BIBLIOMETRIC ANALYSIS OF INNOVATION IN THE SOCIAL ECONOMY. ITS THEORETICAL IMPLICATIONS

Victor Dante AYAVIRI-NINA[*]
Universidad Nacional de Chimborazo (UNACH), Facultad de Ciencias Políticas y Administrativas, Riobamba Ecuador,
e-mail: vdayaviri@gmail.com

Sofia Alejandra MATOS AROCA
Universidad Nacional de Chimborazo (UNACH), Facultad de Ciencias Políticas y Administrativas, Riobamba Ecuador,
e-mail: sofia.matos@unach.edu.ec.

Gabith Miriam QUISPE FERNANDEZ
Universidad Nacional de Chimborazo (UNACH), Facultad de Ciencias Políticas y Administrativas, Riobamba Ecuador,
e-mail: gquispe@unach.edu.ec.

Edgar Anibal RODRIGUEZ
Universidad Nacional de Chimborazo (UNACH), Facultad de Ciencias Políticas y Administrativas, Riobamba Ecuador,
e-mail: earodriguez@unach.edu.ec.

David FLORES RUIZ
Universidad de Huelva, Departamento de Economía, Huelva España, e-mail: david.flores@dege.uhu.es.

Gerardo Mauricio ZURITA VACA
Universidad Nacional de Chimborazo (UNACH), Facultad de Ciencias Políticas y Administrativas, Riobamba Ecuador,
e-mail: gzurita@unach.edu.ec.

Abstract: The present research develops a bibliometric analysis of innovation in the social economy, the study provides a comprehensive vision of the current state of the field and highlights the most relevant publications, authors, sources and research topics, taking as its general objective to analyze the behavior and advances in the literature about innovation in the social economy through a bibliometric analysis, in this way Scopus and Web of Science (WoS) were considered as data sources, forming a database of 304 registered articles, of which 111 belong to Scopus and 193 Web of Science (WoS). In the processing and representation of data, the Bibliometrix and VoSviewer programs were used, which highlights information on trends, citation analysis, H index, analysis of co-occurrences, keywords, affiliations on innovation research in the social economy. The growing scientific production underlines the growing importance of the social economy as a driver of sustainable economic development. Geographic distribution, thematic trends, and identification of influential contributors contribute to future research and practical efforts within this field.

Keywords: innovation, social economy, bibliometric analysis, social innovation

* * * * * *

INTRODUCTION

Innovation involves the creation and application of new ideas, methods or technologies that result in significant improvements or advances in various fields (Weerawardena et al., 2021), such as technology (Santos et al., 2012), business and industry (Jeon et al., 2016), markets and economic aspects (Durand and Henseler, 2023), social (Vercher et al., 2023; Sun et al., 2023). In this way, it is a driving force behind the progress and growth of society, enabling people, organizations and nations to adapt, evolve and prosper in a rapidly changing world (Bernal and Rodríguez, 2019). Innovation encompasses a wide range of activities, from scientific discoveries and technological advances to creative problem solving and novel approaches to business strategies, the innovation is fundamental in shaping the competitive landscape, driving economic development and addressing social challenges through the introduction of novel solutions, as well as expanding the boundaries of what is possible. That is, innovation is present in the analysis of the social economy (Evans and Syrett, 2007; Foronda et al., 2018).

The social economy is based on the idea that it can and should be a means to promote individual and community well-being (Bapuji et al., 2019), which promotes solidarity, equity and the participation of citizens in economic decision-making, the basis of the social economy must be at the service of people and not the other way around, therefore, it focuses on the creation of decent employment, social inclusion, equal opportunities and environmental

---

[*] Corresponding author

sustainability. Thus, the social economy sector is crucial to fill the gaps in the public and private sectors by offering innovative solutions to society's challenges, in order to foster community development, promote social inclusion and advance the Development Goals. Sustainable (SDG) (Villalba and Pérez, 2019; Akbari et al., 2021).

In this sense, innovation in the social economy encompasses a wide range of transformative ideas and practices that pose social challenges, with the purpose of improving the well-being of people and communities, as has been demonstrated in different research (Gallego, 2008; Rodríguez and Guzmán, 2013; Pérez and Espasandín, 2014; Phillips et al., 2015; Akhmetshin et al., 2018; Weerawardena et al., 2021; Padilla, 2023). These innovations occasionally emerge as responses to complex social and environmental problems, driven by the desire to create positive change.

For example, social enterprises have increasingly adopted innovative business models that combine financial sustainability with social impact and environmental (Defourny and Nyssens, 2013). Thus, innovative social economy initiatives go beyond traditional profit-based approaches, with values of solidarity, inclusion and sustainability to create lasting social value (Moulaert et al., 2013), such innovations require collaboration between diverse stakeholders, including the Government, civil society organizations and private and public sector actors, to collectively shape a more equitable and sustainable future (Dey et al., 2020). Generally, innovation in the social economy serves as a catalyst for positive social transformation, driving change at the individual, organizational and systemic levels (Núñez et al., 2020).

In this way, studies on innovation are diverse, since the evolution and creation of scientific production, in recent years, has shown growth. A method that allows reflecting the evolution of studies on a topic is the bibliometric method, which relates the theoretical aspects, the current situation and the trends in the activity of the social economy. Thus, there are several studies of the bibliometric analysis of innovation (Salam and Senin, 2022; Fitz and Wasgen, 2023; Zhang and McGuire, 2023). However, there are no bibliometric studies on innovation in the social economy, so this research becomes a pioneering and relevant one, which allows us to observe the evolution of the literature and the theoretical implications of the topic.

LITERATURE REVIEW

Citation network analysis has become a leading technique for mapping the knowledge structure of scientific disciplines (Martinez-Perez et al., 2022), likewise, machine learning and natural language processing techniques have been used to automate the extraction of bibliographic data, which has optimized bibliographic scalability (Yang et al., 2022). Thus, Glänzel et al., (2019), by examining co-authorship networks, identified influential researchers, thus highlighting research communities and studying the impact of interdisciplinary collaboration on scientific production. Scholars have debated its limitations, leading to the development of alternative indicators, such as field-normalized metrics and percentile-based measures (Bornmann and Haunschild, 2018). Advanced visualization techniques, such as science overlay maps and density-based clustering, allow researchers the ability to explore the structure and evolution of scientific disciplines (Leydesdorff et al., 2020). For Martinez et al. (2020), combining topic models with traditional bibliometric methods provides a more nuanced understanding of the intellectual landscape within a specific field. For their part, Ballardo et al. (2022) investigated articles to search for innovation techniques using Web of Science data as the main source. In this ranking, you can see an interesting discussion that reveals that the most productive authors and universities are located in the United States. These innovations provide more accurate and fair assessments of academic performance, so researchers can analyze early-stage studies and incorporate a broader range of literature into their analyses, resulting in more comprehensive bibliometric assessments (Álvarez et al., 2019; Bornmann, 2020; Gao et al., 2020).

According to McLaren and Bruner (2019), this study showed the multiple dimensions and interpretations of social innovation, with the understanding of its theoretical foundations, however, the main focus was the use of knowledge for the establishment of good practices. For their part, Le et al. (2019) had a bibliometric approach, where various articles were evaluated with the Web of Science database, this globally and with the theme of innovation. Likewise, Yoga et al. (2022) used bibliometric analysis to evaluate the interdisciplinary nature of innovation in the social economy, thus, in sociology, management and economics, the multidimensional nature of social innovation is highlighted (Simao et al., 2021; Peng et al., 2021; Palacios et al., 2022). In their study of management and economics, the use of a bibliometric analysis is noted, with the Web of Science and Scopus database, where the temporality of individual publications, citation rates and keywords were identified (Zakrzewska et al., 2022). In this way, a growing trend was confirmed in the last five years of publications in the administrative and economic field (Akay et al., 2022), with information in the fields of economics with an econometric vision, which provides knowledge for future research. Thus, bibliometric analysis is used as a new modeling technique, since the information is collected through the Scopus database, where researchers increasingly collaborate to improve their publications (Zehra and Urooj, 2022; Ayaviri-Nina et al., 2023).

The patterns used for the research determined the innovative behavior in consideration of the journals, countries and academic discipline in Scopus, therefore, innovation behavior is important in the social factor worldwide (Salam and Senin, 2022). Impact investing has become a prominent approach within the social economy, to generate positive social and environmental outcomes along with financial returns (Silva et al., 2018). This approach has gained ground among investors and philanthropists, with new ways to finance social innovation initiatives (Bugg and Emerson, 2011; Rao-Nicholson et al., 2017); in such a framework, the integration of social impact metrics in investment decisions has opened opportunities to align capital with social objectives, leading to greater innovation in the sector.

On the other hand, blockchain technology has attracted attention for its potential to address social and economic challenges, as it offers decentralized and transparent systems that improve trust and allow efficient transactions (Hadi et al., 2019; L'Esteve, 2023). In the social economy, blockchain has been used to improve transparency and accountability in charitable giving

(Samudra, 2023), in addition, blockchain-based platforms have facilitated peer-to-peer lending, allowing people to support causes directly social (Ahmad et al., 2022), these innovations have transformed the social financing landscape.

MATERIALS AND METHODS

The methodology of this research is the application of a bibliometric analysis of innovation in the social economy, of an analytical type, of a descriptive-retrospective nature, with a quantitative and qualitative approach. To do this, a combination of typologies will be obtained, which allows analyzing, measuring and identifying the different bibliographic data and relevant aspects of scientific publications (Quispe et al., 2023). To develop bibliometric analysis, it is necessary to obtain bibliographic data from Scopus and Web of Science because it has world-class academic information and scientific articles are highly relevant.

Table 1. Search criteria and Analysis parameters (Source: Own elaboration)

Search criteria	
Database	Scopus and Web of Science
Language	English and Spanish
Analysis period	1997-2023
Consultation date	January 20, 2024
Document types	Scientific articles
Magazine type	Any kind
Field and search terms	"innovation" and "social economy"
Total Results	304
Analysis parameter	
The parameters analyzed are the annual scientific production by country, most cited articles, authors with the highest number of citations, journals with the highest number of publications on innovation in the social economy, and keywords with the highest number of entries.	

Subsequently, a search string "Title of the article" must be generated with the terms already established in English and entered with quotes ("Innovation" and "social economy"). Therefore, conference proceedings, book citation indexes, book reviews and articles under review are excluded, resulting in 304 published articles. Table 1 shows the search criteria and the analysis parameter, while Figure 1 shows the flow chart of the methodology steps.
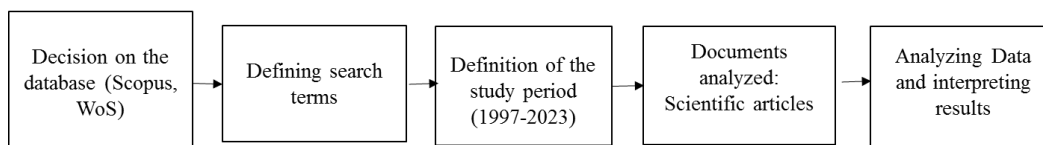

Figure 1. Flow Chart of Methodology Steps

RESULTS

The results obtained from the bibliometric indicators indicated are presented below. Figure 2 indicates the scientific production of 304 articles registered in Scopus and Web of Science, where a trend line can be seen in which the growth of publications in the last six years is verified. In this Scopus context, the first article on innovation in the social economy in the title appears, for the first time, in 2013, in the University of Toronto Press, in the magazine Explore JESTOR by Bouchard (2013), titled "Innovation and Social Economy: the Quebec Experience." While in Web Of Science, the first article on innovation in the social economy in the title appears, for the first time, in 2009, in the magazine Revesco-Revista de Estudios Cooperativos, titled "The social economy: International perspectives on economic solidarity" followed by (Klein et al., 2009; Smith and Teasdale, 2009).
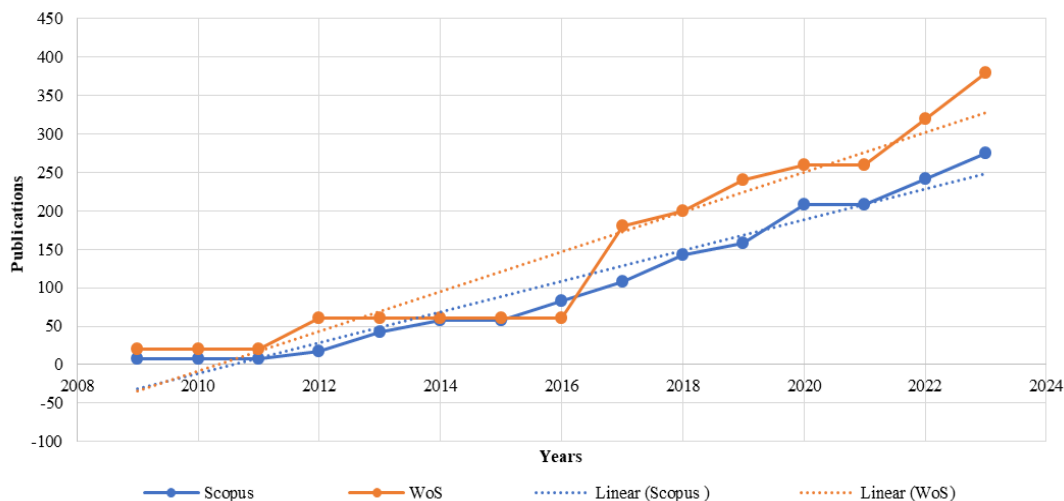

Figure 2. Scientific Production Average

Thus, the average annual growth rate of Scopus is 1.08% and of Web of Science is 1.47%, taking into account that the latter mentioned has had a greater growth in publications starting in 2017 when they obtained 180 scientific articles on innovation in the social economy, while Scopus has 108 published articles.

In this sense, a total of 304 articles established by Scopus and Web of Science were identified, thus, the two search engines agree that 55 articles are written by a single author. Thus, the co-authorship rate has an average of 1.17% in Scopus and 2.05% authors per scientific article in Web of Science. This reflects the increase in the number of authors due to the number of scientific articles. In Table 2, based on the indicator ("H" Index), it was ranked for the top 20 researchers found in Scopus and Web of Science due to its greatest impact. This indicator shows the visibility of each author's work, such as the number of citations per publication and determines H = number of articles/citations at the time of calculation (Hirsch, 2005). In such a way that recognized researchers and innovation professionals standout such as (Bouchard, 2012; Afonasova et al., 2019; Agyapong et al., 2019; Calvo Martinez et al., 2019; Vercher, 2022).

Table 2. Main Authors and H-Index (Note: This table represents the Scopus and Web Of Science (WoS) H-index based on Bibliometrix, 2023)

Rank	Authors	Scopus	WoS	Host	No. of Appointments	H Index
1	Bouchard (2012)	x		University of Rosario, Colombia-Bogota	45	12
2	Chalmers (2013)	x		University of Strathclyde, Scotland	81	11
3	Catalá (2023)		x	University of Masarykova, Czech Republic	181	9
4	Martin et al. (2015)	x		University of Leeds, United Kingdom	181	9
5	Bernardo et al. (2023)		x	Complutense University of Madrid	98	7
6	Potts and Hartley (2015)		x	University of California, United States-California	50	7
7	Agyapong et al. (2017)	X		Nova Science Publishers, United States	50	7
8	Rodriguez and Guzman (2013)		x	Complutense University of Madrid	71	6
9	Nelms et al. (2018)	X		University of California, United States-California	71	6
10	Padilla-Meléndez et al. (2014)		x	Complutense University of Madrid-Spain	36	6
11	Chaves and Monzo (2018)	X		University of Valencia, Spain-Madrid	103	6
12	Espasandín-Bustelo et al. (2023)		x	Journal of Technology Managemente 6 Innovation, United States	103	5
13	Vercher (2023)		x	University of Valencia, Spain-Madrid	96	5
14	Afonasova (2019)	X		Polish Journal of Management Studies	96	5
15	Wadhwa et al. (2017)	X		Emerald Insight: Discover Journals, Books & Case Studies	26	5
16	Street (2020)		x	University of Leeds, United Kingdom	40	4
17	Bouchard (2012)		x	University of Rosario, Colombia-Bogota	45	3
18	Muñoz Medraño et al. (2018)		x	University of Strathclyde, Scotland	50	2
19	Rodríguez and Guzman (2013)	X		International Journal of Production Economics, United States	50	2
20	Nicholson et al. (2017)	X		University of Kent, United Kingdom	11	1

From the registered affiliations of the authors, it was possible to identify the main institutions and countries to which they belong, which makes it possible to visualize and determine the productive behavior between countries or institutions (Padilla, 2016; Duran-Sanchez et al., 2018; Cui et al., 2023).
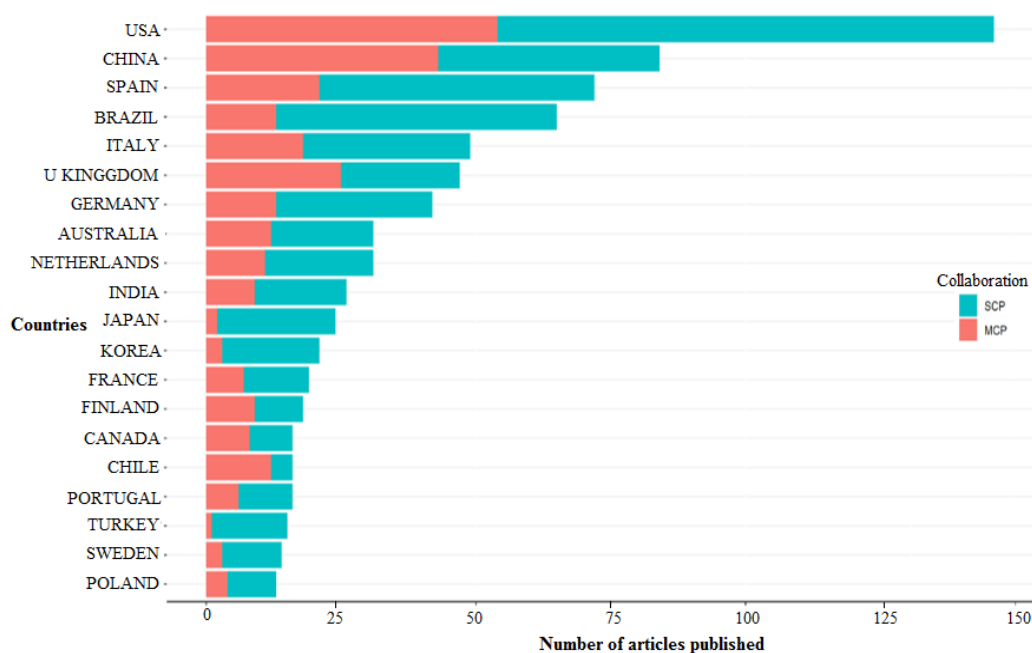

Figure 3. Scientific production by country (Note: Statistical relationship of
intra-country (SCP) and inter-country (MCP) collaboration, based in Bibliometrix, 2023)

Figure 3 shows the 20 countries that contributed the greatest number of publications related to the topic of innovation in the social economy, based on the articles published by a single country (SCP) and through other countries (MCP).

In this way, you can see the ranking of the countries that have the greatest number of publications on the topic to be studied. This topic is led by the United States with 92 (SCP) articles published by a single country and 54 (MCP) by other countries, followed by China with 41 (SCP) and 43 (MCP) publications, while Spain has 51 (SCP) and 21 (MCP) Brazil has 52 (SCP) and 13 (MCP), Italy 31 (SCP) and 18 (MCP), United Kingdom 22 (SCP) and 25 (MCP), Germany 29 (SCP) and 13 (MCP). MCP), Australia 19 (SCP) and 12 (MCP), Netherlands 20 (SCP) and 11 (MCP), and finally, there is India with 17 (SCP) and 9 (MCP) completing the top 10 most productive countries in research developed and focused on innovation in the social economy, within the bibliographic databases in Scopus and Web of Science.

Regarding the authors who collaborated by country, it can be seen in Figure 2, that intra-country collaboration (SCP) is the majority, especially in the United States and China. For intercountry collaboration (MCP), both Scopus and WoS, the United States, China, the United Kingdom and Spain stand out.

For its part, Figure 4 represents the 20 universities with which Scopus and Web of Science coincide, of a total of 304 institutions identified with the most contributions in Innovation in the social economy, among them nine come from the United States and are of high level scientific in recent years, followed by the United Kingdom with four high-quality universities, Spain with five universities and finally Latin America, Argentina and Colombia with one university each.

Among them, the Georgia Institute Technology stands out. School of Public Policy is located in the state of Atlanta in the United States, known for being leaders in addressing social problems through political processes and in this way generates knowledge that contributes to sustainability, creating a more equitable society, implementing innovation in the intersection of technological sciences. Similarly, with 12 published articles, there is the University País Vasco, Spain, specialized in economic and business sciences.
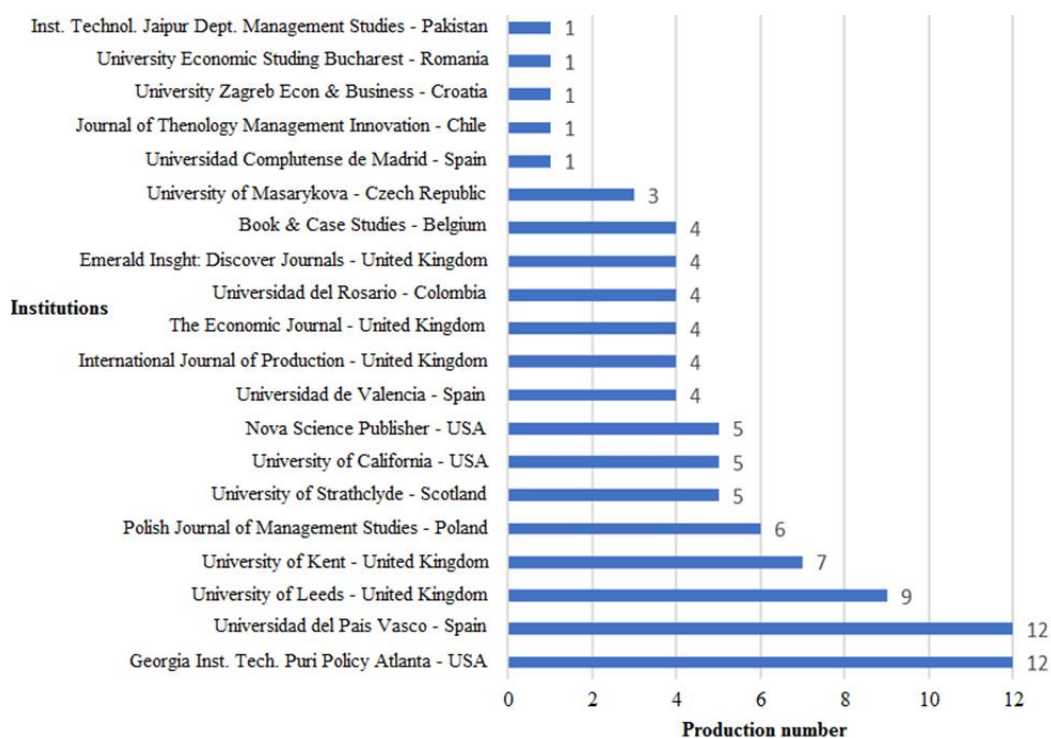

Figure 4. Productivity by type of institution

Table 3 presents the first 20 most relevant authors in Scopus and Web of Science based on the citation index in the field of innovation in the social economy. In these works, each author presents a different idea, with different lines of research for the study and theoretical and empirical development within the field. Thus, in Scopus, the work with the highest number of references is by Marchesi (2021), who carried out a commercial orientation in grassroots social innovation, with perspectives from the collaborative economy.

In turn, Chaves and Monzón (2018) exposed the social economy to emerging economic paradigms: social innovation, collaborative economy, circular economy, and corporate social responsibility, economy of the common good, social enterprise and solidarity economy. In Web of Science, the research with the greatest number of references was that of Catalá (2023), who pointed out the entrepreneurship and innovation ecosystems, as well as the social economy ecosystem, followed by Rodríguez (2013), who spoke about innovation in social economy companies.

In the analyzed period, the top twenty in the ranking are observed (Table 4). Switzerland leads with 7 journals with high impact factor Q1 and Q2; Spain also registers 4 journals with an impact of Q2 and Q3, followed by Canada and the United Kingdom with an impact of Q1 and Q2. Among the most important journals and published topics, the following journals are noted: Sustainability, Ciriec-España Revista de Economía Publica, Social, Innovation And The Social Economy: The

Quebec Expe, Annals Of Public And Cooperative Economics, Revesco-Revista de Estudios Cooperativos, 70% of the magazines are described, the table publishes topics related to innovation in the social economy, helping to create more inclusive, creative and sustainable societies and economies, thus helping to generate innovative solutions to improve the quality of life and well-being of people (Abhari et al., 2019; Bernardo, 2023; Calle et al., 2020).

Table 3. Article Titles and Number of Citations
Note. The following table represents the titles used for the study and the citations, based on Bibliometrix (2023)

Author	Scopus	WoS	Article title	Appointment number
Catalá (2023)		x	From entrepreneurial and innovation ecosystems to the social economy ecosystem	181
Martin (2015)	x		Commercial orientation in grassroots social innovation: Insights from the sharing economy	181
Marchesi (2021)	x		Social innovation for a circular economy in social housing	180
Chaves and Monzón (2018)	x		The social economy in the face of emerging economic paradigms: social innovation, collaborative economy, circular economy, corporate social responsibility, economy of the common good, social enterprise and solidarity economy	103
Rodríguez (2013)		x	Innovation in social economy firms	103
Bernard (2023)		x	The challenge of maintaining the principles of the social economy in the long term: the case of TUSGSAL	98
Afonasova (2019)	x		Digitalization in Economy and Innovation: The Effect on Social and Economic Processes	96
Chalmers (2013)	x		Social innovation: An exploration of the barriers faced by innovating organizations in the social economy	81
Street (2020)		x	Social Economy, Environmental Proactivity, Eco-Innovation and Performance in the Spanish Wine Sector	81
Klein (2010)		x	Social economy-based local initiatives and social innovation	71
Bouchard (2012)	x		Social innovation, an analytical grid for understanding the social economy: the example of the Québec housing sector	45
Bouchard (2012)		x	Social innovation, an analytical grid for understanding the social economy: the example of the Québec housing sector	45
Lyne (2018)		x	Understanding social enterprise, social entrepreneurship and the social economy in rural Cambodia	34
Klein (2010)	x		Social economy-based local initiatives and social innovation	32
Briones (2012)		x	Academic cooperation in agribusiness: innovative strategies and experiences of the Tecnológico de Costa Rica	28
Chatzichristos (2021)		x	Regional Institutional Arenas for Social Innovation	27
Bouchard (2013)	x		The Social Economy in Québec: A Laboratory of Social Innovation	27
Espasandin-Bustelo et al. (2023)		x	Innovation and performance in social economy enterprises	26
Abhari (2019)	x		Collaborative innovation in the sharing economy: Profiling social product development actors through classification modeling	24
Acquier (2018)	x		Sharing Economy and Social Innovation	10

Table 4. Magazines and quartiles based on Innovation in the Social Economy
Note. Analysis of the magazines and their quartiles based on innovation and social economy, own elaboration 2023

Rank	Scopus	WoS	Magazine	No. of Items	Country	Quartiles (2024)	ISNN
1	X		Sustainability	7	Swiss	Q1	20711050
2	X		Ciriec-Espana Journal of Public and Social Economy	4	Spain	Q2	19896816
3		x	Ciriec-Espana Journal of Social and Cooperative Public Economy	8	Spain	Q2	19896816
4	X		Innovation And The Social Economy: The Quebec Expe	3	Canada	Q1	14678292
5		x	Annals Of Public And Cooperative Economics	4	United Kingdom	Q2	13704788
6		x	REVESCO-Journal of Cooperative Studies	3	Spain	Q2	18858031
7	X		Social Innovation And Territorial Development	3	Canada		
8		x	Journal Of Business Research	2	USA	Q1	1482963
9	X		Cogent Business And Management	2	United Kingdom	Q2	23311975
10		x	Technology in Progress	2	USA	Q1	17508614
11	X		Entrepreneurship And Regional Development	2	United Kingdom	Q1	14645114
12		x	Agriculture And Human Values	1	Netherlands	Q1	15728366
13		x	Dixie	1	Spain	Q3	18869440
14	X		Journal Of Business Research	2	USA	Q1	1482963
15	X		Migration Letters	2	United Kingdom	Q2	17418992
16		x	Economic And Social Changes-Facts Trends Forecast	1	USA		
17		x	Economy And Society	1	United Kingdom	Q1	3085147
18		x	Environment And Planning C-Politics And Space	1	United Kingdom	Q1	23996552
19	X		Social Enterprise Journal	2	United Kingdom	Q1	17508533
20	X		Strategies And Best Practices In Social Innovation	2	USA		9783319

Similarly, Figure 5 shows a thematic analysis of the most significant research sources based on a number of keywords to provide a broad view of the level of agreement with the theme of innovation in the social economy. However, to know the most used keywords, a reference system was used to determine the future development of different searches. Tentatively, the VOSviewer package was used, based on the authors' keywords to identify the most current topics or research directions of innovation in the social economy (Aria and Cuccurullo, 2017). Thus, a total of 601 terms were identified: social (137) is the word that is most repeated, based on the search criteria, as well as social innovation (101); impact (116); science (110); social economy (91); technology (62); emerging (13); digital (6); impact (4), among others.
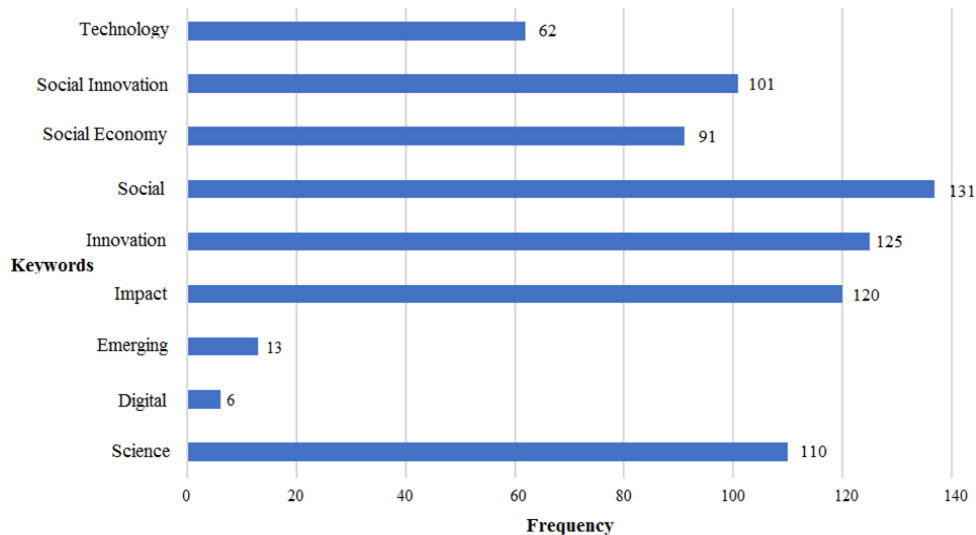
Figure 5. Keywords

In this context, Figure 6 shows that research on innovation in the social economy was related to innovation, corporate principles, and social innovation, among the most important. Between 2014 and 2016 it was related to the social economy, public economy, social capital, economic growth. As of 2018, research is closely related to innovation, social innovation, and technology. The co-occurrence map shows the themes and trends according to the keywords used from January 2022 to January 2023, this is how the analysis provides a valuable perspective on the current state of knowledge about innovation in the social economy, being this multidisciplinary field is influenced by factors such as innovation, social economy, sustainable consumption and social innovation. Our findings also highlight the potential for interdisciplinary collaboration between the social economy and other sectors, such as finance, technology and policy, to accelerate innovation and promote social and environmental progress. Several themes were also identified that are not commonly associated with innovation in the social economy but that appear in the literature due to the nature of co-occurrence analysis such as: Public policy and administration, Theory and organizational behavior, Management and strategy innovation.
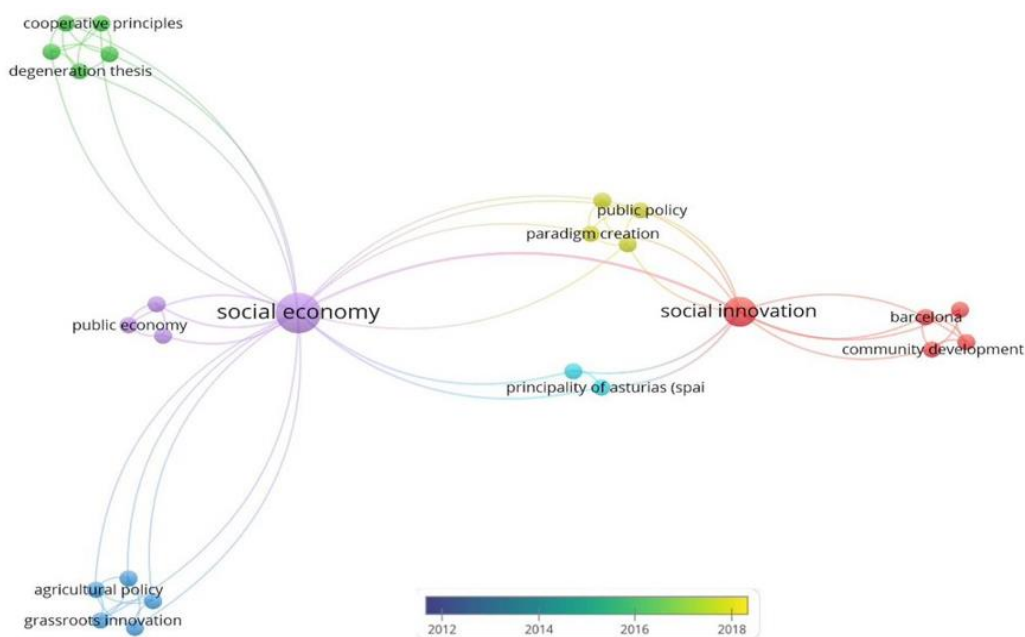

Figure 6. Co-occurrence map (Note. The figure represents the co-occurrence
network based on the information search criteria of Scopus and WoS, based on VOSviewer, 2023)

Likewise, in Figure 7, it can be identified that the databases on the authors and their publications on innovation in the social economy, 12% in Scopus of 100% and WoS 25.6%. On the other hand, the authors published in different international journals, such as Sustainability (8.4%), followed by Revista de Economía Publica, Social (10%).

It is observed that there is a strong correlation between the eminence of a scientist and his productivity, the Lotka index was considered, which mentions Divide the authors of the publication group into three levels of productivity: Small producers (only one article or equal productivity index to 0), average producers (2 to 9 articles and productivity index) (greater than 0 and less than 1) and large producers (10 or more papers and a productivity index equal to or greater than 1) (Lotka, 1926) cited in (Abhari et al., 2019) being (Bouchard, 2012), followed by (Klein et al., 2010), (Lyne et al., 2018), these authors being with greater scientific production in social economy innovation, the rest are small producers or collaborators in research.
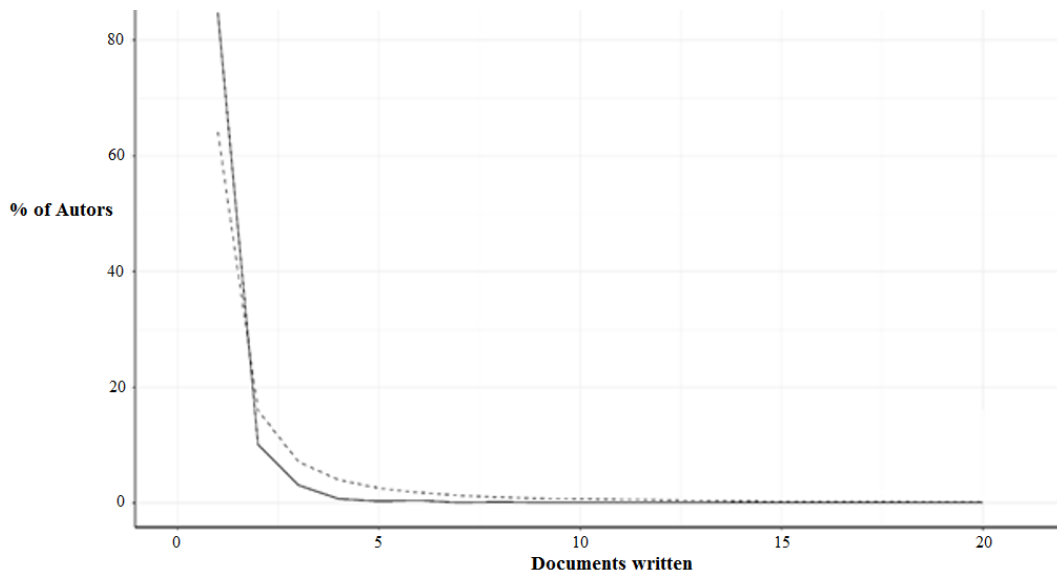

Figure 7. Author productivity through Lotka's law

Next, in Figure 8 you can identify the analysis of the main currents of the study where three scenarios are presented.
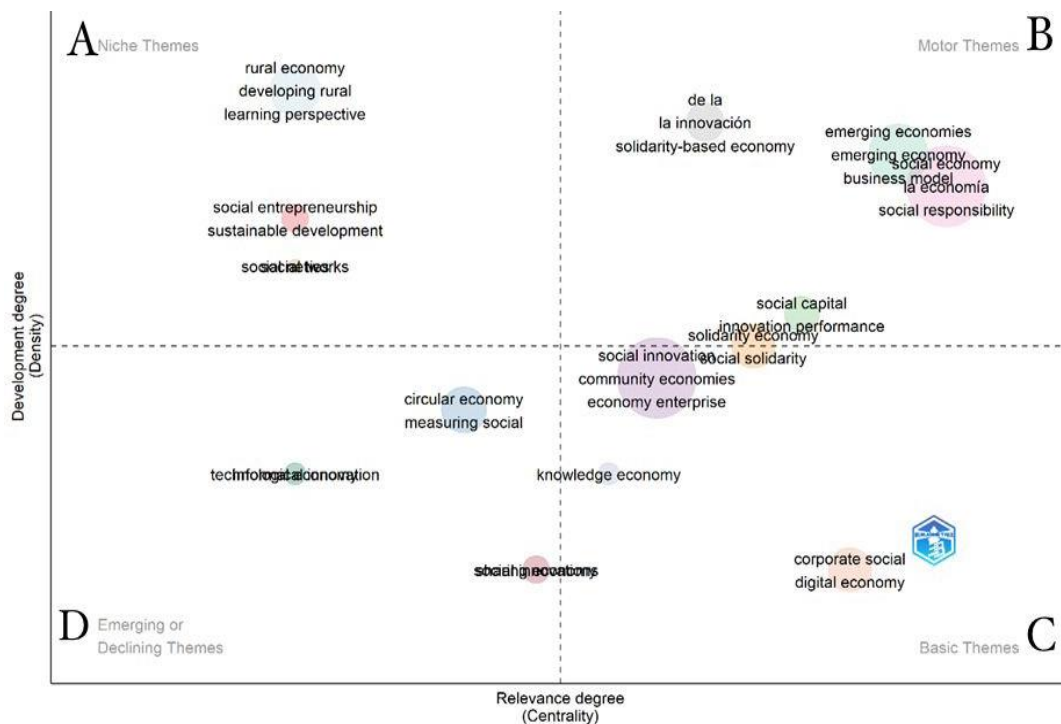

Figure 8. Main research streams

Niche Themes (A)

This quadrant reflects different study topics that accompany the construction within innovation in the social economy. In such a way that, innovation is taken as a meaning of improvement within the social economy to generate

new processes, in the development of products, aid and social innovations. Within innovation in the social economy, its greatest impact on innovation and the social economy is maximized (Martin et al., 2015; Cohen et al., 2017; Nelms et al., 2018; Wadhwa et al., 2017), since entrepreneurship and digital generate more value in the social economy (Creech and Nadler, 2018). Thus, it is possible to determine that the social economy has an association with entrepreneurship, environmental sustainability and non-profit organizations, to promote different businesses with the help of innovation, in order to develop new income for different sectors. Overall, the main research trends on specific topics suggest a growing focus on the role of social and environmental factors in economic development, as well as on the importance of technology and innovation. Furthermore, the need to consider the relevance and centrality of certain research topics, as well as the driving forces behind economic growth and development, is recognized.

Motor Themes (B)

Based on the bibliometric data provided, the main research trends in the driving themes of quadrant B can be analyzed as follows: First of all, it can be observed that the density and centrality of the theme "social responsibility" developed by Marchesi (2021) is high, indicating that it is a well-researched and significant topic in the B quadrant driving themes. This is consistent with the growing awareness and importance of corporate social responsibility in modern business practices. While Afonasova (2019) in her topic on "digital economy" also has a high density and centrality, suggesting that it is an important and rapidly growing research area in the driving themes of quadrant B. This reflects the digital transformation in course of economies and societies, and the need to understand its implications for business and society. For this, Bouchard (2012) with his themes developed in "corporate social" has a high centrality, but a lower density, which indicates that it is an important but less researched theme in the motor themes of quadrant B. This may suggest the need to conduct more research on the role of corporations in promoting social responsibility and sustainability.

Calle's (2020) work with the theme "innovation performance" has moderate density and centrality, indicating that it is a significant research trend in the driving themes of quadrant B. It is likely that research in this area will be focus on understanding the factors that contribute to innovation success and how organizations can improve their innovation performance to remain competitive in the digital economy. Key research trends in quadrant B driving topics include social responsibility, economics digital, corporate social activities, innovation performance.

Basic and relevant topics (C)

In this quadrant, the topics that with a greater degree of density that have been the basis for the emergence of new topics specialized in innovation in the social economy are analyzed: social capital, digital economy, innovation, entrepreneurship, community economies.

Regarding social capital, the performance of micro and small businesses in an emerging economy and the mediating role of innovation within the company are highlighted (Agyapong et al., 2017). In this quadrant, it is necessary to take into account the importance of the issue of innovation in the social economy in entrepreneurship and community economies, according to Theodorakopoulos et al. (2014) and their argument about the importance of the fusion of technology and innovation within ventures. On the other hand, Gibson-Graham (2008) analyzed social innovation for community economies, which promotes scientific production.

Emerging or Declining Themes (D)

he emergence of new themes and the decline of old ones have been key trends in the themes of degree of development (density), studies such as: circular economy, social entrepreneurship, sustainable development, social capital, innovation performance emerge. All these topics, innovation in the social economy, are key when facing a problem in emerging issues (D'ovidio and Pradel, 2013; Acquier, 2018; Chavez and Monzón, 2018; Bouchard, 2013; Briones, 2012), these authors study three factors of the role of innovation and the social economy, as a fusion to generate a contrast. For their part, Abhari et al., 2019.

They studied the collaborative innovation in the shared economy, with the profile of the actors in the development of social products through classification models, taking innovation within a shared economy as a starting point, in order to develop subsequent studies on the social economy, the Decline of old themes, such as community economies, indicates a shift in focus towards more innovative and sustainable development approaches.

Implications with the trends of the bibliometric study of innovation in the social economy

Topics such as social entrepreneurship, sustainable development and technological innovation continue to emerge in research on innovation in the social economy. These trends illustrate a growing interest in using innovative approaches to address social and environmental challenges and create new economic opportunities (Agyapong et al., 2017). At the same time, some topics are losing importance, such as the circular economy and the solidarity economy. This may suggest that although these concepts were once considered important, they are no longer relevant today (Acquier, 2018; Chaves and Monzón, 2018). From the perspective of basic issues, social responsibility and corporate responsibility stand out and become important driving forces of innovation in the social economy.

This reflects a growing recognition of the role that businesses can play in creating positive social and environmental impact, and the need for innovative approaches to address social and environmental challenges (Gibson-Graham, 2008). Trends in innovation research in the social economy indicate a growing interest in using innovative approaches to address social and environmental challenges and create new economic opportunities (Briones, 2012).

At the same time, the importance of understanding the social and economic context in which innovation occurs and the role of business and social capital in driving innovation is recognized. The narrowing of topics demonstrates that, while some concepts may no longer be as important, the field of innovation research in the social economy remains dynamic and responsive to emerging trends and challenges.

DISCUSSION

In accordance with the results of the research, it was evident that there are no bibliometric analyzes in the innovation of the social economy, therefore, in innovation, it was found that there is a general vision with a greater number of scientific production carried out by the United States, as well as explained by Ballardo et al. (2019), who indicated a ranking where the authors and universities with the most research on innovation are located in the United States, taking Web of Science as a source. By systematically examining the academic literature with Scopus and Web of Science, a mapping of the innovation landscape in the social economy was generated, where the evolution over time is revealed. This mapping exercise has identified key themes, trends and areas of interest, shedding light on the dynamic nature of innovation in this sector.

In the bibliometric analysis, the authors and institutions that have played key roles in innovation in the social economy were studied. Through citation counting and H-index scoring, Martin (2015) from the University of Leeds collected 181 citations within his scientific article. This information is not only of academic interest, but can help professionals and policymakers identify potential collaborators and experts when they intend to implement innovative solutions in the social economy.

One of the main contributions of this study is the identification of research gaps and emerging trends in the field of social economy innovation. By analyzing the frequency of keywords and citation networks, areas where more research is required are evident, for example, circular economy, social entrepreneurship, sustainable development, social capital and innovation unemployment, these insights provide valuable guidance for future research agendas.

Innovation in the social economy is inherently interdisciplinary and this analysis highlights that fact, as research on this topic comes from a wide range of disciplines, including economics, circular economy, sustainable development, management and public policy. This interdisciplinary nature highlights the complexity of innovation in the social economy and the need for collaborative efforts across academic and practical domains to foster meaningful change.

CONCLUSION

Innovation is crucial in the social economy as it helps not only the growth of companies but also to address and solve social and environmental problems. Innovations in the social economy, in particular, have long-term impacts on society and can be advanced through the efforts of businesses and nonprofit organizations. In today's interconnected world, innovation in the social economy has become necessary to address global challenges such as financial instability, political instability, hunger, poverty and disease. Furthermore, prosperous societies are those that solve social problems in innovative ways with economic and social growth in mind. The bibliometric analysis carried out in this research project reveals several key ideas about innovation in the social economy, research production in this field has increased significantly since 2009, highlighting the scientific production of the United States with 146 publications followed by China, with 84 and Spain, with 72. For this, it becomes especially significant if only articles published in English and Spanish are considered. In turn, Georgia Institute Technology is in first place in the ranking of universities.

School of Public Policy with 12 contributions, followed by the University Pais Vasco, Spain, with 12 contributions, below the University of Leeds. In this way, among the 20 most productive universities, 2 of them are from Spain, which is how the importance of research on innovation in the social economy in that country is corroborated. However, the scientific journals that publish the most articles in this area of research are mostly from English-speaking countries, because their authors are mainly associated with universities based in the United States and the United Kingdom.

This bibliometric analysis provides a complete vision of the evolution and trends in the study of innovation within the social economy. The growing research output underlines the growing importance of the social economy as a driver of sustainable and equitable economic development. Geographic distribution, thematic trends, and identification of influential contributors contribute to future research and practical efforts within this field. By promoting international collaboration, diversification of research perspectives, and engagement with key stakeholders, we can harness the innovative power of the social economy to address pressing social challenges and contribute to a more inclusive and sustainable global economy.

Conflicts of Interest: The authors declare no conflict of interest.

REFERENCES

Abhari, K., Davidson, E., & Xiao, B. (2019). Collaborative innovation in the sharing economy: Profiling social product development actors through classification modeling. *Internet Research*, 29(5), 1014–1039. https://doi.org/10.1108/intr-03-2018-0129

Acquier, A., & Carbone, V. (2018). Sharing Economy and Social Innovation. En *The Cambridge Handbook of the Law of the Sharing Economy* (pp. 51–64). Cambridge University Press.

Afonasova, M., Panfilova, E., Galichkina, M., & Ślusarczyk, B. (2019). Digitalization in economy and innovation: The effect on social and economic processes. *Polish Journal of Management Studies*, 19(2), 22–32. https://doi.org/10.17512/pjms.2019.19.2.02

Agyapong, F. O., Agyapong, A., & Poku, K. (2017). Nexus between social capital and performance of micro and small firms in an emerging economy: The mediating role of innovation. *Cogent Business & Management*, 4(1), 1309784. https://doi.org/10.1080/23311975.2017.1309784

Ahmad, I., Khan, T., Khan, S., Sharif, M., & Waqar, M. (2022). Bibliometric analysis of the digitalized economy: A systematic review. *Journal of Social Sciences Review*, 2(4), 369–376. https://doi.org/10.54183/jssr.v2i4.111

Akay, E., Yılmaz, N., & Kocarık, B. (2022). Bibliometric analysis of the published literature on machine learning in economics and econometrics. *Social Network Analysis and Mining,* 12. https://doi.org/10.1007/s13278-022-00916-6

Akbari, M., Khodayari, M., Khaleghi, A., Danesh, M., & Padash, H. (2021). Technological innovation research in the last six decades: a bibliometric analysis. *European Journal of Innovation Management*, 24(5), 1806–1831. https://doi.org/10.1108/ejim-05-2020-0166

Akhmetshin, E., Dzhavatov, D., Sverdlikova, E., Sokolov, M., Avdeeva, O., & Yavkin, G. (2018). The Influence of Innovation on Social and Economic Development of the Russian Regions. En *European Research Studies Journal,* 21(2), 767-776

Álvarez, J., Maldonado-Erazo, C., & Rama Fernández, M. (2019). Creative Tourism in Small Cities and Rural Areas: A Bibliographic Review. *Enlightening Tourism a pathmaking Journal*, 9(1). https://doi.org/10.33776/et.v9i1.3652

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

Ayaviri-Nina, V. D., Flores Ruiz, D., & Quispe Fernandez, G. M. (2023). Bibliometric Analysis of community-based tourism and its theoretical implications. *GeoJournal of Tourism and Geosites*, 51, 1765-1774. https://doi.org/10.30892/gtg.514spl17-1172

Ballardo, D., Martínez, R., León, E., & Sánchez, K. (2022). Gestión de la innovación en pequeñas y medianas empresas: un enfoque de análisis bibliométrico entre 1985 y 2019. *Cuadernos de Gestión*, 22(2) , https://doi.org/10.5295/cdg.211551el LicenciaCC BY-NC-ND.

Bapuji, H., Ertug, G., & Shaw, J. (2019). Organizations and societal economic inequality: A review and way forward. *Academy of Management Annals,* 14(1), 60-91.

Bernal, M., & Rodríguez, D. (2019). Las tecnologías de la información y comunicación como factor de innovación y competitividad em - presarial. *Scientia et technica,* 24(1), 85-96. https://bit.ly/3OHu7bH

Bernardo, V., Hernández, I., & Serrano, E. (2023). El reto de mantener los principios de la economía social a largo plazo: el caso de TUSGSAL. *REVESCO Revista de Estudios Cooperativos*, 143, e69184. https://doi.org/10.5209/reve.69184

Bornmann, L. (2020). Bibliometric Indicators, In P. Atkinson, S. Delamont, A. Cernat, J.W. Sakshaug, & R.A. Williams (Eds.), *SAGE Research Methods Foundations*. https://doi.org/10.4135/9781526421036825851

Bornmann, L., & Haunschild, R. (2018). Do altmetrics correlate with the quality of papers? A large-scale empirical study based on F1000Prime data. *PLoS ONE*, 13(5), 45-67, https:// doi.org/10.1371/journal.pone.0197133

Bouchard, M. (2012). Social innovation, an analytical grid for understanding the social economy: the example of the Québec housing sector. *Service Business*, 6(1), 47–59. https://doi.org/10.1007/s11628-011-0123-9

Bouchard, M. (2013). *Innovación y Economía Social: la Experiencia de Quebec.* Edit. SFR, Canadá

Briones-Peñalver, A. J., & Ramírez-López, P. M. (2012). La cooperación académica en agronegocios: estrategias innovadoras y experiencias del Tecnológico de Costa Rica y la Universidad Politécnica de Cartagena entre el 2005 y el 2011. *Revista Tecnología en Marcha*, 25(6), 30-46.

Bugg, A., & Emerson, J. (2011). Jed impact investing: transforming how we make money while making a difference. *Innovations Review,* 6(3), 9-18.

Calle, F., González, Á., Carrasco, I., & Vargas, M. (2020). Social economy, environmental proactivity, Eco-innovation and performance in the Spanish wine sector. *Sustainability*, 12(15), 5908. https://doi.org/10.3390/su12155908

Calvo Martínez, S., Morales Pachón, A., Martín Martín, J. M., & Molina Moreno, V. (2019). Solidarity economy, social enterprise, and innovation discourses: understanding hybrid forms in postcolonial Colombia. *Social Sciences,* 8(7), 205. https://doi.org/ 10.3390/socsci8070205

Catalá, B., Savall, T., & Chaves-Avila, R. (2023). From entrepreneurial and innovation ecosystems to the social economy ecosystem. *Journal of Business Research*, 163(113932), 113932. https://doi.org/10.1016/j.jbusres.2023.113932

Chalmers, D. (2013). Social innovation: An exploration of the barriers faced by innovating organizations in the social economy. *Local Economy*, 28(1), 17–34. https://doi.org/10.1177/0269094212463677

Chatzichristos, G., & Nagopoulos, N. (2021). Regional institutional arenas for social innovation: A mixed methods research. *Journal of Social Entrepreneurship*, 12(3), 315–337. https://doi.org/10.1080/19420676.2019.1705378

Chaves, R., & Monzón, J. L. (2018). La economía social ante los paradigmas económicos emergentes: innovación social, economía colaborativa, economía circular, responsabilidad social empresarial, economía del bien común, empresa social y economía solidaria. *CIRIEC-España revista de economía pública social y cooperativa*, 93, 5. https://doi.org/10.7203/ciriec-e.93.12901

Cohen, A., & McDonagh, M. (2012). Studying the potential impact of automated document classification on scheduling a systematic review update. *BMC Med Inform Decis Mak ,* 12(1), 33-48. https://doi.org/10.1186 / 1472-6947-12-33

Creech, B., & Nadler, A. M. (2018). Post-industrial fog: Reconsidering innovation in visions of journalism's future. *Journalism,* 19(2), 182-199. https://doi.org/10.1177/1464884916689573

Cui, W., Tang, J., Zhang, Z., & Dai, X. (2023). A bibliometric analysis on innovation convergence. *Library Hi Tech,* 41(2), 333–354. Https://doi.org/10.1108/lht-12-2021-0430

Defourny, J., & Nyssens, M. (2013). *Social Innovation, Social Economy and Social Enterprise: What Can the European Debate Tell Us?* Edward Elgar Publishing.

Dey, P., Teasdale, S., & Hall, C. (2020). Making sense of social innovation: A systematic review of the literature. Voluntas, *International Journal of Voluntary and Nonprofit Organizations,* 31(3), 501-529.

D'Ovidio, M., & Pradel, M. (2013). Social innovation and institutionalisation in the cognitive–cultural economy: Two contrasting experiences from Southern Europe. *Cities,* 33, 69-76. https://doi.org/10.1016/j.cities.2012.07.002

Durán-Sánchez, A., Álvarez-García, J., del Río-Rama, M. D. L. C., & Oliveira, C. (2018). Religious tourism and pilgrimage: Bibliometric overview. *Religions*, 9(9), 249. https://doi.org/10.3390/rel9090249

Durand, A., & Henseler, C. (2023). *The entrepreneurial humanities: The crucial role of the humanities in enterprise and the economy*. Routledge

Espasandín-Bustelo, F., Rufino-Rus, J. I., & Rodríguez-Serrano, M. Á. (2023). Innovation and performance in social economy enterprises: The mediating effect of legitimacy for customers. *Journal of Business Research*, 158(113626), 113626. https://doi.org/10.1016/j.jbusres.2022.113626

Evans, M., & Syrett, S. (2007). Generating Social Capital : The Social Economy and Local Economic Development. *European Urban and Regional Studies,* 14, 55. https://doi.org/10.1177/0969776407072664

Foronda, C., Beverinotti, J., & Suaznábar, C. (2018). *Análisis de las características de la innovación en empresas y su efecto en la productividad en Bolivia.* Banco Interamericano de Desarrollo [BID].

Fitz-Oliveira, M., & Wasgen, A. M. (2023). Innovation capability and sustainability: a bibliometric analysis. *Technological Sustainability*, 2(2), 156-176. https://doi.org/10.1108/techs-06-2022-0027

Gallego, J. (2008). Economía social y dinámica innovadora en los sistemas territoriales de producción y de innovación. Especial referencia a los sistemas agroalimentarios. *CIRIEC-España, Revista de Economía Pública, Social y Cooperativa*, (60), 7-40.

Gao, H., Ding, X., & Wu, S. (2020). Exploring the domain of open innovation: Bibliometric and content analyses. *Journal of Cleaner Production*, 275(122580), 122580. https://doi.org/10.1016/j.jclepro.2020.122580

Gibson-Graham, J. K. (2008). Diverse economies: Performative practices for `other worlds'. Progress in Human Geography, 32(5), 613-632. https://doi.org/10.1177/0309132508090821

Glänzel, W., Moed, H., Schmoch, U., & Thelwall, M. (2019). *Springer Handbook of Science and Technology Indicators.* https://doi.org/10.1007/978-3-030- 02511-3

Hadi, S., Wahyuningtyas, N., Rachmawati, A., Tang, L., & Mentariningtyas, G. (2023). Innovation and Collaboration in Organizations: A Bibliometric Research. *International Journal of Economics and Management Review*, 1(1), 28–38. https://doi.org/ 10.58765/ijemr.v1i1.67

Hirsch, J. (2005). An index to quantify an individual's scientific research output. Proceedings of the National Academy of Sciences, 102(46), 16569–16572. https://doi.org/10.1073/pnas.0507655102

Jeon, J., Hong, S., Yang, T., & Ohm, J. (2016). How technological innovation affects the structure of an industry: entrepreneurship evolution in the biotechnology and pharmaceutical industry since 1980. *Technology Analysis and Strategic Management*, 28(6), 733–754. https://doi.org/10.1080/09537325.2016.1142073

Klein, J. L., Tremblay, D. G., & Bussieres, D. R. (2009). Social economy-based local initiatives and social innovation: a Montreal case study. *Journal International de La Gestion Technologique [International Journal of Technology Management]*, 51(1), 121. https://doi.org/10.1504/ijtm.2010.033132

L'Esteve, R. (2023). Achieving technology leadership success. En *The Cloud Leader's Handbook*, 7, 315–323.

Le, H., Dao, P., & Tran, D. T. (2019). Global trend of open innovation research: A bibliometric analysis, Cogent Business & Management, 6(1), 1633808. https://doi.org/10.1080/23311975.2019.1633808

Leydesdorff, L., Ràfols, I., & Milojević, S. (2020). Bridging the divide between qualitative and quantitative science studies. *Quantitative Science Studies*, 1(3), 918–926. https://doi.org/10.1162/qss_e_00061

Lyne, I., Ngin, C., & Santoyo, E. (2018). Understanding social enterprise, social entrepreneurship and the social economy in rural Cambodia. *Journal of Enterprising Communities People and Places in the Global Economy*, 12(3), 278–298. https://doi.org/ 10.1108/jec-11-2016-0041

Martin, C., Upham, P., & Budd, L. (2015). Commercial orientation in grassroots social innovation: Insights from the sharing economy. *Ecological Economics: The Journal of the International Society for Ecological Economics*, 118, 240–251. https://doi. org/ 10.1016/j.ecolecon.2015.08.001

Martinez-Perez, C., Alvarez-Peregrina, C., Villa-Collar, C., & Sánchez-Tena, M. Á. (2022). A bibliometric and citation network analysis of contact lenses. *Contact Lens & Anterior Eye: The Journal of the British Contact Lens Association*, 45(1), 101602. https://doi.org/10.1016/j.clae.2022.101602

McLaren, C., & Bruner, M. (2022). Citation network analysis. *International Review of Sport and Exercise Psychology*, 15(1), 179–198. https://doi.org/10.1080/1750984x.2021.1989705

Moulaert, F., MacCallum, D., Mehmood, A., & Hamdouch, A. (2013). *The International Handbook on Social Innovation Collective Action, Social Learning and Transdisciplinary Research.* . Edward Elgar Publishing Limited.

Muñoz Medraño, M., Peñalver, S., & José C. (2018). Innovation management and cooperation in the government of social economy entities. *Journal of Scientific & Industrial Research,* 77(12):684-687.

Nelms, T. C., Maurer, B., Swartz, L., & Mainwaring, S. (2018). Social payments: Innovation, trust, Bitcoin, and the sharing economy. *Theory, Culture & Society*, 35(3), 13–33. https://doi.org/10.1177/0263276417746466

Núñez, R. B., Bandeira, P., & Santero, R. (2020). Social Economy, Gender Equality at Work and the 2030 Agenda: Theory and Evidence from Spain. *Sustainability: Science Practice and Policy,* 12(12), 5192. https://doi.org/10.3390/su12125192

Padilla, V., Gadea, E., Morquecho, R., Pérez, J., & León, M. (2023). *Análisis bibliométrico de percepción de la calidad en el deporte en la basede datos Scopus.* Universidad Autónoma de Nuevo León, México.

Palacios, M., Toribio, A., Llaque, P., & Deroncele, A. (2022). *Innovation and Digital Competence: A Bibliometric Analysis*. 2022 IEEE 2nd International Conference on Advanced Learning Technologies on Education & Research (ICALTER).

Peng, R., Chen, J., & Wu, W. (2021). Mapping innovation research in organizations: A bibliometric analysis. *Frontiers in psychology*, 12. https://doi.org/10.3389/fpsyg.2021.750960

Pérez, M., & Espasandín, E. (2014). El proceso de internacionalización y los resultados de la innovación en las empresas de economía social andaluza. *CIRIEC-España, Revista de Economía Pública, Social y Cooperativa*, (82), 65-95.

Phillips, E., Lee, H., & Ghobadian, A. (2015). Social Innovation and Social Entrepreneurship: A Systematic Review. *Group & Organization Management, 40*(3), https://doi.org10.1177/1059601114560063

Potts, J., & Hartley, J. (2015). How the social economy produces innovation. *Review of Social Economy*, 73(3), 263–282. https://doi.org/10.1080/00346764.2015.1067756

Quispe Fernandez, G. M., Giner-Perez, J. M., Ayaviri Nina, V. D., & Villa Villa, V. M. (2023). Bibliometric Studies on Rural Female Entrepreneurship: A Metabibliometric Review, *Academic Journal of Interdisciplinary Studies*, 12(4), 101-120. https://doi.org/10.36941/ajis-2023-0098

Rao-Nicholson, R., Vorley, T., & Khan, Z. (2017). Social innovation in emerging economies: A national systems of innovation-based approach. *Technological Forecasting and Social Change*, 121, 228–237. https://doi.org/10.1016/j.techfore.2017.03.013

Rodríguez, J., & Guzmán, C. (2013). Innovation in social economy firms. *Management Decision,* 51(1), 986 - 998.

Salam, S., & Senin, A. A. (2022). A Bibliometric Study on Innovative Behavior Literature (1961–2019). *Sage Open,* 12(3). https://doi.org/10.1177/21582440221109589

Samudra, A. (2023). Entrepreneurship and digital economy – A bibliometric analysis. *SDMIMD Journal of Management*, 9–24. https://doi.org/10.18311/sdmimd/2023/32449

Santos, S., Kovaleski, J., Gaia, S., & Paulo de Andrade Júnior, P. (2012). Management innovation in Brazilian technology companies: The challenges faced by managers in the practice of innovation. *American Journal of Industrial and Business Management*, 2(4), 160–165. https://doi.org/10.4236/ajibm.2012.24021

Silva, B. C. (2018). Entrepreneurship and the gig economy: A bibliometric analysis. *Cuadernos de gestión*, 22(2), 23–44. https://doi.org/10.5295/cdg.211580am

Simao, L., Carvalho, L., & Madeira, M. (2021). Intellectual structure of management innovation: bibliometric analysis. *Management Review Quarterly*, 71(3), 651–677. https://doi.org/10.1007/s11301-020-00196-4

Smith, G., & Teasdale, S. (2009). Associative democracy and the social economy: exploring the regulatory challenge. *Economy and Society*, 41(2), 151–176. https://doi.org/10.1080/03085147.2012.661627

Sun, Y., Xu, C., Ding, R., & Cao, Y. (2023). Does innovation in environmental, social, and governance disclosures pay off in China? An integrated reporting perspective. *Borsa Istanbul Review*, 23(3), 600–613. https://doi.org/10.1016/j.bir.2023.01.001

Theodorakopoulos, I., Kastaniotis, D., & Economou, G. (2014). Pose-based human action recognition via sparse representation in dissimilarity space. *Journal of Visual Communication and Image Representation,* 25(1) , https://doi.org/10.1016/j.jvcir.2013.03.008

Vercher, N., Bosworth, G., & Esparcia, J. (2023). Developing a framework for radical and incremental social innovation in rural areas. *Journal of Rural Studies*, 99, 233–242. https://doi.org/10.1016/j.jrurstud.2022.01.007

Villalba, U., & Pérez, J. (2019). La economía social y solidaria como vía para el Buen Vivir. *Revista Iberoamericana de Estudios del Desarrollo,* 8(1), 106-136.

Wadhwa, P., McCormick, M., & Musteen, M. (2017). Technological innovation among internationality active SMEs in the Czech economy: Role of human and social capital of CEO. *European Business Review*, 29(2), 164–180. https://doi.org/10.1108/ebr-12-2015-0156

Weerawardena, J., Salunke, S., Haigh, N., & Sullivan, G. (2021). Business model innovation in social purpose organizations: Conceptualizing dual social-economic value creation. *Journal of Business Research,* 125, 762-771. https://doi.org/10.1016/j.jbusres.2019.10.016

Yang, T., Chien, T., & Lai, F. (2022). Citation analysis of the 100 top-cited articles on the topic of hidradenitis suppurativa since 2013 using Sankey diagrams: Bibliometric analysis. *Medicine*, 101(44), e31144. https://doi.org/10.1097/md.0000000000031144

Yoga, I. P., Susanto, E., & Kumorotomo, W. (2022). Bibliometric analysis of public sector innovation. *Jurnal Ilmu Sosial dan Ilmu Politik*, 25(3), 297. https://doi.org/10.22146/jsp.69862

Zakrzewska, Z., Zawartka, A., Schab, M., Martyniak, A., Skoczeń, S., Tomasik, P., & Wędrychowicz, A. (2022). Prebiotics, Probiotics, and Postbiotics in the Prevention and Treatment of Anemia. *Microorganisms,* 10(7), 1330. https://doi.org/10.3390/microorganisms10071330

Zehra, A., & Urooj, A. (2022). A Bibliometric Analysis of the Developments and Research Frontiers of Agent-Based Modelling in Economics. *Economies,* 10, 171.https://doi.org/10.3390/economies10070171

Zhang, Y., & McGuire, S. (2023). A bibliometric analysis of hrm systems and firm innovation. *International journal of business and society*, 24(1), 82–99. https://doi.org/10.33736/ijbs.5604.2023