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Budget efficiency in local government strategic planning: a systematic review 2020-2025

Eficiencia presupuestal en la planificación estratégica de gobiernos locales: una revisión sistemática 2020-2025

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Sandra Rivas Medina
https://orcid.org/0009-0005-9771-9170
rrivasme75@ucvvirtual.edu.pe
Universidad César Vallejo. Lima, Peru

Abstract

The purpose of this study was to synthesize the findings of the scientific literature on local government budget efficiency published between 2020 and 2025. It was developed under a systematic review design following the PRISMA guidelines, with a search of three major databases such as Scopus, Web of Science, and SciELO, 93 documents were selected, and 35 articles were subsequently systematized. It was found that budget efficiency in local governments is associated with institutional quality, transparency, and management capacity. The methodological approaches used in the studies were predominantly econometric (panel, DEA, stochastic frontier), complemented by systematic reviews and mixed approaches that provided robustness and validity. For budgetary efficiency, institutional, fiscal, and territorial determinants (governance, transparency, accountability, centralism, administrative weakness, and quality of tax reforms) were identified that explain variations in performance. In Latin America, and particularly in Peru, internal control and auditing strengthen budget execution. A minimum framework of indicators is proposed in four dimensions: fiscal-administrative, social, institutional, and environmental. Overall, strengthening budget efficiency requires solid governance, transparency, and sustainability to consolidate citizen trust and equitable territorial development. It is concluded that budgetary efficiency in local governments requires more than fiscal discipline: it requires transparency, governance, and sustainability. Only then will public confidence be strengthened and equitable territorial development be promoted.

Keywords: budget, planning, local governments

Resumen

El presente estudio tuvo como finalidad sintetizar los hallazgos de la literatura científica sobre eficiencia presupuestal de gobiernos locales publicado entre 2020 y 2025. Se ha desarrollado bajo un diseño de revisión sistemática siguiendo las directrices PRISMA, con la búsqueda en tres bases de datos importantes como Scopus, Web of Science y SciELO se seleccionaron 93 documentos, posteriormente se sistematizaron 35 artículos. Se evidenció que la eficiencia presupuestal en gobiernos locales se asocia a la calidad institucional, la transparencia y la capacidad de gestión. Los enfoques metodológicos empleados en los estudios fueron predominantemente econométricos (panel, DEA, frontera estocástica), complementados con revisiones sistemáticas y enfoques mixtos que aportaron robustez y validez. Para la eficiencia presupuestal, se identificaron determinantes institucionales, fiscales y territoriales (gobernanza, transparencia, rendición de cuentas, centralismo, debilidad administrativa, y calidad de reformas tributarias) que explican las variaciones en desempeño. En América Latina, y particularmente en Perú, el control interno y la auditoría fortalecen la ejecución presupuestaria. Se propone un marco mínimo de indicadores en cuatro dimensiones: fiscal-administrativa, social, institucional y ambiental. En conjunto, fortalecer la eficiencia presupuestal exige gobernanza sólida, transparencia y sostenibilidad para consolidar la confianza ciudadana y el desarrollo territorial equitativo. Se concluye que la eficiencia presupuestal en gobiernos locales exige más que disciplina fiscal: requiere transparencia, gobernanza y sostenibilidad, solo así se fortalecerá la confianza ciudadana y se impulsará un desarrollo territorial equitativo.

Palabras clave: presupuesto, planificación, gobiernos locales

Introduction

The quest for efficiency in the utilization of public resources is one of the most universal challenges facing modern administration (Abuzanjal & Bashir, 2024). In a context marked by increasing social demands, fiscal constraints, and pressures to ensure high-quality services, governments are compelled to demonstrate that each monetary unit generates the maximum possible benefit (Guo et al., 2020). While central governments typically focus on macroeconomic impacts, local governments manage essential services directly and receive immediate feedback from the citizenry (Derzayeva & Akhmadieva, 2014). This proximity underscores the urgency for robust mechanisms of budgetary efficiency that not only measure financial execution but also link it to tangible outcomes in social welfare (Łukomska-Szarek et al., 2024).

The international discourse on public management (PM) has evolved since the late 20th century, shifting toward performance-oriented and accountability-centric approaches, significantly influenced by New Public Management (NPM) (Indahsari & Raharja, 2020). This perspective promoted the adoption of private sector practices—such as cost control, benchmarking, and performance indicators—to address the principle of "doing more with less" in scenarios of fiscal constraint (Talero-Sarmiento et al., 2024). Within this framework, public expenditure transitioned from being merely a budgetary execution measure to being assessed for its technical and allocative efficiency, as well as its ability to transform resources into effective services (Camanho et al., 2024). However, advancements at the central level have not always been mirrored at subnational levels, where limited administrative capacity, territorial heterogeneity, and income volatility continue to shape performance outcomes (Brikci et al., 2024).

Comparative literature provides vital insights into budgetary efficiency, which hinges not only on internal factors but also on external determinants related to institutional design (Breaugh et al., 2023). In Europe, research employing Data Envelopment Analysis (DEA) and spatial models indicates that municipal efficiency is influenced by spillovers from neighboring territories: proximity to urban centers with high management standards enhances the relative performance of surrounding municipalities (Yi et al., 2025). A study utilizing stochastic frontier analysis (SFA) concluded that municipalities with greater fiscal autonomy exhibit higher efficiency, as the ability to generate their own revenues strengthens accountability (Afonso et al., 2024).

In Latin America, it has been reported that fewer than 40% of local governments possess integrated systems for measuring budgetary outcomes (Meyer, 2025). In developing countries, decentralization and incentive systems tend to enhance efficiency when accompanied by reforms in transparency and institutional capacity (Sima et al., 2023).

In Peru, the Results-Based Budgeting (RBB) initiative has been institutionalized as a strategy to align allocations with measurable outcomes through budget programs and evaluation mechanisms (Ticona-Carrizales et al., 2024). However, despite improvements in transparency, execution problems persist, particularly at the district and provincial levels, where investment expenditure rates in some cases did not exceed 60% in 2023.

Concurrently, methodological literature on efficiency has advanced towards more sophisticated techniques. Traditional approaches such as DEA and SFA have been supplemented by order-m models, resilient to outliers, and two-stage analyses to explain variations in efficiency through variables such as fiscal autonomy, population density, or governance levels (Ospina et al., 2023). Spatial models have also been integrated to capture inter-jurisdictional dependencies; these innovations strengthen the capacity to link efficiency studies with public policy decisions (La Torre et al., 2024).

Despite the abundance of studies, literature on budgetary efficiency presents significant gaps. First, there exists methodological fragmentation, as studies utilize different inputs and outputs, complicating comparability across countries or regions (Hüsken et al., 2024). Second, research often focuses solely on technical efficiency, overlooking dimensions associated with equity, expenditure quality, and impacts on citizen welfare (Manfreda & Mijač, 2024). Lastly, analyses integrating open data perspectives and digitalization remain limited (Reis & Melão, 2023). These gaps substantiate the need for a systematic review to synthesize evidence from 2020 to 2025, classify methodologies, identify common patterns, and propose an operational framework to enhance the evaluation of local public management.

Thus, the objective of this study is to synthesize findings from the scientific literature on budgetary efficiency of local governments published between 2020 and 2025. Specifically, it aims to classify the methodological approaches employed, identify the institutional, fiscal, and territorial determinants influencing budgetary efficiency, analyze experiences in Latin America and Peru within the framework of municipal policies such as RBB and municipal incentives, and propose a framework of minimal indicators to guide future research in decentralized public management.

Methodology

The methodological design was developed using a systematic review approach (RSL), adhering to the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Rethlefsen et al., 2021) to ensure a rigorous, transparent, and replicable process. In the initial stage of identification, a systematic search was conducted in databases utilizing combinations of descriptors in both English and Spanish. The second phase, screening, involved the removal of duplicates and filtering documents based on predefined inclusion and exclusion criteria. During the third stage, eligibility, the methodological quality and relevance of the selected studies were assessed by examining their objectives, research designs, and reported outcomes. In the fourth phase, inclusion, articles that met quality standards and contributed substantive information to the analysis of budgetary efficiency in local governments were selected.

A comprehensive search strategy was devised for article selection, employing descriptors or terms combined using Boolean operators (“AND,” “OR”) and utilizing truncation (*) to include related terms as well as quotation marks (“”) for exact phrases. The terms or descriptors included “budget efficiency,” “public expenditure efficiency,” “fiscal efficiency,” “public spending efficiency,” “local government,” “municipality,” and “subnational government.”

The database selection process focused on three primary sources (Scopus, Web of Science, and SciELO) due to their coverage and quality as interdisciplinary databases in social sciences and public administration (Chaparro-Martínez et al., 2016). Their inclusion was also crucial for capturing regional Latin American literature, particularly concerning local governments in developing countries.

Accordingly, considering the databases, terms, and Boolean operators, search equations were established. For Scopus, the equation was: TITLE-ABS-KEY ("budget efficiency" OR "public expenditure efficiency" OR "fiscal efficiency" OR "public spending efficiency" AND "local government" OR municipality* OR "subnational government"). For Web of Science, it was: TI=("budget efficiency" OR "public expenditure efficiency" OR "fiscal efficiency" OR "public spending efficiency" AND "local government" OR "subnational government"). Meanwhile, for SciELO, the equation was: (ti:("eficiencia presupuestaria")) OR (ti:("eficiencia del gasto público")) OR (ti:("eficiencia fiscal")) AND (ti:("gobierno local")) OR (ti:(municipio)).

Selection criteria were established as follows: a) articles published between 2020 and 2025, b) empirical studies focused on budgetary efficiency, public expenditure efficiency, or financial management in local governments; c) studies published in English, Spanish, and Portuguese; d) articles available in full text; and e) those employing efficiency evaluation methodologies. Exclusion criteria included: a) non-peer-reviewed documents or grey literature, b) opinion articles, c) review or meta-analytic studies, as these do not pertain to umbrella studies, and d) duplicate publications across databases.

During the evaluation of methodological quality, criteria were applied to ensure scientific rigor and thematic relevance of the included studies. Each article was verified for a coherent design aligned with its objectives, a clear delineation of the population or sample, and collection and analysis procedures adhering to academic rigor. Additionally, internal validity, consistency among the theoretical framework, variables, and results, and the relevance of the empirical approach in relation to budgetary efficiency and strategic planning in local governments were examined. This process allowed only reliable evidence studies to be included, thereby enhancing the robustness of the analysis and ensuring conclusions aligned with the researched realities from 2020 to 2025.

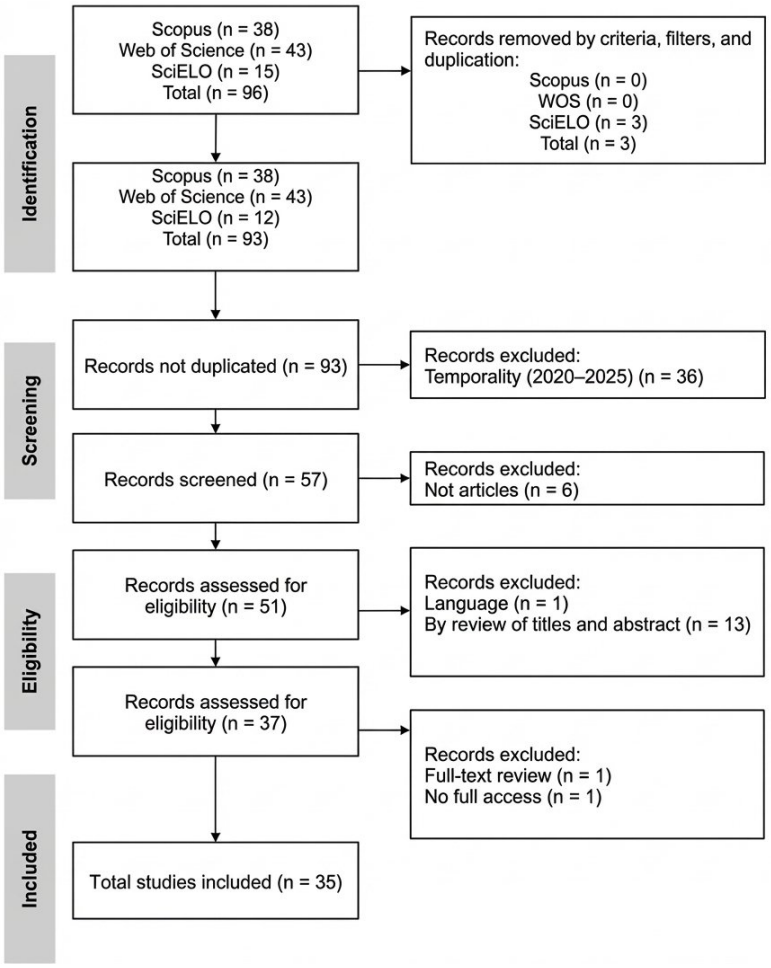
Table 1

Preliminary search

Database	Quantity	%
Scopus	38	40.9
Web of Science	43	46.2
SciELO	12	12.9
Total	93	100

The subsequent step involved the screening and eligibility phase, during which the previously established inclusion and exclusion criteria were applied to refine the initial set of identified articles. In this stage, the thematic relevance, temporal adequacy, and methodological quality of each study were assessed in relation to the overall objective of the research. Records that did not meet the defined parameters, such as duplication, lack of full access, non-eligible language, or irrelevance to the central variable, were eliminated. As a result, a definitive corpus of research was consolidated, forming the core of the systematic review and ensuring the validity and coherence of the conducted analysis, as detailed in the PRISMA figure.

Figure 1
PRISMA Matrix



These works form the foundation for the analysis presented in this systematic review, ensuring the transparency of the selection process and the validity of the findings obtained (Table 2).

Table 2
Articles selected for analysis

Author, Year, and Country	Approach	Design
Panda & Nayak (2025), India	Quantitative	Descriptive, comparative
Eroğlu et al. (2023), Turkey	Quantitative	Econometric panel
Jung (2021), South Korea	Quantitative	Quasi-experimental
Silva et al. (2022), Brazil	Quantitative	Econometric
Chiu et al. (2021), Taiwan	Quantitative	Longitudinal
Giray & Neyapti (2022), Turkey	Quantitative	Multicentric
Afonso et al. (2021), Europe	Quantitative	Econometric analysis
Dorn et al. (2021), Germany	Quantitative	Comparative analysis
Afonso & Venâncio (2020), Portugal	Quantitative	Econometric analysis
Morales Rocha et al. (2025), Peru	Quantitative	Correlational and explanatory
Curo et al. (2025), Peru	Quantitative	Applied, non-experimental, descriptive, and correlational
Gerrish et al. (2025), United States	Quantitative	Meta-analysis
Saji & Madheswaran (2025), India	Quantitative	Econometric analysis
Apeti et al. (2025), Sub-Saharan Africa	Quantitative	Macroeconomic analysis

Mohanty & Bhanumurthy (2021), India	Quantitative	Longitudinal
Silva et al. (2022), Brazil	Quantitative	Econometric analysis
Coda Moscarola et al. (2020), Italy	Quantitative	Longitudinal
Dixit et al. (2024), India	Quantitative	Cross-sectional
H. Jung (2022), South Korea	Quantitative	Cross-sectional
Jiang et al. (2025), China	Quantitative	Spatial panel data
Tirtosuharto (2022), Indonesia	Quantitative	Econometric analysis
Lawes et al. (2020), Germany	Quantitative	Experimental
Zasko et al. (2021), Russia	Quantitative–Qualitative	Correlation
Pereira & Miterhof (2021), Brazil	Quantitative	Econometric study
Casanova-Figueroa & Gómez-García (2024), Ecuador	Quantitative	Non-experimental, descriptive, and field study
Labanda & Tandazo (2024), Ecuador	Mixed	Descriptive study with documentary analysis
Torres-Paredes et al. (2024), Peru	Mixed	Applied, non-experimental, retrospective, with surveys, interviews, and documentary review
Solorzano & Reyes (2025), Ecuador	Mixed	Non-experimental, correlational
Chévez-Nágera & Feijó-Cuenca (2025), Ecuador	Qualitative	Exploratory-descriptive and comparative
Lucio & Lino Gómez (2024), Ecuador	Mixed	Documentary, descriptive
Castro (2025), Peru	Qualitative	Documentary and normative
Mayorga et al. (2025), Ecuador	Qualitative	Bibliographic-documentary
Merino & Chávez (2020), Peru	Quantitative	Non-experimental, longitudinal, and predictive correlational
Figueroa et al. (2024), Peru	Quantitative	Correlational
Tigua & Yoza (2025), Ecuador	Mixed	Qualitative-Quantitative

Results and discussion

The analysis of literature published between 2020 and 2025 enabled the synthesis of a broad range of findings that illustrate how budgetary efficiency in local governments has become a priority in both emerging economies and developed countries. Overall, studies agree that budgetary efficiency is contingent not only on fiscal discipline but also on institutional quality, transparency, and local management capacity (Eroğlu et al., 2023; Jiang et al., 2025; H. Jung, 2022; S.-M. Jung, 2021; Panda & Nayak, 2025; Silva et al., 2022). Globally, local governments face tensions between the need to expand social spending and fiscal constraints, thus necessitating clearer regulatory frameworks and more effective control systems (Apeti et al., 2025; Mohanty & Bhanumurthy, 2021). In this regard, budgetary efficiency is directly linked to governance, administrative innovation, and the capacity to articulate coherent public policies (Giray & Neyapti, 2022; Tirtosuharto, 2022; Zasko et al., 2021).

Classification of methodological approaches employed

The reviewed methodological approaches demonstrated significant diversity. The predominant use of econometric methods, such as panel data models, stochastic frontier analysis, and Data Envelopment Analysis (DEA), is evident in contexts within India, Brazil, and Europe (Afonso et al., 2021; Dixit et al., 2024; Saji & Madheswaran, 2025). These methods facilitate the measurement of relative efficiency by comparing expenditure allocations with social outcomes. However, research utilizing meta-analysis and systematic reviews also contributes to greater robustness and reproducibility of conclusions (Gerrish et al., 2025; Saji & Madheswaran, 2025). Qualitative or mixed studies, such as those analyzing fiscal digitalization and citizen participation processes, provide more contextual insights into budgetary management (H. Jung, 2022; Zasko et al., 2021). In Latin America, an applied and correlational approach is often prioritized, particularly in Peru, where studies rely on validated questionnaires and statistical analyses like ordinal logistic regression (Castro, 2025; Curo et al., 2025; Lawes et al., 2020; Merino & Chávez, 2020; Morales Rocha et al., 2025).

Institutional, fiscal, and territorial determinants

The determinants of budgetary efficiency identified in the literature are grouped into three levels. At the institutional level, governance, transparency, and accountability emerge as decisive factors (Dorn et al., 2021; Mohanty & Bhanumurthy, 2021). Centralization and administrative weakness, as observed in Peru, negatively impact the capacity of local governments to execute their budgets efficiently (Morales Rocha et al., 2025). At the fiscal level, the quality of tax reforms and the progressivity of the tax system correlate with higher efficiency levels

by reducing distortions and enhancing equity in revenue collection (Afonso & Venâncio, 2020; Coda Moscarola et al., 2020). At the territorial level, regional disparities and differences in management capacities account for significant variations: states or provinces with greater autonomy and human capital tend to show better performance, as evidenced by cases in Taiwan, India, and Brazil (Chiu et al., 2021; Saji & Madheswaran, 2025; Silva et al., 2022). Furthermore, the impact of geography and infrastructure is evident in contexts like Indonesia, where provinces with better connectivity have effectively reduced poverty through efficient fiscal management (Tirtosuharto, 2022).

Experiences in Latin America and Peru

Latin American studies indicate that local governments face common challenges related to dependency on intergovernmental transfers and limited technical capacity. In Brazil, the influence of externalities, such as regional inequality, has been a factor reducing expenditure efficiency (Silva et al., 2022). In Ecuador and Peru, strategic planning systems, such as Results-Based Budgeting (RBB) and municipal incentives, have sought to enhance efficiency, albeit with heterogeneous outcomes (Casanova-Figueroa & Gómez-García, 2024; Chévez-Nágera & Feijó-Cuenca, 2025; Curo et al., 2025; Labanda & Tandazo, 2024; Lucio & Lino, 2024; Mayorga et al., 2025; Morales Rocha et al., 2025; Solorzano & Reyes, 2025; Tigua & Yoza, 2025). In Peru specifically, evidence shows that internal control and financial auditing strengthen the quality of budget execution, whereas social conflicts and centralism hinder progress (Curo et al., 2025; Figueroa et al., 2024; Morales Rocha et al., 2025; Torres-Paredes et al., 2024). Additionally, in Brazil, it has been observed that fiscal incentives for infrastructure do not always translate into greater efficiency, highlighting the need to improve targeting mechanisms (Pereira & Miterhof, 2021).

Conclusions

Budgetary efficiency in local governments hinges on the interplay of fiscal, institutional, and territorial factors. Although there have been advances in transparency and control, management gaps and regional disparities persist, limiting expenditure effectiveness. The reviewed studies primarily employed econometric models (DEA, stochastic frontier, panel data), generating consistent comparisons; however, strengthening longitudinal and comparative analyses remains necessary to enhance result validity. Institutional quality, technical capacity, and fiscal reforms emerge as the main determinants of efficiency, with more favorable outcomes in regions with greater autonomy. In Latin America and Peru, results-oriented programs and municipal incentives have partially contributed to optimizing management, although centralism and social conflicts continue to affect performance.

The review also delineated a basic framework of indicators for future research, identifying four key dimensions: (1) fiscal-administrative efficiency, encompassing budget execution levels and deficit control (Apeti et al., 2025; Panda & Nayak, 2025); (2) social efficiency, measured by outcomes in education, health, and poverty reduction (Dixit et al., 2024; Saji & Madheswaran, 2025; Tirtosuharto, 2022); (3) institutional efficiency, evaluated through transparency, governance, and citizen participation (Dorn et al., 2021; H. Jung, 2022; Mohanty & Bhanumurthy, 2021); and (4) environmental and sustainability efficiency, linked to green productivity and responsible resource use (Jiang et al., 2025; Zasko et al., 2021). These indicators establish a comparative and replicable framework that can guide future research in local governments and strengthen decentralized public management under the principles of sustainability and equity.

References

Abuzanjal, A., & Bashir, H. (2024). Service innovation challenges in UAE government entities: Identification and examination of the impact of organizational size and excellence model implementation. *Journal of Open Innovation: Technology, Market, and Complexity*, *10*(3). https://doi.org/10.1016/j.joitmc.2024.100364

Afonso, A., Jalles, J. T., & Venâncio, A. (2021). Structural Tax Reforms and Public Spending Efficiency. *Open Economies Review*, *32*(5). https://doi.org/10.1007/s11079-021-09644-4

Afonso, A., Tovar Jalles, J., & Venâncio, A. (2024). Fiscal decentralization and public sector efficiency: Do natural disasters matter? *Economic Modelling*, *137*. https://doi.org/10.1016/j.econmod.2024.106763

Afonso, A., & Venâncio, A. (2020). Local territorial reform and regional spending efficiency. *Local Government Studies*. https://www.tandfonline.com/doi/abs/10.1080/03003930.2019.1690995

Apeti, A. E., Bambe, B. W. W., & Combes, J.-L. (2025). On the macroeconomic effects of fiscal reforms: Fiscal rules and public expenditure efficiency. *Public Choice*, *205*(1). https://doi.org/10.1007/s11127-025-01275-4

Breaugh, J., Rackwitz, M., & Hammerschmid, G. (2023). Leadership and institutional design in collaborative

government digitalisation: Evidence from Belgium, Denmark, Estonia, Germany, and the UK. *Government Information Quarterly*, *40*(2). https://doi.org/10.1016/j.giq.2022.101788
Brikci, N., Alao, R., Wang, H., Erlangga, D., & Hanson, K. (2024). Improving the efficiency in spending for health: A systematic review of evidence. *SSM - Health Systems*, *2*. https://doi.org/10.1016/j.ssmhs.2024.100008
Camanho, A. S., Silva, M. C., Piran, F. S., & Lacerda, D. P. (2024). A literature review of economic efficiency assessments using Data Envelopment Analysis. *European Journal of Operational Research*, *315*(1). https://doi.org/10.1016/j.ejor.2023.07.027
Casanova-Figueroa, G. F., & Gómez-García, S. L. (2024). Control interno y su incidencia en la gestión del presupuesto del Gobierno Autónomo Descentralizado Municipal del cantón Olmedo, provincia de Manabí. *MQRInvestigar*, *8*(2). https://doi.org/10.56048/MQR20225.8.2.2024.797-819
Castro, J. C. (2025). La ejecución presupuestal en gobiernos locales del Valle Rio Apurímac y la modernización del Estado. *Revista InveCom*, *5*(1). https://doi.org/10.5281/zenodo.11110270
Chaparro-Martínez, E. I., Álvarez-Muñoz, P., & D'Armas-Regnault, M. (2016). Gestión de la información: Uso de las bases de datos scopus y web of science con fines académicos. *Universidad, Ciencia y Tecnología*, *20*(81). https://ve.scielo.org/scielo.php?script=sci_arttext&pid=S1316-48212016000400003
Chévez-Nágera, Y. S., & Feijó-Cuenca, N. P. (2025). De la planificación a la ejecución: Eficiencia en la gestión presupuestaria universitaria en Ecuador. *MQRInvestigar*, *9*(3). https://doi.org/10.56048/MQR20225.9.3.2025.e921
Chiu, Y., Huang, K.-Y., Lin, T.-Y., & Chang, T.-H. (2021). Government debt and fiscal execution efficiency. *Wiley.* https://doi.org/10.1002/mde.3362
Coda Moscarola, F., Colombino, U., Figari, F., & Locatelli, M. (2020). Shifting taxes away from labour enhances equity and fiscal efficiency. *Journal of Policy Modeling*, *42*(2). https://doi.org/10.1016/j.jpolmod.2019.07.002
Curo, W. Q., Muro, E. D. A., Miranda, O. C. C., & Guadalupe, A. L. G. (2025). Internal control and financial auditing in the quality of budget execution at a local government in Peru. *Sapienza: International Journal of Interdisciplinary Studies*, *6*(2). https://doi.org/10.51798/sijis.v6i2.831
Derzayeva, G. G., & Akhmadieva, G. G. (2014). Budgetary Policy Efficiency of Municipalities in the Field of Education. *Procedia - Social and Behavioral Sciences*, *152*. https://doi.org/10.1016/j.sbspro.2014.09.291
Dixit, V., Singh, J., & Sardar, S. (2024). Efficiency of subnational government expenditure towards elementary education and nutrition: Bootstrap data envelopment analysis for India. *Journal of Public Affairs*, *24*(1). https://doi.org/10.1002/pa.2884
Dorn, F., Gaebler, S., & Roesel, F. (2021). Ineffective fiscal rules? The effect of public sector accounting standards on budgets, efficiency, and accountability. *Public Choice*, *186*(3). https://doi.org/10.1007/s11127-019-00755-8
Eroğlu, E., Aydemir, M., Tunç, G., & Gerçek, A. (2023). An Analysis of the Relationship between Municipalities and NGOs in Terms of Active Participation in Local Budgeting in Türkiye. *Sosyoekonomi*, *31*(56). https://doi.org/10.17233/sosyoekonomi.2023.02.08
Figueroa, Y., Aroni, A., & Condori, M. (2024). Asignación presupuestaria y la ejecución de gasto público en el contexto universitario peruano. En *Instituto Universitario de Innovación Ciencia y Tecnología Inudi Perú*. Instituto Universitario de Innovación Ciencia y Tecnología Inudi Perú. https://doi.org/10.35622/inudi.b.138
Gerrish, E., Ivonchyk, M., Charles, C., Greer, R. A., & Moldogaziev, T. T. (2025). A meta-analysis of the state and local government borrowing costs. *Public Administration Review*, *85*(2). https://doi.org/10.1111/puar.13822
Giray, E., & Neyapti, B. (2022). Fiscal Decentralization, Political Heterogeneity and Welfare. *Prague Economic Papers*, *31*(5). https://doi.org/10.18267/j.pep.813
Guo, K., Guo, H., Ren, S., Zhang, J., & Li, X. (2020). Towards efficient motion-blurred public security video super-resolution based on back-projection networks. *Journal of Network and Computer Applications*, *166*. https://doi.org/10.1016/j.jnca.2020.102691
Hüsken, L. M., Slinger, J. H., Vreugdenhil, H. S. I., & Altamirano, M. A. (2024). Money talks. A systems perspective on funding and financing barriers to nature-based solutions. *Nature-Based Solutions*, *6*. https://doi.org/10.1016/j.nbsj.2024.100200
Indahsari, C. L., & Raharja, S. J. (2020). New Public Management (NPM) as an Effort in Governance. *Jurnal Manajemen Pelayanan Publik*, *3*(2). https://doi.org/10.24198/jmpp.v3i2.25342
Jiang, L., Chen, Y., Jiang, Y., & Zhang, B. (2025). Does Fiscal Efficiency Affect Green Total Factor Productivity: Evidence Based on Spatial Panel Data Models. *Review of Development Economics*. https://doi.org/10.1111/rode.13217

Jung, H. (2022). Online Open Budget: The Effects of Budget Transparency on Budget Efficiency. *Public Finance Review*, *50*(1). https://doi.org/10.1177/10911421221093412
Jung, S-M. (2021). Participatory budgeting and government efficiency: Evidence from municipal governments in South Korea. *International Review of Administrative Sciences*. https://doi.org/10.1177/0020852321991208
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*. https://doi.org/10.1016/j.ribaf.2023.102197
Labanda, V. E. R., & Tandazo, J. J. C. (2024). Eficiencia de la gestión presupuestaria de los Gobiernos Autónomos Descentralizados Parroquiales Rurales del cantón Loja. *Prometeo Conocimiento Científico*, *4*(1). https://doi.org/10.55204/pcc.v4i1.e87
Lawes, M., Schultze, M., & Eid, M. (2020). Making the Most of Your Research Budget: Efficiency of a Three-Method Measurement Design With Planned Missing Data. *Assessment*, *27*(5). https://doi.org/10.1177/1073191118798050
Lucio, A. D. J., & Lino, L. L. (2024). Influencia de la planificación presupuestaria en los objetivos estratégicos de los GAD parroquiales. *Ciencia y Desarrollo*, *27*(4). https://doi.org/10.21503/cyd.v27i4.2723
Łukomska-Szarek, J., Wójcik-Mazur, A., & Martynko, A. (2024). Evaluation of the Budget Management of Local Government Units in Poland Based on Methods of Multi-Criteria Analysis in 2019-2021. *Lex Localis - Journal of Local Self-Government*, *22*(2). https://doi.org/10.52152/22.2.243-276
Manfreda, A., & Mijač, T. (2024). Highlighting gaps in technology acceptance research: A call for integrating happiness and well-being into smart city development. *Journal of Innovation & Knowledge*, *9*(4). https://doi.org/10.1016/j.jik.2024.100585
Mayorga, D. J. Z., Basurto, E. M. P., Chango, J. P. P., & Zambrano, L. P. C. (2025). La Planificación Estratégica como Mejora Continua en el Sector Público. *Revista Veritas de Difusão Científica*, *6*(1). https://doi.org/10.61616/rvdc.v6i1.458
Merino, J. A. V., & Chávez, W. E. Z. (2020). La gestión del presupuesto por resultados y la calidad del gasto en gobiernos locales. *Revista Científica Visión de Futuro*, *24*(2). https://visiondefuturo.fce.unam.edu.ar/index.php/visiondefuturo/article/view/442
Meyer, D. F. (Ed.). (2025). *Trends in Emerging Markets, Globalization, Economic Development, Entrepreneurship and Management Strategies as a Result of Cross-Border Cooperation*. MDPI - Multidisciplinary Digital Publishing Institute. https://doi.org/10.3390/books978-3-7258-3808-0
Mohanty, R. K., & Bhanumurthy, N. R. (2021). Assessing public expenditure efficiency at the subnational level in India: Does governance matter? *Journal of Public Affairs*, *21*(2). https://doi.org/10.1002/pa.2173
Morales Rocha, J. L., Lauracio Ticona, T., Coyla Zela, M. A., Ramos Rojas, J. T., Serruto Medina, G., Vargas Torres, N. I., & Zeballos Hurtado, N. J. (2025). Impact of social conflicts and fiscal centralization on fiscal efficiency and governance of subnational governments in Peru, 2016–2023. *Frontiers in Political Science*, *7*. https://doi.org/10.3389/fpos.2025.1451195
Ospina, R., Baltazar, S. G. F., Leiva, V., Figueroa-Zúñiga, J., & Castro, C. (2023). Robust Semi-Parametric Inference for Two-Stage Production Models: A Beta Regression Approach. *Symmetry*, *15*(7). https://doi.org/10.3390/sym15071362
Panda, M., & Nayak, C. (2025). Fiscal Consolidation in the Indian States: A Status Assessment. *Journal of Quantitative Economics*. https://doi.org/10.1007/s40953-025-00462-w
Pereira, T. R., & Miterhof, M. T. (2021). Uma nota sobre a eficiência fiscal das debêntures incentivadas em infraestrutura no Brasil. *Revista Brasileira de Economia*, *75*. https://doi.org/10.5935/0034-7140.20210011
Reis, J., & Melão, N. (2023). Digital transformation: A meta-review and guidelines for future research. *Heliyon*, *9*(1).https://doi.org/10.1016/j.heliyon.2023.e12834
Rethlefsen, M. L., Kirtley, S., Waffenschmidt, S., Ayala, A. P., Moher, D., Page, M. J., Koffel, J. B., Blunt, H., Brigham, T., Chang, S., Clark, J., Conway, A., Couban, R., de Kock, S., Farrah, K., Fehrmann, P., Foster, M., Fowler, S. A., Glanville, J., … PRISMA-S Group. (2021). PRISMA-S: An extension to the PRISMA Statement for Reporting Literature Searches in Systematic Reviews. *Systematic Reviews*, *10*(1). https://doi.org/10.1186/s13643-020-01542-z
Saji, D. R., & Madheswaran, S. (2025). Public expenditure efficiency on health in Indian states: Generalised stochastic frontier approach. *Journal of the Asia Pacific Economy*, 1-24. https://doi.org/10.1080/13547860.2025.2545211
Silva, T. C., Guerra, S. M., & dos Santos, M. V. B. (2022). The role of externalities in fiscal efficiency. *Empirical Economics*, *62*(6). https://doi.org/10.1007/s00181-021-02124-1

Sima, M., Liang, P., & Qingjie, Z. (2023). The impact of fiscal decentralization on economic growth: A comparative analysis of selected African and OECD countries. *Heliyon*, *9*(9). https://doi.org/10.1016/j.heliyon.2023.e19520

Solorzano, Y. C. Z., & Reyes, S. G. S. (2025). Análisis de la planificación presupuestaria en el Gobierno Autónomo Descentralizado Parroquial La Unión. *Polo del Conocimiento*, *10*(2). https://doi.org/10.23857/pc.v10i2.8866

Talero-Sarmiento, L. H., Escobar-Rodríguez, L. Y., Gomez-Avila, F. L., & Parra-Sanchez, D. T. (2024). A literature review on Lean healthcare: Implementation strategies, challenges, and future research directions. *Cogent Engineering*, *11*(1). https://doi.org/10.1080/23311916.2024.2411857

Ticona-Carrizales, L., Condori, S. C., Segales, B. C., Saico, C. R. Y., Campos, V. N. T., & Apaza-Panca, C. M. (2024). Analysis of the results-based budget and its effect on the quality of public expenditure of the national penitentiary institute, Peru. *Journal of Infrastructure, Policy and Development*, *8*(12). https://doi.org/10.24294/jipd.v8i12.6923

Tigua, G. P. C., & Yoza, R. B. Y. (2025). Planificación presupuestaria y eficiencia financiera en el Gobierno Autónomo Descentralizado Parroquial La Unión. *Revista Pulso Científico*, *3*(3). https://doi.org/10.70577/rps.v3i3.77

Tirtosuharto, D. (2022). The impact of fiscal efficiency on poverty reduction in Indonesia: Institutional factor and geographical differences. *Journal of Geographical Systems*, *24*(1). https://doi.org/10.1007/s10109-021-00359-1

Torres-Paredes, M. J., Delgado-Bardales, J. M., & Contreras-Julián, R. M. (2024). Competencias en gestión por procesos para ejecución presupuestal en la Gestión de Servicios de Salud. *Archivo Médico Camagüey*, *28*. https://revistaamc.sld.cu/index.php/amc/article/view/10659

Yi, C., Xu, B., Shi, X., Li, R., & Chen, J. (2025). Exploring the spatial effects of rapid urbanization on land use efficiency in China under Low-Carbon constraints. *Ecological Indicators*, *174*. https://doi.org/10.1016/j.ecolind.2025.113442

Zasko, V., Sidorova, E., Komarova, V., Boboshko, D., & Dontsova, O. (2021). Digitization of the Customs Revenue Administration as a Factor of the Enhancement of the Budget Efficiency of the Russian Federation. *Sustainability*, *13*(19). https://doi.org/10.3390/su131910757