

A Bibliometric Review of Entrepreneurship Research in the Financial Sector: Trends, Themes, and Global Collaboration

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Abstract. In today's digital economy, entrepreneurship in the financial services sector plays an increasingly vital role in fostering inclusive growth, empowering micro, small, and medium enterprises (MSMEs), and expanding access to financial services. This study conducts a bibliometric analysis of 989 publications indexed in the Web of Science (WoS) from 1997 to 2025 to map the evolution, patterns, and thematic structure of academic literature in this domain. The results reveal a significant growth in publication volume, with an annual growth rate of 17.66%, reflecting rising scholarly interest in topics such as fintech innovation, microfinance, and financial inclusion. Using the Bibliometrix package in R, this study identifies the most influential authors, journals, and countries—highlighting the dominance of the United States and China in terms of productivity, with *Sustainability* and *Small Business Economics* emerging as the most prolific journals. Conceptual structures, analyzed through thematic mapping and keyword co-occurrence, demonstrate a shift in research focus from traditional themes like microfinance and poverty alleviation toward contemporary issues such as digital finance and entrepreneurial technologies. Despite the rapid expansion of literature, a substantial gap remains in developing an integrated framework that encompasses diverse forms of financial entrepreneurship—including cooperatives, fintech, Islamic microfinance, and hybrid models—across institutional, social, and community dimensions. This study provides a comprehensive mapping of the scholarly landscape and offers future research directions that emphasize cross-disciplinary collaboration, regulatory responsiveness, and the socio-economic impacts of financial entrepreneurship. The findings serve as a critical reference for researchers, policymakers, and practitioners in developing an inclusive and sustainable financial entrepreneurship ecosystem.

Keywords: entrepreneurship, financial services, bibliometric analysis, fintech, microfinance, financial inclusion, MSMEs, innovation

1. Introduction

In the modern economic era, financial services businesses such as fintech, cooperatives, and microfinance institutions play an important role in supporting economic and business activities. Services such as credit, savings, payments, and insurance are the main pillars for micro, small, and medium enterprises (MSMEs) to run their operations efficiently and sustainably. Equitable access to finance not only expands financial inclusion but also directly drives national economic growth. World Bank data shows that MSMEs in developing countries face an unmet financing need of more than US\$5.2 trillion per year (World Bank, 2020), underscoring the important role of financial institutions in bridging this gap. Financial services also help communities and businesses cope with economic risks and uncertainties, as evidenced by studies showing that access to banking services can mitigate the negative impact of declining sales during crises such as the COVID-19 pandemic (Beck et al., 2021).

Financial services companies contribute significantly to poverty reduction and job creation, with MSMEs accounting for more than 50% of formal employment in developing countries (IFC, 2023). The rapid digitization of financial services, including fintech, digital wallets, and online lending, has accelerated financial inclusion by reaching people in remote areas efficiently and at low cost. However, this digital transformation also presents new challenges, such as the need for adaptive digital regulation and financial technology risk mitigation. Maintaining a balance between digital innovation and consumer protection is becoming increasingly important in the digital economy.

Entrepreneurship in financial services encompasses a range of activities, including institution-oriented (cooperatives), fintech-enabled (digital finance applications), Islamic microfinance, community-focused, agent-oriented, and social-commercial hybrid models (OECD, 2024). Advances in financial technology, the push for national financial inclusion, and the growth of MSMEs have driven the diversity and expansion of this sector (Kudelić et al., 2023). Recent research highlights the integration of artificial intelligence in entrepreneurial finance and the transformation of traditional institutions through digital and open banking innovations.

Previous systematic reviews have generally focused on specific topics such as fintech innovation for financial inclusion, the impact of microfinance on women's empowerment, and the role of community-based cooperatives in local economic development (Kudelić et al., 2023, Stefanelli et al. 2022). However, these reviews often emphasize technological aspects or isolated case studies, resulting in a lack of a comprehensive framework that integrates various types of financial services entrepreneurship.

Despite valuable insights from previous research, there remains a significant gap in the literature: the absence of an integrated framework that maps and integrates various forms of financial services entrepreneurship, taking into account institutional, social, technological, and community-based approaches. A holistic and systematic approach is needed to examine the interactions between various financial services and entrepreneurial initiatives. This approach will enable a deeper understanding of how these factors collectively influence economic outcomes and community development, and serve as a guide for future research and policy.

Identifying these gaps is crucial to providing a strong conceptual foundation for policy-making, SME mentoring, and financial innovation in startups. By mapping the actors, types, and subdomains of financial entrepreneurship, future research can move beyond a narrow focus on technology or isolated cases toward a more integrated perspective to support sustainable economic development.

Table 1. Types of Financial Entrepreneurship

Types of Entrepreneurship	Main Form	Actor / Performer
Institution-Based	Establishing a cooperative / MFI	Social Entrepreneurs
Fintech-Enabled	Microloan applications, e-wallets	Fintech Founders
Islamic Microfinance	BMT, Islamic credit union	Entrepreneur sharia
Community-Based	Savings and loan group	Community Leader
Agent-Based	Laku Pandai agent / cooperative	Individual Agent
Hybrid Social-Commercial	Social enterprise + business model	Social Modern Entrepreneurs

Table 2. Forms of Financial Entrepreneurship

Sub-field	Main Focus
Fintech	Modern financial technology
Microfinance/Cooperatives	Community-based financial services
Islamic Finance	Sharia-based financial services
Insurtech/WealthTech	Insurance & wealth management
Crowdfunding/Alternative Finance	Alternative & social financing
Embedded/B2B Finance	Integrated B2B financial services

2. Methods

Bibliometrics is one of the scientometric disciplines that aims to study scientific literature through a qualitative analysis approach (Salini, 2016). Bibliometric analysis plays a major role as a tool for

describing, evaluating, and conducting systematic and continuous scientific monitoring and review (Derviş, 2019). This study utilizes bibliometric methods to provide an overview of the development of entrepreneurship research in the field of finance over the past few years, while also providing direction for future research.

2.1 The search query and data collection

To ensure adequate coverage of the topic, we used keywords to form the initial search query: “entrepreneurship” OR “entrepreneur” OR “startup.” This study used the words ‘entrepreneurship’ OR “entrepreneur” to maintain the relevance of the search results. Meanwhile, the word “startup” is used due to the development of terminology referring to entrepreneurship or new businesses. To cover financial services, words such as “financial services” OR “finance industry” OR “microfinance” OR ‘fintech’ OR “digital finance” OR “financial cooperatives” OR “Islamic finance” are used. These words were selected based on the financial service categories for small and medium-sized enterprises. The Web of Science (WoS) database was used for data collection because it covers 34,000 journals and supports various use cases for researchers and analysts (Birkle et al., 2020). The initial search results yielded 989 articles that had been published online as of July 2025.

2.2 Refining of the initial results

In the document search process, this study only considered articles in English to facilitate understanding, which did not have a significant impact on the bibliometric analysis results (Dobrescu et al., 2021). Furthermore, the search was also limited to scientific articles published in journals due to the verification process for these documents (Ramos-Rodríguez and Ruíz-Navarro, 2004). The limitations of this study are further illustrated in Figure x.

2.3 Bibliometric analysis

The use of bibliometric analysis aims to manage the exponential growth of literature in a field of study. Bibliometric tools are capable of conducting in-depth analysis and providing comprehensive information on the relationships between articles, citations, co-citations, and keywords, as well as helping to identify significant research themes (Zupic and Cater, 2015). This bibliometric analysis was conducted using the “bibliometrix” package from R (Aria and Cuccurullo, 2017).

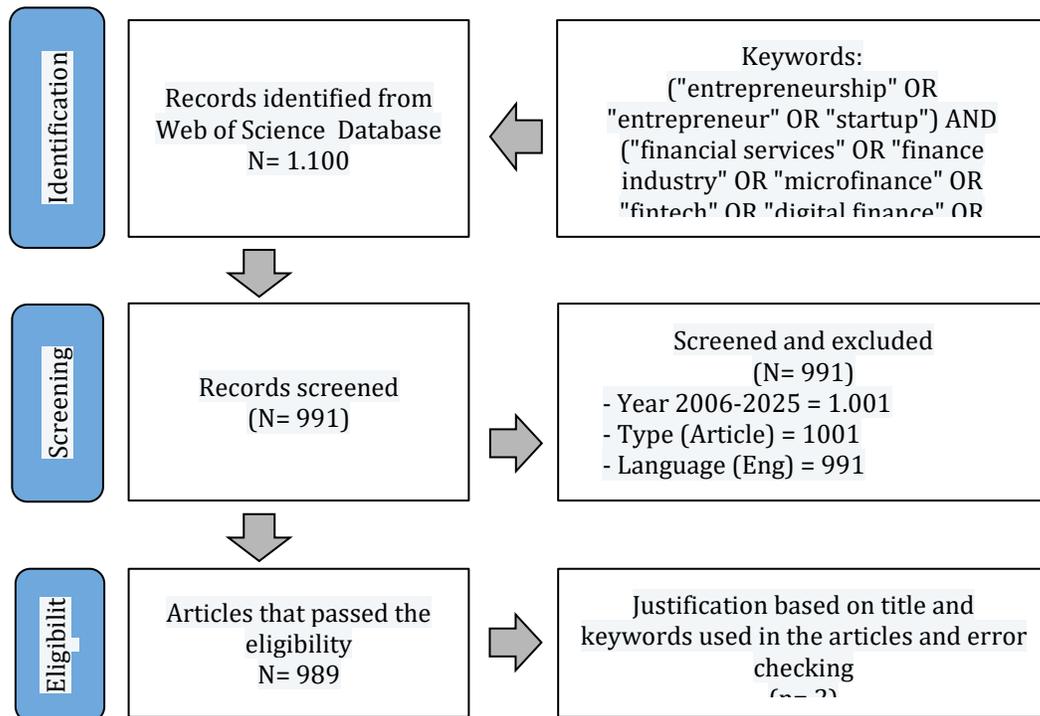


Figure 1. Identification and Eligibility Flow of Relevant Articles

3. Results

3.1 Background

Key information regarding the results of bibliometric analysis, such as year, number of sources, number of keywords, and document type, is presented in Table 1.

Tabel 3. General Information Regarding Document Data

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	1997:2025
Sources (Journals, Books, etc)	471
Documents	989
Annual Growth Rate %	17.66
Document Average Age	4.79
Average citations per doc	22.29
References	0
DOCUMENT CONTENTS	
Keywords Plus (ID)	1443
Author's Keywords (DE)	2806
AUTHORS	
Authors	2222
Authors of single-authored docs	175
AUTHORS COLLABORATION	
Single-authored docs	185
Co-Authors per Doc	2.64
International co-authorships %	32.86
DOCUMENT TYPES	
article	889
article; book chapter	32
article; early access	61
article; proceedings paper	5
article; retracted publication	2
Source(s): Authors' own work	

The general information table in Table 1 shows the publication range from 1997 to 2025 with an average growth rate of 17.66% per year. These documents have an average of 22.29 citations per document. In addition, 2806 keywords were found from the authors themselves ("Author's Keywords"). In the author information, there are 2222 authors, where 175 documents were written by a single author and 32.86% of the documents were the result of international collaboration. Finally, the types of documents analyzed were mostly journal articles (889 documents).

3.2 Overview

3.2.1 Average citation

The first manuscript published on the topic of financial entrepreneurship, as shown in Table 2., was in 1997. The average citation per article was initially 19 in 1997 and then experienced dynamics. Documents in 2001 had the highest average total citation per year, namely 14. Figure 2. shows that documents in 2007 had the lowest average total citation per year.

Table 2. Average citation per year

Year	Average total citation per article	Number	Average total citation per year	Citable years
1997	19	1	0.66	29
2001	350	1	14	25
2002	33	1	1.38	24
2003	91	1	3.96	23
2005	12	3	0.57	21
2006	38.5	2	1.93	20
2007	5	1	0.26	19
2008	37.67	3	2.09	18
2009	13.5	6	0.79	17
2010	41.91	11	2.62	16
2011	56.5	18	3.77	15
2012	26.36	11	1.88	14
2013	57.35	26	4.41	13
2014	31.44	18	2.62	12
2015	63.07	29	5.73	11
2016	42.53	43	4.25	10
2017	36.58	38	4.06	9
2018	28.85	52	3.61	8
2019	37.73	66	5.39	7
2020	23.23	97	3.87	6
2021	20.78	95	4.16	5
2022	18.17	115	4.54	4
2023	12.96	104	4.32	3
2024	4.12	152	2.06	2
2025	0.86	95	0.86	1

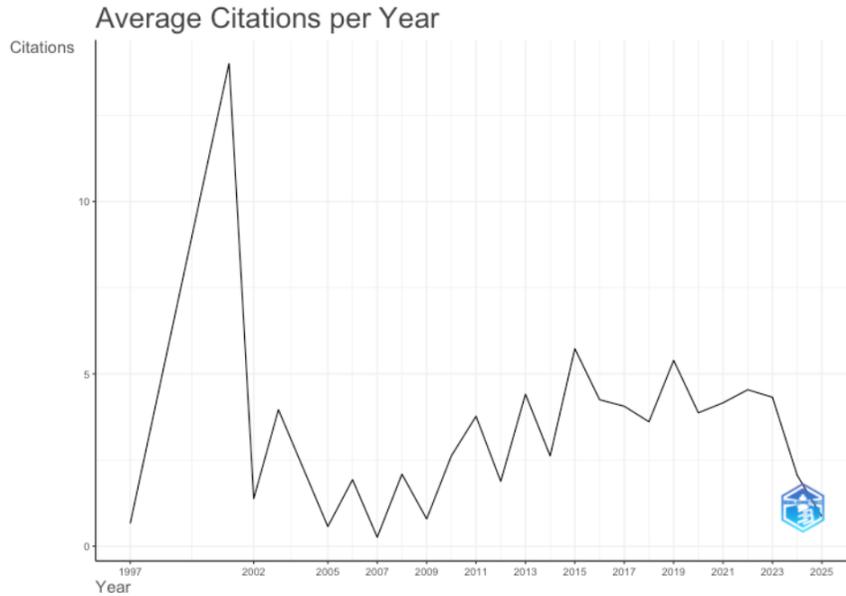


Figure 2. Average citation per year. Source: Authors' work

3.2.2 Annual scientific production.

Figure 2. presents annual scientific production, which shows that publications on the theme of financial entrepreneurship have increased from year to year.

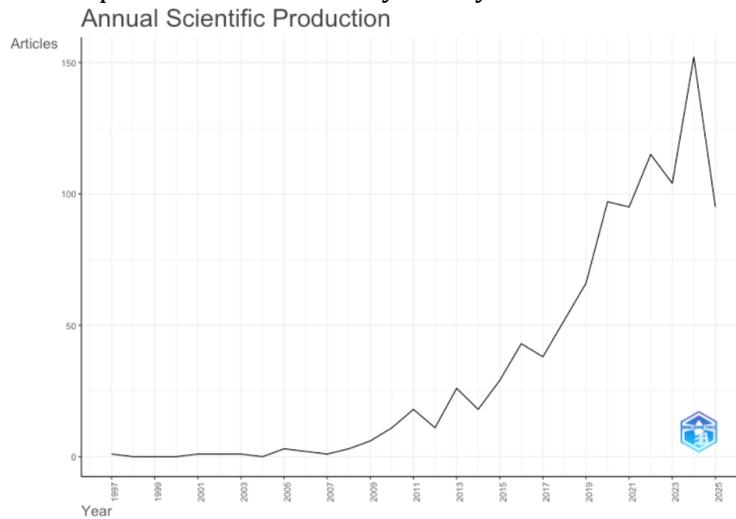


Figure 2. Annual scientific production. Source: Authors' work

3.3 Sources and documents

This section provides detailed information about the sources where publications are published. It includes the most relevant sources, sources with the most local citations, Bradford's law, and trends in source production over time.

3.3.1 Most relevant sources.

The ten most productive sources shown in Figure 3 indicate that publications on this topic are dominated by Sustainability with 27 articles, followed by Small Business Economics (24 articles) and the Journal of Business Venturing (20 articles).

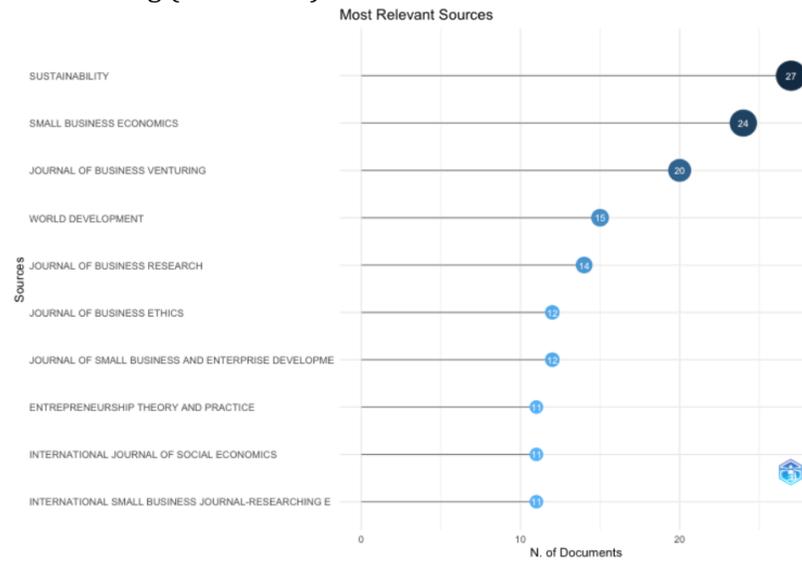


Figure 3. Most Relevant Sources. Source: Authors' work

3.3.2 Bradford's law

This concept was introduced by Samuel C. Bradford in 1934 and describes the distribution or fragmentation of a research topic across various journals. In this context, the theme of entrepreneurship in the health sector is analyzed based on its distribution across a number of journals, making it possible to measure the extent to which the topic is spread across existing publications. A total of 31 journals are included in Zone 1 (core sources) according to Bradford's Law, with Sustainability, Small Business Economics, and Journal of Business Venturing being the top three. This zone includes the most productive journals in publishing articles related to the topic under review.

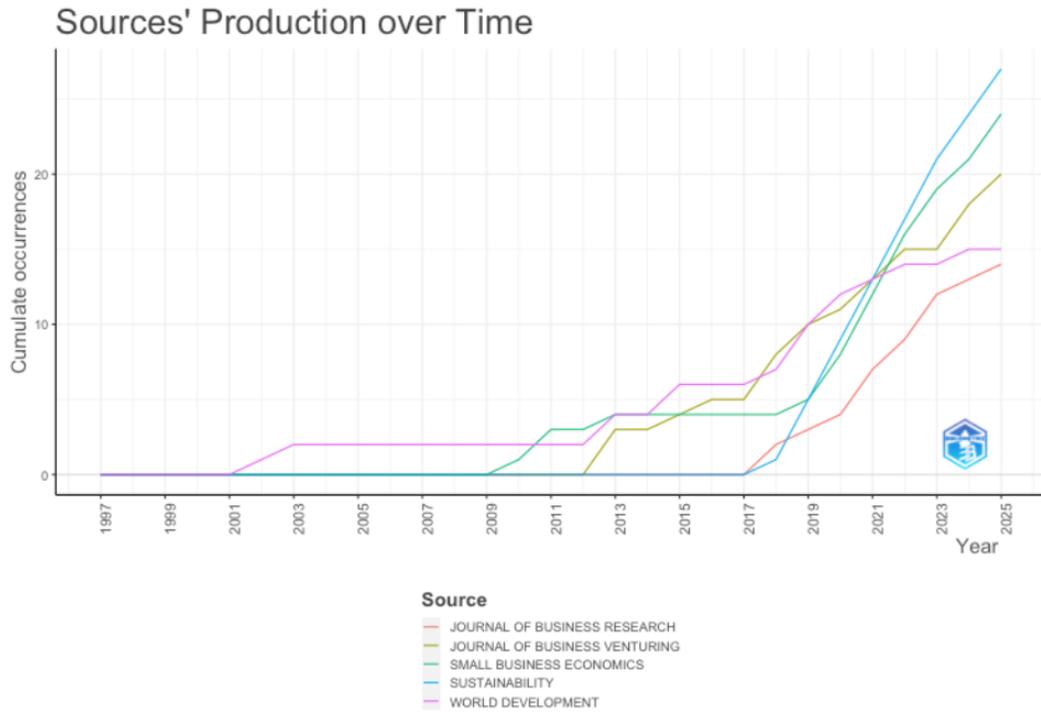


Figure 4. Source dynamics. Source: Authors' work

3.4 Authors and countries

This section discusses authors who have contributed to entrepreneurship in the health sector and contributions from various countries. The analysis covers the most productive authors, publication rates based on Lotka's Law, countries with the most citations, trends in scientific production by country over time, and the country of origin of corresponding authors.

3.4.1 Most relevant authors.

The most prolific author on the topic of entrepreneurship in healthcare is Ashta A with 8 publications, followed by Bruton GD, Mersland R, and Sun SL, who each contributed 7 articles. In terms of fractionalized contributions, Chakrabarty S has the highest score (4), indicating his active role in co-authoring. This list shows the leading researchers who have a strong influence in this field of study.

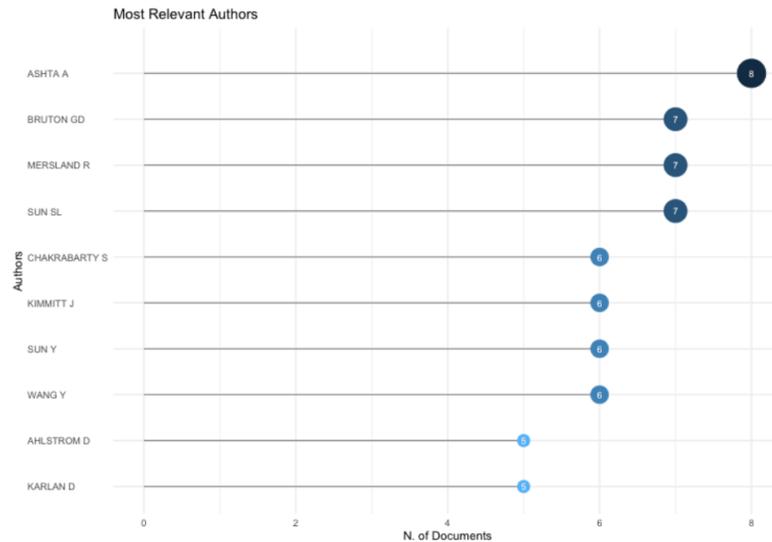


Figure 5. Most Relevant Authors. Source: Authors' work

3.4.2 Authors' production.

The authors' publications show consistency and significant contributions from several leading names such as Ashta A, Bruton GD, and Sun SL. For example, Ashta A has been actively publishing articles from 2012 to 2024 on topics related to financial inclusion and microfinance. Meanwhile, Bruton GD stands out with a high number of citations, such as a 2013 article that received 363 citations. Sun Y has also been one of the most productive authors in recent years, with highly influential articles, such as one in 2023 that received 75 to 86 citations. Overall, this data shows the continuity of research and the strong influence of several leading authors in the field of entrepreneurship and inclusive finance.

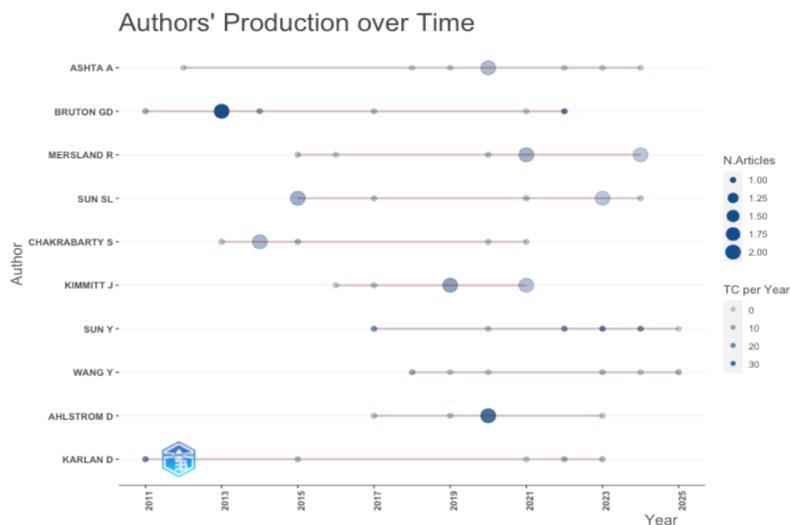


Figure 6. Authors' Production. Source: Authors' work

3.4.3 Lotka's law.

Based on bibliometric analysis using Lotka's Law, it appears that the distribution of author productivity is dominated by authors with only one article. Of the total data, 1,969 authors (88.6%) wrote only one article, in line with Lotka's characteristic pattern where the majority of scientific contributions come from authors with a single publication. There were 170 authors (7.7%) who wrote two articles, and this number continued to decline significantly as the number of articles written increased. Only one author (0.045%) wrote eight articles. This pattern is consistent with Lotka's Law, which states that the number of authors decreases exponentially as publication productivity increases.

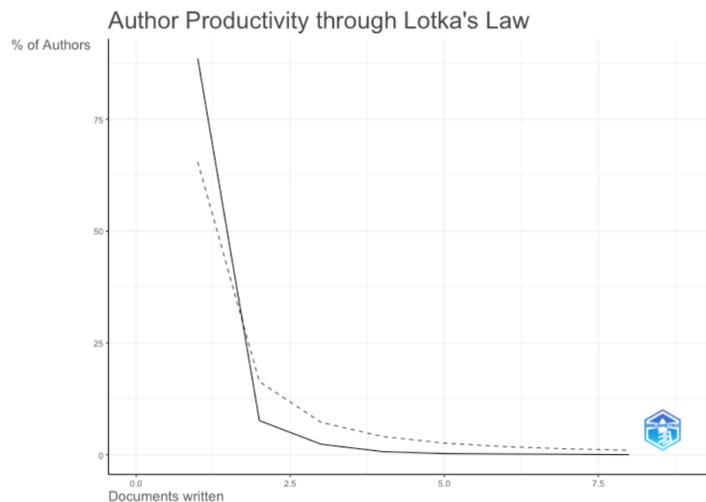


Figure 7. Author Productivity through Lotka's Law. Source: Authors' work

3.3.4 Corresponding authors' countries

The United States and China are the two countries with the highest number of articles, with 161 and 147 publications, respectively. Countries such as the United Kingdom, Italy, and Australia show a high proportion of international collaboration, as indicated by a significant MCP ratio. Malaysia, Belgium, and Italy also have high MCP ratios, indicating active involvement in cross-country collaboration. In general, research contributions come from various countries in Asia, Europe, America, and Oceania, reflecting the global nature of the topics analyzed.

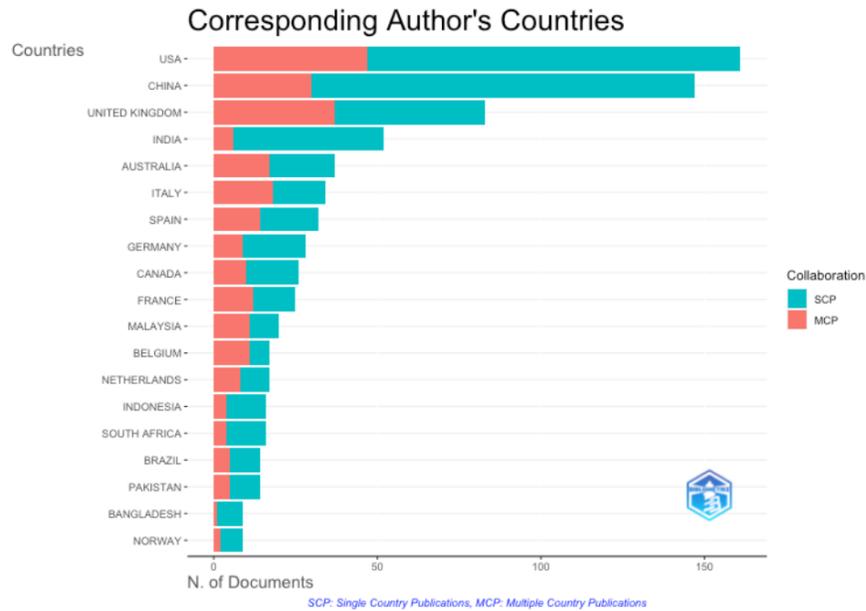


Figure 8. Corresponding Author's Countries. Source: Authors' work

3.3.5 Countries Scientific Production.

The United States and China dominate scientific production with 557 and 498 publications, respectively. European countries such as the United Kingdom, Italy, and Germany are also among the most productive. A number of Asian and African countries such as India, Indonesia, Malaysia, Ghana, and Tanzania show active involvement despite their contributions being lower than those of developed countries. The distribution of publications illustrates global participation in research, with contributions coming from various regions of the world.

Country Scientific Production

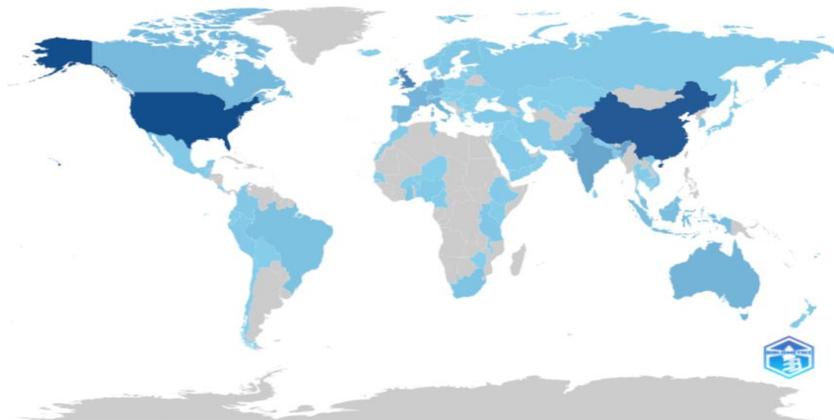


Figure 9. Country Scientific Production. Source: Authors' work

3.3.6 Countries' production over time.

Scientific production from the United States, China, India, the United Kingdom, and Italy has shown a sharp upward trend since 2010. The United States began to dominate in 2010 and

peaked with 557 publications in 2025. China has shown a significant surge in recent years, particularly after 2020. Other countries such as the United Kingdom, India, and Italy have also experienced consistent growth, indicating an increase in global contributions to scientific publications on this topic.

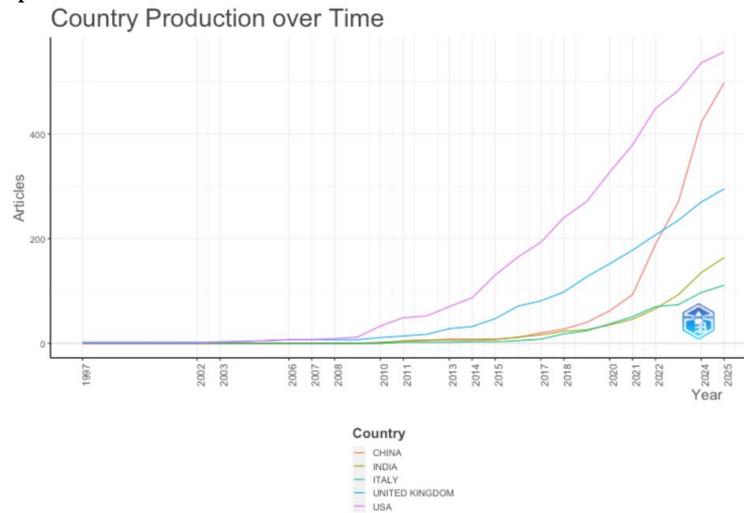


Figure 10. Countries' Production Over Time. Source: Authors' work

3.3.7 Most Cited Countries.

The United States is the most influential country in scientific publications with a total of 6,089 citations and an average of 37.8 citations per article, followed by the United Kingdom and China. Although China is quite productive, its impact per article is relatively low (16.5 citations), far below Western countries. Sweden recorded the highest average citations per article (85.9), indicating very high publication quality despite having fewer total citations. Countries such as Germany (43.8), Canada (37.7), and Australia (28.7) also show very significant contributions. Conversely, India, despite being an active contributor, only receives an average of 7.7 citations per article, indicating more limited academic influence.

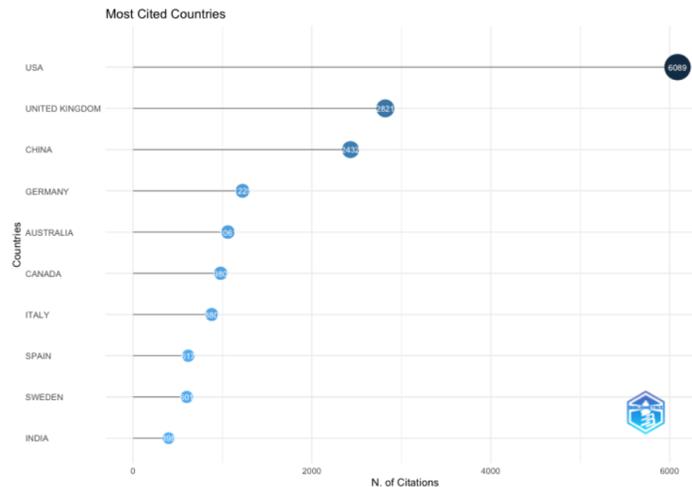


Figure 11. Most Cited Countries. Source: Authors' work

3.3.8 Most Relevant Affiliations

The institution with the most publications in this study was the University of Agder with 18 articles, followed by Makerere University (15 articles) and Indiana University and Zhejiang University, which each contributed 14 articles. Several other universities with significant contributions include Monash University, Texas Christian University, University of Bergamo, and Wageningen University, each with 13 publications. Florida Atlantic University and Katholieke Universiteit Leuven are also among the ten most productive affiliations with 12 articles each, indicating the active role of these institutions in related research topics.

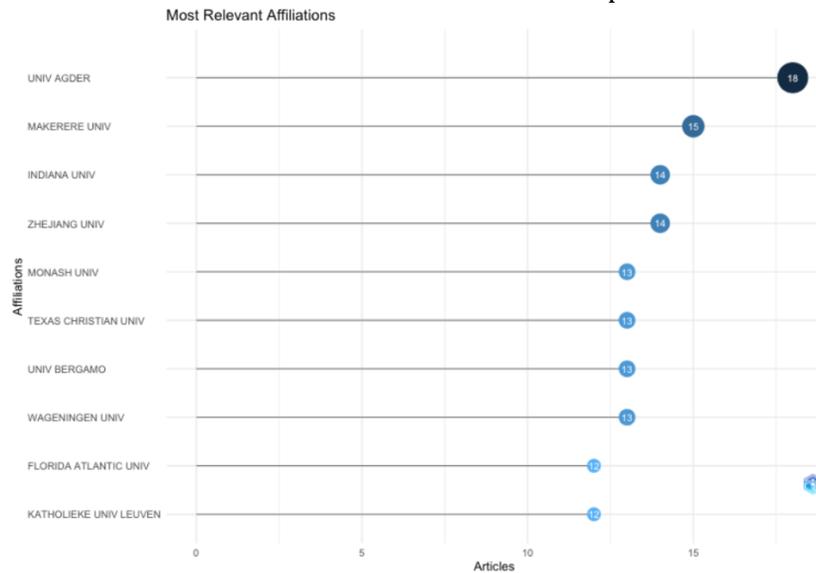


Figure 12. Most Relevant Affiliations. Source: Authors' work

3.5 Words framework

3.5.1 Most frequent words

The words “entrepreneurship” and “microfinance” appear most frequently, indicating the main focus of the research. Terms such as “impact,” “performance,” and “innovation” are also frequently used, indicating attention to results and developments in this context. The words ‘gender’ and “poverty” reflect the social dimensions that are also of concern in this study. In general, this collection of keywords reflects the relationship between entrepreneurship, microfinance, and their impact on growth and welfare.

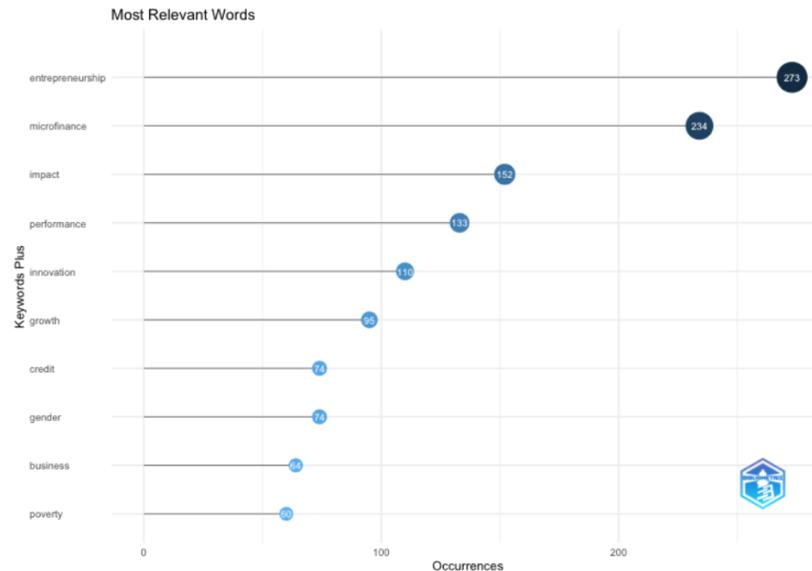


Figure 13. Most frequent words. Source: Authors’ work

3.5.2 Word cloud

The word cloud image shows that the words “entrepreneurship” and ‘microfinance’ dominate in frequency of appearance, illustrating the main focus of the publications analyzed. Other words such as “impact,” “performance,” “innovation,” and “growth” also appear prominently, reflecting interest in the results, progress, and impact of entrepreneurial activities. Terms such as “gender,” “poverty,” and “credit” indicate the connection between economic themes and social issues. Overall, this visual representation shows the interconnection between financial aspects, innovation, and welfare in the context of the study.



Figure 14. Word cloud. Source: Authors’ work

3.5.3 Word frequency over time

The cumulative frequency of keywords has increased significantly since 2015. The words “entrepreneurship” and “microfinance” have experienced the sharpest increase, indicating a high

level of interest in these topics in recent years. Words such as “impact,” “performance,” and “innovation” have also shown steady growth since 2018. Overall, this graph illustrates the growing scientific interest in the topics of entrepreneurship and microfinance over time.

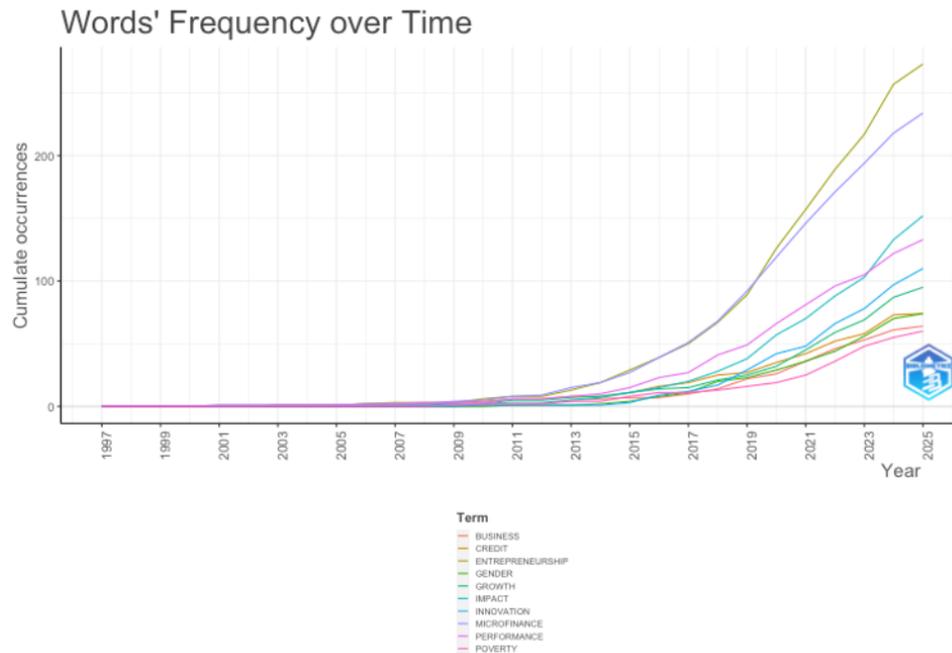


Figure 15. Words' Frequency Over Time. Source: Authors' work

3.5.4 Trend topics

Topics such as “entrepreneurship,” “microfinance,” and ‘performance’ are the most frequently mentioned themes and have continued to increase in recent years. Several topics such as “technology,” “economic growth,” and “internet” began to dominate in 2022, reflecting a shift in focus towards digital and modern issues. Topics such as “emerging economies,” “market,” and “credit programs” began to gain attention in the 2017–2020 period. This data shows a thematic development from institutional and social issues towards more innovative and technological topics in research.

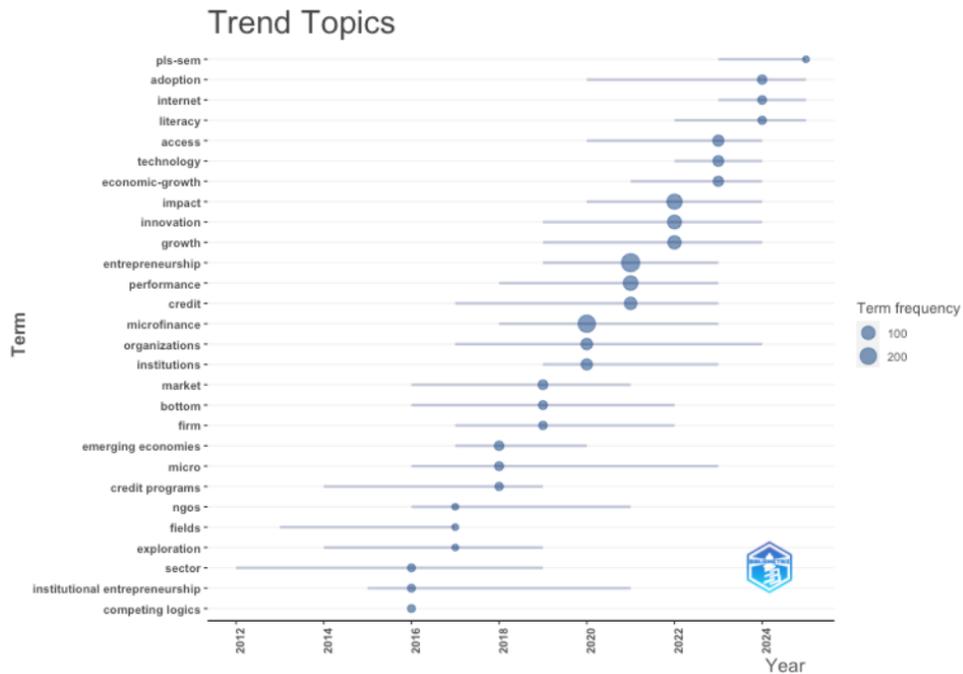


Figure 16. Trend topics. Source: Authors' work

3.6 Collaboration

3.6.1 Collaboration network.

The collaboration network shows that some authors form strong and consistent working groups, such as Bruton GD with Khavul S, and Mersland R with D'Espallier B. Authors such as Ashta A, Chakrabarty S, and Wang Y. also appear to be centers of collaboration within their respective groups. There are several separate clusters that show the diversity of collaboration networks in this field of research. This visualization indicates the existence of structured and focused scientific collaboration among certain groups of authors.

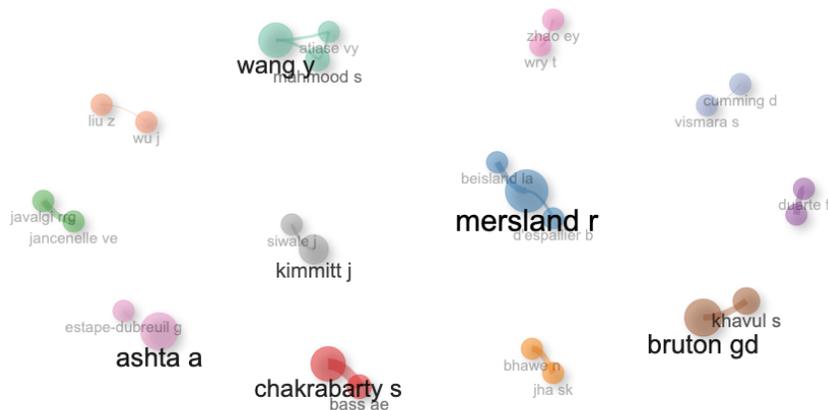


Figure 17. Collaboration network. Source: Authors' work

3.6.2 Countries Collaboration Map

The collaboration map shows that the United States, China, and the United Kingdom are the main hubs in the international cooperation network. Collaboration pathways appear to connect countries in Europe, Asia, and Oceania, reflecting the global distribution of research activities. Countries in darker colors indicate a higher intensity of contribution to scientific publications. Overall, this map illustrates the active involvement of various countries in cross-border cooperation in related research fields.



Figure 18. Countries Collaboration Map. Source: Authors' work

3.7 Conceptual structure

3.7.1 Thematic map

Themes such as entrepreneurship, microfinance, and impact fall under the category of basic themes, indicating that these topics are highly relevant but still in the development stage. Themes such as innovation, organizations, and management are in the motor themes quadrant, which means that these topics have a high level of development and importance in the field of study. Several themes such as models, investment, and markets are categorized as niche themes, indicating a narrow but fairly developed focus. Meanwhile, credit, gender, and poverty are in the emerging or declining themes quadrant, indicating that these topics may be developing or beginning to decline in research attention.

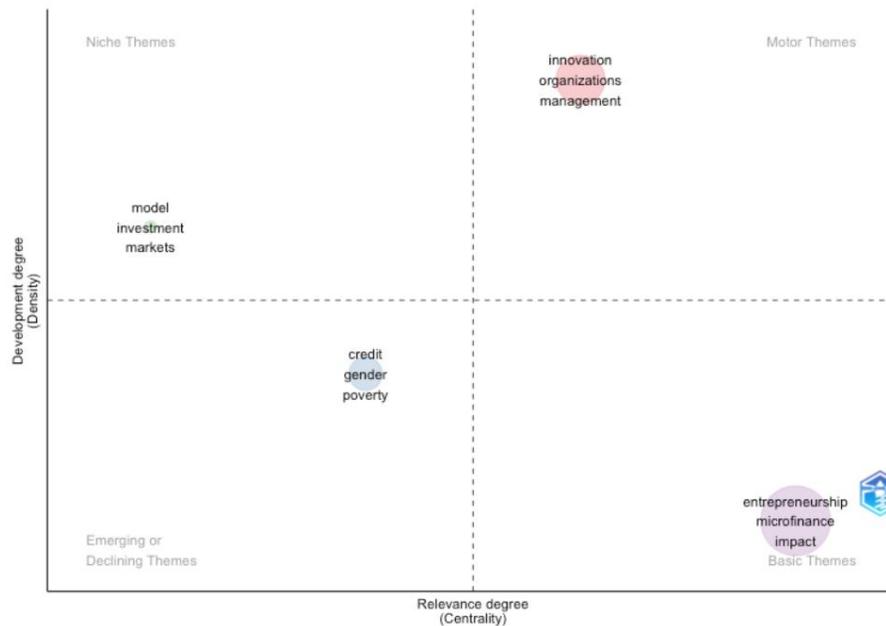


Figure 20. Thematic Map. Source: Authors' work

3.7.2 Co-occurrence network

The keywords entrepreneurship, microfinance, and impact occupy a central position in the network of interrelationships, indicating their important role in the research topic structure. These terms are closely linked to other themes such as performance, credit, poverty, and innovation, forming a main cluster colored red. On the other hand, keywords such as social entrepreneurship, management, and organizations form separate thematic clusters, indicating a more specific sub-topic focus. Overall, this visualization reflects the complex and segmented conceptual structure of the field of research being analyzed.

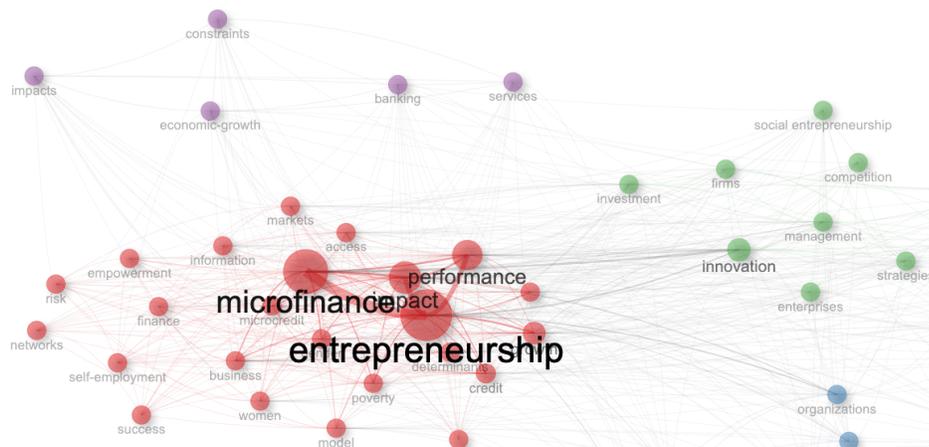


Figure 21. Co-occurrence network. Source: Authors' work

4. Discussion

The results of this bibliometric review highlight several important trends and insights in the field of entrepreneurship and financial services research. A steady increase in publication volume and a high level of international collaboration reflect a growing global interest and interconnectedness of research in this field. The dominance of journals such as *Sustainability* and *Small Business Economics* indicates a strong focus on sustainable development, innovation, and the economic impact of entrepreneurship.

An analysis of author productivity and collaboration networks shows that although some authors and institutions are highly productive and influential, most contributors publish only one article, consistent with Lotka's Law. This pattern underscores the openness of this field to new contributors and the diversity of perspectives brought to the discourse. The thematic evolution observed in the keyword analysis shows a shift from traditional topics such as microfinance and poverty alleviation towards more contemporary issues such as digital finance, technology, and innovation. This transition reflects broader changes in the global economy, where digital transformation and technological advances are reshaping the landscape of entrepreneurship and financial inclusion. The emergence of topics such as “technology,” “economic growth,” and “the internet” as dominant themes in recent years suggests that future research will likely continue to explore the intersection of entrepreneurship with digital innovation and technology.

Furthermore, the co-occurrence and thematic mapping analysis reveals the complex and interconnected nature of research in this field. Core themes such as entrepreneurship, microfinance, and impact remain central, while innovation and management are becoming increasingly important as “driving themes” that propel the field forward. Meanwhile, topics such as credit, gender, and poverty are emerging or declining, reflecting shifts in research priorities and the dynamic nature of the field.

In short, this bibliometric review provides a detailed and nuanced understanding of the evolution, current state, and future direction of entrepreneurship research in the financial sector. These findings underscore the importance of interdisciplinary collaboration, the growing influence of digital innovation and technology, and the need for continued exploration of both established and emerging themes. These insights offer valuable guidance for researchers, policymakers, and practitioners who wish to navigate and contribute to this dynamic and rapidly changing field.

5. Conclusion

5.1 Implications

This bibliometric analysis provides a broad overview of the development and current state of research on entrepreneurship in the financial industry, with an emphasis on microfinance, fintech, and related fields. The analysis shows a marked increase in scientific output in recent decades, highlighting the growing scientific and practical interest in the convergence of entrepreneurship, financial innovation, and social impact. Key findings show that the journals with the highest output in this field are *Sustainability*, *Small Business Economics*, and the *Journal of Business Venturing*, with the United States and China dominating in terms of publication frequency and research productivity. Thematic analysis reveals that “entrepreneurship,” “microfinance,” “impact,” and “innovation” are the main topics, with a recent shift toward digital and technological themes reflecting broader transformations in the global economy.

This study highlights the importance of global collaboration, with most publications originating from international collaborations. Leading authors and organizations have significantly influenced

the conversation, but the field still welcomes new participants, as evidenced by the high number of authors with only one publication. Thematic mapping and *co-occurrence network analysis* reveal a diverse and interconnected research framework, with fundamental themes such as entrepreneurship, microfinance, and impact remaining important, while innovation and management are increasingly recognized as important influences in this domain.

5.2 Limitations

Despite using a comprehensive approach, this review has several limitations. Reliance on the Web of Science (WoS) database may have excluded relevant literature listed in other databases, which may have limited the scope of the analysis. Furthermore, this study only covers articles written in English, which could potentially create language bias and overlook important research published in other languages. Emphasizing journal articles and maintaining quality through peer review may neglect important insights found in conference proceedings, books, and other forms of publication.

5.3 Future research directions

Future research needs to overcome these limitations by combining various databases and including non-English publications to obtain a broader and more diverse perspective. With the ongoing evolution in this field, greater investigation into the impact of digital transformation, fintech, and technological advances on entrepreneurship and financial inclusion is essential. Researchers are encouraged to explore new areas such as the impact of artificial intelligence, blockchain, and digital platforms on the entrepreneurial ecosystem. In addition, multidisciplinary methods that integrate knowledge from economics, technology, management, and social sciences will be essential to advance understanding and application in this dynamic and rapidly evolving domain.

Reference

- [1] Salini, S. (2016), "An introduction to bibliometrics", in *Research Methods for Postgraduates*, pp. 130-143, <https://doi.org/10.1002/9781118763025.ch14>.
- [2] Dervis, H. (2019), "Bibliometric analysis using bibliometrics and R package", *Journal of Scientometric Research*, Vol. 8 No. 3, pp. 156-160, <https://doi.org/10.5530/jscires.8.3.32>.
- [3] Birkle, C., Pendlebury, D., Schnell, J., & Adams, J. (2020). Web of Science as a data source for research on scientific and scholarly activity. *Quantitative Science Studies*, 1, 363-376. <https://doi.org/10.1162/qss.a.00018>.
- [4] Dobrescu, A., Nussbaumer, S., Klerings, I., Wagner, G., Persad, E., Sommer, I., Herkner, H., & Gartlehner, G. (2021). Restricting evidence syntheses of interventions to English-language publications is a viable methodological shortcut for most medical topics: a systematic review: Excluding English-language publications a valid shortcut. *Journal of clinical epidemiology*. <https://doi.org/10.1016/j.jclinepi.2021.04.012>.
- [5] Ramos-Rodriguez, A.-R. and Ruiz-Navarro, J. (2004), "Changes in the intellectual structure of strategic management research: a bibliometric study of the *Strategic Management Journal*, 1980–2000", *Strategic Management Journal*, Vol. 25 No. 10, pp. 981-1004.
- [6] Beck, T., & Keil, J. (2020). *Have banks caught corona? Effects of COVID on lending in the U.S.* SSRN. <https://doi.org/10.2139/ssrn.3766831>
- [7] OECD (2024), *Society at a Glance 2024: OECD Social Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/918d8db3-en>
- [8] World Bank. (2020). *The World Bank Annual Report 2020: Small and Medium Enterprises in the Pandemic*.
- [9] Stefanelli, V., Manta, F., & Toma, P. (2022). *Digital financial services and open banking innovation: Are banks becoming invisible?* *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), Article 143. <https://doi.org/10.1177/09721509231151491>
- [10] Kudelić, R., Šmaguc, T., & Robinson, S. (2025). *Artificial intelligence in the service of entrepreneurial finance: Knowledge structure and the foundational algorithmic paradigm*. *Financial Innovation*, 11(1), Article 72. <https://doi.org/10.1186/s40854-025-00759-y>