

Budget Execution and Public Spending Quality in Regional Governments: A Systematic Literature Review

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Abstract – The primary aim of this research is to examine the current status of studies on budget execution and its impact on the quality of public expenditure in regional governments. A rigorous systematic literature review (SLR) was conducted, adhering to the guidelines set forth by Kitchenham, focusing on papers published between 2018 and 2023. To facilitate this analysis, renowned digital databases such as ProQuest, Web of Science, Scopus, ScienceDirect, Springer, and EBSCOhost were employed. The findings suggest that the previously selected studies place particular emphasis on the implementation of projects within the public sector, highlighting areas such as education, health, and construction.

Keywords – Budget execution, public spending quality, strategy, implementation, systematic literature review.

1. Introduction

Budget execution and the quality of public spending play fundamental roles in regional governments.

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These factors are essential because, through them, infrastructure is built, public services are provided, and a balanced territorial development is sought to improve the quality of life of the inhabitants. Therefore, the main question is: What is the state of the art of research on budget execution and its impact on the quality of public spending in regional governments? According to study [3], it was determined that the state budget is highly dependent on the oil sector, and that fluctuations in global oil prices have a significant impact on oil revenues and, consequently, on the state budget. From the perspective of [29], policymakers often base their decisions on public investments on the immediate contribution of such investment to the economy. This contribution, in many cases, is limited to the direct employment generated by the project's implementation. Considering [30], some public administration organizations are incorporating innovative approaches for project implementation and adopting matrix organizational structures. Complex interactions between actors with varied interests are identified and challenges in the preparatory phase of public projects are exposed, revealing inefficiencies in institutional arrangements, unsustainable financing, and leadership challenges [39]. As noted by [45], large-scale infrastructure projects, such as dams or oil projects require coordination among multiple contractors who independently operate different subprojects. According to [60], local authorities have the responsibility to promote a conducive environment for the development of Public-Private Partnerships (PPP) and ensure their proper implementation. From the perspective of [63], maintaining a balanced state budget is essential to ensure a prosperous and healthy community. Furthermore, the lack of adequate evaluation and financing tools can compromise fundamental social rights. Citing [64], state budget revenue generation reflects the applied fiscal policy and is essential for effective government. According to [65], performance in asset management significantly impacts the quality of financial statements.

However, budget execution and financial statement disclosure do not appear to have a similar effect. Cities are experiencing unprecedented socioeconomic, demographic, and environmental transformations [72]. Smart Energy Cities (SEC) emerge as an urban development strategy, especially in Europe, highlighting the importance of technological integration and the commitment of the involved actors and dynamic business models for successful implementation and intra and intergenerational equity. Considering [73], measuring progress on the 2030 agenda is essential, and budgets are key tools in this process. Various measures have been proposed to assess their effectiveness in this context. Finally, as [74] states, the quality of budget execution had a notable impact on Vietnam's economic growth between 2011 and 2019, highlighting the role of local government spending and public administration in this growth. Despite the wealth of international studies on the topic, clarity is still lacking in the relationship between budget execution and the quality of public spending in the regional context. Terminological and contextual differences between countries can complicate this understanding.

A systematic review that synthesizes and clarifies these relationships will be invaluable for researchers, professionals, and public sector students in the future. A systematic literature review synthesizing the results of these studies will help clarify the relationship between budget execution and the quality of public spending by regional governments, providing guidance for students, public sector collaborators, and future researchers on the subject. The goal of this systematic review is to determine the state of the art of research on budget execution and its impact on the quality of public spending in regional governments.

2. Methodology

To address this research, we have chosen the methodology proposed by Kitchenham, as presented in [61]. This methodology, widely recognized in the academic field, aims to group and examine pre-existing research, allowing the identification of gaps between previous and more recent studies. The primary purpose of this methodology is to create an orderly and coherent synthesis of the work done and outline a structured and solid research scheme. The different phases and design of this methodology are detailed in Figure 1.

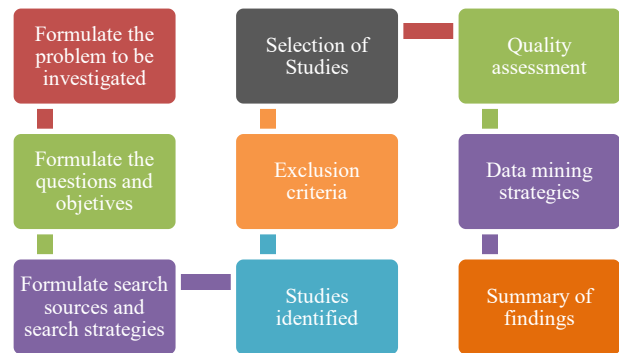


Figure 1. SLR process

2.1. Research Questions and Objectives

In this section, the research questions and objectives are considered. Five specific objectives have been considered, as detailed in Table 1.

Table 1. Research problems and their objectives

Research Questions	Objectives
RQ1: Which authors and countries are the most productive in studies evaluating the impact of budget execution on the quality of public spending in regional governments?	Identify the most productive authors and countries in studies evaluating the impact of budget execution on the quality of public spending in regional governments
RQ2: What is the quartile level of the journals in which studies on the impact of budget execution on the quality of public spending in regional governments have been published?	Determine the quartile level of the journals in which studies on the impact of budget execution on the quality of public spending in regional governments have been published
RQ3: What are the most used words in the keywords and abstracts about the impact of budget execution on the quality of public spending in regional governments?	Find the most used words in the keywords and abstracts about the impact of budget execution on the quality of public spending in regional governments
RQ4: What are the phases of Budget Execution?	Determine the phases of Budget Execution
RQ5: What are the clusters of articles whose conclusions are characterized by high objectivity and low polarity in the research on budget execution and its impact on the quality of public spending in regional governments?	Investigate the clusters of articles whose conclusions are characterized by high objectivity and low polarity in the research on budget execution and its impact on the quality of public spending in regional governments

2.2. Sources and Search Strategies

To locate relevant information for this study, six main databases were consulted: Web of Science, Scopus, ProQuest, Springer, ScienceDirect, and EBSCOhost.

In terms of search strategy, keywords and their pertinent synonyms aligned with the variables under investigation were employed. As a supplement, the Thesaurus portal was used to identify specific synonyms for terms like "budget execution" and "quality of public spending." These synonyms are detailed in Table 2.

Table 2. Search descriptors and their synonyms

Descriptor
Budget execution/ project implementation/ Budget quality of public spending/ quality of state spending + Regional Governments / quality of public funds + Local government

Subsequently, search equations were proposed for each source as shown in Table 3.

Table 3. Search equations by data source

Source	Search Equation
ProQuest	Title ("Budget execution") OR summary ("Project implementation") OR title ("state Budget") OR title("Budget") AND title ("quality of public spending in regional governments") OR abstract ("quality of public funds") OR abstract ("quality of state spending")
Web of science	((Title, Keywords, Abstract: ("Budget execution" OR Title, Keywords, Abstract: ("Project implementation") OR Title, Keywords, Abstract: ("state Budget") OR Title, Keywords, Abstract: ("budget") AND ("quality of public spending in regional governments") OR Title, Keywords, Abstract: ("quality of public funds OR quality of state spending"))
Scopus	((Title, Keywords, Abstract ("Budget execution") OR Title, Keywords, Abstract ("Project implementation") OR Title, Keywords, Abstract ("state Budget") AND (quality of public spending in regional governments) OR Title, Keywords, Abstract (quality of public funds OR quality of state spending))
ScienceDirect	Title, Keywords, Abstract: (("Budget execution" OR "Project implementation" OR "state Budget" OR "Budget") AND (quality of public spending in regional governments OR Quality of public funds OR Quality of state spending))
Springer	Title, Keywords, Abstract (("Budget execution" OR "Project implementation" OR "state Budget" OR "Budget") AND (quality of public spending in regional governments OR quality of public funds OR quality of state spending))
EBSCOhost	((TX "Budget execution" OR TX "Project implementation" OR TX "state Budget" OR TX "Budget") AND TX (quality of public spending in regional governments OR TX quality of public funds OR TX quality of state spending))

2.3. Identified Studies

Figure 2 displays the identified studies.

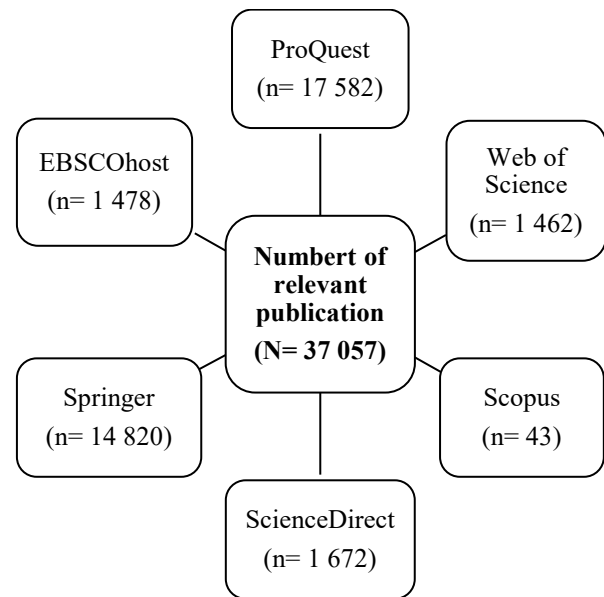


Figure 2. Number of results by source

2.4. Exclusion Criteria

Nine exclusion criteria were applied during the review of the information. These criteria are detailed in Table 4.

Table 4. Exclusion criteria

CE1	The papers are more than 5 years old
CE2	The papers are not written in English
CE3	The papers were not published in Peer-reviewed Conferences or Journals
CE4	The papers are Systematic Reviews
CE5	The titles and keywords of the papers are not very appropriate
CE6	The full text of the paper is not available
CE7	The papers are not unique
CE8	The abstracts of the papers are not very relevant
CE9	The Conferences or Journals are not recognized by Scopus or WoS

Accordingly, after applying the exclusion criteria, the PRISMA diagram is presented. This illustrates the exclusions made at each stage of the selection process. 60 papers were identified that met the defined criteria and are relevant to the current research, as detailed in Figure 3.

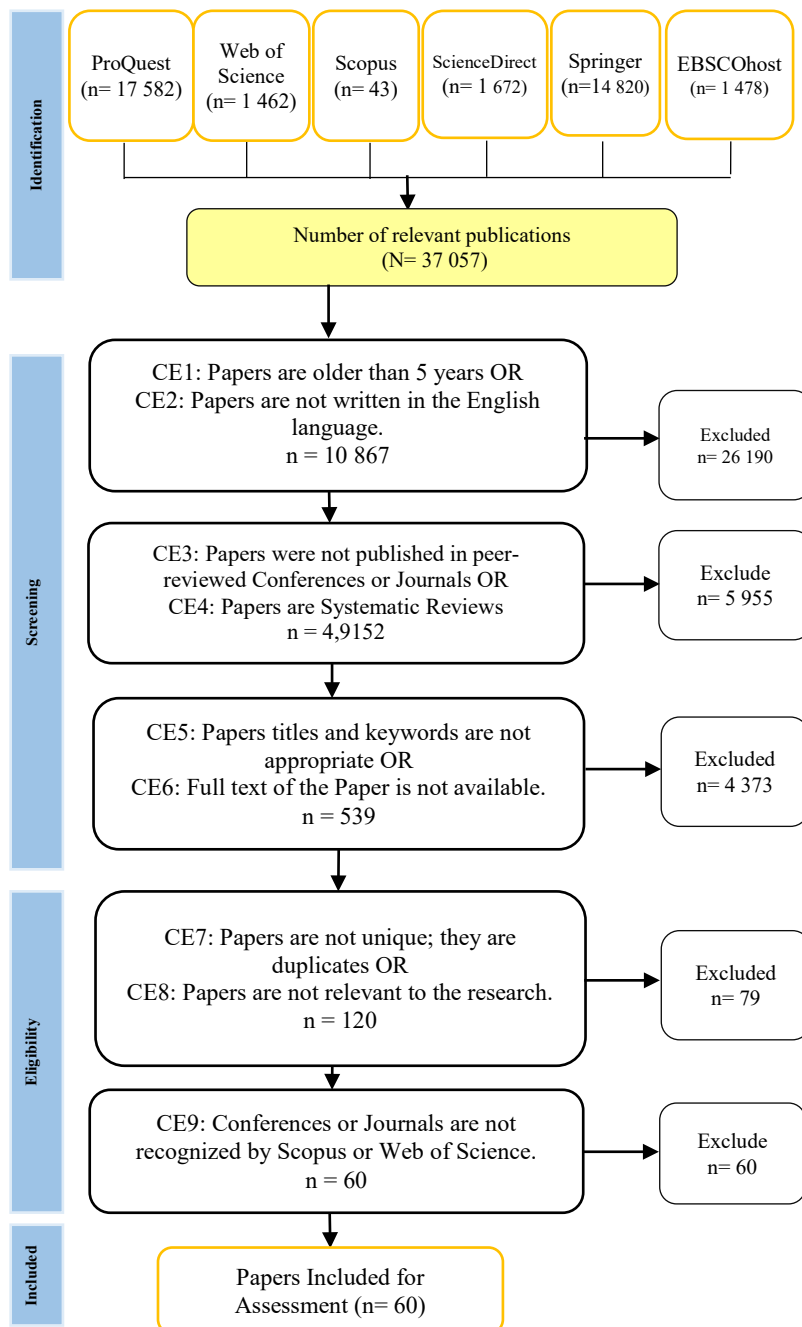


Figure 3. PRISMA chart

The flowchart presents the detailed and systematic process of study selection for the review. It starts with a preliminary search in databases such as ProQuest, Web of Science, Scopus, ScienceDirect, Springer and EBSCOhost, identifying 37057 relevant publications. Through a rigorous set of exclusion criteria, 26190 studies were eliminated for age or for not being in English (EC1 and EC2), 5995 for lack of peer review or because they were existing systematic reviews (EC3 and EC4), and 4373 for inadequacy of titles, keywords or availability (EC5 and EC6). In addition, 79 were discarded for duplicity or irrelevance (SG7 and SG8), and 60 more were published in non-recognized sources (SG9).

At the conclusion of this rigorous process, 60 primary studies were selected for qualitative and quantitative evaluation cited as [1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11], [12], [13], [14], [15], [16], [17], [18], [19], [20], [21], [22], [23], [24], [25], [26], [27], [28], [29], [30], [31], [32], [33], [34], [35], [36], [37], [38], [39], [40], [41], [42], [43], [44], [45], [46], [47], [48], [49], [50], [51], [52], [53], [54], [55], [56], [57], [58], [59], [60]. These papers, which meet the strict inclusion criteria, form a solid basis for further analysis and ensure the quality and completeness of the systematic review.

2.5. Quality Assessment

Each of the 60 selected papers was individually assessed according to seven quality criteria (QA). For each one, the full text was reviewed, and the quality criteria shown in Table 5 were applied.

Table 5. Quality criteria

Quality Criteria	Assmt.
QA1: Are the research objectives clearly identified in the paper?	Yes
QA2: Is there sufficient background information in the paper?	Yes
QA3: Does it explain the context in which the research was conducted?	Yes
QA4: Is the research methodology extensively described?	Yes
QA5: Does the paper employ the data analysis approach correctly?	Yes
QA6: Are the results of the experiments conducted clearly identified and reported?	Yes
QA7: Overall, is the paper considered useful?	Yes

These seven criteria provided a standard that ensures the reliability of the study findings to enrich this review. Each criterion was assessed dichotomously, being rated as "Yes" or "No." It is relevant to highlight that the 60 selected articles fully met these seven quality assessments criteria.

2.6. Data Extraction Strategies

During this phase, data from the 60 studies that are part of the systematic review were extracted. To facilitate the extraction process, the Mendeley tool was used, allowing for the organization, and grouping of all articles by their source.

2.7. Synthesis of Findings

After extracting the information from each study, an in-depth data analysis was conducted to answer each research question.

3. Results and Discussion

After applying the data collection instrument and addressing the previously established research questions, the following results were obtained: These

are divided into two sections: a) general description of the studies, and b) answers to the research questions.

3.1. General Description of the Studies

This section addresses the key findings that were not directly considered in the research questions.

Below is Figure 4, which represents the distribution of the number of citations from the studies over a five-year period.

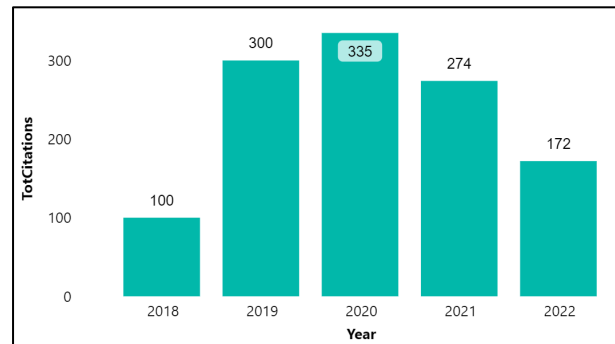


Figure 4. Number of citations per year

As can be seen, the year with the highest number of citations is 2020, accounting for 335 citations. It is followed by the year 2019 with 300 citations. On the other hand, the year with the fewest citations is 2018, recording a total of 100.

The study conducted by the authors in [67] addresses this question in relation to the year factor. However, they consider a longer timeframe from 2011 to 2021.

3.2. Answers to Research Questions

In this section, the results that address the posed research questions are considered:

RQ1: *Who are the most productive authors and countries in research to evaluate the effect of budget execution on the quality of public spending in regional governments?*

Figure 5 displays the production of papers by country as a heatmap.

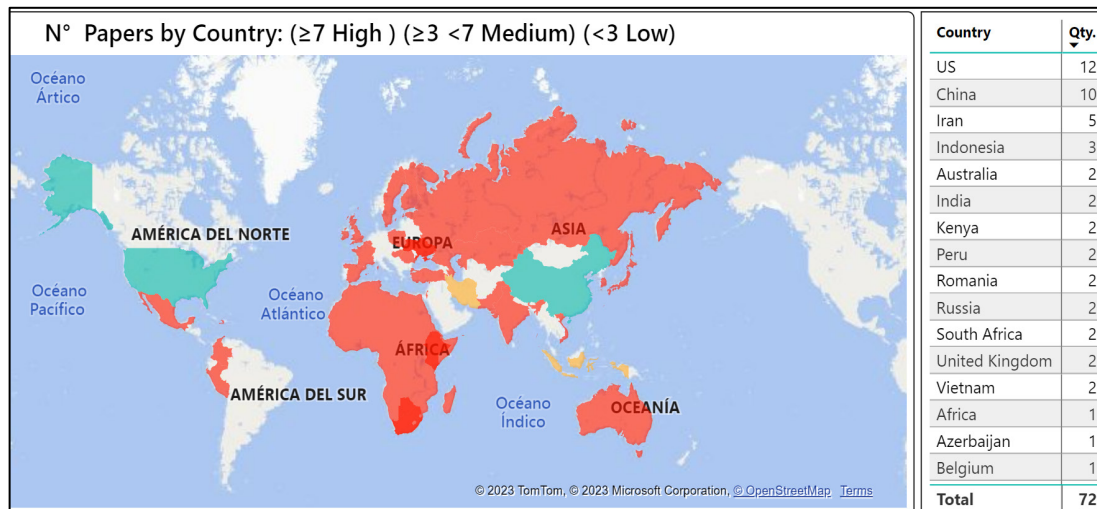


Figure 5. Most productive countries

As evident, the United States leads in terms of productivity, accounting for a total of 12 studies, followed by China with 10.

Conversely, Azerbaijan and Belgium are the least prolific nations, each contributing only one study.

According to study [66], the authors also investigate the most productive countries in this area. They identify Malaysia with 4 studies, the

Philippines with 3, and both India and Indonesia with 3 studies each.

This question helps to understand which countries are focused on publishing papers about the studied variables.

Additionally, the most productive authors are analyzed, with details presented in Table 6.

Table 6. Papers by author and source

Autor	ProQuest	Science Direct	Scopus	Springer	Web of Science	Total
Mohammad Khalilzadeh	1	0	0	0	2	3
Aaron Pinkhasov	1	0	0	0	0	1
Abdullah	0	0	0	0	1	1
Agnes Quisumbing	0	0	0	0	1	1
Ahmad Irsan A. Moeis	1	0	0	0	0	1
Ákos Kengyel	0	0	0	1	0	1
Aldea Marina-Alina	1	0	0	0	0	1
Amanda Eiden	0	1	0	0	0	1
Ana Vaz	0	0	0	0	1	1
Andrew Mulwa	0	0	0	0	1	1
Anita Musiega	0	0	0	0	1	1
Anita Samboma	0	0	0	0	1	1
Aris Ananta	1	0	0	0	0	1
Artur Zhavoronok	1	0	0	0	0	1
Ashkan Hafezalkotob	0	0	0	0	1	1
...
Total	48	10	8	1	16	183

As shown in Table 6, concerning the variables of budget execution and the quality of public spending in regional governments, Mohammad Khalilzadeh is the most productive author with 3 studies.

When comparing with other authors, the question of this research is similar to the study in [62], where they indicate that Semashko and Li are the most prolific authors on this topic based on the year.

It is important to highlight the production by author, as it showcases how many of these authors write on the same topic more than once.

RQ2: *What are the quartile levels of the journals where research on the effect of budget execution on the quality of public spending in regional governments has been published?*

The quartile levels of the journals where the studies have been published are presented in Figure 6.

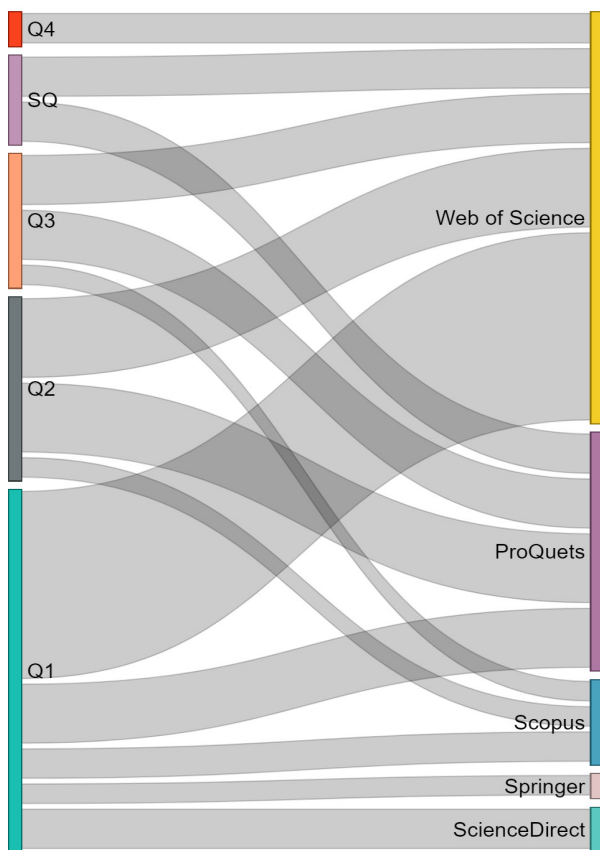


Figure 6. Sankey diagram - quartile levels of journals by year

In this research, journals were categorized into various levels: quartile 1 (Q1), quartile 2 (Q2), quartile 3 (Q3), quartile 4 (Q4), and some without a defined quartile classification. It is worth noting that the majority of the selected articles belong to quartile 1 and mainly come from the Web of Science database. However, articles from ProQuest, Scopus, Springer, and ScienceDirect were also included.

It is essential to emphasize that the articles belonging to Q1 are the most significant, followed by Q2, meaning they are of high quality.

RQ3: What are the most frequently used words in the Keywords and Abstracts concerning the effect of budget execution on the quality of public spending in regional governments?

The most common words in the research keywords are depicted as a word cloud, presented in Figure 7.



Figure 7. Most frequently used words in keywords

As evident from Figure 7, some of the most frequently used keywords include: Machine learning, construction projects, and state budget, among others.



Figure 8. Most frequently used words in abstracts

Upon analyzing the abstracts, as shown in Figure 8, standout terms include: project, implementation, public, and study, among others.

It is worth highlighting the terms: project, implementation, and public, as they are key variables in the current research.

RQ4: What are the phases of Budget Execution?

The phases of budget execution are detailed in Table 7.

Table 7. Phases of budget execution

Stage	Reference	Qty. (%)
Budget Formulation	[3] [29] [39]	3 (5.00)
Budget Execution	[29] [32] [39]	3 (5.00)
Budget Implementation	[29]	1 (1.67)
Budget Evaluation	[5] [30] [45] [60]	4 (6.67)

Regarding the stages of budget execution, the results are shown in Table 9. The stage of budget formulation is mentioned in [3], [29], and [39]. The stage of budget execution is found in [29], [32], and [39]. Meanwhile, budget implementation is only found in [29]. Finally, concerning "budget evaluation", it is mentioned in [5], [30], [45], and [60].

Upon analyzing the reviewed literature, no studies were found that present the phases of budget execution in this way, which could indicate the originality or novelty of this research.

However, it is essential to highlight the importance of identifying the phases of budget execution and determining which articles address them, as this provides indicators about the areas of focus in the existing literature.

RQ5: *What are the Clusters of Articles whose Conclusions are characterized by high Objectivity and low Polarity in the research on budget execution and its influence on the quality of public spending in regional governments?*

Figure 9 displays the reviewed articles as clusters grouped by the objectivity and polarity of their conclusions.

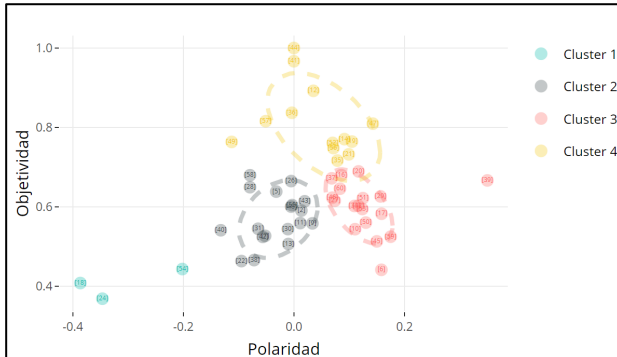


Figure 9. Clusters of papers based on the objectivity and polarity of their conclusions

As shown in the figure, the studies characterized by having conclusions of high objectivity are: [44], [41], [12], [36], [57], [19], and [47]. On the other hand, those studies showing low polarity are: [18], [24], [54], etc.

Finally, it can be asserted that there is an information gap concerning the posed question. Therefore, the current research is novel or one of the first to consider such a question.

4. Conclusions

In this study, a statistical analysis was conducted following the RSL guide to evaluate budget execution and the quality of public spending in regional governments. We assessed 60 articles published between 2018 and 2023 and posed 5 research questions. For the search process, 6 search engines were utilized, with Web of Science yielding the highest number of relevant studies.

Regarding RQ2, it is highlighted that the majority of the reviewed articles fall within quartile 1 and are sourced from Web of Science.

For RQ3, frequently identified keywords include: machine learning, construction projects, and execution strategies, among others. Concerning RQ4, the study (59) from 2020 displayed an objectivity of 1.00 and zero polarity, followed by the study (56) from 2022 with an objectivity of 0.84 and a polarity of 0.02.

It is important to note that this systematic research has its limitations, especially in obtaining government-level information. This study aims to strengthen both conceptual and empirical research regarding budget execution and its impact on the quality of public spending in regional governments.

References:

- [1]. Abrahamson, K., Davila, H., Kirk, L., Garavito, G. A., & Mueller, C. (2021). Can a nursing home psychotropic reduction project be successfully implemented in assisted living?. *Journal of applied gerontology, 40*(9), 1071-1079.
- [2]. Ahmadov, B. (2022). The Impact of Oil Prices on the Capital Expenditures of the State Budget in Azerbaijan. *International Journal of Energy Economics and Policy, 12*(6), 383.
- [3]. Ahmed, F., Shahzad, M., & Ghazanfar, U.. (2021). Factors Affecting The Foreign Funded Projects Implementation in Transition Economies. *Pacific Business Review International, 13*(11).
- [4]. Alekseev, P. N., Udyanskiy, Y. N., & Schepetina, T. D. (2021). Economic Efficiency of Large, Medium, and Small Size NPP Including Construction Stage Risks. *Atomic Energy, 129*, 309-315.
- [5]. Amoah, C., Kajimo-Shakantu, K., & van Schalkwyk, T. (2020). The empirical reality of project management failures in the construction of social housing projects in South Africa. *Journal of Facilities Management, 18*(4), 417-435.
- [6]. Asahara, A., Kawasaki, D., & Yanagihara, S. (2021). Study on strategy construction for dismantling and radioactive waste management at Fukushima Daiichi Nuclear Power Station. *Nuclear Engineering and Design, 374*, 111066.

- [7]. Banihashemi, S. A., Khalilzadeh, M., Shahraki, A., Malkhalifeh, M. R., & Ahmadizadeh, S. S. R. (2021). Optimization of environmental impacts of construction projects: a time–cost–quality trade-off approach. *International Journal of Environmental Science and Technology*, 18, 631-646.
- [8]. Blomster, M., & Koivumäki, T. (2022). Exploring the resources, competencies, and capabilities needed for successful machine learning projects in digital marketing. *Information systems and e-business management*, 20(1), 123-169.
- [9]. Camngca, V. P., Amoah, C., & Ayesu-Koranteng, E. (2024). Underutilisation of information communication and technology in the public sector construction project's implementation. *Journal of Facilities Management*, 22(1), 1-20.
- [10]. Chapel, C. (2022). Impact of official development assistance projects for renewable energy on electrification in sub-Saharan Africa. *World Development*, 152, 105784.
- [11]. He, Z., Liu, C. & Chen, Z. (2020). The financing of local government in China: Stimulus loan wanes and shadow banking waxes. *Journal of Financial Economics*, 137(1).
- [12]. Das, R., Laishram, B., & Jawed, M. (2019). Public participation in urban water supply projects–The case of South-West Guwahati, India. *Water research*, 165, 114989.
- [13]. Wang, T., & Yang, M. H. (2018). Land use and land cover change in China's Loess Plateau: the impacts of climate change, urban expansion and Grain for Green project implementation. *Applied Ecology & Environmental Research*, 16(4).
- [14]. Gitau, O., & Sang, P. (2022). Sustainable project risk and stakeholder management for pension funds projects performance in Kenya. *International Journal of Research in Business and Social Science* (2147-4478), 11(1), 273-282.
- [15]. Gupta, I., Chowdhury, S., & Ranjan, A. (2020). Health investment priorities in India: A new methodology-based analysis of state budgets. *Journal of Health Management*, 22(3), 375-388.
- [16]. Heald, J. (2019). Value for Money in Mexico? Including the Missing Risks in Infrastructure Project Evaluation. *International Journal of Economics and Financial Issues*, 9(4), 60.
- [17]. Hoffman, K. U., & Reese, C. C. (2019). A comparative analysis of periodicity in the Arkansas state budget process. *Journal of Public Budgeting, Accounting & Financial Management*, 31(1), 66-84.
- [18]. Husin, S., Abdullah, A., Riza, M., & Afifuddin, M. (2018). Risk assessment of resources factor in affecting project time. *Advances in Civil Engineering*, 2018.
- [19]. Ivonchuk, M. (2020). Gubernatorial Policy Priorities and State Fiscal Outcomes. *Politics & Policy*, 48(3), 490-524.
- [20]. Jacob, S. (2020). Massification and the public financing of higher education in Haiti: issues and challenges. *International Review of Administrative Sciences*, 86(2), 349-367.
- [21]. Kang, J. N., Wei, Y. M., Liu, L. C., Yu, B. Y., & Liao, H. (2021). A social learning approach to carbon capture and storage demonstration project management: An empirical analysis. *Applied Energy*, 299, 117336.
- [22]. Kellner, E., & Attorps, I. (2020). The school–university intersection as a professional learning arena: Evaluation of a two-year action research project. *Teacher Development*, 24(3), 366-383.
- [23]. Kengyel, Á. (2018). A Neglected Aspect of the Debates on the EU Budget: Duration of the MFF. *Intereconomics*, 53(4), 225-232.
- [24]. Khalilzadeh, M., Masoumi, S., & Masoumi, I. (2019). Identification and prioritization of factors influencing organization risk tolerance level. *Journal of Advances in Management Research*, 16(4), 417-435.
- [25]. Kilić Pamuković, J., Rogulj, K., & Jajac, N. (2020). Assessing the bonitet of cadastral parcels for land reallocation in urban consolidation. *Land*, 10(1), 9.
- [26]. Kocot, M., & Kocot, D. (2022). Determinants of the success of an outsourcing project in the field of IT separations : the experience of companies in the Silesian Voivodeship. *European Research Studies Journal*, 25(1), 208-225.
- [27]. Lavee, D. (2019). The impact of investment in transport infrastructure on employment: the case of Israel. *European Transport*, 74(3), 1-21.
- [28]. Olga, L., & Valeria, T. (2018). Lean team members' selection for public administration organisations. *Voprosy gosudarstvennogo i munitsipal'nogo upravleniya*, (6), 45-64.
- [29]. Li, H., & Guo, Y. (2022). Performance management of university financial budget execution relying on comprehensive budget management strengthening model. *Advances in Multimedia*, 2022, 1-11.
- [30]. Lisinge, R. T., & van Dijk, M. P. (2022). Regional transport infrastructure programmes in Africa: what factors influence their performance?. *Canadian Journal of African Studies/Revue canadienne des études africaines*, 56(1), 99-121.
- [31]. Lucia, C. E., Marina-Alina, A., & Nicola-Mihaela, C. (2021). State Budget. Evidence From Romania. *Journal of Information Systems & Operations Management*, 15(2), 110-127.
- [32]. Malapit, H., Quisumbing, A., Meinzen-Dick, R., Seymour, G., Martinez, E. M., Heckert, J., ... & Team, S. (2019). Development of the project-level Women's Empowerment in Agriculture Index (pro-WEAI). *World development*, 122, 675-692.
- [33]. Martin, L. L. (2019). State public-private partnership (P3) legislation and P3 project implementation: an exploratory investigation. *Journal of Public Procurement*, 19(1), 55-67.
- [34]. Martyniuk, V., Wołowiec, T., & Mieszajkina, E. (2021). Planning and forecasting customs revenues to the state budget : a case study of Ukraine. *European Research Studies Journal*, 24, 648-665.
- [35]. Mauskopf, J., Blake, L., Eiden, A., Roberts, C., Hu, T., & Nyaku, M. (2022). Economic evaluation of vaccination programs: a guide for selecting modeling approaches. *Value in Health*, 25(5), 810-823.

- [36]. Moeis, A. I. A., Djalal Nachrowi, N., Ananta, A., & Adrison, V. (2022). A trade-off between old-age financial adequacy and state budget sustainability: Searching a government optimum solution to the pension system in Indonesia. *Cogent Economics & Finance*, 10(1), 2079176.
- [37]. Liu, C., Cao, J., Wu, G., Zhao, X., & Zuo, J. (2022). How does network position influence project performance in Chinese megaprojects? An inter-organizational conflict-based perspective. *International Journal of Conflict Management*, 33(3), 448-474.
- [38]. Nguyen, H. T. (2021). Forecast The Reasonable Scale Of State Budget Collection In Vietnam In The Period Of 2021-2025, Orientation To 2030. *Academy of Strategic Management Journal*, 20, 1-8.
- [39]. Nyawira, L., Mbau, R., Jemutai, J., Musiega, A., Hanson, K., Molyneux, S., ... & Barasa, E. (2021). Examining health sector stakeholder perceptions on the efficiency of county health systems in Kenya. *PLoS Global Public Health*, 1(12), e0000077.
- [40]. Oinarov, A. R., Eshimova, D., & Adilbekova, B. (2019). Public policy on public-private project financing in Kazakhstan. *Journal of Asian Public Policy*, 12(2), 228-256.
- [41]. Pinkhasov, A., Singh, D., Chavali, S., Legrand, L., & Calixte, R. (2019). The impact of designated behavioral health services on resource utilization and quality of care in patients requiring constant observation in a general hospital setting: a quality improvement project. *Community Mental Health Journal*, 55, 31-37.
- [42]. Piri, L., Ghezavati, V., & Hafezalkotob, A. (2020). Developing a new model for simultaneous scheduling of two grand projects based on game theory and solving the model with Benders decomposition. *Frontiers of Engineering Management*, 1-18.
- [43]. Raicu, S., Costescu, D., Popa, M., & Rosca, M. A. (2019). Including negative externalities during transport infrastructure construction in assessment of investment projects. *European Transport Research Review*, 11(1), 24.
- [44]. Rajbhandari, P., Auron, M., Worley, S., & Marks, M. (2021). Improving documentation of inpatient problem list in electronic health record: a quality improvement project. *Journal of Patient Safety*, 17(8), e1371-e1375.
- [45]. Raudla, R., & Douglas, J. W. (2022). Austerity and budget execution: control versus flexibility. *Journal of Public Budgeting, Accounting & Financial Management*, 34(2), 292-309.
- [46]. Rezaei, M., Atikol, U., & Özdenefe, M. (2020). Promotion of Trombe wall through demand-side management. *Solar Energy*, 206, 216-227.
- [47]. Rocha, J. L. M., Zela, M. A. C., Torres, N. I. V., Rojas, J. T. R., Mamani, D. Q., & Frias, J. O. H. (2020). Level of Budget Execution According to the Professional Profile of Regional Governors Applying Machine Learning Models. *International Journal of Advanced Computer Science and Applications*, 11(11).
- [48]. Shkarlet, S., Dubyna, M., Hrubliak, O., & Zhavoronok, A. (2019). Theoretical and applied provisions of the research of the state budget deficit in the countries of Central and Eastern Europe. *Revista »Administratie si Management Public« (RAMP)*, (32).
- [49]. Samboma, T. A. (2022). Project implementation in local authorities: The Botswana context. *Journal of Public Affairs*, 22(4), e2610.
- [50]. Saragih, L. R., Dachyar, M., & Zagloel, T. Y. M. (2021). Implementation of telecommunications cross-industry collaboration through agile project management. *Heliyon*, 7(5).
- [51]. Sawasdipakdi, P. (2021). Thailand's Engagement with China's Belt and Road Initiative: Strong Will, Slow Implementation. *Asian Perspective*, 45(2), 349-374.
- [52]. Senbeta, F. M., & Shu, Y. (2019). Project implementation management modalities and their implications on sustainability of water services in rural areas in Ethiopia: Are community-managed projects more effective?. *Sustainability*, 11(6), 1675.
- [53]. Stojanovic, D., Young, C., Troy, S., & Heinsohn, R. (2020). Evaluation of intervention aimed at improving reproductive success in Orange-bellied Parrots *Neophema chrysogaster*: Lessons, barriers and successes. *Ecological Management & Restoration*, 21(3), 205-210.
- [54]. Van Tam, N., Diep, T. N., Quoc Toan, N., & Le Dinh Quy, N. (2021). Factors affecting adoption of building information modeling in construction projects: A case of Vietnam. *Cogent Business & Management*, 8(1), 1918848.
- [55]. Wang, Y., Liu, Y., & Canel, C. (2018). Process coordination, project attributes and project performance in offshore-outsourced service projects. *International Journal of Project Management*, 36(7), 980-991.
- [56]. Yang, F., Li, J., Wang, Y., Guo, S., & Lei, H. (2022). Spatial Characteristics and Driving Factors of Public-Private Partnership Projects Implemented in China. *Buildings*, 12(6), 768.
- [57]. Yonto, D., Issel, L. M., & Thill, J. C. (2019). Spatial analytics based on confidential data for strategic planning in urban health departments. *Urban Science*, 3(3), 75.
- [58]. Yuan, D., Yau, Y., Hou, H., & Liu, Y. (2021). Factors influencing the project duration of urban village redevelopment in contemporary China. *Land*, 10(7), 707.
- [59]. Zhang, Y., Gao, P., Zhang, J., & Lu, L. (2020). Effect of authoritarian leadership on user resistance to change: evidence from IS project implementation in China. *Industrial Management & Data Systems*, 120(10), 1813-1834.
- [60]. Zohrehvandi, S., Vanhoucke, M., & Khalilzadeh, M. (2020). A project buffer and resource management model in energy sector; a case study in construction of a wind farm project. *International Journal of Energy Sector Management*, 14(6), 1123-1142.

- [61]. Kitchenham, B. (2004). *Procedures for Undertaking Systematic Reviews. Joint Technical Report, Computer Science Department*. Australia: Keele University and National ICT Australia Technical Report 0400011T.
- [62]. Onofrei, M., Cigu, E., Gavriluta, A. F., Bostan, I., & Oprea, F. (2021). Effects of the covid-19 pandemic on the budgetary mechanism established to cover public health expenditure. A case study of Romania. *International Journal of Environmental Research and Public Health*, 18(3), 1134.
- [63]. Marushchak, L., Pavlykivka, O., & Oleksandra, K. (2020). Managerial Tools Used To Regulate Of The State Budget Resources In Context of Human Right Social Protection. *Cogito- Multidisciplinary Research Journal*, 12(3).
- [64]. Shkolnyk, I., Kozmenko, S., Drahosov, J., Kozmenko, O., & Aldiwani, K. (2021). State budget revenue optimization using the simplex method. *Journal of International Studies*, 14(2).
- [65]. Kaharrukmi, D., & Adli, A. (2022). The Effect of Budget Execution Performance and Asset Management Performance on the Quality of Financial Statements Moderated By Disclosure of Financial Statements (Empirical Study on Ministry of Public Works and Housing). *Saudi J Econ Fin*, 6(3), 87-97.
- [66]. Osei-Kyei, R., Chan, A. P., Dansoh, A., Ofori-Kuragu, J. K., & Owusu, E. K. (2018). Motivations for adopting unsolicited proposals for public-private partnership project implementation: a survey of international experts. *Journal of Financial Management of Property and Construction*, 23(2), 221-238.
- [67]. Abas, A., Arifin, K., Ali, M. A. M., & Khairil, M. (2023). A systematic literature review on public participation in decision-making for local authority planning: A decade of progress and challenges. *Environmental Development*, 100853.