

Decoding Worldwide Research Trends on Cooperatives and their Economic Influence: A Bibliometric Analysis from 2015-2025

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Abstract

Global cooperative research (2015–2025) evolved dynamically, peaking in scholarly interest during 2020–2023. Publication surge in 2020–2021 reflected rising interest in cooperatives amid COVID-19 disruptions. Thematic analysis reveals "cooperative" as the central concept, frequently linked with terms such as "economic," "development," "sustainable," "health," "policy," and "environmental," forming distinct clusters that explore public health and community well-being, policy and economic evaluation, global crises and adaptation, and sustainability. This body of work underscores a rich, interdisciplinary approach. The study identifies China and the U.S. as leading contributors, with the UK, Germany, and Australia as key international research intermediaries. This global engagement is complemented by an evolving methodological sophistication, evidenced by the frequent appearance of terms such as "analysis," "model," "impact," and "data," indicating a shift towards more rigorous empirical evaluations, often employing quantitative and mixed-method approaches including bibliometric analysis.

Keywords: Cooperatives, Economic, Trends

1. Introduction

Cooperatives are globally recognized for their pivotal role in economic development, fostering financial stability, generating employment, and promoting sustainable business practices (Mckillop et al, 2020). Operating on principles of economic democracy, these member-owned and member-operated entities enable active participation in decision-making and collective sharing of benefits, which in turn fosters inclusivity and social welfare (Saz-Gil et al., 2021). Their remarkable flexibility is evident in their presence across diverse sectors, including agriculture, finance, and housing. Historically, cooperatives have demonstrated considerable resilience during periods of economic instability and have been instrumental in ensuring a more equitable distribution of benefits within communities (Ribas et al., 2022).

Despite the widely acknowledged contributions of cooperatives and the growing academic interest in this distinctive organizational model, a comprehensive mapping of the evolving research landscape on cooperatives remains a significant challenge (Osten et

al., 2024). While numerous studies have delved into various facets of cooperatives—ranging from their economic resilience and organizational governance to their profound social impact—there are persistent limitations in understanding the broader patterns, interconnections, and emergent trends within this expanding body of literature (Westoby & Shevellar, 2019). Many existing studies often maintain a regional focus, thereby failing to provide a holistic perspective that integrates diverse findings across different geographical and thematic domains (Billiet et al., 2021). The unique governance model of cooperatives, which fundamentally emphasizes participatory principles and member voice, further distinguishes research in this field from conventional enterprise studies, making a broad mapping even more imperative (Lauer et al., 2024).

The multifaceted nature of cooperatives means that researchers investigate them across a wide array of areas. For instance, studies highlight their capacity to create stable and sustainable employment, particularly in sectors vulnerable to market fluctuations (Paudel et al., 2021). They also underscore the crucial role

cooperatives play in improving community living standards through mechanisms such as profit distribution and general welfare enhancement, often providing greater benefits than conventional businesses in this regard (Paudel et al., 2021). However, scholarly attention also addresses significant challenges faced by cooperatives in maintaining business sustainability (Joshi et al., 2024). These include difficulties in securing adequate funding and gaining broader market access, often when competing with conventional firms that possess more extensive resources (C, 2025). The imperative for digital adaptation and addressing digital literacy issues among cooperative members also represents a current frontier of research. Furthermore, regulatory and policy constraints, such as unsupportive taxation frameworks and licensing hurdles, are identified as critical areas that impede cooperative development and competitiveness (Ziegler et al., 2023).

Given the increasing volume of scholarly publications on cooperatives and the growing complexity of the global economic landscape, fundamental questions arise: How are research trends in this field evolving over time? What are the interconnections between researchers, institutions, and thematic clusters that shape this domain of knowledge? Therefore, a systematic review is crucial not only for understanding the current role of cooperatives in the global economic context but also for identifying critical research gaps and pinpointing areas for future contributions. This study aims to address these questions by exploring the dynamics of cooperative research over the past decade, specifically from 2015 to 2025.

By utilizing a combination of bibliometric analysis and a systematic literature review (SLR), this research endeavors to provide a deeper, more structured understanding of the emerging themes, publication patterns, and global collaborations within cooperative studies. This dual approach is expected to offer new, data-driven insights that can inform and support the future development and effectiveness of cooperatives worldwide.

2. Research Method

Methodology refers to the approach used to understand a research problem and seek answers to research questions. In social sciences, methodology reflects how research is conducted, influenced by assumptions, objectives, and the scope of study (Marzi et al., 2024). The selection of a methodology depends on the research goals and the characteristics of the issue being examined. One of the commonly applied methods in academic studies is bibliometric analysis and systematic literature review (SLR) (Rialti et al., 2019). Bibliometric analysis enables researchers

to evaluate publication trends, identify citation patterns, and understand collaboration among scholars. Meanwhile, SLR provides a comprehensive overview of a particular topic by systematically and structurally reviewing relevant literature (Cheng et al., 2023).

In previous studies, bibliometric analysis has been widely used to map research developments across various fields, including economics and business (Goyal et al., 2020). This approach is often employed to analyze scientific publications over extended periods to identify patterns and emerging trends (Bashir et al., 2021). Studies have shown that this method offers valuable insights into research dynamics and the role of specific concepts within various disciplines. For instance, research on economic inequality and wealth distribution demonstrates how bibliometric analysis can bridge different disciplines such as economics and sociology (Goyal & Kumar, 2020; Phoong et al, 2022).

Given these advantages, this study adopts a combination of bibliometric analysis and SLR to map the influence of cooperatives on economic development. Additionally, this research will analyze various factors related to the evolution of cooperatives in economic contexts and identify research trends on cooperatives over time. The methodological approach in this study is systematically designed to ensure that the findings provide in-depth and accurate insights. The following sections will elaborate on the research design, characteristics of the study subjects, data collection methods, key indicators, and data analysis techniques applied to derive conclusions that effectively address the research questions.

Research Design

This research is using bibliometric visualization, bibliometric analysis, and Systematic Literature Review (SLR) as the main method.

Bibliometric analysis is a method for evaluating scientific literature by analyzing publication metadata, such as keywords and citation relationship (Rojas-Lamarena, 2022). In this study, the focus is on keyword analysis and bibliographic coupling at the country level. Keyword analysis (co-word analysis) identifies frequently co-occurring terms in research, revealing thematic trends and emerging topics in cooperative studies (Wang & Chai, 2018). Meanwhile, bibliographic coupling measures the similarity between countries based on shared references, mapping international research collaborations (Chang et al., 2015).

To complement the bibliometric approach, this study also employs a Systematic Literature Review (SLR), which provides a structured and reproducible method for synthesizing existing research. Unlike bibliometric analysis, which focuses on quantitative

patterns, SLR allows for an in-depth evaluation of key themes, methodologies, and theoretical frameworks in cooperative research (Edenfield, 2019). By integrating both methods, this study ensures a comprehensive understanding of global research trends on cooperatives, combining data-driven insights from bibliometric analysis with qualitative synthesis from SLR to offer a well-rounded perspective (Saz-Gil et al., 2021).

Bibliometric visualization tools such as VOSviewer and Scopus AI are used to create network maps illustrating keyword relationships and global research linkages. This research design is chosen because bibliometric analysis provides an objective, scalable, and data-driven approach to understanding global research trends, while SLR enhances the depth of analysis by critically evaluating the content of key studies (Goyal & Kumar, 2020; Cheng et al., 2023).

Research Subject

The sample for this study consists of scholarly publications retrieved from the Scopus database, focusing on the selected keyword “cooperatives and global economic.” All publications in the sample are peer-reviewed journal articles that are relevant to the research topic.

Research Tools

This study focuses on publications from the last ten years (2015-2025), utilizing Publish or Perish. Additionally, Mendeley is used to manage and align keyword related to the research topic. Mendeley serves as an efficient tool for organizing research citations and references, streamlining literature organization and analysis (Wani et al., 2024). Lastly, VOSviewer is used for bibliometric data analysis and visualization, allowing for in-depth mapping of citation networks and keyword co-occurrence. VOSviewer is widely recognized for generating network visualizations based on common terms within specific research domains (Tomaszewski, 2023).

Research Procedure

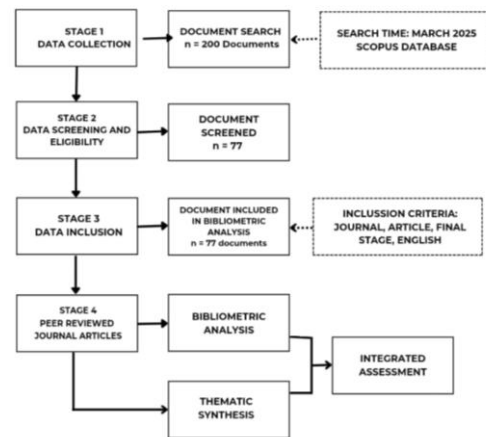


Figure 1: Research Framework

This study begins by identifying and selecting the research topic, “cooperatives and global economic,” with the objective of exploring the relationship between cooperatives and the global economy. Once the topic is established, the Scopus database is selected as the primary source due to its comprehensive indexing of peer-reviewed academic literature. The search is conducted in March 2025 using keywords such as “cooperatives” and “global economic,” which yields an initial total of 200 documents.

The document retrieval process is facilitated using the *Publish or Perish* software. The metadata from the Scopus search results is exported in RIS format and managed through Mendeley, where documents are organized into thematic folders. At this stage, a preliminary screening is conducted to remove duplicates and obviously irrelevant articles. After this initial filtering, 77 documents are retained for deeper evaluation and screening of eligibility.

Following this, a manual screening is conducted based on predefined inclusion criteria, which require documents to be: (1) journal articles, (2) written in English, and (3) in their final publication stage. As a result of this eligibility screening, all 77 documents are confirmed as suitable and included for further analysis.

The cleaned and organized dataset is then re-exported in RIS format and imported into VOSviewer for bibliometric analysis. The bibliometric analysis is divided into two main components:

1. Performance Analysis: to evaluate publication output over time, and journal productivity
2. Science Mapping: to visualize and assess co-occurrence of keywords, and country-level collaboration patterns.

In parallel, a thematic synthesis is conducted based on the contents of the peer-reviewed journal articles,

aiming to extract dominant research themes and contextual insights. The results from both the bibliometric and thematic analyses are finally integrated into a comprehensive narrative interpretation, highlighting trends, relationships between publications, and collaborative structures in global cooperative studies.

Data Analysis Technique

The bibliometric research data analysis technique involves a series of methods to evaluate scientific literature through comprehensive bibliographic data. The process begins with data collection from the Scopus database, which is then adjusted according to the metadata from the collector database. The analytical techniques used include performance analysis, which aims to assess the overall research and publication performance, and science mapping, which seeks to reveal the structure and dynamics of the research topic (Donthu et al., 2021).

These techniques together provide in-depth insight into research metadata, which, one interpreted, offer valuable information and support the development of more effective research and publication strategies. This analysis will highlight the interactions between various variables and subtopics, enabling a better understanding of the role of cooperatives and global economic.

Additionally, this research will evaluate keywords and research trends related to cooperatives and global economic that have emerged over the past ten years. The results of this analysis are expected to provide a deeper insight into the role of cooperatives in global economic, the influencing factors, and the evolving research trends. Furthermore, it is anticipated that these findings will open opportunities for further exploration in future studies. Thus, the methodology described above will serve as the foundation for this research, providing a systematic and structured framework to achieve the research objectives. The implementation of these methods will ensure valid interpretation in mapping, analyzing, and identifying the research problems under study

3. Results & Discussions

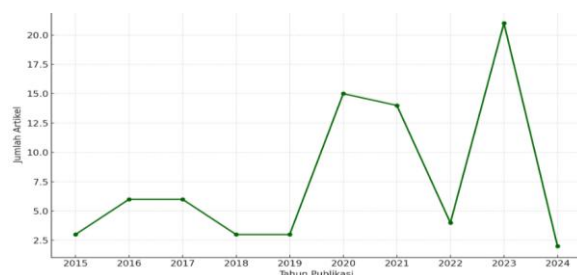


Figure 2: Trends in Global Cooperatives Publications (2015-2025)

The line graph titled "Trends in Global Cooperatives Publications (2015–2025)" illustrates the yearly distribution of academic articles focusing on cooperatives over an 11-year period. From 2015 to 2019, the trend remains relatively stable and modest, with publication counts fluctuating between 3 to 5 articles per year. This indicates that in the early part of the decade, cooperatives did not receive significant attention in global academic discourse. It could reflect either a niche interest in the topic or limited integration of cooperatives into mainstream economic and development studies at the time.

A marked shift occurs in 2020 and 2021, where the number of publications spikes sharply to 16 in 2020 and remains high in 2021. This substantial increase coincides with the onset of the COVID-19 pandemic, which disrupted global economic systems and exposed vulnerabilities in conventional capitalist structures (Billiet et al., 2021). During this time, cooperatives likely gained traction as an alternative or complementary model for community resilience, inclusive economies, and local empowerment (Dave, 2021). The increase in research suggests a reactive scholarly interest in exploring how cooperative models could mitigate systemic economic shocks and support sustainable development.

In 2022, however, the graph shows a significant drop back to about 5 publications, signaling a temporary decline in academic focus. This dip could result from a number of factors, such as a reallocation of research priorities, delays in publication cycles, or reduced funding for research on alternative economic systems (Billiet et al., 2021). Nonetheless, the following year (2023) marks the peak of cooperative-related research in the dataset, with over 20 publications. This surge could represent the culmination of pandemic-related research outputs, as well as growing institutional and policy interest in social and solidarity economy models as viable post-crisis recovery strategies (Agarwala & Mori, 2025).

Finally, the years 2024 and 2025 display zero publications, which likely does not indicate a real decline in research activity, but rather reflects data incompleteness, as the publication and indexing processes are often delayed. Especially for 2025, which is ongoing, these figures should be interpreted with caution. Overall, the graph depicts a growing global awareness of and academic engagement with cooperatives, especially during periods of global uncertainty and transformation, positioning them as an important subject within development,

Keyword Co-Occurance Analysis

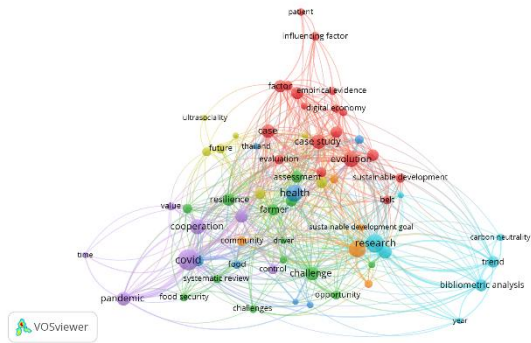


Figure 3: Keyword Co-Occurrence Analysis

The co-occurrence network visualization in the image above illustrates the thematic structure of literature related to global cooperatives using keyword mapping (Traub & Kovacevic, 2025). Each node represents a keyword, and the lines or links indicate co-occurrence relationships among those terms within the same articles (Vargas et al., 2022). The nodes are grouped into several distinct clusters, each with a unique color representing a different thematic domain or research focus. For example, the green cluster in the center prominently features terms like "health," "community," and "research," suggesting a significant focus on cooperative engagements in public health and community well-being.

The red cluster at the top appears to concentrate on policy, economics, and evaluation-related themes. Keywords such as "evaluation," "economic confidence," and "case study" suggest an analytical orientation, focusing on measuring the effectiveness and sustainability of cooperative models. This cluster likely represents studies that explore how cooperatives function in varying institutional or economic environments, often assessing their resilience, innovation capacity, and governance models. Its relatively dense linkages imply that this analytical focus is interwoven with broader cooperative concerns.

Meanwhile, the purple cluster on the left side shows thematic emphasis on global crises and adaptation. Keywords such as "covid," "cooperation," "pandemic," and "food security" point to research on how cooperatives played roles during global emergencies, particularly the COVID-19 pandemic. This group underscores the role of cooperatives in crisis mitigation, local response networks, and ensuring the continuity of services and supplies under disrupted conditions. The links between "covid" and terms in the green and red clusters also suggest that pandemic-related studies are closely tied with broader discussions on community resilience and

health systems.

Lastly, the blue cluster to the right revolves around sustainability and bibliometric approaches. Terms like "carbon neutrality," "SDGs," and "bibliometric analysis" suggest an emerging interest in evaluating cooperatives through the lens of environmental sustainability and data-driven literature reviews. These themes demonstrate a modern turn in cooperative research, emphasizing climate responsibility, long-term development goals, and scholarly mapping techniques. Overall, the visualization reflects a rich, interdisciplinary body of work on cooperatives, connecting social, economic, health, environmental, and methodological threads into a cohesive research landscape.

Bibliographic Country Coupling

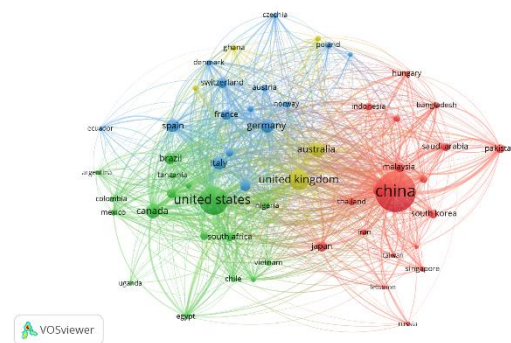


Figure 4: Bibliographic Country Coupling

The second visualization presents a country co-authorship network map generated by VOSviewer, which illustrates the collaborative relationships among countries in global academic literature (Isfandyari et al., 2021). Each node represents a country, and the size of the node indicates the volume of publications or contributions from that country. The lines or edges connecting the nodes represent co-authorships, meaning researchers from the connected countries have collaborated on scholarly publications. The thickness of these lines denotes the strength or frequency of such collaborations. The color clusters group countries that are closely linked in terms of collaboration, suggesting regional or strategic research partnerships.

In this map, China and the United States are the two most prominent nodes, signifying their dominant roles in global academic output. China appears in a red cluster with several Asian and Middle Eastern countries like Malaysia, Saudi Arabia, and South Korea, showing strong regional and strategic linkages. The United States, forming the green cluster, is centrally connected with numerous countries, particularly from the Americas, Europe, and parts of Asia, including Canada, Brazil, Germany, and South Africa. The clustering implies a broad, diversified

Overall, the visualization reflects the geopolitical dynamics of global research. It underscores not only the centrality of powerhouse nations like China and the U.S. but also the importance of cross-border academic collaboration in strengthening knowledge production. The structural patterns in the network show how research is increasingly a product of international effort, with regional blocs forming dense sub-networks while remaining interlinked through influential bridge countries.

Several high-frequency co-occurring terms are clustered around the central concept, including “economic,” “development,” “sustainable,” “health,” “policy,” and “environmental.” The strong presence of these terms indicates that studies on cooperatives

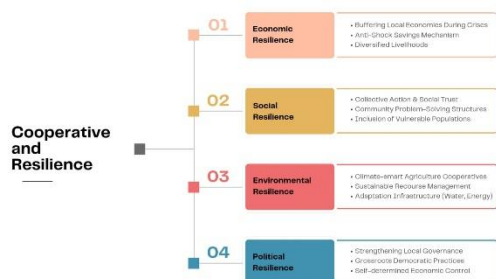
Furthermore, the appearance of methodological and analytical terms such as “analysis,” “model,” “impact,” and “data” reflects the increasingly empirical orientation of the field. This trend denotes a shift from normative or descriptive accounts toward more rigorous evaluations of cooperative performance, outcomes, and policy implications using quantitative and mixed-method approaches. Collectively, the keyword co-occurrence structure suggests that contemporary research on cooperatives is marked by interdisciplinarity, global applicability, and an evolving methodological sophistication that enhances its theoretical and practical contributions

Despite these notable academic developments, several empirical gaps persist. Specifically, the contributions of cooperatives toward macroeconomic resilience, transnational economic integration, and

Sustainable Development Goals remain underexplored in empirical literature. While cooperatives are frequently cited in normative policy frameworks, such as the International Labour Organization's recommendations and UNDESA reports, there is a scarcity of applied studies that critically evaluate their systemic impact across diverse economies. Moreover, although the cooperative model is often invoked in discourses on social justice, environmental ethics, and inclusive growth, its practical scalability across governance systems and market structures remains underinvestigated.

These limitations underscore significant opportunities for future research. There is a pressing need for longitudinal and comparative studies across different political economies, particularly those experiencing economic shocks or transitioning toward green and circular models. Incorporating diverse methodologies and interdisciplinary approaches from development studies, institutional economics, political ecology, and organizational sociology can offer deeper insights into the transformative potential of cooperatives. Advancing such research would not only enhance the theoretical clarity of cooperative economics but also solidify its role as a credible, inclusive, and ethically grounded strategy for global economic development.

Cooperatives and Resilience



The conceptual diagram titled “Cooperatives and Sustainable Development” outlines a multi-layered thematic model composed of three interlinked domains: ecological stewardship, inclusive economic structures, and social empowerment. This triadic architecture reflects cooperatives as operational agents of sustainable development, demonstrating their ability to integrate ethical commitments with pragmatic solutions across environmental, economic, and social spheres (Castilla-Polo & Sánchez-Hernández, 2020). The ecological stewardship domain situates cooperatives within the paradigm of environmental responsibility, highlighting their engagement in climate-adaptive agriculture, renewable energy networks, and circular economy systems. These initiatives embody a localized yet

scalable response to planetary boundaries and biodiversity concerns, positioning cooperatives as bottom-up catalysts in achieving environmental targets embedded in the Sustainable Development Goals (SDGs) (Imaz & Eizagirre, 2020).

The inclusive economic structures domain emphasizes cooperative models that reject extractive profit-maximization in favor of redistributive logic and democratic participation (Imaz & Eizagirre, 2020). Through shared ownership, reinvestment strategies, and member-based decision-making, cooperatives facilitate more equitable value chains and enable access to capital and services for historically marginalized groups, including smallholder farmers, informal workers, and indigenous communities (Wang & Chai, 2018). This domain reinforces cooperatives' role in advancing poverty alleviation, financial inclusion, and decent work, aligning their operations with SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), and SDG 10 (Reduced Inequalities).

Simultaneously, the social empowerment domain anchors cooperatives in human development by enhancing agency, collective voice, and civic participation. Education programs, health initiatives, and gender-equity practices within cooperatives serve as instruments of empowerment, allowing members to exercise social autonomy and influence community decision-making (Ribas et al., 2022). This domain aligns cooperatives with long-term capacity building and rights-based development, reinforcing their place in the broader architecture of sustainability governance.

Despite the model's coherence, it faces challenges in operationalizing cross-domain integration, particularly when balancing ecological constraints with social equity in resource-limited contexts. Additionally, the model underrepresents the institutional complexity of multistakeholder engagement and regulatory frameworks that shape cooperative scalability (De León et al., 2021). Future scholarship must strengthen the systemic articulation between ecological, economic, and social layers within cooperative systems. Doing so will enhance the theoretical precision and strategic utility of cooperatives as integrative mechanisms for sustainable development in both local and transnational arenas.

Cooperatives and Sustainable Development



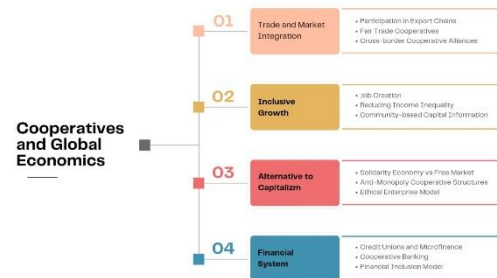
The conceptual framework titled “Cooperatives and Global Economics” constructs a layered thematic structure comprising three interconnected domains: institutional positioning, macroeconomic alignment, and systemic influence. This triadic schema frames cooperatives not only as economic actors within local contexts but also as transnational mechanisms that reinforce distributive justice, fiscal stability, and inclusive capital formation. The institutional positioning domain situates cooperatives within pluralistic market economies, highlighting their role in balancing profit-driven enterprises through principles of democratic governance, profit-sharing, and stakeholder accountability. Their structure ensures a redistribution of economic gains that supports both social equity and enterprise sustainability across varied geoeconomic landscapes.

The macroeconomic alignment dimension underscores the synchronization of cooperative principles with global fiscal dynamics, including trade flows, capital mobility, and monetary regimes. Cooperatives demonstrate adaptability within neoliberal economies while offering countercyclical mechanisms to buffer economic shocks, stabilize income, and enhance local economic multipliers (Bretos et al., 2017). This domain further integrates cooperatives within value chain modernization, fair trade arrangements, and regional integration platforms, evidencing their economic versatility and political resilience in globalized markets. Lastly, the systemic influence domain explores how cooperatives contribute to shaping global economic norms by promoting ethical finance, tax justice, and inclusive innovation ecosystems (Namdouh & Chentoufi, 2023). Their collective model directly interfaces with debates on economic democracy and equitable globalization.

Despite its analytical coherence, the framework exhibits certain limitations. The separation between local cooperative functions and global macroeconomic processes risks underrepresenting the feedback loops between grassroots initiatives and systemic economic reforms. Additionally, underexplored dimensions such as digital financial inclusion, cooperative-led trade blocs, and macroprudential regulation may constrain the

conceptual reach of cooperatives in the global economic arena (Fernandez et al., 2020). Future research must synthesize micro-level cooperative practices with macro-level institutional shifts, embedding cooperatives as key nodes within restructured global economic governance models. This will enhance their viability as both stabilizers and reformers in an increasingly volatile global financial system.

Cooperatives and Global Economics



The domain “Cooperatives and Global Economics” conceptualizes cooperatives as both agents and outcomes of evolving global economic dynamics, structured through three interrelated analytical lenses: global market integration, inclusive growth, and financial democratization. This framework interprets cooperatives not only as local economic units, but as actors embedded in, and responsive to, transnational economic structures, trade flows, and financial architectures. Within the global market integration dimension, cooperatives participate in global value chains through fair trade certification, agricultural export networks, and ethical sourcing platforms (Bretos & Marcuello, 2017). By pooling production, negotiating power, and distribution mechanisms, cooperatives enable small producers and enterprises to access international markets, especially in sectors such as coffee, dairy, textiles, and artisanal crafts. These participatory economic arrangements provide marginalized producers with leverage in otherwise asymmetrical trade relationships (Eseza & Nyakundi, 2023).

The inclusive growth dimension focuses on cooperatives as institutional vehicles that redistribute economic gains across social classes and geographies (Joshi, 2024). In contrast to traditional capitalist enterprises that concentrate wealth, cooperatives prioritize member welfare, reinvest profits locally, and pursue employment generation. This structure aligns with inclusive development goals by ensuring that economic participation extends beyond capital holders to workers, consumers, and producers. Empirically, cooperative proliferation in both the

Global North and South has demonstrated positive correlations with job stability, income equality, and reduced regional disparities, especially in rural and peri-urban areas (Billiet et al., 2021)

The financial democratization dimension articulates the role of cooperatives in transforming access to capital and financial services (Castilla-Polo & Sánchez-Hernández, 2020). Through credit unions, savings cooperatives, and microfinance networks, cooperatives expand financial inclusion by offering ethical, member-governed alternatives to commercial banking (Agarwala & Mori, 2025). This is particularly salient in economies marked by credit rationing, high collateral demands, or exclusionary interest regimes. Cooperatives mitigate these barriers by fostering trust-based lending, revolving funds, and community-based risk assessments (Mamdouh & Chentoufi, 2023). In doing so, they contribute to the deepening of financial markets while challenging the dominance of extractive financial logics.

Despite these contributions, the positioning of cooperatives within global economics is not without tensions. Cooperatives often face structural constraints in scaling operations, attracting investment, and complying with international standards. Moreover, global economic volatility, currency fluctuations, and digital trade disruptions may disproportionately impact cooperative models that lack hedging mechanisms or institutional buffers (Paudel & Acharya, 2021). Therefore, further theorization is required to integrate cooperatives into global economic models as resilient, redistributive, and rights-based actors. By doing so, the cooperative movement can be reframed not merely as a development tool, but as a transformative force in the architecture of the global economy.

Synthesis of Contributions and Research Gaps

The existing literature affirms that the cooperative model is both conceptually resilient and practically flexible, integrating economic democracy, social equity, and sustainability as a comprehensive alternative to conventional capitalist enterprise systems. Its implementation across various sectors including agriculture, finance, housing, and social care demonstrates its relevance in addressing structural inequalities and promoting inclusive economic participation. Nevertheless, multiple limitations constrain the broader applicability of the cooperative model. Much of the current research remains context specific, often focusing on case studies within high performing cooperative ecosystems such as those in Western Europe or selected Latin American countries, thereby limiting the external validity and global transferability of these findings.

Furthermore, the lack of clarity regarding the institutional architectures, governance mechanisms, and enabling policy environments that underpin successful cooperative outcomes weakens the model's scalability in different socioeconomic and political settings. This challenge is compounded by insufficient integration of cooperative studies into broader theoretical discourses such as post capitalist transition theories, solidarity economy frameworks, and degrowth models. As a result, cooperatives are often viewed as peripheral to mainstream development strategies rather than as central vehicles for structural transformation.

To address these constraints, future research must pursue longitudinal and comparative cross-national analyses that evaluate cooperative performance across varying institutional regimes. Additionally, deeper exploration into the political, legal, and financial infrastructures that facilitate or hinder cooperative development is necessary. Theoretical engagement with interdisciplinary paradigms including ecological economics, institutional sociology, and political economy is also essential to reframe cooperatives as pivotal actors within a pluralistic and equitable global economic system.

4. Conclusion

The research highlights significant shifts and patterns in the global study of cooperatives from 2015 to 2025. Initially, academic attention to cooperatives was modest and stable between 2015 and 2019, with a low number of publications annually. A marked increase in publications occurred in 2020 and 2021, coinciding with the COVID-19 pandemic, suggesting a scholarly interest in cooperatives as models for community resilience and sustainable development during global economic disruptions. Research peaked in 2023, possibly reflecting the culmination of pandemic-related studies and growing interest in social and solidarity economy models. The dominant thematic structure, revealed by keyword frequency, centers on "cooperative" as the pivotal concept, frequently linked with terms such as "economic," "development," "sustainable," "health," "policy," and "environmental". Keyword co-occurrence analysis further groups these into distinct clusters, including public health and community well-being (green cluster), policy, economics, and evaluation (red cluster), global crises and adaptation (purple cluster focusing on COVID-19 and food security), and sustainability and bibliometric approaches (blue cluster like "carbon neutrality" and "SDGs"). This reflects a rich, interdisciplinary body of work connecting social, economic, health, environmental, and methodological threads.

The study also maps global collaborative relationships in cooperative research, indicating China and the United States as the two most prominent nodes in

academic output, forming distinct regional and strategic linkages. Countries like the United Kingdom, Germany, and Australia serve as bridging nations, connecting major clusters and playing intermediary roles in international research networks. Other countries such as France, Italy, Spain, and Japan also actively participate in cross-regional scientific partnerships. The presence of geographic identifiers like “China” and “global” further emphasizes the transnational scope of scholarly engagement. This increasingly globalized research effort is also marked by an evolving methodological sophistication, as evidenced by the frequent appearance of terms such as “analysis,” “model,” “impact,” and “data,” signaling a shift towards more rigorous empirical evaluations, often employing quantitative and mixed-method approaches including bibliometric analysis.

References

- Agarwala, R., & Mori, A., “Union-Cooperative Collaborations: Toward a Global Framework of Analysis”, *Sociology Compass*, 2025. <https://doi.org/10.1111/soc4.70029>.
- Bashir, M., B., B., Komal, B., & Bashir, M., “Analysis of environmental taxes publications: a bibliometric and systematic literature review”, *Environmental Science and Pollution Research*, 28, 20700 – 20716, 2021. <https://doi.org/10.1007/s11356-020-12123-x>.
- Billiet, A., Dufays, F., Friedel, S., & Staessens, M., “The resilience of the cooperative model: How do cooperatives deal with the COVID-19 crisis?”, *Strategic Change*, 30, 99 – 108, 2021. <https://doi.org/10.1002/JSC.2393>.
- Bretos, I., & Marcuello, C., “Revisiting Globalization Challenges and Opportunities in the Development of Cooperatives”, *Public Economics: Fiscal Policies & Behavior of Economic Agents eJournal*, 2017. <https://doi.org/10.1111/apce.12145>.
- C, V., “Building a Better World: The Impact and Potential of Cooperatives”, *International Journal for Multidisciplinary Research*, 2025. <https://doi.org/10.36948/ijfmr.2025.v07i02.42501>.
- Castilla-Polo, F., & Sánchez-Hernández, M., “Cooperatives and Sustainable Development: A Multilevel Approach Based on Intangible Assets”, *Sustainability*, 12, 4099, 2020. <https://doi.org/10.3390/su12104099>.
- Cheng, C., Wang, L., Xie, H., & Yan, L., “Mapping digital innovation: A bibliometric analysis and systematic literature review”, *Technological Forecasting and Social Change*, 2023. <https://doi.org/10.1016/j.techfore.2023.122706>.
- Dave, M., “Resilient to Crises: How Cooperatives Are Adapting Sustainably to Overcome COVID-19-induced Challenges”, *International Journal of Rural Management*, 17, 13S - 39S, 2021. <https://doi.org/10.1177/0973005221991624>.
- De León, D., Fragoso, O., Rivera, I., & Rivera, G., “Cooperatives of Mexico: Their Social Benefits and Their Contribution to Meeting the Sustainable Development Goals”, *Social Sciences*, 10, 149, 2021. <https://doi.org/10.3390/SOCSCI10050149>.
- Edenfield, A., “Research in Cooperatives: Developing a Politically Conscious Research Methodology”, *Technical Communication Quarterly*, 28, 376 – 390, 2019. <https://doi.org/10.1080/10572252.2019.1621388>.
- Eseza, N., & Nyakundi, A., “A historical review on the Global evolution, benefits, challenges and performance of Cooperatives”, *Idosr Journal of Humanities and Social Sciences*, 2023. <https://doi.org/10.59298/idosr/2023/12.1.3894>.
- Goyal, K., & Kumar, S., “Financial literacy: A systematic review and bibliometric analysis”, *International Journal of Consumer Studies*, 2020. <https://doi.org/10.1111/ijcs.12605>.
- Imaz, O., & Eizagirre, A., “Responsible Innovation for Sustainable Development Goals in Business: An Agenda for Cooperative Firms”, *Sustainability*, 12, 6948, 2020. <https://doi.org/10.3390/su12176948>.
- Joshi, J., “Understanding the Role of Cooperatives in Economic Development”, *AMC Journal (Dhangadhi)*, 2024. <https://doi.org/10.3126/amcjd.v5i1.69128>.
- Lauer, R., Merkel, S., Bosompem, J., Langer, H., Naeve, P., Herten, B., Burmann, A., Vollmar, H., Otte, I., Brand, A., Brand, H., Clemens, T., Geller, S., Hinzmann, A., Huhnt, J., Kerstan, L., & Venne, J., “(Data-) Cooperatives in health and social care: a scoping review”, *Journal of Public Health*, 2024. <https://doi.org/10.1007/s10389-024-02226-x>.
- Mamdouh, N., & Chentoufi, M., “Representation and Evaluation of the Global Performance of Cooperatives”, *Studies in Business and Economics*, 2023. <https://doi.org/10.29117/sbe.2023.0141>.
- Marzi, G., Balzano, M., Caputo, A., & Pellegrini, M., “Guidelines for Bibliometric-Systematic Literature Reviews: 10 steps to combine analysis, synthesis and theory development”, *International Journal of Management Reviews*, 2024. <https://doi.org/10.1111/ijmr.12381>.

- Mckillop, D., French, D., Quinn, B., Sobiech, A., & Wilson, J., "Cooperative financial institutions: A review of the literature", *International Review of Financial Analysis*, 71, 101520 – 101520, 2020. <https://doi.org/10.1016/j.irfa.2020.101520>.
- Isfandyari-Moghaddam, A., Saberi, M., Tahmasebi-Limoni, S., Mohammadian, S., & Naderbeigi, F., "Global scientific collaboration: A social network analysis and data mining of the co-authorship networks", *Journal of Information Science*, 49, 1126 – 1141, 2021. <https://doi.org/10.1177/01655515211040655>.
- Paudel, R., & Acharya, C., "Cooperatives and economic growth in a developing country: The case of Nepal", *Annals of Public and Cooperative Economics*, 2021. <https://doi.org/10.1111/APCE.12323>.
- Phoong, S., Phoong, S., & Khek, S., "Systematic Literature Review With Bibliometric Analysis on Markov Switching Model: Methods and Applications", *SAGE Open*, 12, 2022. <https://doi.org/10.1177/21582440221093062>.
- Ozek, B., Lu, Z., Pouromran, F., & Kamarthi, S., "Analysis of pain research literature through keyword Co-occurrence networks", *PLOS Digital Health*, 2, 2022. <https://doi.org/10.1371/journal.pdig.0000331>.
- Rialti, R., Marzi, G., Ciappei, C., & Busso, D., "Big data and dynamic capabilities: a bibliometric analysis and systematic literature review", *Management Decision*, 2019. <https://doi.org/10.1108/MD-07-2018-0821>.
- Ribas, W., Pedroso, B., Vargas, L., Picinin, C., & De Freitas Júnior, M., "Cooperative Organization and Its Characteristics in Economic and Social Development (1995 to 2020)", *Sustainability*, 2022. <https://doi.org/10.3390/su14148470>.
- Saz-Gil, I., Bretos, I., & Díaz-Foncea, M., "Cooperatives and Social Capital: A Narrative Literature Review and Directions for Future Research", *Sustainability*, 2021. <https://doi.org/10.3390/SU13020534>.
- Tomaszewski, R., "Visibility, impact, and applications of bibliometric software tools through citation analysis", *Scientometrics*, 128, 4007 – 4028, 2023. <https://doi.org/10.1007/s11192-023-04725-2>.
- Traub, C., & Kovacevic, R., "Exploring co-participation in health: strategies and initiatives towards inclusive well-being", *International Journal of Health Governance*, 2025. <https://doi.org/10.1108/ijhg-08-2024-0107>.
- Vargas, C., Whelan, J., Brimblecombe, J., & Allender, S., "Co-creation, co-design, co-production for public health - a perspective on definition and distinctions", *Public health research & practice*, 32, 2, 2022. <https://doi.org/10.17061/phrp3222211>.
- Von Der Osten, F., Martins, T., Dong, H., & Bailey, A., "What does the 7th cooperative principle (concern for community) really mean?", *Management Review Quarterly*, 2024. <https://doi.org/10.1007/s11301-024-00421-4>.
- Wang, M., & Chai, L., "Three new bibliometric indicators/approaches derived from keyword analysis", *Scientometrics*, 116, 721 – 750, 2018. <https://doi.org/10.1007/s11192-018-2768-9>.
- Wani, J., Rehman, I., Ganaie, S., & Maqbool, A., "Measuring the global scientific literature on big data analytics in the LIS: the blending approach of altmetrics and bibliometrics", *Information Discovery and Delivery*, 2024. <https://doi.org/10.1108/idd-01-2024-0001>.
- Westoby, P., & Shevellar, L., "The possibility of cooperatives: a vital contributor in creating meaningful work for people with disabilities", *Disability & Society*, 34, 1613 – 1636, 2019. <https://doi.org/10.1080/09687599.2019.1594699>.
- Ziegler, R., Poirier, C., Lacasse, M., & Murray, E., "Circular Economy and Cooperatives—An Exploratory Survey", *Sustainability*, 2023. <https://doi.org/10.3390/su15032530>.