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TAX COLLECTION EFFICIENCY IN PUBLIC ADMINISTRATION: A BIBLIOMETRIC AND SCIENCE-MAPPING ANALYSIS OF CONCEPTS, MEASURES, AND THEORETICAL FOUNDATIONS


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Abstract:

This study examines how scholarly research on tax collection efficiency in public administration has evolved using bibliometric and science-mapping techniques. It focuses on how the field is conceptualised, how efficiency is measured, and which theories are most frequently used. The topic is increasingly crucial for revenue administration, fiscal sustainability, and public-sector performance. Nevertheless, existing work is spread across tax administration, public finance, governance, compliance, and digital transformation. To address this fragmentation, the article maps the field's development, influence, main themes, and patterns of international collaboration. Accordingly, data were retrieved from the Scopus database for 299 English-language journal articles published between 2000 and 2026 using a TITLE-ABS-KEY search string that combined terms such as "tax administration efficiency," "public administration," and "tax collection performance." After screening by language, subject area, and publication year, the dataset was analysed using Scopus Analyser, OpenRefine, and VOSviewer. The results reveal slow growth in publications between 2000 and 2010, followed by a marked increase after 2020, with the highest annual outputs recorded between 2021 and 2025. Citation analysis highlights a small group of highly cited articles, while keyword co-occurrence analysis reveals dominant themes such as tax revenue, tax administration, tax compliance, corruption, revenue administration, tax reform, efficiency, and Information and Communication Technology (ICT). Meanwhile, country-level co-authorship analysis indicates that

the United States (US) contributes the most documents, while the United Kingdom (UK) has the highest citation impact. Overall, the study indicates that tax collection efficiency is a multidimensional and interdisciplinary research domain shaped by administrative capacity, governance quality, digitalisation, compliance behaviour, and performance measurement. It also offers a structured knowledge base for future work on efficient and technology-enabled revenue administration.

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Tax Collection Efficiency; Revenue Administration; Tax Compliance; Public Administration; Bibliometric Analysis; Science Mapping



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Introduction

Tax collection efficiency has emerged as a central concern of revenue administrations as governments seek to mobilise more domestic revenue without imposing excessive burdens on taxpayers or the administration. Efficiency focuses on raising more revenue at a reasonable cost, in a fair way, and in ways that sustain voluntary compliance over time. Recent research links tax administration performance to wider goals such as fiscal stability, economic development, and the quality of the relationship between the state and citizens (Martínez et al., 2022; Sahari et al., 2021; Tang et al., 2024; Yan et al., 2022).

Within this context, tax collection efficiency sits at the intersection of tax administration, public finance, governance, and public management. It is affected by legal and institutional frameworks, organisational capacity, service quality, digital systems, and taxpayer attitudes toward the state (Kirchler et al., 2014; Martínez et al., 2022; Mitu & Mitu, 2024; Sahari et al., 2021; Tang et al., 2024; Yan et al., 2022). As governments modernise their revenue systems and invest in digital technologies, they increasingly view tax collection efficiency as both a technical and governance issue that shapes trust, compliance, and legitimacy.

Conceptually, tax collection efficiency is now viewed as a multidimensional construct that goes beyond simple revenue outcomes. Frameworks developed for land tax administration, national tax systems, and regional case studies highlight a mix of administrative, compliance, human resource management, monitoring and evaluation, law enforcement, leadership style, use of ICT, and tax reforms as key drivers of efficiency (Sahari et al., 2021). Other authors also emphasise principles such as transparency, stability of tax policy, simplicity, and alignment with development goals as important conditions for an efficient tax system (Martínez et al.,

2022; Tang et al., 2024; Yan et al., 2022). In this view, tax administration performance is the ability to deliver core tasks such as assessment, collection, enforcement, and taxpayer service with the minimum necessary resources, while maintaining fairness and accountability (Martínez et al., 2022; Mitu & Mitu, 2024).

The literature uses a range of measures to capture tax collection efficiency. Some studies rely on simple ratios that compare actual collections with potential tax bases or with Gross Domestic Product (GDP). In contrast, others use composite indicators or frontier methods, such as Data Envelopment Analysis (DEA), to assess relative efficiency across jurisdictions (Martínez et al., 2022; Mitu & Mitu, 2024). Many empirical studies link these measures to determinants such as administrative reforms, ICT adoption, institutional quality, taxpayer education, and levels of corruption (Apeti & Edoh, 2023; Mallick, 2021; Martínez et al., 2022; Mascagni et al., 2021; Sahari et al., 2021; Yan et al., 2022).

Despite this progress, existing measures are often developed for specific contexts or programmes, and they use different definitions, variables, and data sources. As a result, it remains challenging to compare findings across countries or to build a cumulative understanding of how tax collection efficiency should be measured in public administration.

Furthermore, research on tax collection efficiency draws on both deterrence-based and non-deterrence-based theories. Classical economic models emphasise audit probabilities, penalties, and expected utility, linking higher detection risk and stronger sanctions to improved compliance and revenue performance (Bezerra et al., 2024; Hallsworth, 2014; Misra, 2019; Slemrod, 2018). However, a large body of work suggests that deterrence explains only a fraction of observed compliance; psychological, social, and institutional factors play a substantial role (Hallsworth, 2014; Kirchler et al., 2014; Misra, 2019). Systematic reviews of non-deterrence determinants identify tax service quality and trust in government as especially powerful drivers of compliance, exceeding the impact of personal norms, social norms, and religiosity (Dularif & Rustiarini, 2021). In addition, empirical work in Ethiopia highlights that government trust, tax knowledge, perceived fairness, and rewards significantly increase voluntary compliance, while high compliance costs reduce it (Mebratu, 2024). On a similar note, integrative frameworks, such as the “slippery slope” model and tax morale approaches, argue that enforced compliance (based on authority power) and voluntary cooperation (based on trust and perceived legitimacy) jointly shape compliance behaviour (Gobena, 2017; Kornhauser, 2022). Cooperative compliance strategies and innovations in enforcement, facilitation, and trust-building are thus framed as complementary investments. Such initiatives can expand the base of quasi-voluntary compliance and improve efficiency by reducing the need for costly coercion (Bezerra et al., 2024; Prichard et al., 2019).

Building on these insights, recent literature connects institutional design, digital transformation, and governance quality to tax collection efficiency. Studies in the Organisation for Economic Cooperation and Development (OECD) countries reveal that fiscal decentralisation, appropriate tax structure (for example, balance between direct and indirect taxes), simplification, digitalisation, and taxpayer education can substantially improve the technical efficiency of collection (Kirchler et al., 2014; Martínez et al., 2022). Digital tools such as big data, Artificial Intelligence (AI), online platforms, and e-filing are highlighted as mechanisms to reduce collection costs, improve processing speed, support risk-based audits, and facilitate taxpayer services. This is evident in “governing taxation by numbers” initiatives

and African and Asian reform experiences (Milosavljević et al., 2024; Tang et al., 2024; Yan et al., 2022). At the same time, research on developing and less-developed regions emphasises that weak economic bases, limited administrative capacity, and fragmented regulations can constrain efficiency gains, underscoring the need for context-specific frameworks and reforms (Gobena, 2017; Misra, 2019). Conceptual and empirical work converges on the view that efficient revenue administration rests on an integrated package: clear legal rules, robust organisational and information systems, strategic use of enforcement, high-quality services, and deliberate trust-building with taxpayers. Studies on digitalisation and e-government also provide important theoretical insights by linking tax collection efficiency to technological innovation, information systems, and public-sector transformation (Senthil Priya & Mathiyalagan, 2011; Tang et al., 2024; Yan et al., 2022). Together, these perspectives imply that tax collection efficiency is shaped by administrative capacity, governance quality, taxpayer behaviour, and the design of digital systems.

In conclusion, although interest in tax collection efficiency has grown, the literature remains fragmented across tax compliance, public finance, governance, development, and digital transformation. Most studies focus on specific countries, reforms, or technologies, and they rarely use the explicit terms “tax collection efficiency” or “tax administration efficiency” as central keywords. To date, there is no comprehensive bibliometric and science-mapping study that systematically organises research on tax collection efficiency in public administration, including its core concepts, measurement approaches, and theoretical foundations.

This study addresses that gap using bibliometric and science-mapping techniques to analyse publication trends, influential articles, dominant keywords and themes, and patterns of international collaboration on tax-collection efficiency in public administration. Concurrently, it provides a structured overview of how the field has developed and offers a knowledge base to support future research and policy on efficient, accountable, and technology-enabled revenue administration.

Research Question

Four research questions guide this study:

1. RQ1: How has scholarly research on tax collection efficiency in public administration evolved over time in terms of publication growth and temporal distribution from 2000 to 2026?
2. RQ2: What are the most influential scholarly articles on tax collection efficiency in public administration based on citation impact, and what do they reveal about the intellectual foundations of the field?
3. RQ3: What are the dominant keywords, thematic patterns, and emerging research themes in tax collection efficiency research within public administration?
4. RQ4: What patterns of international research collaboration and country-level knowledge production emerge from co-authorship networks in tax collection efficiency research within public administration?

Methodology

This study uses a bibliometric analysis to systematically review research on tax collection efficiency. Bibliometric analysis involves collecting, organising, and examining bibliographic data from peer-reviewed publications to identify patterns in a field (Alves et al., 2021; Assyakur & Rosa, 2022; Verbeek et al., 2002). Beyond simple counts of publications and citations, bibliometric techniques enable mapping the intellectual structure of a research domain through indicators such as author prominence, citation impact, and co-tation networks (Wu & Wu, 2017).

A rigorous bibliometric review requires an iterative process of keyword refinement, careful database searching, and systematic analysis of the retrieved records (Fahimnia et al., 2015). In line with this approach, the present study focuses on high-impact journal articles that contribute to the theoretical and conceptual understanding of tax collection efficiency (Al-Khoury et al., 2022; di Stefano et al., 2010; Khiste & Paithankar, 2017). To ensure data accuracy and consistency, Scopus was designated as the primary retrieval database. In adherence to scholarly rigour, the corpus was restricted exclusively to peer-reviewed journal articles, with books and conference lecture notes systematically excluded (Gu et al., 2019). On a similar note, publications from Elsevier's Scopus database, widely recognised for its comprehensive disciplinary coverage, were retrieved for subsequent bibliometric analysis from 2000 to 2026.

Data Search Strategy

The data search strategy was implemented in Scopus to retrieve publications on tax collection efficiency in revenue administration. As summarised in Table 1, the search string was applied to the title, abstract, and keywords using the Scopus TITLE-ABS-KEY function. The search terms included key phrases related to tax collection and revenue administration, namely "tax collection efficiency," "tax administration efficiency," "revenue administration," "tax collection performance," "tax administration performance," "tax revenue collection," and "tax revenue efficiency." These keywords were selected to capture studies that discuss tax collection efficiency from different yet closely related perspectives, including administrative efficiency, revenue collection performance, and tax revenue outcomes. The search was limited to publications from 2000 to 2026 to ensure that the dataset reflects contemporary developments in tax and revenue administration. This is particularly true in the growing emphasis on performance, efficiency, digitalisation, and administrative reform. In addition, only English-language publications were included to ensure consistency in bibliometric processing and interpretation. Based on this search strategy, a final dataset of 299 documents was retrieved from Scopus.

A screening process was then applied to refine the dataset and ensure its relevance to the scope of the bibliometric analysis. As presented in Table 2, the inclusion criteria focused on three main aspects: language, subject area, and publication year. First, only English-language publications were retained, while non-English documents were excluded. Second, the search was restricted to four subject areas: Economics, Econometrics and Finance; Social Sciences; Business, Management and Accounting; and Computer Science. These subject areas were likely selected due to the fact that they are closely aligned with the study's focus on tax collection efficiency, revenue administration, public-sector performance, governance, and the digital or technological dimensions of tax systems. However, publications from other subject

areas were excluded to avoid including studies that were less relevant to the review's conceptual and analytical boundaries. Third, the review covered publications from 2000 to 2026, while studies published before 2000 were excluded. This screening process ensured that the final dataset was sufficiently focused, recent, and relevant for examining the development of knowledge on tax collection efficiency. This includes its concepts, measures, and theoretical foundations.

Table 1: The Search String

Scopus	TITLE-ABS-KEY ("tax collection efficiency" OR "tax administration efficiency" OR "revenue administration" OR "tax collection performance" OR "tax administration performance" OR "tax revenue collection" OR "tax revenue efficiency") AND PUBYEAR > 1999 AND PUBYEAR < 2027 AND (LIMIT-TO (SUBJAREA , "ECON") OR LIMIT-TO (SUBJAREA , "SOCI") OR LIMIT-TO (SUBJAREA , "BUSI") OR LIMIT-TO (SUBJAREA , "COMP")) AND (LIMIT-TO (LANGUAGE , "English"))
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Table 2: The Search Selection Criteria

Criterion	Inclusion	Exclusion
Language	English	Non-English
Subject	Economics, Econometrics and Finance, Social Sciences, Business Management and Accounting, Computer Science	Others
Year	2000-2026	<2000

Data Analysis

The study used Scopus Analyser to examine descriptive indicators, including annual publication trends, leading journals, and citation counts. For science-mapping, the cleaned data were imported into VOSviewer version 1.6.20, a software package designed for building and visualising bibliometric networks (van Eck & Waltman, 2010, 2017).

VOSviewer was used to create maps based on co-authorship, citations, co-citations, bibliographic coupling, and keyword co-occurrence. These maps enable the identification of clusters of related authors, documents, countries, and concepts, as well as the visualisation of the field's main themes and collaborative structures. Compared with traditional Multidimensional Scaling (MDS), VOSviewer uses a Visualisation of Similarities (VOS) approach and normalisation procedures that are well suited to co-occurrence data (Appio et al., 2014; van Eck & Waltman, 2010).

In this study, bibliographic data comprising publication year, article title, author names, source titles, citation counts, and author keywords were retrieved from the Scopus database in plain-text format. The dataset covered publications from 2000 to 2026 and was analysed using VOSviewer version 1.6.20. The software was employed to generate and analyse bibliometric

maps using VOS mapping and clustering techniques. Unlike conventional MDS, VOSviewer positions items in a low-dimensional space in which the distance between two items reflects the strength of their relatedness (van Eck & Waltman, 2010). Although VOS shares conceptual similarities with MDS (Appio et al., 2014), it differs methodologically by applying normalisation procedures that are particularly suitable for co-occurrence data. In this regard, the Association Strength (AS_{ij}) between items i and j is calculated as follows (van Eck & Waltman, 2007):

$$AS_{ij} = \frac{C_{ij}}{W_i W_j}$$

Association strength captures the extent to which the observed co-occurrence of items i and j exceeds the level expected if the two items were statistically independent, thereby providing a normalised indicator of their relatedness (Van Eck & Waltman, 2007).

Result and Discussion

Four research questions are discussed in this section.

RQ1: How Has Scholarly Research on Tax Collection Efficiency in Public Administration Evolved Over Time in Terms of Publication Growth and Temporal Distribution From 2000 To 2026?

The publication trend suggests that research on tax collection efficiency in public administration developed slowly during the early period from 2000 to 2010, with annual publications generally ranging from one to five documents, except for a small rise in 2011. This indicates that the topic was still relatively underdeveloped as a distinct research area during the first decade of the review period. Accordingly, studies on taxation were more likely to be framed around broader issues such as tax compliance, fiscal policy, public finance, or revenue mobilisation, rather than specifically focusing on tax collection efficiency, measurement, and administrative performance. This pattern is displayed in Figure 1, which charts the annual number of publications on tax collection efficiency in public administration from 2000 to 2026. From 2011 onwards, the number of publications gradually increased, reflecting growing academic attention to tax authority performance, public-sector reform, governance quality, and the need for more effective revenue-collection systems. The period from 2011 to 2019 marked the emergence of tax collection efficiency as a prominent research theme in public administration, even though annual output remained moderate. Table 3 summarises the number and percentage of publications per year, confirming that early output was low, though it began to rise from 2011 onwards.

A stronger growth pattern is observed from 2020 onwards, with publication output increasing substantially compared with earlier years. The period 2021 to 2025 represents the most active phase, with particularly high publication counts in 2021 (31 publications, 10.37%), 2022 (22 publications, 7.36%), 2023 (32 publications, 10.70%), 2024 (35 publications, 11.71%), and 2025 (39 publications, 13.04%). This sharp increase can be linked to the growing importance of efficient revenue administration in response to digital transformation, post-pandemic fiscal pressures, government revenue needs, tax system modernisation, and the expansion of data-

driven public administration (Mallick, 2021; Martínez et al., 2022; Mascagni et al., 2021; Tang et al., 2024; Yan et al., 2022). During this period, governments and scholars increasingly recognised that tax collection efficiency is not merely a technical issue. Rather, they also constitute a governance, institutional, technological, and performance-management issue.

The decline in 2026 (20 publications, 6.69%) should be interpreted with caution, as the year may still be incomplete depending on the date of data extraction. Overall, the trend suggests that tax collection efficiency has evolved from a marginal topic into a growing interdisciplinary research area, particularly after 2020. This is likely driven by the need for more accountable, technology-enabled, and performance-oriented revenue administration systems.

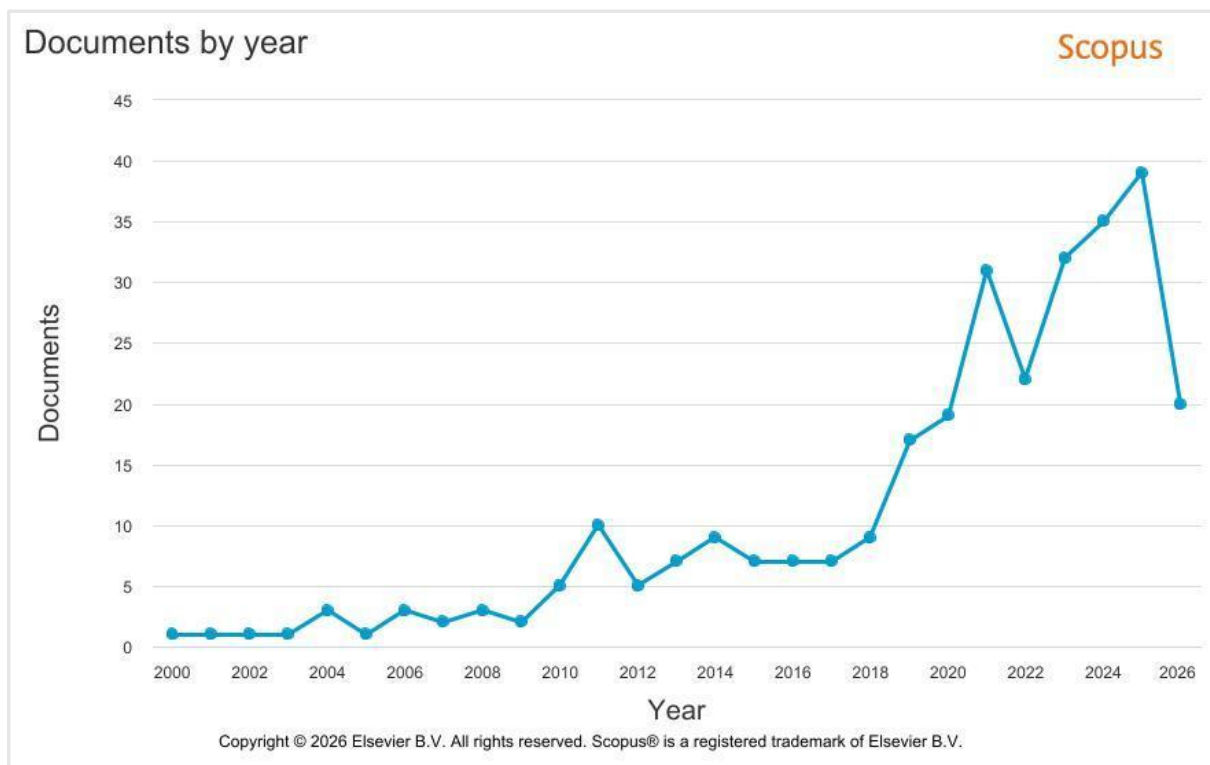


Figure 1: Annual Number of Publications on Tax Collection Efficiency in Public Administration, 2000-2026

Table 3: Number And Percentage of Publications by Year, 2000-2026

Year	Number of Publications	Percentage (%)
2026	20	6.69
2025	39	13.04
2024	35	11.71
2023	32	10.70
2022	22	7.36
2021	31	10.37
2020	19	6.35
2019	17	5.69

2018	9	3.01
2017	7	2.34
2016	7	2.34
2015	7	2.34
2014	9	3.01
2013	7	2.34
2012	5	1.67
2011	10	3.34
2010	5	1.67
2009	2	0.67
2008	3	1.00
2007	2	0.67
2006	3	1.00
2005	1	0.33
2004	3	1.00
2003	1	0.33
2002	1	0.33
2001	1	0.32
2000	1	0.32

RQ2: What Are the Most Influential Scholarly Articles on Tax Collection Efficiency in Public Administration Based on Citation Impact, And What Do They Reveal About the Intellectual Foundations of The Field?

As indicated in Table 4, the citation profile indicates that the most influential works in the dataset are not limited to narrowly defined tax-collection efficiency studies. It also includes broader contributions from development studies, governance, digital transformation, and public administration. The most cited article by Ellis and Freeman (2004), with 289 citations, focuses on rural livelihoods and poverty reduction in African countries. Although it is not directly centred on tax administration, its strong citation performance suggests that broader development and public finance issues remain closely linked to discussions of revenue generation, poverty reduction, and state capacity. Similarly, this includes works such as Talbot (2007), who examined the colonial Punjab, and Senthil Priya and Mathiyalagan (2011), who studied e-governance in land revenue administration. This literature indicates that tax collection efficiency is interdisciplinary, drawing from historical, institutional, governance, and digital public administration perspectives (Senthil Priya & Mathiyalagan, 2011; Talbot, 2007). Likewise, this pattern suggests that tax collection efficiency is not treated merely as a technical fiscal matter. Instead, it is part of a wider administrative and developmental system shaped by governance structures, institutional capacity, and state-society relations. Although these studies are not always labelled as tax collection efficiency articles, they address revenue administration, governance, or digital innovation, which are central to efficient tax collection (Ellis & Freeman, 2004; Senthil Priya & Mathiyalagan, 2011; Talbot, 2007).

More recent highly cited articles demonstrate a clear shift towards technology, governance quality, and administrative reform as key drivers of tax and revenue performance. For example, Apeti and Edoh (2023) received 82 citations despite being a very recent publication. This

indicates a strong academic interest in the relationship between mobile money and tax revenue in developing countries (Apeti & Edoh, 2023). On a similar note, Mascagni, Mengistu, and Woldeyes (2021) and Mallick (2021) underscored the growing significance of ICT infrastructure, digital innovation, and taxpayer responses in strengthening compliance and revenue mobilisation (Mallick, 2021; Mascagni et al., 2021). Moreover, the presence of Martínez et al. (2022) is particularly relevant as it directly addresses tax collection efficiency and identifies decentralisation, simplification, digitalisation, and education as mechanisms for improving performance in OECD countries (Martínez et al., 2022). Overall, Table 4 suggests that the most cited literature reflects two major intellectual directions: first, the foundational role of governance, institutions, and administrative capacity. Second, the emerging importance of digitalisation and technological innovation in modern revenue administration. This supports the argument that tax collection efficiency has evolved into a multidimensional research domain involving public administration, economics, digital governance, and institutional reform.

Table 4: Most Cited Articles

No.	Authors	Title	Year	Source title	Cited by
1	Ellis & Freeman (2004)	Rural livelihoods and poverty reduction strategies in four African countries	2004	Journal of Development Studies	289
2	Apeti & Edoh (2023)	Tax revenue and mobile money in developing countries	2023	Journal of Development Economics	82
3	Job et al. (2007)	Culture change in three taxation administrations: From command-and-control to responsive regulation	2007	Law and Policy	74
4	Mascagni et al. (2021)	Can ICTs increase tax compliance? Evidence on taxpayer responses to technological innovation in Ethiopia	2021	Journal of Economic Behaviour and Organisation	54
5	Talbot (2007)	The Punjab under colonialism: Order and transformation in British India	2007	Journal of Punjab Studies	46
6	Arif & Rawat (2018)	Corruption, governance, and tax revenue: Evidence from EAGLE countries	2018	Journal of Transnational Management	43

7	Senthil Priya & Mathiyalagan (2011)	A study of the implementation status of two e-governance projects in land revenue administration in India	2011	Stakeholder Adoption of E-Government Services: Driving and Resisting Factors	35
8	Martínez et al. (2022)	Tax collection efficiency in OECD countries improves via decentralisation, simplification, digitalisation, and education	2022	Journal of Policy Modeling	35
9	Mallick (2021)	Do governance quality and ICT infrastructure influence the tax revenue mobilisation? An empirical analysis for India	2021	Economic Change and Restructuring	34
10	Lewis (2006)	Local government taxation: An analysis of administrative cost inefficiency	2006	Bulletin of Indonesian Economic Studies	34

RQ3: What Are the Dominant Keywords, Thematic Patterns, And Emerging Research Themes Related to The Conceptualisation, Measurement, And Theoretical Foundations of Tax Collection Efficiency in Public Administration?

As presented in Figure 2, the keyword co-occurrence network indicates that the literature on tax collection efficiency is strongly centred on the broader concepts of tax revenue, tax administration, and tax compliance. The most frequently occurring keyword is tax revenue, with 31 occurrences and a total link strength of 27, followed closely by tax administration, with 30 occurrences and a total link strength of 32. This suggests that tax collection efficiency is most commonly discussed within the wider context of how tax authorities administer, collect, and manage public revenue. In particular, the strong link strength of tax administration implies that it serves as a central connecting concept across research themes, linking discussions of revenue performance, compliance behaviour, reform, policy, governance, and administrative capacity. Meanwhile, tax compliance records 19 occurrences and a total link strength of 23, indicating that compliance remains a crucial mechanism for understanding tax collection efficiency. This pattern is reasonable since efficient tax collection depends on both administrative systems and taxpayers' willingness and ability to comply with tax obligations.

Figure 2 also indicates that the field is multidimensional, with important supporting themes such as corruption, tax reform, revenue administration, economic growth, fiscal policy, tax evasion, public finance, ICT, and performance. These keywords suggest that tax collection efficiency is not studied as a narrow technical issue. Rather, it serves as a broader public administration and governance concern. For example, the presence of corruption, tax evasion,

and shadow economy indicates that inefficiency in tax collection is often linked to weak governance, non-compliance, and informal economic activities. At the same time, keywords such as information and communication technology, tax reform, and performance highlight the growing relevance of digitalisation and administrative modernisation in improving revenue outcomes (Apeti & Edoh, 2023; Mallick, 2021; Martínez et al., 2022; Mascagni et al., 2021; Yan et al., 2022). In the network, one cluster focuses on tax revenue, public finance, and fiscal policy; a second cluster covers tax administration, tax compliance, and governance. A third cluster emphasises ICT, e-government, and digital transformation. A fourth cluster relates to corruption, tax evasion, and the shadow economy.

Interestingly, the exact keywords tax administration efficiency and tax collection efficiency each appear only seven times, with relatively modest link strengths, especially tax collection efficiency, with a link strength of only 2. This indicates that although the underlying topic is widely discussed, the specific terminology of “tax collection efficiency” remains relatively fragmented and underdeveloped. The result supports the novelty of this bibliometric study by consolidating a dispersed body of literature on the concepts, measures, and theoretical foundations of tax collection efficiency in public administration.

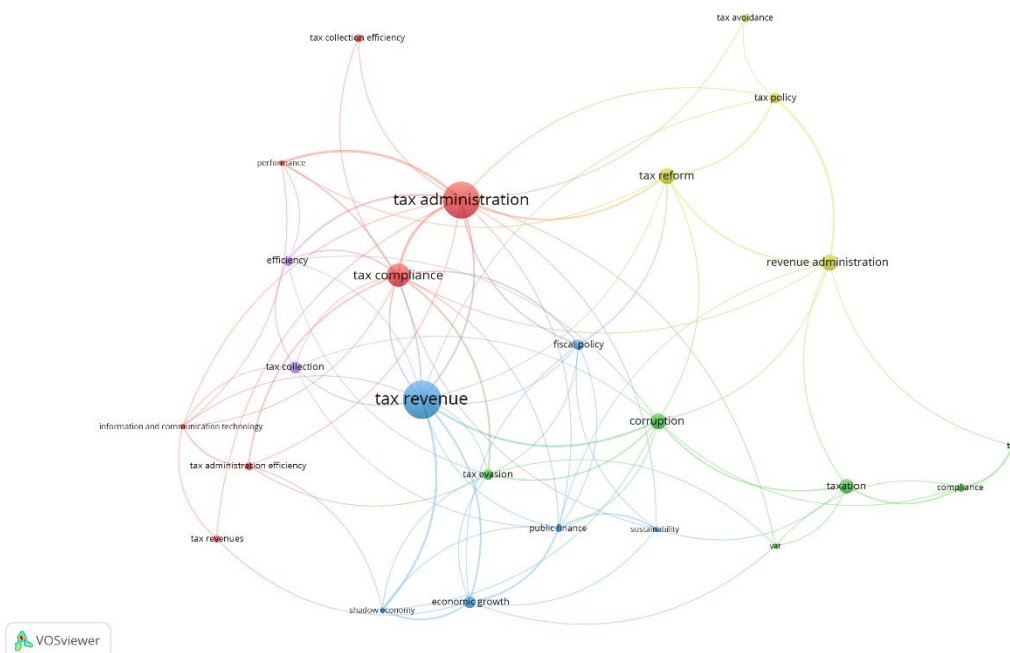


Figure 2: Network Visualisation Map of Keywords' Co-Occurrence

RQ4: What Patterns of International Research Collaboration and Country-Level Knowledge Production Emerge from Co-Authorship Networks in Tax Collection Efficiency Research Within Public Administration?

As illustrated in Figure 3, the country-level co-authorship network indicates that research on tax collection efficiency in public administration is led mainly by the United States (US). In particular, it records the highest publication output (42 documents, 357 citations) and the strongest total link strength (15). This suggests that the US is a major producer of literature in

this field and a central collaborator within the international research network. The United Kingdom (UK) is also highly influential, despite producing fewer documents (17), as it records the highest number of citations (458) and a strong total link strength of 12. This implies that UK-based publications have had substantial academic impact and are well-connected to other countries. India follows with 32 documents and 157 citations, presenting strong productivity, although its total link strength of 4 suggests that much of its contribution may be more nationally or regionally concentrated rather than highly embedded in global co-authorship networks. Overall, the dominance of the US and the UK reflect the strong role of advanced research systems, established academic institutions, and international publication networks in shaping knowledge production on tax administration, revenue performance, and public-sector efficiency.

Figure 3 also indicates that developed economies do not dominate the field, as several developing and emerging countries are actively contributing to the literature. Countries such as Nigeria, South Africa, Indonesia, Malaysia, Tanzania, Kenya, Pakistan, and Iraq appear in the network. This indicates that tax collection efficiency is a highly relevant issue for economies where revenue mobilisation, compliance, administrative reform, and governance capacity are major policy concerns. Interestingly, Kenya has only five documents, though it records 299 citations, suggesting that a small number of publications from or related to Kenya have gained strong scholarly influence. This may be due to the fact that they address high-interest issues such as tax compliance, ICT adoption, and revenue mobilisation in developing-country contexts. On the other hand, countries such as Germany and Canada demonstrate relatively high total link strength per document, indicating stronger international collaboration intensity. In contrast, the Russian Federation has a total link strength of 0, indicating that, in this dataset, its publications do not form co-authorship links with other countries. Overall, the pattern in Figure 3 demonstrates that tax collection efficiency is an internationally relevant and collaborative research domain. However, the network remains uneven, with knowledge production concentrated in a few highly productive, highly cited countries, while developing economies increasingly contribute context-specific insights into revenue administration challenges.

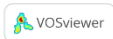
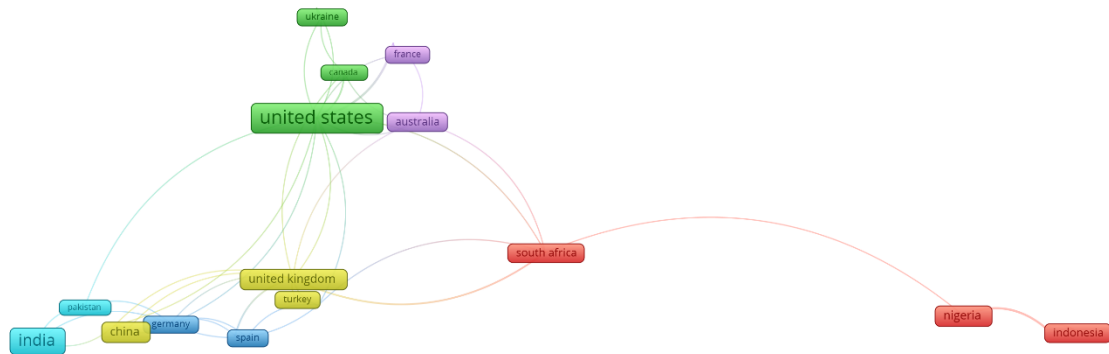


Figure 3: Country-Level Co-Authorship Network For Tax Collection Efficiency Research

Conclusion

This study examined the development of scholarly research on tax collection efficiency in public administration through bibliometric and science-mapping analyses. The purpose was to map publication growth, identify highly cited articles, examine dominant keywords and thematic patterns, and analyse country-level research collaboration. Based on Scopus-indexed publications from 2000 to 2026, with a final dataset of 299 documents, the study indicates that research in this area grew slowly during the early period from 2000 to 2010. Consequently, it increased gradually after 2011 and expanded more strongly from 2020 onwards. Specifically, the highest publication activity occurred between 2021 and 2025, indicating that tax collection efficiency has become more important due to fiscal pressure, digital transformation, public-sector reform, governance concerns, and the need for stronger revenue administration.

The findings also reveal that the intellectual structure of this field is shaped by several connected themes, including tax revenue, tax administration, tax compliance, corruption, revenue administration, tax reform, efficiency, ICT, and performance. Citation analysis indicates that influential studies are not limited to technical tax-collection issues. It also addresses broader areas. This includes development, governance, administrative reform, digital innovation, and institutional capacity. Keyword co-occurrence analysis further suggests that tax collection efficiency is a multidimensional topic involving fiscal, administrative, behavioural, technological, and governance dimensions. Nonetheless, the relatively low frequency of the exact keyword “tax collection efficiency” suggests that the concept remains

fragmented and requires greater conceptual clarity, more consistent measurement approaches, and deeper theoretical development.

This study contributes by organising a dispersed body of literature into a clearer knowledge structure and by presenting how tax collection efficiency has evolved as an interdisciplinary research area within public administration. The findings may help scholars, policymakers, and revenue authorities understand the main research trends, influential works, and collaboration patterns shaping this field. Additionally, the results suggest that revenue authorities should view tax collection efficiency as part of a wider governance and digital transformation agenda, rather than as a narrow technical indicator (Mallick, 2021; Martínez et al., 2022; Mascagni et al., 2021). They highlighted the need for integrated reforms that combine clear legal and regulatory frameworks, robust information systems, strategic yet proportionate enforcement, and taxpayer-oriented services to strengthen voluntary compliance and overall performance (Kirchler et al., 2014; Sahari et al., 2021; Tang et al., 2024).

Nevertheless, the study has several limitations. The analysis is restricted to Scopus-indexed publications, English-language documents, and selected subject areas, which means that relevant studies in other databases, languages, or disciplines may not be captured. In line with this, bibliometric indicators focus on publication and citation patterns and cannot fully assess the depth, methodological quality, or practical impact of individual studies. In response, future research can extend this work by incorporating data from additional databases and applying systematic literature review methods. This examines more closely how tax collection efficiency is conceptualised, measured, and theoretically explained across different administrative and country contexts.

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