

Two Decades of Research on Fiscal Decentralization and Territorial Development: A Bibliometric analysis and Content analysis

Abdallah CHENGUITI, (Ph.D. Student)

*Laboratory of Economics and Management of Organizations (LEMO)
 Faculty of Economics and Management
 Ibn Tofail University, Kenitra, Morocco*

Cheklekbire MALAININE, (Full Professor)

*Laboratory of Economics and Management of Organizations (LEMO)
 Faculty of Economics and Management
 Ibn Tofail University, Kenitra, Morocco*

Correspondence address :	Faculty of Economics and Management of Kenitra Ibn Tofail University Morocco (Kenitra) B.P 2010- Kenitra
Disclosure Statement :	The authors declare that they have not received any financial support that could have influenced the objectivity of this study. They take full responsibility for any potential plagiarism, the use of artificial intelligence in the writing process, as well as for the results presented in this article.
Conflict of Interest :	The authors report no conflicts of interest.
Cite this article :	CHENGUITI, A., & MALAININE, C. (2025). Two Decades of Research on Fiscal Decentralization and Territorial Development: A Bibliometric analysis and Content analysis. <i>International Journal of Accounting, Finance, Auditing, Management and Economics</i> , 6(12), 253–278. https://doi.org/10.5281/zenodo.17624895
License	This is an open access article under the CC BY-NC-ND license

Received: 09/10/2025

Accepted: 17/11/2025

International Journal of Accounting, Finance, Auditing, Management and Economics - IJAFAME
ISSN: 2658-8455
Volume 6, Issue 12 (2025)

Two Decades of Research on Fiscal Decentralization and Territorial Development: A Bibliometric analysis and Content analysis

Abstract

Fiscal decentralization has gained prominence as a structural reform strategy worldwide, fostering local governance and territorial development. Despite its theoretical promise, anchored in fiscal federalism and allocative efficiency, the empirical evidence remains fragmented and context dependent. The growing volume of literature, coupled with methodological heterogeneity, calls for a systematic synthesis of the field.

This study aims to provide a comprehensive bibliometric mapping of the scholarly production on fiscal decentralization and territorial development from 2000 to 2025, identifying key trends, influential actors, thematic clusters, and emerging research fronts.

Using the Scopus database, relevant publications were extracted based on a refined search strategy. Bibliometric techniques, including co-authorship, co-citation, and keyword co-occurrence analyses, were applied using VOSviewer and Bibliometrix in R.

A total of 567 publications were included in the final analysis. The results reveal a steady increase in academic output, with notable regional disparities in publication volume and citation impact. Leading authors and institutions are predominantly based in OECD countries, although contributions from the Global South are steadily increasing. Thematic clustering identifies four major research streams: intergovernmental fiscal relations, governance and public service delivery, spatial equity and development, and institutional preconditions for decentralization. Recent research fronts emphasize resilience, sustainability, and fiscal federalism in crisis contexts.

This bibliometric review uncovers both the intellectual structure and the temporal evolution of the field. It highlights conceptual fragmentation and geographic asymmetries, calling for deeper interdisciplinary integration and greater attention to underrepresented regions. The findings offer a new evidence base to guide future scholarly inquiry and policy development.

Keywords: Territorial development, fiscal decentralization, Bibliometric analysis

JEL Classification: H55, J16, J40, F43, O41.

Paper type: Theoretical Research

1. Introduction

Over the last few decades, fiscal decentralization has emerged as a prominent institutional reform strategy adopted across a wide range of political and administrative contexts (Neupane, 2024). Defined as the systematic transfer of fiscal authority, including revenue generation, expenditure assignments, and intergovernmental transfer mechanisms, from central to subnational governments, fiscal decentralization reflects a broader reconfiguration of the state in response to changing governance demands. This shift is not merely administrative but structural, embodying a move toward the territorialization of public policies, where subnational actors assume greater autonomy in shaping public interventions tailored to localized socioeconomic conditions (A. Shah, 1999) (Oates, 1972)

Theoretically, decentralization is underpinned by the classical principles of fiscal federalism, which posit that devolved governance structures enhance allocative efficiency and democratic accountability. By aligning service delivery with local preferences, subnational governments are presumed to foster more effective public spending and more responsive policy outcomes (Oates, 1972) (Barthélémy et al., 2014). Moreover, decentralization is hypothesized to promote interjurisdictional competition, incentivizing innovation, cost-efficiency, and citizen-centered governance at the local level (Rodden, 2004) (Weingast, 2009)

Empirical findings, however, remain inconclusive and context-dependent. In institutional environments characterized by high administrative capacity, rule of law, and robust fiscal systems, decentralization has been linked to improved public infrastructure, better health and education outcomes, and greater citizen satisfaction (Martinez-Vazquez & McNab, 2003). Conversely, in countries with fragmented institutions, weak intergovernmental coordination, and limited local capacity, decentralization has produced suboptimal outcomes, including fiscal indiscipline, duplication of services, and reinforcement of clientelistic networks (Prud'homme, 1995) (Rodríguez-Pose & Ezcurra, 2010)

This divergence in empirical results has sparked debate about the preconditions for successful decentralization (Slavinskaite, 2017a). The presence of clearly defined responsibilities, transparent intergovernmental transfer formulas, adequate own-source revenues, and citizen participation mechanisms are frequently cited as necessary, though not sufficient, conditions for improved outcomes (, 2021). When these institutional factors are absent, decentralization may fail to deliver on its promises and, in some cases, exacerbate existing territorial inequalities or erode national solidarity (Smoke, 2001)

Although the literature on fiscal decentralization has grown substantially, several structural challenges limit the consolidation and comparability of findings (Slavinskaite, 2017b). First, the literature is predominantly case-based, focusing on individual countries or regions, which constrains generalizability and theory-building (Rodríguez-Pose & Ezcurra, 2010). Second, there is a lack of consensus on measurement frameworks: some studies use fiscal ratios (e.g., subnational revenue/expenditure as a share of total), while others propose multidimensional indices incorporating aspects of political and administrative autonomy (Stegarescu, 2005); (Martinez-Vazquez & Timofeev, 2010) ;Third, the concept of territorial development is multidimensional and unevenly treated across disciplines. While economists focus on indicators such as GDP growth, public investment, and productivity, social scientists incorporate access to services, equity, and governance quality. Recent approaches also integrate spatial and environmental variables, such as territorial resilience and ecological footprints (Pike et al., 2017).

Anterior studies suffer from a lack of systematic bibliometric analysis. While narrative and meta-analytical reviews provide valuable insights, they do not allow for the quantification of research output, the mapping of intellectual networks, or the detection of evolving research fronts. Bibliometric methods, such as co-citation analysis, co-authorship networks, and

thematic clustering, have been successfully applied in adjacent policy domains but remain underutilized in the fiscal decentralization field (Aria & Cuccurullo, 2017). This methodological gap is particularly salient in relation to the Global South, where publication visibility, author collaboration, and citation impact remain disproportionately low (Rezende, 2021)

To address these gaps, this study conducts a comprehensive bibliometric analysis of the academic literature on fiscal decentralization and territorial development over the period 2000–2025. By systematically mapping the structure and dynamics of the field, the study aims to answer the following research questions:

- What are the most influential publications, authors, and journals in the field?
- How has the volume and geographic distribution of publications evolved over time?
- What are the dominant patterns of institutional and international collaboration?
- What thematic clusters structure the field, and how have they shifted over time?
- What are the main emerging research fronts and underexplored areas?

This study contributes to both scientific knowledge consolidation and agenda-setting. It provides a global overview of academic production, identifies key actors and institutions, and offers an evidence-based assessment of conceptual maturity and fragmentation within the field. The remainder of the article is structured as follows: Section 2 presents the methodological framework, including database selection (Scopus), search strategies, inclusion criteria, and the suite of bibliometric tools employed (e.g., VOSviewer, Bibliometrix, R). Section 3 reports the key findings, including descriptive statistics, co-authorship networks, citation mapping, and thematic cluster analysis. Section 4 provides a critical discussion, relating empirical patterns to the theoretical and institutional literature, identifying structural gaps, and highlighting regional disparities. Section 5 concludes with a synthesis of insights and a reflection on future research directions, particularly concerning interdisciplinary integration and research visibility in the Global South.

2. Methods

2.1. Data source

Scopus was used as the sole source for this bibliometric analysis due to its broad multidisciplinary coverage, the quality of its peer reviewed content, and its advanced literature search functionalities. Scopus indexes a substantial number of international scientific journals in the fields of social sciences, economics, management, and spatial/territorial planning, making it particularly well suited to exploring publications on fiscal decentralization and territorial development (Mongeon & Paul-Hus, 2016). The database provides access to structured metadata (titles, abstracts, keywords, authors, affiliations, citations) required for bibliometric analysis (Falagas et al., 2008). Its advanced search interface allows the use of complex queries, facilitating the targeted extraction of documents according to precise criteria (time period, language, document type, disciplinary field).

2.2. Research strategy

To build a representative and scientifically rigorous corpus, an advanced search query was designed and executed in the Scopus database, given its extensive coverage of peer reviewed publications in the social, economic, and territorial sciences. The search strategy relies on a logical combination of Boolean operators applied to the TITLE ABS KEY fields, targeting publications containing the following expressions: (“fiscal AND decentralization” OR “local AND fiscal”) AND (“territorial AND development” OR “local AND development” OR “regional AND development”) AND (“impact*” OR “effect” OR “influence”).

(TITLE ABS KEY ((fiscal AND decentralization) OR (local AND fiscal*)) AND TITLE ABS KEY ((territorial AND development) OR (local AND development) OR (regional AND development)) AND TITLE ABS KEY (impact* OR effect OR influence)) AND PUBYEAR > 1999 AND PUBYEAR < 2026 AND (LIMIT TO (DOCTYPE , "ar")) AND (LIMIT TO (SUBJAREA , "SOCI") OR LIMIT TO (SUBJAREA , "ENVI") OR LIMIT TO (SUBJAREA , "ECON") OR LIMIT TO (SUBJAREA , "BUSI") OR LIMIT TO (SUBJAREA , "MULT")) AND (LIMIT TO (LANGUAGE , "English"))

2.3. Inclusion and Exclusion Criteria

This filtering narrowed the search to articles that explicitly address the effects of fiscal decentralization on territorial development dynamics. The temporal scope was set to 2000–2025 to capture recent developments in the literature and emerging trends. The query was restricted to document type “article” (LIMIT TO (DOCTYPE, "ar")) and to the English language, in order to ensure the scientific quality of the selected publications and their international accessibility. Moreover, thematic selection was limited to the principal relevant subject areas (LIMIT TO (SUBJAREA, "SOCI", "ECON", "ENVI", "BUSI", "MULT")), thereby ensuring alignment between the field of study and the academic domains mobilized.

2.4. Data Analysis Tools

The bibliometric analysis drew on two complementary methodological instruments, each adding specific value to the exploration of the corpus: Bibliometrix, an open-source package developed in R (Aria & Cuccurullo, 2017), and VOSviewer, a reference software for visualizing scientific networks (van Eck & Waltman, 2010). Bibliometrix enabled exhaustive processing of the metadata extracted from Scopus, facilitating fine grained descriptive analyses: the diachronic evolution of scientific output, identification of the most prolific authors and journals, and mapping of the geographic dispersion of publications. In complement, VOSviewer was used to construct dynamic visual representations of keyword co-occurrence, co citation, and institutional collaboration networks.

3. Results

The descriptive results of this bibliometric analysis provide a quantitative and qualitative overview of the scientific literature on the impact of fiscal decentralization on territorial development over the period 2000–2025. The analyzed corpus comprises 1,065 scientific documents across 454 sources (scientific journals, conference proceedings, etc.). The average annual growth rate of publications, estimated at 7.5%, attests to a sustained increase in scientific interest in this issue over the past twenty-five years. Nearly 2,193 authors have contributed to this body of work, with an average of 2.87 co-authors per article. However, the international collaboration rate, at 18.5%, points to a still limited mobilization of transnational research networks. The relatively small number of single authored publications (n = 194) further confirms the predominance of co-authored work in this domain. The publications identified exhibit an average of 17.28 citations per article, reflecting notable scientific visibility and integration into knowledge production and dissemination dynamics. Descriptor analysis reveals a total of 2,994 author keywords. Moreover, the mean age of publications, estimated at 5.71 years.

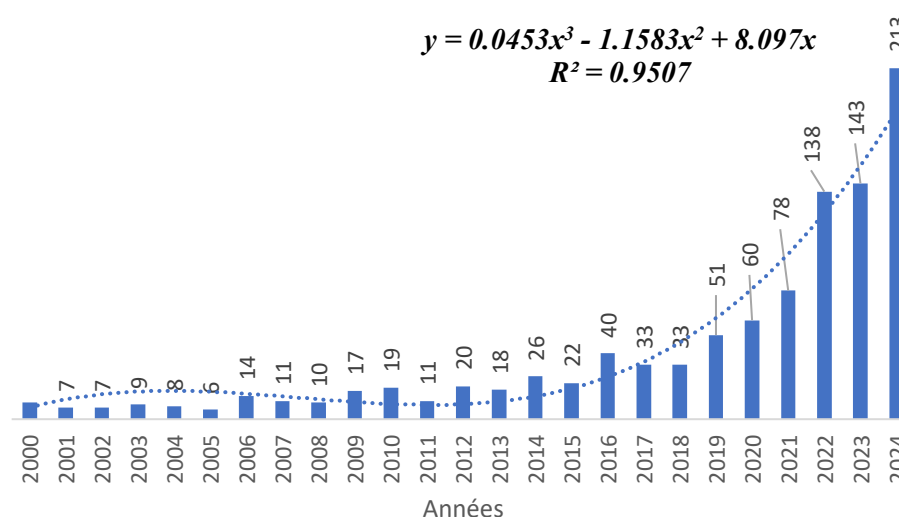
Fig 1 General Bibliometric Indicators of Scientific Output 2000–2025



3.1. Publications by Year

Figure 2 highlights the annual evolution of scientific output on fiscal decentralization and its impact on territorial development over the period 2000–2024. The analysis shows sustained, indeed exponential, growth in publication activity, particularly from 2015 onward. During the first decade (2000–2010), the volume of publications remained relatively modest, fluctuating between 6 and 19 articles per year. From 2015, a more pronounced growth dynamic emerged, peaking at 213 articles in 2024, more than a fivefold increase in the annual volume of publications compared with 2015. The recent acceleration in publications (notably between 2019 and 2024) also appears to indicate a maturation of the field, with the emergence of specific subdomains and a diversification of the methodological approaches employed. The polynomial fit (coefficient of determination $R^2 = 0.9507$) corroborates the strong alignment of the model with the empirical trends observed, confirming the nonlinear growth of the literature.

Fig 2 Chronological Evolution of the Number of Publications Between 2000–2024



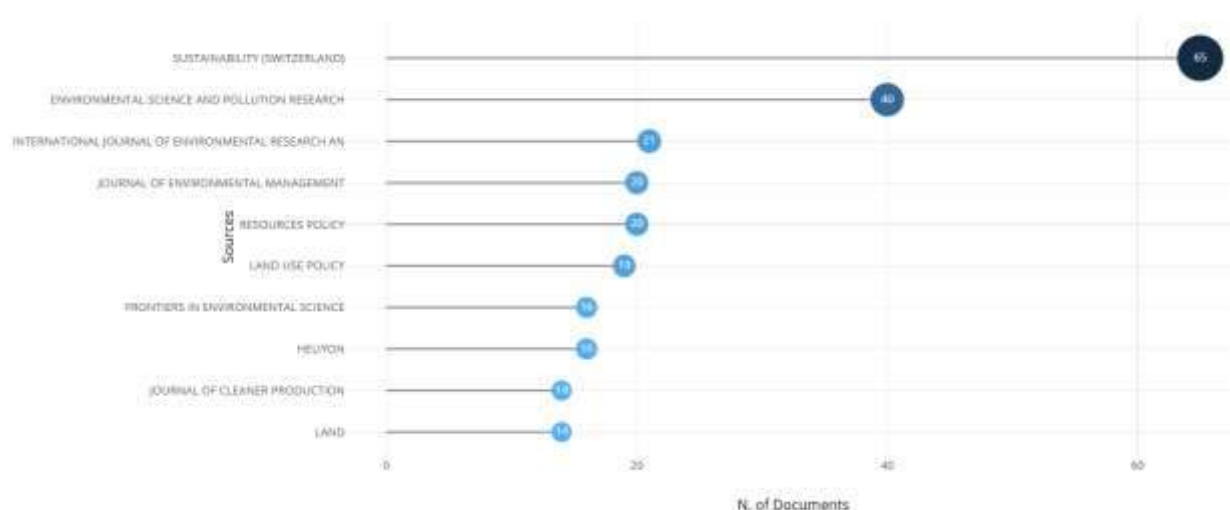
3.2. Publications by Journal

With respect to the most frequently cited sources, the bibliometric analysis confirms earlier observations regarding the editorial concentration of research on fiscal decentralization and territorial development. Sustainability (Switzerland), published in Switzerland and ranked Q2 in *Sustainability Sciences*, stands out clearly with 65 publications. It is followed by Environmental Science and Pollution Research, a German journal ranked Q2 in *Environmental Sciences*, which plays a major role in addressing environmental externalities associated with

public policies. Likewise, the International Journal of Environmental Research and Public Health, also based in Switzerland and positioned in Q2 (*Public Health, Environmental and Occupational Health*), accounts for 21 publications, while Resources Policy and the Journal of Environmental Management, both published in the United Kingdom and ranked Q1 in *Development & Planning* and Q1 in *Environmental Management* respectively, each total 20 articles. Land Use Policy, published in the Netherlands and ranked Q1 in *Urban Studies*, follows closely with 19 publications, underscoring the growing importance of land use and territorial planning issues in the scientific debate.

Other journals, such as Heliyon (Q2, Multidisciplinary), Frontiers in Environmental Science (Q2, Environmental Sciences), and the Journal of Cleaner Production (Q1, Environmental Science & Engineering) , mostly published in the United Kingdom or Switzerland, further confirm the diversity of disciplinary perspectives engaged. Finally, the presence in the top 15 of titles such as Finance Research Letters, Environment, Development and Sustainability, and World Development is noteworthy.

Fig 3 Distribution of Publications by Scientific Journals



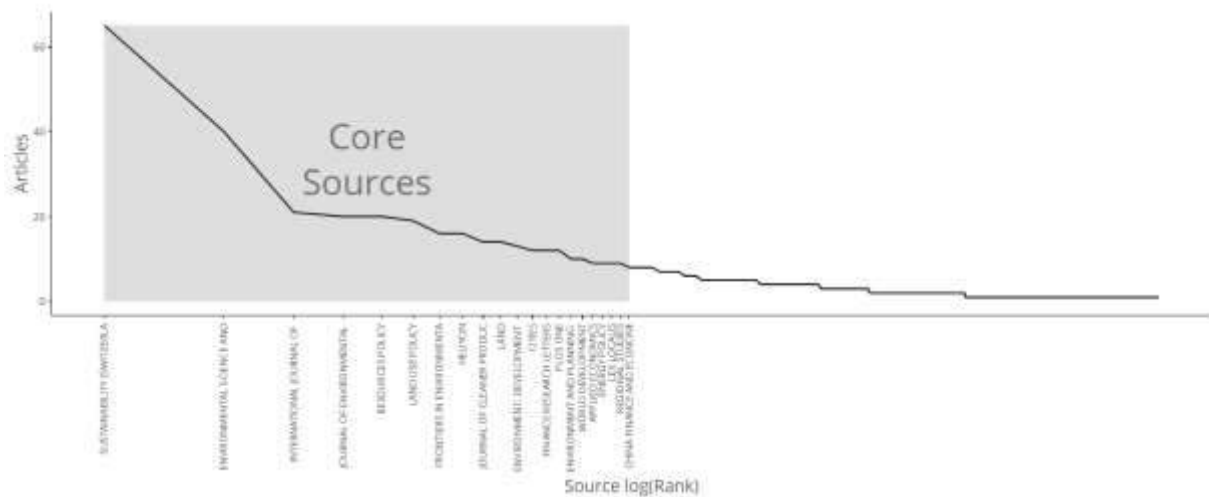
Source: Authors

Figure 4 illustrates the application of Bradford's law, which helps identify the core journals concentrating the majority of publications on fiscal decentralization and territorial development. The shaded area highlights a small group of central outlets , among them *Sustainability (Switzerland)*, *Environmental Science and Pollution Research*, and *International Journal of Environmental Research and Public Health* , that occupy dominant positions in the field. These journals structure the domain by hosting highly visible, interdisciplinary contributions. As one moves to the right of the graph, the curve indicates an increasing dispersion of publications across secondary journals.

The data show a predominance of European journals, particularly from publishers based in Germany, Switzerland, the United Kingdom, and the Netherlands. Among the most prolific outlets, Environmental Science and Pollution Research (Germany) stands out for its high H index (18) and total number of citations (TC = 901). It is followed by Sustainability (Switzerland), a Swiss Q2 ranked journal whose indicators (H index = 14, g index = 19) confirm its anchoring in work at the interface of territorial sustainability and local public policies. Land Use Policy (Netherlands) and the Journal of Cleaner Production (United Kingdom) also display notable performance, both in terms of citation volume and thematic diversity. In parallel, several Q1 ranked journals in their respective fields , such as Resources Policy, Energy Policy, Journal of Environmental Management, and Land Use Policy , exhibit robust visibility indicators

despite more moderate H indices, reflecting a recent growth dynamic, often post 2015. It is also worth noting the presence of North American journals such as Journal of Urban Affairs, PLOS ONE, and Economic Development Quarterly, which, though less central in terms of volume, make a promising thematic contribution, notably on urban policy, regional economic dynamics, and the institutional analysis of fiscal reforms

Fig 4 La loi de Bradford Les principaux journaux plus prolifiques dans la discipline



Source: Authors

Table 1 Ranking of Scientific Journals by Bibliometric Indicators in the Environmental Field (2000–2025)

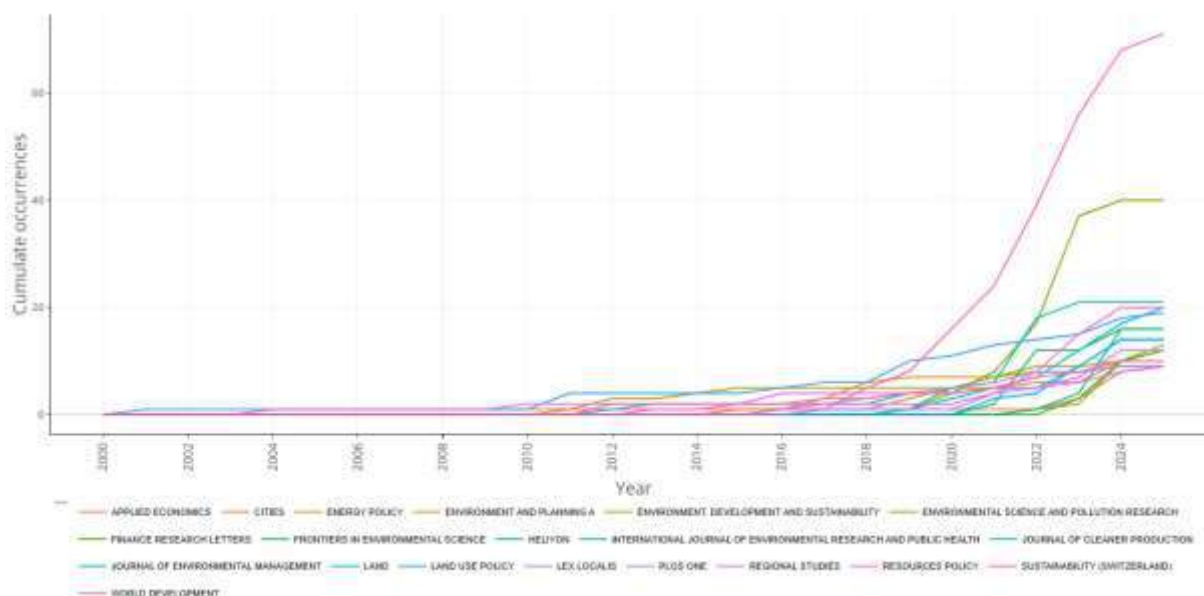
Source	PY_start	Pays	H_index	g_index	M_index	TC	NP	PY_start
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH	2019	Germany	18	29	2.571	901	40	2019
SUSTAINABILITY (SWITZERLAND)	2016	Suisse	14	19	1.4	590	65	2016
LAND USE POLICY	2001	Netherlands	12	19	0.48	697	19	2001
JOURNAL OF ENVIRONMENTAL MANAGEMENT	2017	UK	11	20	1.222	492	20	2017
INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH	2019	Suisse	10	17	1.429	318	21	2019
JOURNAL OF CLEANER PRODUCTION	2012	UK	10	14	0.714	1110	14	2012
RESOURCES POLICY	2013	UK	9	20	0.692	403	20	2013
ENERGY POLICY	2016	UK	8	9	0.8	325	9	2016
ENVIRONMENT AND PLANNING A	2004	UK	8	10	0.364	425	10	2004
FRONTIERS IN ENVIRONMENTAL SCIENCE	2021	Suisse	8	12	1.6	155	16	2021
URBAN STUDIES	2000	UK	8	8	0.308	754	8	2000
CITIES	2015	Netherlands	7	12	0.636	247	12	2015
JOURNAL OF URBAN AFFAIRS	2000	USA	7	8	0.269	172	8	2000
WORLD DEVELOPMENT	2012	UK	7	10	0.5	214	10	2012
HABITAT INTERNATIONAL	2002	UK	6	8	0.25	609	8	2002
LAND	2021	Suisse	6	9	1.2	99	14	2021
PLOS ONE	2017	USA	6	9	0.667	93	12	2017
SCIENCE OF THE TOTAL ENVIRONMENT	2019	Netherlands	6	7	0.857	385	7	2019
CHINA ECONOMIC REVIEW	2000	Netherlands	5	7	0.192	155	7	2000
GROWTH AND CHANGE	2009	USA	5	7	0.294	164	7	2009
ECONOMIC ANALYSIS AND POLICY	2021	Australia	4	5	0.8	64	5	2021
ECONOMIC CHANGE AND RESTRUCTURING	2022	Netherlands	4	4	1	35	4	2022
ECONOMIC DEVELOPMENT QUARTERLY	2007	USA	4	6	0.211	72	6	2007
ENERGY ECONOMICS	2019	Netherlands	4	5	0.571	315	5	2019
ENVIRONMENT, DEVELOPMENT AND SUSTAINABILITY	2022	Netherlands	4	5	1	32	13	2022

Source: Authors

3.3. The most active Journals

With respect to the most active journals, Figure 5 displays the cumulative evolution of publications by journal on local fiscal decentralization and territorial development between 2000 and 2025. Sustainability (Switzerland) clearly dominates, with a sharp uptick since 2019. Environmental Science and Pollution Research, Land Use Policy, and the Journal of Cleaner Production also show pronounced growth, indicating strong engagement by journals with environmental and territorial orientations.

Fig 5 Cumulative evolution of publications on fiscal decentralization and territorial development by scientific journal (2000–2025)

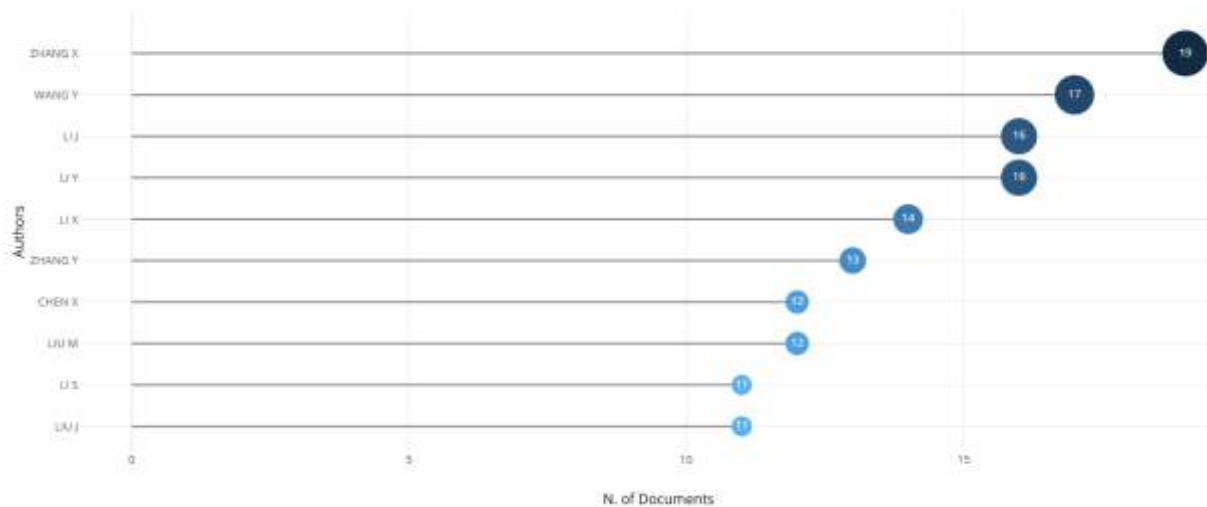


Source: Authors

3.4. The most cited authors

With respect to the most cited authors, the analysis of the most prolific contributors in the field of local fiscal decentralization and territorial development reveals a strong concentration of scientific output in the hands of a few scholars, mainly affiliated with Chinese institutions. This trend is reflected in the predominance of names such as Zhang, X. (19 publications, College of Architecture and Landscape, Peking University), Wang, Y. (17 publications, School of Economics and Finance, Xi'an Jiaotong University), Li, J. (16 publications, affiliated notably with the College of Economics and Management, South China Agricultural University, and the Institute of Agricultural Economics and Development), Li, Y. (16 publications, School of Economics and Trade, Shandong Management University), and Li, X. (14 publications). These scholars occupy a key position in academic production, publishing regularly in high impact journals such as *Sustainability*, *Land Use Policy*, and *Environmental Science and Pollution Research*. Moreover, the diversity of their institutional affiliations points to an active national academic infrastructure spanning universities with economic, agricultural, environmental, and territorial orientations.

Fig 6 Top 10 des auteurs les plus prolifiques dans la littérature sur la décentralisation fiscale et le développement territorial (2000–2025)

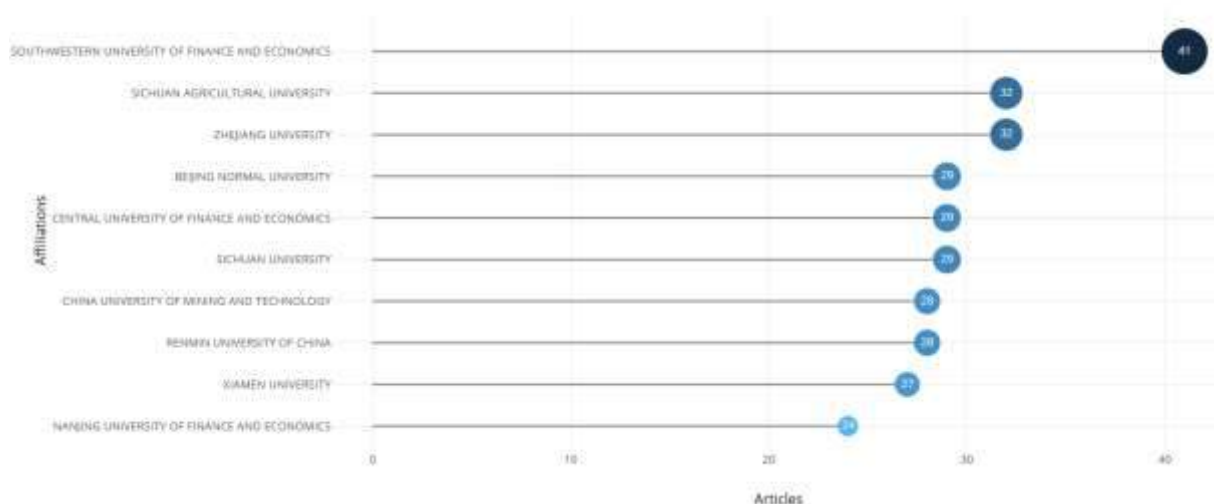


Source: Authors

3.5. The most active organizations/universities

The analysis of institutional contributors to the scientific literature on fiscal decentralization and territorial development reveals a marked geographic concentration, with a clear predominance of Asian , particularly Chinese , academic institutions. Universities such as Peking University, Xi'an Jiaotong University, and South China Agricultural University stand out not only for their publication volume but also for their anchoring in complementary disciplines (economics, agriculture, territorial/spatial planning), which points to a robust interdisciplinary approach. Moreover, the high visibility of these institutions is often correlated with their regular presence in high-impact journals, notably *Sustainability*, *Land Use Policy*, and *Environmental Science and Pollution Research*. This organizational centrality is underpinned by structured co publication networks that facilitate the circulation of knowledge and the strengthening of internal scientific capacities.

Fig 7 Top 10 most productive institutions in the field of fiscal decentralization and territorial development, 2000–2025

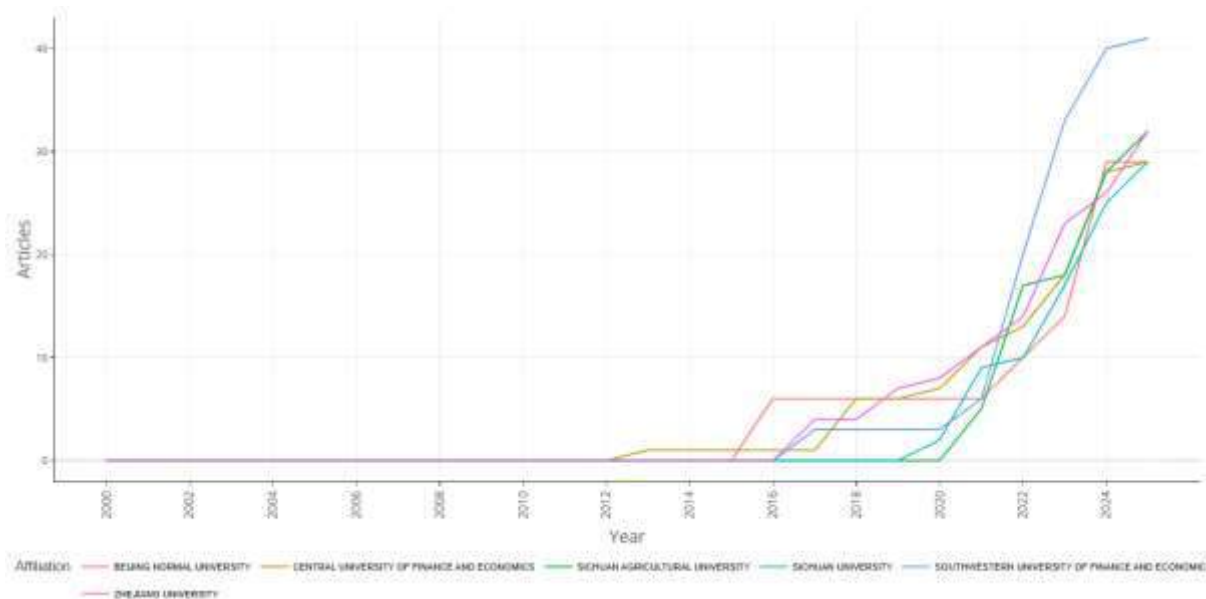


Source: Authors

Figure 7 depicts the temporal dynamics of scientific output for six of the most active Chinese

universities in the field of fiscal decentralization. It shows a pronounced intensification of editorial activity from 2018 onward, with particularly rapid growth between 2020 and 2025. This trend reflects the commitment of Chinese institutions to strengthen their presence in international debates on fiscal governance and territorial development. Among the institutions represented, the Southwestern University of Finance and Economics stands out for its remarkable trajectory, surpassing 40 articles in 2025. Zhejiang University, Sichuan University, and the Central University of Finance and Economics also display significant upward trajectories.

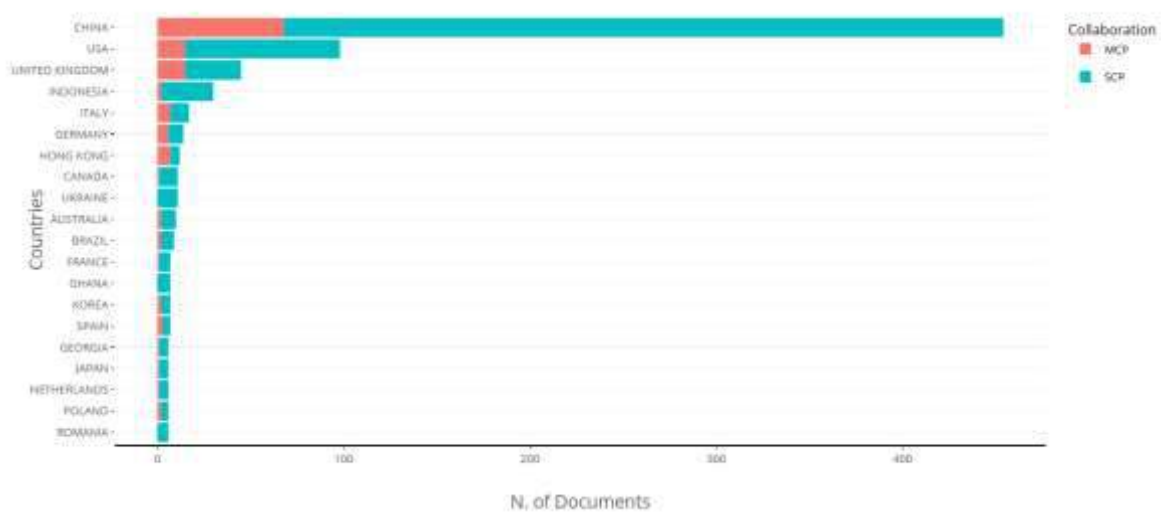
Fig 8 Time evolution of scientific output



Source: Authors

3.6. Collaboration between countries

Fig 9 Geographical distribution of scientific production on fiscal decentralization and the environment: national contribution and international collaboration



Source: Authors

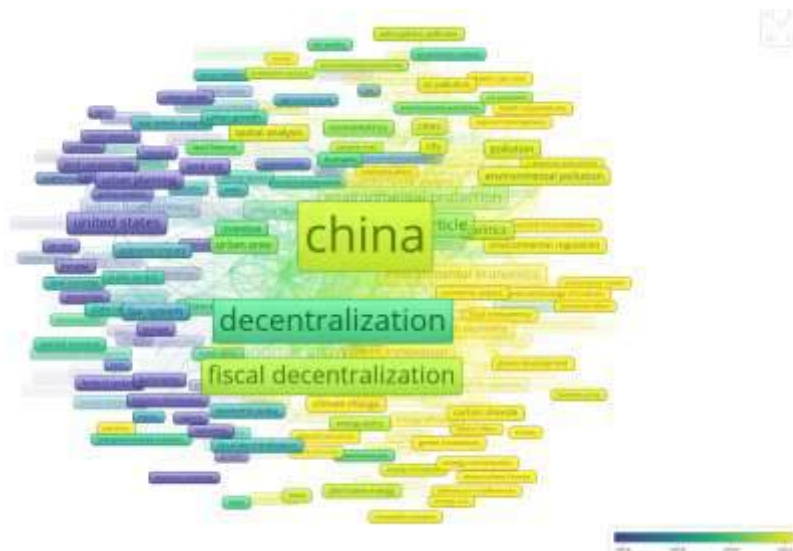
Figure 9 illustrates the temporal evolution of scientific output for six of the most active Chinese universities in the field of fiscal decentralization. It reveals a marked intensification of editorial

activity from 2018 onward, with particularly rapid growth between 2020 and 2025. Among the institutions represented, the Southwestern University of Finance and Economics stands out for its spectacular progression, surpassing 40 articles in 2025, which makes it the most productive institutional actor in this corpus. Zhejiang University, Sichuan University, and the Central University of Finance and Economics also display significant upward trajectories, indicating an institutional convergence around decentralization issues. The recent rise of Sichuan Agricultural University suggests a late but dynamic entry into the field, possibly linked to specific rural or agro territorial concerns. Finally, Beijing Normal University, while slightly behind its counterparts in cumulative volume, shows a steady growth trajectory, reflecting sustained yet more gradual engagement.

3.7. Evolving Research Dynamics in Fiscal Decentralization and Territorial Development

The co-occurrence map reveals three interconnected poles: China as the dominant empirical node, (fiscal) decentralization as the conceptual core, and environmental/economic applications as principal domains. “China” exhibits exceptional size and centrality, closely tied to cities, Chinese provinces, the Yangtze River, pollution, and regional heterogeneity, evidence of intensive reliance on spatial and regional case data. The decentralization/fiscal decentralization cluster links to tax system, economic policy, intergovernmental transfers, autonomy, fiscal transparency, local government, and spatial analysis, alongside methodological anchors such as econometrics, spatial econometric models, and panel data, indicating rigorous empirical designs. A third, environment-oriented cluster aggregates environmental pollution, air quality, green economy, carbon dioxide, environmental protection, and green innovation; the prominence of more recent terms (e.g., COVID 19, green technology innovation, environmental tax) points to post pandemic and climate policy updates. Peripheral terms (United States, Europe, India, Pakistan, Africa) suggest geographic underrepresentation and underscore the need for broader comparative coverage, particularly in developing regions.

Fig 10 Keyword co-occurrence map in research on fiscal decentralization and territorial development (2000–2025)

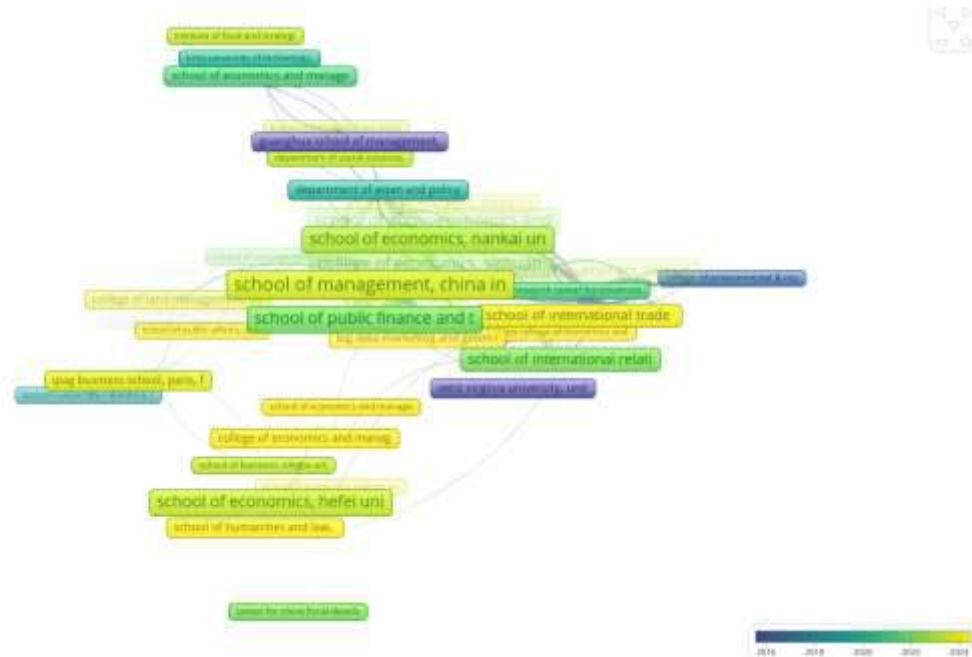


Source: Authors

3.8. The most cited organizations

The affiliation network is highly concentrated around Chinese universities, especially in economics, public management, and territorial finance, with central hubs including the School

Fig 11 Network of the most contributing institutions in research on fiscal decentralization and territorial development (2000–2025)



3.9. The most Cited papers

266

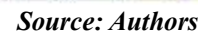
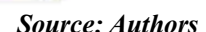


Fig 13 International Scientific Collaboration Network on Fiscal Decentralization and Territorial Development (2000–2025)

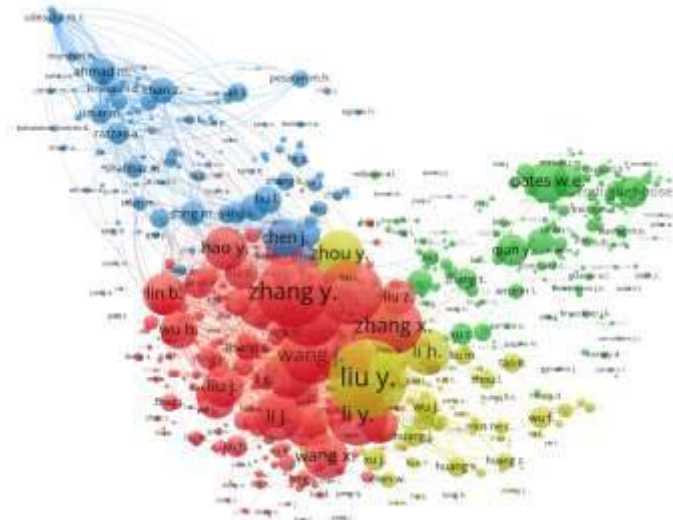


267

South Africa; their lighter coloring (2020–2022) indicates a recent opening toward the Global South, although this dynamic remains peripheral.

3.11. The most cited countries

Fig 14 Co-author network in fiscal decentralization research: thematic clustering analysis.



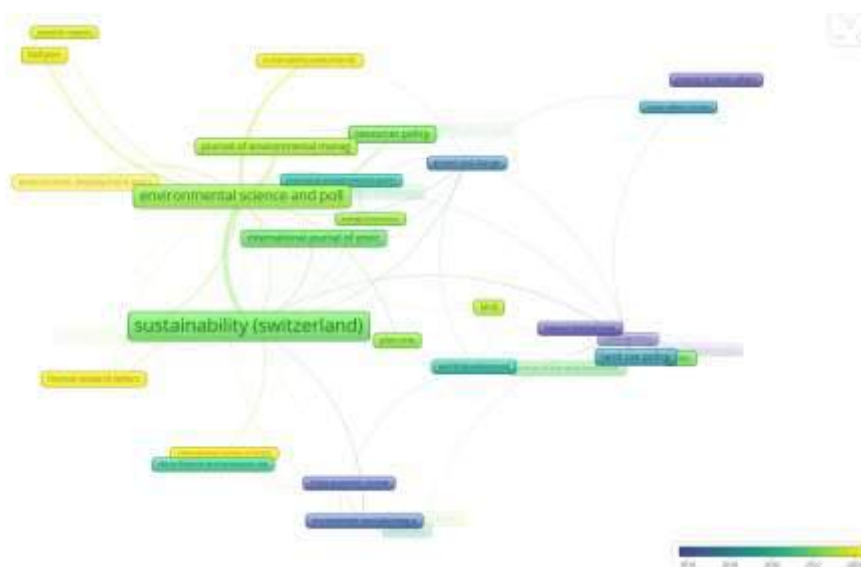
Source: Authors

Country-level co-publication patterns show continentally polarized centers of scientific centrality. In Asia, the network clusters around **Zhang X. (China)**, whose high-volume work anchors debates on local governance, urbanization, and environmental efficiency, e.g., agricultural land conversion and urban investment circuits in *Cities* (2024), local public debt regulation in *Journal of International Financial Markets* (2024), and agro-energy transition in *Ecological Modelling* (2025). In Africa, **Amoah A. (Ghana)** emerges as a pivotal author through research on willingness to pay environmental taxes in *Politics and Policy* (2024), highlighting differentiated fiscal behavior under fragile institutions and its links to public-service inequality. In Europe, **Li Z.** is noted for a recent *Heliyon* (2024) article on institutional quality and regional economic development, underscoring post-pandemic territorial resilience. Collectively, these nodal authors, and the thematic breadth of their outputs, illustrate a progressively globalized field shaped by territorial, environmental, and institutional logics.

3.12. The journal co citation map

The journal co citation map is dominated by a small core of outlets and is interdisciplinary, spanning economics, environmental studies, and territorial policy. Sustainability (Switzerland) is the central hub, highly co cited and networked, bridging quantitative and normative work on decentralization, local governance, and sustainability. Surrounding it, Environmental Science and Pollution Research, Journal of Environmental Management, and Resources Policy anchor an eco-territorial policy lens; Land Use Policy and Habitat International connect to planning and land access; IJERPH incorporates social/health impacts; finance titles (Finance Research Letters, China Economic Review, International Review of Finance) elucidate macro budgetary effects, while Urban Affairs Review and Journal of Urban Affairs, though more peripheral, signal growing political institutional engagement.

Fig 15 Mapping of core academic journals in research on territorial fiscal governance



Source: Authors

- **Cluster 1 : Gouvernance fiscale locale et trajectoires de développement spatialement différencié**

Cluster 1 (164 keywords) forms the bibliometric core, centering on links between fiscal decentralization, economic development, and local governance. High frequency terms , *fiscal decentralization*, *economic growth*, *local government*, *urban development*, *public policy*, *infrastructure* , are coupled with social outcome descriptors (*income inequality*, *housing policy*, *vulnerability*, *health impact*), underscoring effects on access to care, housing, and equity. Empirical anchors span China, Brazil, Indonesia, California, and the European Union, enabling comparative assessments of how regions align local development with fiscal autonomy. Interdisciplinary by design (economics, political science, spatial planning, social policy), the cluster foregrounds efficiency, equity, and resilience, and serves as the platform from which the other thematic orientations branch.

- **Cluster 2 : Décentralisation fiscale, efficience territoriale et innovation verte dans une perspective économétrique spatialisée**

Cluster 2 (64 keywords) delineates a quantitatively oriented research axis focused on econometric assessment of fiscal decentralization's effects on territorial productivity, industrial dynamics, and sustainable technological change. Unlike Cluster 1's governance/social policy emphasis, it sits at the intersection of endogenous growth, the green economy, and new economic geography. Salient co terms , *fiscal competition*, *fiscal transparency*, *vertical fiscal imbalance*, *financial decentralization*, *foreign direct investment*, *resource allocation* , signal attention to the efficiency of decentralized tax regimes under interjurisdictional competition. Methodologically, studies mobilize panel data, spatial Durbin and related spatial econometric models, and threshold techniques to identify non linearities, regional heterogeneity, and spatial spillovers. The ecological turn , *green economy*, *green technology*, *environmental governance*, *energy conservation*, *green total factor productivity* , frames decentralization as a lever for eco innovation that can raise productivity within environmental constraints, in conjunction with *technological development*, *innovation*, *human capital*, and *industrial structure*. Empirically, the cluster is strongly China centric (*China*, *Chinese provinces*, *Yangtze River*), with spatiotemporal analyses foregrounding regionally differentiated development trajectories.

- **Cluster 3 : Gouvernance environnementale, évaluation écologique et externalités des dynamiques territoriales**

Cluster 3 (60 keywords) delineates an environment centric subspace linking ecological pressures, territorial management, and regulatory public policy. It foregrounds air quality concerns (*air pollution, air quality, air pollutants, dust, carbon footprint*) and ecosystem governance (*ecosystem services, conservation of natural resources, environmental assessment*), while emphasizing regulatory instruments, *environmental monitoring, environmental (and government) regulation, environmental tax, pollution control*, operating across territorial scales (*county level, cities, agricultural land*). Unlike Cluster 2's performance/innovation focus, this cluster pivots to ecological impact measurement and the allocation of environmental costs, as indicated by *economic and social effect, cost analysis, compensation system, industrial economics, environmental economics*. Methodologically, it relies on rigorous empirical designs (*regression analysis, models, controlled studies, population statistics*), often with locally or regionally disaggregated data, enhancing analytical granularity. Overall, the cluster captures the rising salience of ecological transition under territorial constraints, highlighting tensions , and policy trade-offs , between local economic dynamics (agriculture, industry, investment), environmental preservation, quality of life, environmental justice, and institutional responsibility.

- **Cluster 4 : Défis macroéconomiques, politiques publiques et durabilité en contexte africain émergent**

Cluster 4 (38 keywords) delineates a distinct discourse centered on developing economies, especially Sub-Saharan Africa (e.g., Africa, Ghana), with emphasis on economic growth, public management, and environmental sustainability. It foregrounds structural challenges, growth targets, macroeconomic stability, market development, financial management, and local government debt , facing emerging economies seeking sustained expansion alongside prudent fiscal stewardship. Methodologically, it deploys advanced econometrics (e.g., method of moments, spatial econometric models) to capture spatial and temporal specificities of the Global South. The cluster integrates environmental governance (environmental impact, environmental technology) with natural resource management, orienting analysis toward sustainable growth supported by R&D and institutional responsibility in policy making. The explicit presence of COVID 19 signals assessments of shock effects on growth trajectories and the sustainability of public policies. Finally, references to institutional frameworks, regional policy, and government expenditure underscore a political territorial reading in which institutional quality is pivotal to the success or failure of structural reforms.

- **Cluster 5 : Fiscal Decentralization as a Lever for Decarbonization: Evidence on the Energy–Climate Nexus**

Cluster 5 (58 keywords) links fiscal decentralization to the energy transition, environmental regulation, and climate policy, reframing local fiscal governance as a lever for mitigation and decarbonization rather than efficiency alone. Salient terms , carbon neutrality, carbon emissions, greenhouse gases, carbon sequestration, emission intensity, climate change , signal a focus on reducing carbon footprints, including in developing country contexts (e.g., India). Methodologically, the cluster features advanced empirical tools , data envelopment analysis, difference in differences, econometric models, emission inventories , to quantify policy impacts via counterfactual and comparative designs. The presence of energy transition, energy efficiency, energy policy, green innovation, alternative energy, and fossil fuels underscores an integrated agenda aligning fiscal instruments with energy policy to support a progressive shift away from fossil fuel dependence.

3.13. Abstract content analysis

- *Most cited theories*

The textual analysis of the abstracts reveals a limited yet structuring set of theoretical frameworks that guide scholarly inquiry into fiscal decentralization and territorial development. The predominance of certain frameworks indicates a strong intellectual lineage, while others, less frequent, offer complementary perspectives.

Fiscal federalism theory clearly emerges as the most widely used conceptual foundation, with twenty-two occurrences. Rooted in the foundational works of Musgrave (1959), Tiebout (1956), and Oates (1972), it sets out principles for the optimal allocation of tax and budgetary competencies across levels of government. In this corpus, it is employed to analyze how local fiscal autonomy affects territorial economic performance and to assess the relevance of vertical and horizontal transfers. Some contributions draw on the “second-generation” approach (e.g., Weingast, 2009), incorporating political-institutional dimensions, such as information asymmetries and incentive mechanisms, that extend the framework beyond purely economic considerations.

Next is political economy (five abstracts), which explains how power relations, actor interests, and institutional contexts shape the implementation and outcomes of fiscal reforms. This framework complements economic analyses by accounting for why similar instruments may yield divergent effects across political and territorial configurations (North, 1990; Acemoglu & Robinson, 2012).

Public choice theory appears three times, positing that public decision-makers pursue their own interests rather than a purely collective optimum. Popularized by Buchanan & Tullock (1962), it is used here to discuss incentive effects and risks of capture or inefficiency associated with fiscal decentralization. Also present in three studies, institutional theory underscores the decisive influence of formal and informal rules, administrative traditions, and social norms on fiscal governance (Scott, 2014). Authors adopting this lens emphasize the need to situate decentralization within specific institutional settings to understand implementation gaps and outcome differences. Finally, multi-level governance (three cases) provides a political-science framework focused on interactions across decision-making tiers. Initially developed in the context of European integration (Marks, 1993; Hooghe & Marks, 2001), it illuminates the complexity of intergovernmental relations in decentralized fiscal systems and is often combined with fiscal federalism to propose a more integrated reading of coordination and negotiation mechanisms.

- *Conceptual model proposed*

Territorial development is a complex, multidimensional process shaped by the interplay of multiple, systemically interacting factors. Four dimensions emerge as decisive: the fiscal–institutional dimension, the political–governance dimension, the environmental–technological dimension, and the spatial–socioeconomic dimension. Each exerts a direct effect on territorial performance and attractiveness, while maintaining interdependent relationships with the others.

The fiscal and institutional dimension plays a structuring role by determining territories’ capacity to mobilize and allocate financial resources to development projects. Recent studies indicate that optimizing local tax systems, combined with effective institutional management, fosters public and private investment and stimulates economic activity. This relationship is particularly strong where institutions are stable and transparent, ensuring taxpayer trust and sound resource allocation. Conversely, in settings of weak governance, fiscal capacity can be impaired, limiting its impact on territorial development.

The political and governance dimension shapes the strategic coherence and legitimacy of

development policies. Participatory governance that engages public, private, and civil-society actors enhances decision relevance and social acceptability. Inclusive and transparent decision processes facilitate the implementation of ambitious fiscal reforms and strengthen interterritorial coordination. Robust governance is likewise essential for steering investment toward strategic sectors and arbitrating territorial planning choices.

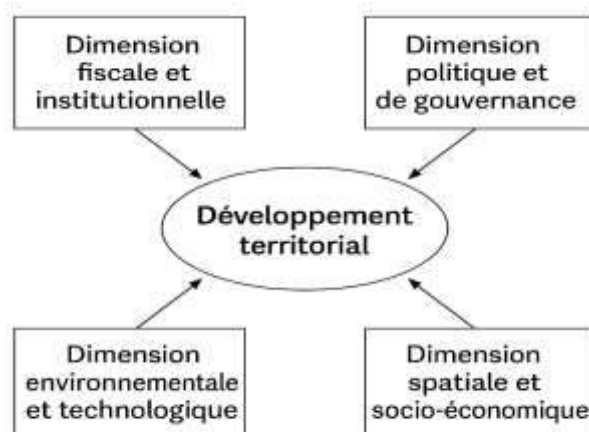
The environmental and technological dimension has become a central lever of sustainable territorial development. The adoption of green technologies, coupled with proactive environmental governance, reinforces long-term competitiveness and improves quality of life. Territories investing in technological innovation and ecological transition are more likely to attract sustainable investment and follow resilient growth trajectories. These choices nonetheless require adequate financing and effective institutional coordination to ensure durability.

The spatial and socioeconomic dimension influences the distribution of infrastructure, economic activities, and opportunities across space. Integrated spatial-planning policies aimed at reducing urban concentration and energizing peripheral areas foster territorial cohesion and limit regional inequalities. Experiences involving the relocation of public institutions and support for local economic development show that spatial balance and economic diversification are essential drivers of territorial attractiveness

These four dimensions do not operate in isolation but within a system of mutual interactions. Fiscal and institutional resources finance governance projects, technological innovations, and spatial interventions. Governance guides the allocation of these resources and coordinates territorial planning. Environmental and technological choices, in turn, influence spatial organization, while socioeconomic structuring conditions needs for resources, governance, and innovation. Territorial development can thus be understood as an integrated system in which weakness in any one dimension may compromise the overall development dynamic, hence the need for holistic, coordinated approaches.

To clarify the analytical structure used in this study, the accompanying figure presents a schematic representation of the proposed conceptual framework. It highlights the four determining dimensions, fiscal-institutional, political-governance, environmental-technological, and spatial-socioeconomic, and their direct relationship with the dependent variable, territorial development. This visual model synthesizes the main levers identified in the literature and illustrates how each contributes, in a complementary manner, to the overall dynamics of territorial development.

Fig 16 Conceptual Framework Based on Thematic Analysis



Source: Authors

4. Discussion

The analysis reveals a continuous increase in the number of publications addressing fiscal decentralization and territorial development over the period 2000–2025. A notable acceleration has been observed since 2015, reflecting the growing interest in issues of local governance within the broader context of sustainability and institutional reforms. The surge of publications on fiscal decentralization and territorial development between 2000 and 2025, particularly after 2015, can be explained by several converging dynamics.

First, the adoption of sustainability policies and the need for more effective local governance have strengthened the role of territorial communities in resource management and the provision of public services (Korbutiak et al., 2019). Second, institutional reforms undertaken in many countries, particularly in Africa, Eastern Europe, and Latin America, have expanded local fiscal powers, thereby increased financial autonomy and enhanced the ability to respond to local needs (Korbutiak et al., 2019). Third, the rise of territorial and social inequalities has reinforced interest in more targeted redistributive tools, particularly through local taxation (Szarowská, 2022).

The dominance of China, the United States, and India in scientific production can be explained by significant investments in research and development, supportive innovation policies, and strong institutional embeddedness in global scientific networks. By contrast, contributions from Africa and Latin America remain marginal, largely due to limited funding, restricted access to scientific infrastructure, and linguistic or institutional barriers that hinder their visibility on the international stage (Arunachalam & Manorama, 2020)

In addition, there is a bias in international databases such as *Scopus* and *Web of Science*, which privilege English-language journals and publications from the Global North, thereby reducing the visibility of scientific work produced locally in the Global South (Mongeon & Paul-Hus, 2016)

Thus, the geographical imbalance observed in scientific production results from a combination of structural disparities in funding, editorial infrastructure, and institutional recognition.

Leading journals such as *Sustainability* (Switzerland), *Environmental Science and Pollution Research*, *Land Use Policy*, and the *Journal of Cleaner Production* have advanced research linking fiscal decentralization, territorial disparities, and environmental outcomes. Recent studies reveal that well-designed fiscal autonomy can reduce regional inequality when paired with strong institutions and local revenue capacity (Kyriacou et al., 2017). However, evidence from China indicates that fiscal decentralization can aggravate pollution and carbon emissions unless moderated by environmental regulation and green innovation (Cheng & Zhu, 2021); (Wu & Wang, 2022).

Sustainability (Switzerland), published by MDPI, is an open-access journal covering a wide range of topics related to sustainable development. With an H-index of 207 and an SJR of 0.688 in 2024, it is ranked in the first quartile (Q1) of sustainability journals. The journal is recognized for its interdisciplinary approach, integrating economic, social, and environmental perspectives. Several bibliometric analyses confirm its position among the most prolific outlets for sustainability research, especially in studies related to land use, circular economy, and environmental governance (Tang et al., 2022; C. Zhang et al., 2019)

Environmental Science and Pollution Research, published by Springer, focuses on environmental sciences and pollution. With an H-index of 212 and an SJR of 1.004 in 2024, it is also ranked in Q1. The journal is well known for its coverage of the environmental impacts of public policies and for studies on pollution. *Land Use Policy*, published by Elsevier, focuses on land-use policies and territorial dynamics. It reports an H-index of 153 and an SJR of 1.847 in 2024, ranking it in Q1 within the fields of geography, planning, and development. The journal is essential for research on land governance and spatial planning policies. The *Journal of*

Cleaner Production, also published by Elsevier, concentrates on clean production and sustainability. With an H-index of 309 and an SJR of 2.058 in 2024, it is classified in Q1 across multiple categories, including environmental sciences and industrial engineering. The journal is widely recognized for its contributions to the transition toward sustainable practices and the analysis of environmental policies. Bibliometric studies identify it as one of the top platforms contributing to research on environmental sustainability, green finance, and climate-related policies (Effah et al., 2023; M. N. Shah & Shahid, 2024)

Co-authorship networks reveal a strong concentration of scientific collaborations in East Asia, with researchers affiliated with Chinese universities occupying a particularly central position. This trend is well documented in recent bibliometric analyses, which highlight China's continuous rise in global scientific production, especially in areas related to sustainability, the environment, and territorial policies. However, these collaborations remain predominantly regional. A recent study by Glänzel et al. (2024), published in *Scientometrics*, emphasizes that intercontinental co-publications account for less than 25% of China's international scientific output, with the majority of collaborations conducted with Asian or nearby European partners (Glänzel et al., 2024). This geographical limitation of collaboration networks can be partly explained by linguistic barriers, national policy priorities in research funding, and structural differences in university systems. Other works highlight China's growing centrality in global research, while noting that this centrality stems largely from the scale of production rather than diversity of international ties (Z. Zhang et al., 2018) ..

This lack of transversality reduces the capacity of researchers to integrate diverse perspectives, thereby limiting the construction of a truly internationalized scientific space. The supposed universality of science is thus contradicted by the reality of diffusion circuits and co-authorship logics, often biased in Favor of major research hubs. Several experts recommend strengthening multinational co-publication initiatives, collaborative funding networks, and open science policies in order to expand these networks beyond regional boundaries (Glänzel et al., 2024)

The co-occurrence analysis of keywords reveals a thematic structure organized around three main poles: the Chinese context, which occupies a central position in the corpus; fiscal decentralization as the conceptual core; and environmental and economic challenges as major fields of application. The mapping highlights several distinct research dynamics. Similarly, co-occurrence analyses of highly cited Chinese publications in environmental and resource economics indicate a strong clustering around themes such as sustainable development, energy efficiency, and carbon emissions (Han et al., 2022). These findings confirm the consolidation of a research field that integrates fiscal governance, environmental regulation, and economic policy within an increasingly interdisciplinary Chinese scholarly landscape.

A first cluster of articles focuses on the relationships between local fiscal governance, territorial development, social equity, and public policies, with attention to diverse contexts such as China, Brazil, or the European Union. These studies align with the literature emphasizing that decentralization can enhance the efficiency of public services and strengthen local participation (Martinez-Vazquez & Timofeev, 2010). A second strand mobilizes econometric approaches to examine the efficiency of decentralized fiscal systems, territorial competitiveness, and green innovation, integrating spatial models and environmental performance indicators. This orientation is evident in studies on Chinese cities, which explore the links between decentralization and environmental productivity gains. A third axis is structured around environmental regulation and externalities, focusing on green taxation, carbon taxes, or compensation mechanisms. These instruments are analyzed as incentive tools for ecological transition. Other works assess the impact of territorial taxation on energy transition, often through counterfactual or quasi-experimental approaches. In addition, an emerging body of literature on developing countries, particularly in Sub-Saharan Africa, addresses challenges related to governance, local debt, and sustainability, emphasizing the potential of fiscal

decentralization to support environmental objectives and human development (Monkam & Mangwanya, 2024; Udeagha & Breitenbach, 2023)

This study provides an additional contribution to understanding the evolution of the scientific field devoted to fiscal decentralization and territorial development. Through its approach and methodology, it sheds new light on this domain of research. The analysis reveals a tripartite configuration of the field, highlighting: (i) a dominant pole centered on economic efficiency and multi-level governance; (ii) an emerging axis integrating environmental and sustainability issues; and (iii) an institutional dimension analyzing the specificities of developing countries.

The study provides compelling evidence of the marked acceleration in scientific production since 2015, with an annual growth rate of 7.5%, accompanied by a clear thematic diversification toward issues of ecological transition and territorial resilience in the post-2020 period. A particularly significant contribution of this research lies in highlighting geographical disparities in scientific production. The analysis documents with precision the growing hegemony of Chinese institutions, which account for nearly half of the publications, while also revealing the severe deficit of studies addressing African and Latin American contexts. This raises important questions regarding the geographical and linguistic biases that structure the academic field.

The methodology developed in this study combines, in a synergistic manner, several complementary approaches: co-citation analysis to identify schools of thought, co-occurrence mapping to visualize thematic links, evaluation of institutional collaborations, and fine-grained temporal analysis of research dynamics. This methodological combination makes it possible to overcome the limitations of traditional literature reviews while offering both a panoramic and precise vision of the field's evolution.

For emerging countries, the results of this study underline several key implications. The limited visibility of research from these contexts indicates that essential issues such as local tax effort, real revenue potential, and the effectiveness of intergovernmental transfers remain insufficiently examined. Yet these elements are central to understanding whether fiscal decentralization can genuinely support territorial development. Many emerging economies face structural constraints, including weak cadastral systems, high informality, and uneven administrative capacities, which limit the ability of regions and municipalities to generate their own revenues. At the same time, the strong dependence on state transfers increases the importance of evaluating the equity and predictability of equalization mechanisms. Finally, the lack of studies on the institutional and political factors shaping decentralization reforms suggests that emerging countries need more context-specific analyses capable of identifying the conditions under which fiscal autonomy can translate into real improvements in local development.

4. Conclusion

The bibliometric exploration of literature on the effects of fiscal decentralization on territorial development, based on a corpus spanning 2000 to 2025, highlights a rapidly expanding body of scientific output. This trend is evident not only in the steady increase in publication volume but also in the growing prominence of specific geographic hubs, most notably China, which has become the central figure in the field. This leadership is reinforced by an editorial concentration in a set of influential journals and by a thematic broadening that connects local governance, environmental sustainability, fiscal performance, and territorial transformation.

Beyond quantitative growth, the analysis reveals the emergence of key scholarly figures across different regions. In Asia, Zhang X. and Wang Y. occupy central nodal positions, with their work on urban planning, environmental regulation, and local public debt management actively shaping current debates. In Africa, Amoah A. stands out for innovative research on fiscal inequalities and citizen behavior, while in Europe, Li Z. introduces relevant institutional

perspectives on regional resilience. From a methodological standpoint, the corpus demonstrates increasing reliance on advanced econometric models, spatial analysis techniques, and composite indicators, reflecting an ambition to better capture the differentiated effects of decentralization policies.

This study is constrained by four specific factors. First, the exclusive use of Scopus omits a substantial share of francophone, African, and Latin American research not indexed in this database, which likely underrepresents local studies on decentralization reforms. Second, nearly half of the corpus originates from China, resulting in a thematic and methodological tilt toward Chinese institutional settings, spatial econometric modeling, and environmental-policy applications; this concentration limits the applicability of results to countries with different governance systems. Third, the literature employs inconsistent measures of fiscal decentralization, ranging from simple revenue–expenditure ratios to composite autonomy indices, which reduces comparability across studies. Fourth, the bibliometric approach cannot fully capture qualitative aspects of institutional change, negotiation processes, or political dynamics that shape decentralization outcomes but are poorly reflected in keywords and metadata.

Future work should broaden geographical coverage beyond the current dominance of Chinese studies to include Africa, Latin America, and other understudied regions. More consistent and multidimensional indicators of fiscal decentralization and territorial development are also needed to improve comparability. Methodologically, expanding beyond spatial econometric models toward quasi-experimental and mixed approaches would strengthen causal analysis. Further research should examine how local fiscal autonomy interacts with environmental and climate policies. Finally, greater integration of governance factors such as institutional quality and citizen participation would help explain the differing outcomes of decentralization across contexts.

Références

- (1). Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959–975. <https://doi.org/10.1016/j.joi.2017.08.007>
- (2). Arunachalam, S., & Manorama, K. (2020). Science in the periphery: A bibliometric analysis of visibility issues in developing countries. *Journal of Information Science*, 46(5), 611–622. <https://doi.org/10.1177/0165551519875480>
- (3). Barthélémy, I., Lebel, D., Vaillancourt, R., Niro, C., Mitchell, J., & Bussi eres, J.-F. (2014). Conformity with optimal drug-use processes: Comparison between the accreditation Canada Managing Medications Standards and the hospital pharmacy in Canada report. *Canadian Journal of Hospital Pharmacy*, 67(2), 108–115. <https://doi.org/10.4212/cjhp.v67i2.1335>
- (4). Cheng, Z., & Zhu, Y. (2021). The spatial effect of fiscal decentralization on haze pollution in China. *Environmental Science and Pollution Research*, 28(36), 49774–49787. <https://doi.org/10.1007/S11356-021-14176-Y>
- (5). Gl anzel, W., Liu, Y., & Debackere, K. (2024). Geographical dynamics of international collaboration in science: The rise of China in co-authorship networks. *Scientometrics*.
- (6). Korbutiak, D., Krysovaty, A., & Tarasova, T. (2019). Transformation of local governance in Eastern Europe: Fiscal tools and institutional challenges. *Public Administration Issues*, 2, 49–65.
- (7). Kyriacou, A. P., Muinel-Gallo, L., & Roca-Sagal es, O. (2017). Regional inequalities,

- fiscal decentralization and government quality. *Regional Studies*, 51(6), 945–957. <https://doi.org/10.1080/00343404.2016.1150992>
- (8). Martinez-Vazquez, J., & McNab, R. M. (2003). Fiscal decentralization and economic growth. *World Development*, 31(9), 1597–1616. [https://doi.org/10.1016/S0305-750X\(03\)00109-8](https://doi.org/10.1016/S0305-750X(03)00109-8)
 - (9). Martinez-Vazquez, J., & Timofeev, A. (2010). *Decentralization measures revisited*.
 - (10). Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: a comparative analysis. *Scientometrics*, 106(1), 213–228. <https://doi.org/10.1007/s11192-015-1765-5>
 - (11). Monkam, N., & Mangwanya, M. G. (2024). Digital Tools for Boosting the Impact of Fiscal Decentralization in Africa's Local Economies. *F1000Research* 2024 13:279, 13, 279. <https://doi.org/10.12688/f1000research.143922.1>
 - (12). Neupane, D. (2024). The Relationship between Fiscal Decentralization and Economic Growth: A Systematic Review. *Journal of Business and Management*, 8(2), 50–60. <https://doi.org/10.3126/jbm.v8i2.76128>
 - (13). Oates, W. E. (1972). *Fiscal federalism*. Harcourt Brace Jovanovich.
 - (14). Pike, A., Rodríguez-Pose, A., & Tomaney, J. (2017). Shifting horizons in local and regional development. *Regional Studies*, 51(1), 46–57. <https://doi.org/10.1080/00343404.2016.1158802>
 - (15). Prud'homme, R. (1995). The dangers of decentralization. *The World Bank Research Observer*, 10(2), 201–220. <https://doi.org/10.1093/wbro/10.2.201>
 - (16). Rezende, F. (2021). The global periphery and knowledge production: Rethinking the geography of science. *Science and Public Policy*, 48(4), 536–547. <https://doi.org/10.1093/scipol/scab019>
 - (17). Rodden, J. (2004). Comparative federalism and decentralization: On meaning and measurement. *Comparative Politics*, 36(4), 481–500. <https://doi.org/10.2307/4150164>
 - (18). Rodríguez-Pose, A., & Ezcurra, R. (2010). Does decentralization matter for regional disparities? A cross-country analysis. *Journal of Economic Geography*, 10(5), 619–644. <https://doi.org/10.1093/jeg/lbp049>
 - (19). Shah, A. (1999). *Balance, accountability, and responsiveness: Lessons about decentralization* (Issue Policy Research Working Paper No. 2021).
 - (20). Slavinskaite, N. (2017a). Fiscal Decentralisation and Economic Theory. *Review of Business and Legal Sciences*, 26, 109. <https://doi.org/10.26537/rebules.v0i26.1005>
 - (21). Slavinskaite, N. (2017b). Fiscal Decentralisation and Economic Theory. *Review of Business and Legal Sciences*, 26, 109. <https://doi.org/10.26537/rebules.v0i26.1005>
 - (22). Smoke, P. (2001). *Fiscal decentralization in developing countries: A review of current concepts and practice*.
 - (23). Stegarescu, D. (2005). Public sector decentralization: Measurement concepts and recent international trends. *Fiscal Studies*, 26(3), 301–333. <https://doi.org/10.1111/j.1475-5890.2005.00017.x>
 - (24). Szarowská, I. (2022). Fiscal decentralization and redistribution: Empirical evidence from Central Europe. *European Research Studies Journal*, 25(2), 25–38.
 - (25). Udeagha, M. C., & Breitenbach, M. C. (2023). Can fiscal decentralization be the route to the race to zero emissions in South Africa? Fresh policy insights from novel dynamic

- autoregressive distributed lag simulations approach. *Environmental Science and Pollution Research* 2023 30:16, 30(16), 46446–46474. <https://doi.org/10.1007/S11356-023-25306-Z>
- (26). Weingast, B. R. (2009). Second generation fiscal federalism: The implications of fiscal incentives. *Journal of Urban Economics*, 65(3), 279–293. <https://doi.org/10.1016/j.jue.2008.12.005>
- (27). Wu, Q., & Wang, R. (2022). Exploring the Role of Environmental Regulation and Fiscal Decentralization in Regional Energy Efficiency in the Context of Global Climate. *International Journal of Environmental Research and Public Health*, 19(24). <https://doi.org/10.3390/IJERPH192416577>