of the diversity of the San Martín region, from the smallest to the largest districts. In this regard, a non-probabilistic and convenience sample was chosen due to geographical and logistical barriers in the region. Although this limits generalization, it provides valuable information on municipal treasury practices in San Martín (Wehrle et al., 2024). It should be noted that in this region, distances and logistics can be challenging, making the method used more practical.

#### 3.3. Data Collection Techniques

The data was collected through a survey inspired by Soares, Da Rosa, and Zonatto (2020), whose ratings were on a 5-point Likert scale, ranging from "Strongly disagree" to "Strongly agree." This survey had 45 questions covering the five dimensions of treasury management: financial planning (9 items), execution of payments and collections (9 items), internal control (9 items), staff capabilities (9 items), and transparency and accountability (9 items). The final survey was administered digitally using Google Forms, given the geographical dispersion of the municipalities in the San Martín region. The links were distributed through institutional WhatsApp groups to ensure direct access by treasury staff. Participation was voluntary and anonymous, considering that the most user-friendly method for data collection is the questionnaire (Rahban et al., 2024). Regarding content validity, three experts were consulted, and the instrument's reliability yielded a Cronbach's alpha of 0.812.

#### 3.4. Statistical Techniques for Information Processing

Once responses were obtained, they were processed using descriptive statistics, including means, standard deviations, and percentiles, to assess management efficiency in San Martín. SPSS statistical software was employed. Tables facilitated easy reading of results, focusing on describing findings. This approach aligns with the study by Santopietro et al. (2024), who used descriptive statistics to analyze energy expenditures of Italian municipalities.

#### 3.5. Ethical Considerations

Before beginning, informed consent was explained to each participant, clarifying that their contribution was voluntary and without pressure. This consent was included in the survey. Their names and personal data would not be problematic because they are anonymous. Codes were used instead of identifiers so that no one would know who the questionnaire belonged to. Additionally, the data were only used for this study. This ethical commitment is inspired by Hawkins et al. (2023), who analyzed health agencies in Eastern Europe and emphasized protecting participants' privacy. In San Martín, where transparency and trust are sensitive issues, following their example

ensures that treasurers complete their questionnaires freely and that the study remains a safe space for everyone. Therefore, not only are the rules followed, but the people behind the data are also respected.

**Table 1.** Level of efficiency in municipal treasury management in the San Martín Region.

Variable	Categories	f	%
Municipal treasury management	Low	19	8.3
	Medium	133	58.3
	High	76	33.3
	Total	228	100.0

#### 4. RESULTS

Table 1 reflects the level of efficiency in municipal treasury management in the San Martín Region, in accordance with the main objective of the study. According to the data obtained, more than half of the respondents (58.3%) perceive efficiency to be at an intermediate level, while 33.3% consider it to be high and only 8.3% rate it as low. These percentages indicate that, in general, the administration of public resources in the region operates with moderate performance, although with significant differences between the evaluated municipalities.

In the accounting and financial sphere, most municipal treasuries in the San Martín Region carry out basic procedures, such as correctly recording transactions and making payments on time. However, not all of them achieve the same degree of success. Many of these institutions receive an average rating, which shows that, although their performance is acceptable, they face difficulties that prevent them from achieving greater efficiency. Factors that could influence this include budget planning with a limited short-term vision or inflexible liquidity management. This means that these limitations reduce the ability of treasuries to make the most of available resources and respond to variations in financial income. It should be noted that 33.3% of municipalities in the region achieve high efficiency in the management of their municipal treasury. This indicates that, with the right tools, significant improvements can be made in managing municipal resources.

In most of these cases, the use of modern technologies, such as up-to-date accounting software or electronic payment systems, has probably been key to this progress. Likewise, the implementation of stricter internal controls seems to have contributed to optimizing the use of public funds. These practices not only reflect a more effective approach but could also serve as a model for other municipalities in different regions.

In contrast, 8.3% of municipalities in the region face a very worrying situation, with very low levels of efficiency. These figures are striking, given that poor management can lead to the misuse of public funds and damage citizens' trust in their municipalities. It appears that the problems of this group are centered on poor accounting methods. Perhaps the absence of regular audits or weak internal controls could explain this poor performance, increasing the risk of errors or inconsistencies in financial records. Overcoming these deficiencies is essential to moving toward more transparent and reliable administration in all municipalities.

**Table 2.** Level of financial planning.

Dimension	Categories	f	%
Financial planning	Low	57	25.0
	Medium	118	51.8
	High	53	23.2
	Total	228	100.0

Table 2 shows the level of financial planning in San Martín's municipal treasuries, a fundamental element for the effective management of public resources. The results obtained are far from optimistic, as more than half of those surveyed, specifically 51.8%, rate this aspect as intermediate, while 25.0% consider it deficient, which is worrying. Only 23.2% rate it as good. These data reveal the existence of significant challenges in resource management, a

particularly worrying fact when one considers that almost one in four municipalities faces significant obstacles in a crucial area.

In accounting terms, this means that the consequences of insufficient financial planning are profound. For example, the lack of robust systems for budget allocation makes it difficult to meet essential financial obligations and respond to the demands of the population. This situation is exacerbated when organizations do not have adequate tools to anticipate economic variations or develop strategies to minimize the effects of periods of budgetary constraints in the region.

However, only 23.2% of municipalities in the region demonstrate a high level of financial planning. This suggests that few use advanced methods, such as well-developed financial projections or results-based budgeting. These practices enable adaptation to economic changes and prioritization of key investments. Most do not employ these strategies, which limits their treasuries' ability to respond flexibly to circumstances.

When financial planning is not well developed, specific problems arise, ranging from budget deficits to difficulties in financing essential projects. These difficulties highlight the urgent need to strengthen planning processes in the region.

**Table 3.** Level of execution of payments and collections.

Dimension	Categories	f	%
Execution of payments and collections	Low	33	14.5
	Medium	143	62.7
	High	52	22.8
	Total	228	100.0

Table 3 shows the level of execution of payments and collections, linked to the specific objective of analyzing the fulfillment of these activities in the San Martín Region. Sixty-two point seven percent of responses fall into the "medium" category, 14.5% into "low," and 22.8% into "high." Although most perceive moderate performance, the lower percentage in "low" compared to other dimensions indicates that this area is better managed than financial planning. However, there is still room to optimize the timeliness and efficiency of processes, which are key elements for municipal financial health.

In a financial analysis, inefficient payment execution can generate additional costs, such as late payment interest, damage relationships with suppliers, and increased long-term operating costs. Likewise, ineffective revenue collection limits the liquidity available for essential expenses. The 22.8% "high" rating suggests that some municipalities have implemented efficient systems, possibly through automation or standardized processes, which could serve as a model to improve treasury management in the region.

**Table 4.** Level of internal control.

Dimension	Categories	f	%
Internal control	Low	47	20.6
	Medium	133	58.3
	High	48	21.1
	Total	228	100.0

Table 4 provides an interesting insight into how internal controls are working in municipal treasuries, showing how money is managed in these places. The data reveals that most of these treasuries, specifically 58.3%, have a control level considered "medium." This indicates that, although certain measures are in place, there is still room for improvement. On the other hand, 20.6% show a "low" level, raising concerns about possible failures, while only 21.1% reach a "high" level, reflecting more robust management.

These figures are consistent with previous studies and highlight the importance of strengthening oversight systems. Without good controls, serious problems can arise, such as errors in accounting records, fraud, or misuse of public funds. This not only jeopardizes the economic stability of municipalities but can also cause people to lose confidence in how their resources are managed.

**Table 5.** Level of staff capabilities.

Dimension	Categories	f	%
Staff capabilities	Low	39	17.1
	Medium	144	63.2
	High	45	19.7
	Total	228	100.0

A glance at Table 5 provides a better understanding of the skills of municipal treasury staff and how this influences the efficiency of their daily work. The figures show that nearly two out of three employees (63.2%) have an intermediate level of skills, which is acceptable, but not everyone is at the same level. On the other hand, 17.1% have serious gaps in their training, something that cannot be overlooked, while only one in five (19.7%) truly excels at what they do. This mix of results suggests that there is a solid knowledge base, but also much ground to be gained if overall performance is to be improved through well-targeted training.

In the field of public administration, having a well-trained team is a fundamental pillar for municipal finances to run smoothly. When staff are trained, not only are the rules followed to the letter, but accounting processes flow better and fewer mistakes are made that could cloud the clarity of public money management. The fact that less than 20% achieve an outstanding level reflects a challenge seen in many municipalities: there is a lack of experts in key areas such as government accounting or the use of digital tools to manage fiscal resources.

Given this situation, it is essential to implement ongoing training programs that are tailored to the real needs of each municipality. Investing in customized training not only brings administrative procedures into the 21st century but also equips staff to face the challenges of day-to-day public management. This not only makes work more efficient but also creates a work environment where employees feel motivated to give their best for the good of the community. There are cases in other regions that demonstrate this: strengthening technical skills not only streamlines operations but also protects against risks in the management of public funds.

**Table 6.** Level of transparency and accountability.

Dimension	Categories	f	%
Transparency and accountability	Low	55	24.1
	Medium	125	54.8
	High	48	21.1
	Total	228	100.0

If we look at the data in Table 6, we can see how municipal treasuries are performing in terms of transparency and accountability, two pillars that underpin good financial management. The figures show that more than half, 54.8%, remain at an intermediate level in these important areas. However, there is cause for concern: 24.1% are at a low level, which is significant because it directly affects people's trust in their institutions. In contrast, only 21.1% manage to reach a high level. These results clearly indicate that much work remains to make these entities more open and accountable.

Transparency is key, not only so that citizens can trust those who manage public money but also to ensure that those resources are used well. From a financial point of view, it acts as a shield: it allows errors or even irregularities to be detected in time, making administration more efficient. However, when financial data is confusing or difficult to understand, which is the case in many of these treasuries, everything becomes more complicated. And, as if that were

not enough, this lack of clarity can cause people to doubt the credibility of institutions, which ultimately weakens their ability to function as they should.

## 5. DISCUSSION

Based on the overall objective, The analysis of the level of efficiency in municipal treasury management in the San Martín Region presents a mixed picture: most of the surveyed entities (58.3%) show functional operations but do not reach standards of excellence. This suggests that many treasuries manage to meet minimum requirements, such as paying salaries or executing necessary expenditures, but face difficulties in optimizing resources, innovating, or responding quickly to local needs. This finding aligns with Oliveira and Oliveira (2023), who question financial evaluation models that oversimplify municipal realities. In this sense, the average efficiency percentage could mask deeper structural limitations that require specific attention.

According to specific objective 1: Evaluate financial planning, the data reveal that only 23.2% of treasuries achieve a high level of financial planning, while 25.0% are at a low level. This indicates that many municipalities operate without a clear financial roadmap or with unreliable projections. In this situation, the work of Nakpodia et al. (2024) is illustrative: their analysis of 96 countries confirms that weak planning hinders the achievement of development goals, even when resources are available. Similarly, Santopietro et al. (2024) demonstrated that forecasting spending with a sustainable approach allows not only for efficiency but also for investments that last over time. In the case of the San Martín region, improving planning is not a technical luxury but a concrete necessity so that every sol invested has a real and sustainable impact on citizens' lives.

According to specific objective 2: Analyze the execution of payments and collections, 62.7% of the evaluated municipalities have an average level in this dimension, indicating that, despite well-executed basic operations, delays, losses, or efficiency errors persist. As Okorie et al. (2025) argue, automating payments and collections in local governments reduces costs and increases revenue. Furthermore, Yang et al. (2024) argue that the digitization of administrative processes not only speeds up transactions but also enhances financial governance. In regions like San Martín, where technology access is limited, promoting these tools can significantly improve payment efficiency and collection capabilities, making a crucial difference in administrative effectiveness and financial management.

According to specific objective 3, internal controls in treasuries show an average performance of 58.3%, with 20.6% of institutions at low levels, indicating significant risk. In agreement with Hawkins et al. (2023), when comparing public agencies in Eastern Europe, they demonstrate that without a robust control system, budget management becomes less effective and more vulnerable to irregularities. For their part, Berg et al. (2025) propose that good control not only detects failures but also improves the quality of cost estimates and facilitates decision-making. This is crucial in regions such as San Martín, where public money is scarce, and any loss or error can mean a stalled project or unmet needs.

According to specific objective 4: Determine staff capabilities, they show acceptable preparation, with 63.2% at an intermediate level, but only 19.7% achieving high performance.

These skills gaps directly affect service quality, accounting accuracy, and administrative efficiency. In line with Mulyana et al. (2024), who emphasize that strengthening technical skills through continuous training has a direct effect on business performance. Similarly, Ammar (2025) highlights the importance of collaboration between accountants and systems experts to leverage H D technologies such as ERP (Enterprise Resource Planning), which is a software system that helps organizations optimize their core business processes. In the local context, a decisive investment in staff training could unlock immediate improvements in resource execution and oversight.

According to specific objective 5, evaluating transparency and accountability is perhaps the most critical: 24.1% of municipalities have a low level, which can generate social mistrust and undermine institutional legitimacy. The study agrees with Cárcaba et al. (2022), who argue that citizens' perception of good governance improves when information is clear and accessible. In addition, Del Valle et al. (2024) emphasize that transparent communication not

only educates the population but also prevents misinformation and reduces social tensions. For San Martín, implementing accountability mechanisms such as financial web portals or periodic public reports would be a legal obligation and a strategy to rebuild the link between the municipality and the population.

## 6. CONCLUSIONS

It is concluded that, in terms of the level of efficiency in municipal treasury management in the San Martín Region, more than half of the municipalities (58.3%) are at an intermediate level when it comes to using their resources. This means that they cover the basics, pay bills, and keep things running, but they struggle when it comes to making the most of their money or facing bigger challenges. Although they manage to keep the ship afloat, they could be more consistent with their spending so as not to waste money that could go to projects that truly benefit the community.

It is concluded that, in terms of financial planning, one in four municipalities (25%) faces serious problems in preparing their budgets. When there is no clear financial plan or when imbalances occur, sectors such as education and public health are adversely affected. If they worked on solid planning, based on real data and well-thought-out decisions, they could avoid deficits and ensure that funds reach those who need them most.

It can be concluded that, in terms of the level of execution of payments and collections in day-to-day financial operations, things are improving because 62.7% of these entities manage their income and expenses in an orderly manner. However, there are difficulties with late payments or tax collection, which generate extra costs and less money for public works. If they managed to streamline these processes, perhaps with technology or clearer rules, they could work faster and better to show how each sole is spent.

It is concluded that, in terms of internal control, 20.6% of municipalities have inefficient internal supervision systems, representing a major risk. Without orderly records or periodic reviews, errors or suspicious transactions can easily occur, leading to public distrust. Establishing clear rules and ensuring everyone understands what to monitor are key steps in protecting public funds.

It is concluded that, in terms of staff capabilities, the majority (63.2%) have basic knowledge, but few are experts in areas such as public accounting or digital tools. This sometimes leads to errors in reports or failure to fully comply with regulations. With well-focused training tailored to each municipality's needs, the level could be raised, and these difficulties avoided.

It is concluded that the level of transparency and accountability, and the lack of clarity, are serious problems in 24.1% of cases. If there is a lack of transparency regarding how the budget is used, people have no way of knowing whether things are being done well or poorly, and this fuels doubts. Communicating information through online portals or public meetings could help the population feel more secure and perceive that decisions reflect what really matters in their communities in the region.

## 7. RECOMMENDATIONS

Municipalities in this region face various obstacles in managing their treasuries, which affect both their day-to-day operations and the confidence of residents and long-term financial sustainability. A detailed analysis has identified critical areas that require immediate attention to optimize the management of public resources in the region. As a result, practical solutions based on sound accounting principles and effective financial management strategies are proposed, and avenues for future high-impact research are suggested. According to the data, around a quarter of local governments in the San Martín region face serious problems in planning their finances. This hinders the equitable distribution of money, sometimes leading to disruptions in basic services such as street maintenance and healthcare. To combat this challenge, it is recommended that staff be trained in modern budgeting methods, focusing on how to forecast revenues and assess different financial situations.

In a region such as San Martin, where resources fluctuate depending on seasonal factors like agriculture or tourism, these tools would enable anticipation of changes and timely adjustment of spending. This ensures that essential services continue functioning smoothly without issues.

Regarding payments and collections, although only 14.5% of municipalities perform poorly in this area, there is always room for improvement. It is recommended that digital tools be incorporated to streamline transactions and improve accuracy. An effective alternative could be adopting digital platforms to manage these processes, drawing inspiration from successful cases of administrative modernization. For example, from a technological standpoint, implementing online systems for citizens to pay their municipal taxes would facilitate collections, reduce cash usage, and ensure revenues arrive on time to meet municipal needs. It is also recommended that internal control be strengthened to protect public funds, as 20.6% of municipalities are at a low level, leaving resources exposed to risks.

The design and implementation of periodic internal audits and the separation of finance staff tasks would help detect irregularities and ensure compliance with accounting standards. Additionally, a quarterly review system for financial records could promote clarity and monitoring of municipal treasury operations.

It is recommended that staff be trained to perform better: 63.2% of municipalities are at a medium level in terms of staff skills, suggesting untapped potential. Ongoing training programs in public accounting, technology management, and regulatory updates could elevate this performance to an outstanding level. Teaching teams to handle bank reconciliations or financial software would reduce errors and accelerate the preparation of key accounting reports.

It is recommended to make management more transparent to gain public trust: 24.1% of municipalities with a low level in this area reflect a problem that weakens their legitimacy. Publishing financial data on accessible websites, showing income, expenses, and projects carried out, would improve accountability. This measure would encourage citizens to monitor resources, strengthening the ties between municipalities and the community.

It is suggested that a study be conducted on how digitization affects municipal financial efficiency, comparing municipalities that use technology with those relying on manual processes. This analysis could highlight concrete benefits, such as less time spent on reporting or increased revenue collection, and also identify challenges in rural areas. *Té fandangos* Gould guides public policy in the region.

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**Transparency:** The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

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## REFERENCES

- Acevedo-De-los-Rios, A., Jones-Perez, J., & Rondinel-Oviedo, D. R. (2025). Methodology for prioritizing sustainable urban regeneration interventions in informal settlements: Case study in Lima. *Cities*, 157, 105550. <https://doi.org/10.1016/j.cities.2024.105550>
- Amiraslani, F. (2021). Rising to the top ten transformative projects in Asia and the Pacific: A stakeholder analysis of the community-based carbon sequestration project in Eastern Iran. *Project Leadership and Society*, 2, 100030. <https://doi.org/10.1016/j.plas.2021.100030>

- Ammar, S. F. (2025). Unveiling the rivalry of cloud ERP dialectics, underpinning logics and roles of accounting and information system professionals. *International Journal of Accounting Information Systems*, 56, 100728. <https://doi.org/10.1016/j.accinf.2025.100728>
- Berg, H., Larsen, A. S. A., Klakegg, O. J., & Welde, M. (2025). Cost estimation in major public projects' front-end phase: An empirical study on how to improve current practices. *Project Leadership and Society*, 6, 100171. <https://doi.org/10.1016/j.plas.2024.100171>
- Bourdin, S., & Jacquet, N. (2025). Closing the loop at the local scale: Investigating the drivers of and barriers to the implementation of the circular economy in cities and regions. *Ecological Economics*, 231, 108542. <https://doi.org/10.1016/j.ecolecon.2025.108542>
- Cárcaba, A., Arrondo, R., & González, E. (2022). Does good local governance improve subjective well-being? *European Research on Management and Business Economics*, 28(2), 100192. <https://doi.org/10.1016/j.iemeen.2021.100192>
- Coccorese, P. (2024). EU regional policy and local economic growth: Does banking development matter? *Papers in Regional Science*, 103(5), 100049. <https://doi.org/10.1016/j.pirs.2024.100049>
- Del Valle, G. H., Mejía, K. C., Zabal, B. P., Girault, M. A. G., & González, P. V. (2024). CEMLA's survey on central bank digital currencies in Latin America and the Caribbean. *Latin American Journal of Central Banking*, 5(4), 100135. <https://doi.org/10.1016/j.latcb.2024.100135>
- Hawkins, L., Kasekamp, K., van Ginneken, E., & Habicht, T. (2023). Governing health service purchasing agencies: Comparative study of national purchasing agencies in 10 countries in eastern Europe and central Asia. *Health Policy Open*, 5, 100111. <https://doi.org/10.1016/j.hpopen.2023.100111>
- Karol, K., Hryshchuk, S., Kalanj, K., & Parii, V. (2023). The importance of good governance in hospital payment reform—A case study from Ukraine. *Health Policy Open*, 4, 100089. <https://doi.org/10.1016/j.hpopen.2023.100089>
- La Torre, M., Leo, S., Palma, A., & Zapata, J. D. S. (2024). Public spending and green finance: A systematic literature review. *Research in International Business and Finance*, 68, 102197. <https://doi.org/10.1016/j.ribaf.2023.102197>
- Mulyana, R., Rusu, L., & Perjons, E. (2024). Key ambidextrous IT governance mechanisms for successful digital transformation: A case study of Bank Rakyat Indonesia (BRI). *Digital Business*, 4(2), 100083. <https://doi.org/10.1016/j.digbus.2024.100083>
- Nakpodia, F., Sakariyahu, R., Fagbemi, T., Adigun, R., & Dosumu, O. (2024). Sustainable development goals, accounting practices and public financial management: A pre and post COVID-19 assessment. *The British Accounting Review*, 101466. <https://doi.org/10.1016/j.bar.2024.101466>
- National Institute of Statistics and Informatics. (2019). Human resources- Peru: Municipal management indicators 2019. Lima, Peru: National Institute of Statistics and Informatics.
- Okorie, D. I., Adedeji, A., & Ifionu, C. (2025). Assessing digitalization and the economy: A dynamic recursive CGE modelling approach. *Telecommunications Policy*, 49(4), 102936. <https://doi.org/10.1016/j.telpol.2025.102936>
- Oliveira, D. T. D., & Oliveira, A. G. D. (2023). Municipal financial (in) sustainability: The fragile methodology proposed by the federative pact PEC. *Revista de Administração Pública*, 57(5), e2023-0012. <https://doi.org/10.1590/0034-761220230012x>
- Rahban, A., Ghahramani, A., Yusefzadeh, H., Harirchi, I., & Alinia, C. (2024). Price transparency in Iranian healthcare market. *Health Policy Open*, 6, 100120. <https://doi.org/10.1016/j.hpopen.2024.100120>
- Rocha, A., Costa, A. S., Figueira, J. R., Ferreira, D. C., & Marques, R. C. (2021). Quality assessment of the Portuguese public hospitals: A multiple criteria approach. *Omega*, 105, 102505. <https://doi.org/10.1016/j.omega.2021.102505>
- Santopietro, L., Solimene, S., Lucchese, M., Di Carlo, F., & Scorza, F. (2024). An economic appraisal of the SE(C)AP public interventions towards the EU 2050 target: The case study of Basilicata region. *Cities*, 149, 104957. <https://doi.org/10.1016/j.cities.2024.104957>
- Sneideriene, A., & Legenzova, R. (2025). Greenwashing prevention in environmental, social, and governance (ESG) disclosures: A bibliometric analysis. *Research in International Business and Finance*, 74, 102720. <https://doi.org/10.1016/j.ribaf.2024.102720>

- Soares, C. S., Da Rosa, F. S., & Zonatto, V. C. D. S. (2020). Reflections on the use of the cost accounting system in the quality of public management based on the perception of municipal managers in Santa Maria/RS. *Revista Catarinense da Ciência Contábil*, 19, e3103. <https://doi.org/10.16930/2237-766220203103>
- Voorwinden, A., van Bueren, E., & Verhoef, L. (2023). Experimenting with collaboration in the smart city: Legal and governance structures of urban living labs. *Government Information Quarterly*, 40(4), 101875. <https://doi.org/10.1016/j.giq.2023.101875>
- Wehrle, R., Wiens, M., & Schultmann, F. (2024). Evaluation of the potential of infrastructure funds: The case of inland waterways in Germany. *Technological Forecasting and Social Change*, 208, 123711. <https://doi.org/10.1016/j.techfore.2024.123711>
- Yang, C., Gu, M., & Albitar, K. (2024). Government in the digital age: Exploring the impact of digital transformation on governmental efficiency. *Technological Forecasting and Social Change*, 208, 123722. <https://doi.org/10.1016/j.techfore.2024.123722>

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