RESEARCH ARTICLE



Check for updates



A bibliometric analysis of B Corps and sustainable business ecosystems

Daniel Alonso-Martínez Daniel Alonso-Martínez Daniel Alonso-Martínez

Departamento de Dirección y Economía de la Empresa, Facultad de Ciencias Económicas y Empresariales, Universidad de León, León, Spain

Correspondence

Daniel Alonso-Martínez, Departamento de Dirección y Economía de la Empresa, Facultad de Ciencias Económicas y Empresariales, Universidad de León, Campus de Vegazana, s/n. León 24071, Spain.

Email: dalom@unileon.es

Funding information

MCIN/AEI/, Grant/Award Number: PID2022-137379NB-I00; ERDF A Way of Making Europe: PRIMA, Grant/Award Number: (Section 2- 2021); Ministry of Science and Innovation (MCIN), the State Investigation 570 Agency (AEI); European Union "NextGenerationEU"/ Re-571 covery Plant, Transformation and Resilience (PRTR); University of Padova, Department of Economics and Management "Marco Fanno"

Abstract

Comprehending the state of the art of certified B Corps and sustainable business ecosystems (SBE) is crucial to affirming the role of B Corps in SBE development. The aim of this paper is to systematise the scientific knowledge related to both concepts and explore the role and contributions of these enterprises in the SBE. To date, no study has jointly carried out a bibliometric analysis and discussed the state of the art of B Corps and SBEs in management literature. A sample of 696 research documents from 2006 to 2024, extracted from the Web of Science and Scopus databases, has been analysed. The results show a strong relationship with the stakeholder and circular economy theories and a weaker relationship with the institutional theory, among others. The SBE literature is closely connected to sustainable and innovation business models, social entrepreneurship, and it is especially associated with social and environmental impact.

KEYWORDS

B corps, bibliometric analysis, sustainability, sustainable business ecosystem

INTRODUCTION

Business ecosystems (BEs) are complex and dynamic environments in which different business actors and organisations interact (Adner, 2017). These actors include firms, suppliers, customers, competitors, financial institutions, government agencies and non-profit organisations (Moore, 1996). As stated by Moore (1996), a BE resembles a natural ecosystem with interdependence and symbiotic relationships among the different actors. Firms interact with each other and other actors in the ecosystem to create value, share resources, exchange knowledge and collaborate on joint initiatives. This interaction can take the form of strategic partnerships, business alliances,

The main objective of the bibliometric analysis carried out in this study is to identify the business factors that lead to the creation of sustainable business ecosystems and detect the strategies developed by B Corps within these ecosystems. Additionally, the main theories analysing the behaviour of B Corps in the ecosystem are studied.

supply networks and research and development collaborations (Adner, 2017). Thus, the concept of the BE is based on the idea that firms do not operate alone but are part of a larger system in which they are influenced and have an impact (lansiti & Levien, 2004).

BEs play a crucial role in transforming the current business model into one that is more sustainable, responsible and oriented towards the well-being of people and the planet (Rong et al., 2018). In a global context with increasingly urgent social and environmental challenges, B Corps offer an innovative approach to addressing these issues and generating positive multi-stakeholder impact (Boffa et al., 2023). These entities have emerged as key agents of this challenge (Kirst et al., 2021). They are organisations that combine economic benefits with a positive social and environmental impact. They are legally committed to considering the interests of multiple stakeholders, including employees, communities, the environment and suppliers, in their business decisions. These entities adhere to rigorous standards of social

------This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made. © 2024 The Author(s). Corporate Social Responsibility and Environmental Management published by ERP Environment and John Wiley & Sons Ltd.

and environmental performance and undergo independent assessment and certification to achieve a B Corp certification (B Lab, 2024; Patel & Dahlin, 2022). Moreover, B Corps in comparison with Benefit Corporations. B Corps are firms certified by an external agency that evaluates and quantifies the firm's commitment to its stakeholders while Benefit Corporations are firms that proactively modify their legal structure to embed stakeholders' demands, and they also provide reports on their social performance. Therefore, a company can be a Benefit Corporation, a B Corp or both, depending on its strategic and legal choices.

The goal of B Corps is to transform traditional managerial practices oriented towards maximising financial returns into practices with a broader impact on society and the environment (Ballesteros-Sola et al., 2018; Diez-Busto et al., 2022; Halebsky, 2018; Paeleman et al., 2024; Paelman et al., 2022; Villela et al., 2021). Integrating social and environmental issues through their business activities allows these companies to positively impact areas such as poverty, inequality, education, health, social justice and environmental sustainability, among others (Diez-Busto et al., 2021, 2022; Tabares, 2021a; Villela et al., 2021). However, they must balance economic benefits with long-term sustainability and financial stability (Patel & Dahlin, 2022). To this end, they can establish business models that do not limit business success to financial results but also involve responsible management of natural resources, employee well-being and value creation for the community (Carvalho et al., 2022). In addition, they should promote transparency and accountability by publicly reporting on their practices, results and progress towards their goals and commitments (Steingard & Gilbert, 2016). Another key aspect is that they must be able to inspire other firms and lead the market (Lepkowska-White et al., 2023; Villela et al., 2021), possibly driving systemic change that promotes a more sustainable and responsible approach across industries (Diez-Busto et al., 2022; Halebsky, 2018; Villela et al., 2021), reinforcing and developing links among all the agents present in the ecosystem (lansiti & Levien, 2004). For these reasons, the B Corp movement has experienced significant growth worldwide. More and more firms, regardless of their size, are becoming B Corps and adopting a more responsible business mindset (Villela et al., 2021).

Becoming a B Corp involves a strict assessment of the firm's social and environmental impacts, as well as its governance practices. This transparency and accountability create a trusting climate among stakeholders and establish a solid framework for driving and maintaining SBEs (Joo & Shin, 2018; Romanelli, 2018). Firms are considered parts of a broader system, interconnected with their suppliers, customers, communities and the environment (Donaldson & Preston, 1995). This approach recognises that a firm's success cannot be achieved in isolation but through close collaborations and relationships with all stakeholders (Mitchell et al., 1997; Porter & Kramer, 2011).

SBEs aim to integrate sustainability and social responsibility into all the stages of the firm's value chain (Joo & Shin, 2018), transforming their business models (Adner, 2017). This involves adopting sustainable production practices, reducing negative environmental impacts, promoting equitable and fair relationships with suppliers and fostering

a corporate culture oriented towards the well-being of employees and local communities (Espina-Romero et al., 2022). In this context, B Corps recognise that their success and ability to make a positive impact depend on collaboration and integration in their environment (Steingard & Clark, 2016). An example of this is that they try to make a positive difference locally by providing quality jobs, supporting community projects and contributing to inclusive economic development. Through their transparency policies, where they commit to being open and honest, they promote trust within the ecosystem (Ballesteros-Sola et al., 2018; Gazzola et al., 2022). In addition, as Patel and Dahlin (2022) argue, B Corps experience greater performance instability after certification, so creating stronger SBEs seems relevant to ensure their effects on society.

Despite the success of these business models, there are some gaps in the previous literature on the challenges faced by B Corps (Chen & Marquis, 2022; Kim & Schifeling, 2022; Kopaneva & Cheney, 2019; Muñoz et al., 2018; Nigri et al., 2020; Patel & Dahlin, 2022; Sharma et al., 2018; Steingard & Gilbert, 2016; Tabares, 2021a, 2021b; Villela et al., 2021). Creating SBEs that reinforce the success of business models by balancing social and environmental impact with economic benefits constitutes one of the main challenges. Based on these challenges, we propose the following research questions: What theories lead B Corps to create SBEs? What strategies do B Corps develop within SBEs? Previous studies (see, for example, Blasi & Sedita, 2022 and Kirst et al., 2021) have conducted bibliometric analyses of B Corp firms. While Blasi & Sedita, 2022 used the SCOPUS database and 20 additional articles from the Web of Science (WOS), Kirst et al. (2021) used SCOPUS and WOS data sources. However, these studies only focus on B Corp or Benefit Corporation analyses without considering SBEs. As far as the literature on SBEs is concerned, only the article by Sălăgeanu, Soldan, and Bejinaru (2023) presents a bibliometric analysis of this concept from an academic point of view with the SCOPUS database. The article by Espina-Romero et al. (2022) provides a bibliometric analysis of BE in which the term SBE is introduced. However, none of these bibliometric studies analyse the possible factors or business strategies that lead to creating or strengthening these ecosystems. These studies are also limited to describing the previous literature based on journals, keywords and authors.

This paper aims to contribute to the previous literature through a bibliometric analysis by jointly replicating previous studies that separately analyse the literature on B Corps and SBEs using the two databases, SCOPUS and WOS. This study follows the same approach and methodology as the work of Kirst et al. (2021). However, their bibliometric analysis only provides a description of the journals, methods and themes using both databases. Our study goes beyond this analysis by exploring the relationships between countries, authors and keywords. We also explore the temporal evolution of the literature on B Corps. Moreover, by using the methodology proposed by Kirst et al. (2021), we explore the link with SBEs.

This paper makes three significant contributions to the existing body of literature. Firstly, we have conducted the first joint bibliometric analysis of the B Corp and SBE literature, using a sample of 696 documents from the WOS and Scopus databases. Employing bibliometric and VOS viewer techniques, this study stands out as the first to comprehensively review and analyse the emerging concepts of B Corps and SBEs within the field of management research. Secondly, our research implements bibliometric and VOS viewer visualisation analyses of B Corps and SBE, considering co-occurrence, citation, cocitation and country co-citation keywords. Notably, our evaluation spans the period from 2006 to 2024, covering scientific articles retrieved from the WOS and Scopus databases. This approach distinguishes our study from previous literature reviews, which frequently analyse papers from a single database (Blasi & Sedita, 2022; Espina-Romero et al., 2022; Rifa'i et al., 2023; Sălăgeanu, Soldan, & Bejinaru, 2023) or use only bibliometric techniques (Blasi & Sedita, 2022; Kirst et al., 2021). The selected time frame (2006–2024) is strategically chosen to capture the period when both concepts have experienced a notable upswing in scholarly attention. Lastly, our study delves into the challenges and strategies faced by B Corps in developing SBEs, a dimension that has not been explored in the previous literature. In this way, we can determine the business factors that have the greatest impact on SBEs and the possible business strategies that foster the creation of these ecosystems. Additionally, based on the bibliometric analysis, we select the main theories that help to explain the impact of B Corps on the creation of SBEs. By addressing this gap, we aim to contribute valuable insights to the ongoing discourse surrounding B Corps and sustainable business practices.

This research is structured as follows. In the second section, a theoretical review of the main theories and approaches that help to identify the factors influencing the creation of SBEs and the role played by B Corps is carried out. Section 3 explains the methodology used to perform the Bibliometric analysis based on a sample of articles from the WOS described in Section 4. In Section 5, some strategies that B Corps can implement to create or reinforce SBEs are analysed. Finally, the main conclusions of the study are drawn, and some lines of future research are advanced.

2 | FROM BE TO SBE THROUGH B CORPS

The main objective of BEs is to foster shared values and sustainable economic growth (Simoncini, 2011). Firms can benefit from participating in a BE by gaining access to additional resources and knowledge, expanding their reach and market, improving their competitiveness and finding opportunities for innovation and growth (Adner, 2017). In addition, BEs can foster collaboration to address common challenges, such as environmental sustainability or corporate social responsibility, thus transforming them into SBEs. B Corps are based on the idea that businesses cannot thrive in isolation but are part of a larger system that includes other organisations, communities and the environment (Freeman et al., 2010). These firms understand that their success is intrinsically linked to the well-being of their environment and actively work to create a positive impact on BEs.

There are several theories and approaches relevant to the creation of SBEs through B Corps. The *stakeholder theory* (Yi et al., 2022)

emphasises the importance of effectively identifying and managing the needs and expectations of all key stakeholders in a BE. B Corps apply this approach by actively engaging and collaborating with employees, customers, suppliers, local communities and other relevant stakeholders to ensure inclusive decision-making and sustainable value creation (Kim, 2021). As Fonseca et al. (2022) point out, these partnerships play a crucial role in addressing sustainability challenges through innovative and disruptive approaches, minimising environmental impact, enhancing social and economic performance and fostering positive societal change. This collaboration, which enables the integration of sustainability into business strategies, strengthens the creation and maintenance of SBEs (Paeleman et al., 2024; Paelman et al., 2022). The triple bottom line approach (Svensson et al., 2018) is based on the idea that firms should consider and balance three key dimensions in their operations: economic, social and environmental impact. B Corps adopt this approach by setting goals and metrics that go beyond financial returns (Paeleman et al., 2024). They consider the positive impact they have on people and the planet regarding sustainability issues by strengthening their relationships with the other actors in the ecosystem (Stecker, 2016). In addition, the theory of shared value creation (Porter & Kramer, 2011) argues that long-term business success is closely linked to creating value for both the firm and society. B Corps apply this approach by identifying opportunities where business interests and societal needs are aligned, generating win-win solutions that promote sustainability and equity (Moroz & Gamble, 2021). The notion of shared responsibility among different stakeholders can be pivotal in strengthening bonds within SBEs. As highlighted by the theory of shared value creation (Porter & Kramer, 2011), this involves recognising that sustainability is a collective challenge that implies active participation from diverse actors, including businesses, governments, civil society and local communities, all of which are integral parts of a BE. Collaboration and cooperation among the actors involved in the BE can have a broader and more sustainable impact, as each brings different resources, perspectives and knowledge to the table (Hiller, 2013). In this context, working together implies understanding that sustainability transcends individual actions and requires coordinated efforts to address complex challenges and reinforce SBEs.

The *circular economy approach* (Ekins et al., 2019) focuses on designing systems and business models that reduce waste, promote the reuse of resources and encourage environmental regeneration. B Corps apply this approach by adopting sustainable supply chain management practices, promoting product reuse and recycling and seeking solutions that close material and energy cycles (Boffa et al., 2023). The circular economy approach drives the creation of SBEs by promoting resource efficiency and encouraging business practices that minimise environmental impact (Marques-McEwan et al., 2023). This approach is closely related to the *living systems approach*, which views organisations as interconnected and dynamic systems constantly interacting with their environment. B Corps implement this approach by recognising that they are part of a larger system and that their actions affect other actors and the environment. They can manage the interdependencies among the various elements of their BE to

generate more sustainable and balanced outcomes (Sharma et al., 2018), fostering the creation of SBEs.

Another theory that clarifies the role of B Corps as a driver of SBEs is the *theory of sustainability* (Kuhlman & Farrington, 2010), which suggests that economic development must be in harmony with the limits and capacities of the environment. B Corps apply this approach by integrating environmental considerations into all the stages of their value chain, promoting sustainable production and consumption practices and encouraging natural resource conservation and regeneration (Blasi & Sedita, 2022). Moreover, B Corps participate in collective programmes to address large-scale social and environmental challenges, such as fighting against climate change, protecting human rights and promoting gender equality. Through their participation, these firms strengthen their impact and contribute to building a more sustainable ecosystem in their sector or industry (Conger et al., 2018).

This theory could not be understood without a *collaborative multi-stakeholder approach* based on the idea that complex social and environmental challenges require collaboration among multiple actors, including businesses, governments, NGOs, communities and academia. B Corps adopt this approach by seeking strategic alliances and engaging in collaborative platforms that enable them to address social and environmental problems more effectively (Cantele et al., 2023). Forming strategic alliances and collaborating with other organisations and external partners enhance BE sustainability (Paeleman et al., 2024; Paelman et al., 2022).

The collective impact approach (Kramer & Pfitzer, 2016) is used to study the impact of actors' coalitions and networks with the aim of addressing complex social challenges collaboratively. B Corps apply this approach by joining broader initiatives and movements seeking to drive systemic change in areas such as gender equality, social justice and environmental protection (Tabares, 2021b). This approach enables the actors in an SBE, including B Corps, to collectively tackle sustainability-related challenges. The business ethics approach (Schwartz, 2017) is a broader movement that focuses on adopting ethical and moral principles in business decision-making. B Corps apply this approach by establishing solid values that guide their behaviour and align their actions with the well-being of all the stakeholders involved in their BE (Diez-Busto et al., 2022). However, such initiatives require business resilience, understood as a firm's ability to adapt and recover in the face of change and disruption. B Corps apply this approach by developing risk management strategies that enable them to address social, economic and environmental challenges and maintain their commitment to long-term sustainability (Chen & Marquis, 2022). They can actively participate in the political process to promote stronger sustainability regulations and create an environment that supports responsible practices. Lobbying can enable firms to advocate for sustainable public policies and pressure governments and legislators to take action in this direction (Kim, 2021). This ability to lobby and influence policy can be a determining factor in creating and maintaining SBEs.

The behaviour of B Corps in SBE creation can also be explained by the *signalling theory* (Connelly et al., 2011). This is an economic

theory related to B Corps in terms of the impact and communication of their sustainable practices and ethical values. According to this theory, firms use signals to convey information about their quality, reputation and commitment to certain values. In the context of B Corps, these organisations send clear signals to their stakeholders, such as consumers, investors and employees, that they operate responsibly and sustainably. By obtaining B Corp certification, these firms demonstrate that they have met high standards of social and environmental performance and have been independently assessed regarding their commitment to the well-being of people and the planet (Serres et al., 2022). This signal builds trust and credibility and appeals to consumers and investors who value sustainability and corporate responsibility. B Corps also use other signals to communicate their sustainable approach. These may include transparent sustainability reporting, adherence to recognised international standards, collaboration with non-profit organisations and participation in social and environmental impact initiatives. These signals reinforce firms' commitment to sustainability and build a solid reputation in the marketplace. The signalling theory suggests that B Corps benefit from sending clear signals of their sustainable approach as this allows them to differentiate themselves from other conventional firms and attract consumers and investors looking to support socially and environmentally responsible businesses. B Corps value transparency and accountability in all their actions. Publishing sustainability reports and impact disclosures communicating their achievements, challenges and goals is an effective way to reach out to all the actors in the SBE. Some B Corps engage in business activism, advocating public policies favourable to sustainability and corporate responsibility, which makes them agents of change within the sustainable ecosystem (Bianchi et al., 2020).

Finally, the theory of sustainable business models argues that firms can gain a competitive advantage and achieve long-term success by sustainability into their business strategies (Stubbs, 2017a). This theory is based on the premise that sustainability is not only an ethical and social responsibility but also a source of opportunities and a way for firms to mitigate risks. It emphasises the importance of innovation and sustainable supply chain management. By integrating sustainable practices into the firm's value chain, environmental impacts and supply chain-related risks can be reduced, and efficiency can be improved (Stubbs, 2017a). These initiatives can be extended to more actors by creating sustainable networks that strengthen SBE creation and maintenance. These approaches and theories provide a conceptual framework for understanding the role of B Corps in creating SBEs.

3 | METHODOLOGY AND DATA SOURCE

Bibliometric analysis was selected to test our main research questions. This methodology, initiated in the 1950s and developed with the work of authors such as Pritchard (1969) and Broadus (1987), is currently being applied in several topics and areas (see Khan et al., 2021 for a review). This methodology allows us to combine qualitative and quantitative analyses and manage a comprehensive sample of studies. A

TABLE 1 Description of the keywords used.

Keyword	Description
B Corp*/B Corp*/B-Corp*/ BCorp*	B Corp is a firm with high standards of verified performance, accountability and transparency in areas ranging from employee benefits and charitable giving to supply chain practices and input materials.
Sustainable business ecosystem*/SBE* /Business ecosystems for sustainability*	The relationship between actors and their physical environment, interacting with each other and having a common sustainable purpose.

bibliometric analysis can be implemented using different techniques and procedures. In this study, we combine the procedure suggested by Khanra et al. (2020) and Khan et al. (2021) to capture the most relevant literature on this topic and extract the specific research that impacts the study. Khanra et al. (2020) suggest three phases to implement a bibliometric analysis: scanning, curating and analysing. During the first phase, we scanned all the documents collected from two main databases (Scopus and WOS in line with the study of Kirst et al., 2021). All the studies were selected using the keyword method. They were curated based on their topic and analysed considering their keywords, authors' citations and co-citations, principal references and journals. Similar to Kirst et al. (2021), we excluded the studies related to other disciplines such as biology, ecology, veterinary science and other natural sciences. We included the studies related to the following areas of literature: business, economics, management and social science. Finally, a qualitative analysis was conducted to explore the impact of B Corps on SBE creation. Following Secinaro et al. (2022), we also mapped country publications in both areas (B Corps and SBEs) and explored the connections among countries in these areas through a network analysis since the core aim of this paper is to highlight how these two research lines overlap and explain the emerging role of B Corps in SBEs through different theories. Moreover, we included some temporal analyses to evaluate tendencies in the current literature.

The quality of the results depends on the database analysed. In this study, we used the two most relevant databases, Scopus and WOS, to select the most pertinent and highest-quality studies. These databases were also chosen due to their international visibility and dissemination of up-to-date scientific production in various areas, facilitating an analysis of productivity and collaboration in this context. The previous literature considered only one database. For this reason, we analyse both concepts separately and jointly, considering the Scopus database, WOS database and the combined database. Some studies are present in both databases, so we applied filters to avoid repeated studies. The analysis focuses on the behaviour of publications referring to B Corps and SBEs, and the sample includes publications from 2006 to January 2024. We started in 2006 because the B Corp movement began then. The articles were obtained by applying

the advanced search model TAK (Title, Abstract, Keywords) and using the keywords *B Corp*, *B Corp**, *B-Corp**, *BCorp**, *Sustainable business ecosystem**/*SBE**/*Business ecosystems for sustainability**, following the previous research (Gehman & Grimes, 2017). The joint analysis of B Corps and SBEs started in 2017 because this is a new trend, and most of the papers in this research line were published in 2023 since it is an emerging research line.

Then, the bibliometric indicators were defined to analyse the scientific production on the SBE of B Corps in the first phase, applying the selected bibliometric indicators in the second and analysing the data obtained from the bibliometric analysis in the third. A description of the keywords considered in the study is shown in Table 1.

Following the phases mentioned above and widely described in Tables 2, 3 and 4, we obtained a large number of documents, which were refined. After dropping the studies that mentioned the concept but did not explore the main topics or were irrelevant to the analysis, we obtained a sample of 696 documents. The information came from documents about B Corps (298 documents), SBE (361 documents) and B Corps and SBE (37 documents). To reinforce our analysis, we included some robustness tests (we describe the results for each database and each term separately). The digital data processing was carried out using EndNote 20, VoS Viewer 1.6.19 and Microsoft Excel 2021.

4 | BIBLIOMETRIC ANALYSIS

4.1 | Descriptive analysis: Productivity and historical evolution

The analysis of the bibliometric study focused on each level according to the indicators of author productivity and author collaboration, article productivity per year, recurrence of the keywords of greatest interest (with graphical representation), the journals and countries with the most publications on the topics and other relevant indicators of scientific interest. A temporal analysis was also conducted to evaluate tendencies and emerging research lines.

Tables 2, 3 and 4 show a summary of the articles consulted, segmented according to research area, with some criteria relevant to their classification. The information was obtained from the Scopus and WOS databases. Table 2 shows the summary for the Scopus database, Table 3 for WOS and Table 4 for the combined database (Scopus and WOS). Results and Figures were reported using the data in Table 4. However, we checked the other two databases to evaluate whether there were any significant differences.

4.2 | Productivity and historical evolution of B corps

A bibliographic linkage analysis of the B Corps sample by country was conducted to determine the interconnections among the scientific papers and identify the influence and impact of the articles by country

Description	B Corp	SBE	B Corp & SBE
Timespan ^a	2006-2024	2006-2024	2017-2024
Documents (total)	253	1187	33
Documents (final) ^b	244	288	33
Sources (Journals, books, etc.)	5	5	5
Article	162	206	25
Book	11	6	5
Book chapter	52	36	1
Conference paper	14	19	1
Review	5	21	1
Average citations per document	11.72	25.31	18.09
Total citations	2861	7291	597
H-index	32	40	10
Average publications per year	14	16	4.2
Authors	502	1183	80

TABLE 2 Summary of the segmented sample (Scopus).

Source: Scopus (2024).

^bTotal documents after applied quality criteria.

Description	B Corp	SBE	B Corp & SBE
Timespan ^a	2006-2024	2006-2024	2018-2024
Documents (total)	168	860	4
Documents (final) ^b	149	158	4
Sources (Journals, books, etc.) ^c	7	8	2
Article	133	129	2
Book	2	1	-
Book Chapter	3	10	2
Review	3	14	-
Average citations per document	15.97	17.84	11.75
Total citations	2379	2819	47
H-index	31	25	3
Average publications per year	8.27	8.77	0.67
Authors	379	621	9

TABLE 3 Summary of the segmented sample (Web of Science).

Source: Web of Science (2024).

(Figure 1). According to the data, there is a close relationship among five countries (United States, Italy, Canada, United Kingdom and Spain), and two other countries have a strong link (Chile and Australia). As expected, the United States is the country with the most influential articles, largely because it is where the B Corp movement emerged, followed by Italy, Spain, the United Kingdom and Canada, which are countries with a strong environmental commitment, widespread social awareness and legal frameworks favourable to small and medium-sized enterprises. The figure also shows isolated clusters (India, Czech Republic, Ukraine, Taiwan, Romania and

Colombia), which may be due to the business and legislative contexts of these countries, which implies adjusting the B Corp approach.

The results in Figure 1b show the temporal line. Here, we see how the first studies originated in the United States, coinciding with the country where the B Corp movement began. Other Anglo-Saxon countries like the United Kingdom and Australia were also pioneers in this research. Subsequently, Mediterranean countries such as Italy and Spain increased their attention to these types of firms. Currently, countries like the Netherlands and Latin American countries such as Colombia, Argentina, Peru and Chile are paying more attention to this

^aThe analysis started in 2006 because the B Corp movement began then. The joint analysis of B Corps and SBEs started in 2017 because the first study was published on this year.

^aThe analysis started in 2006 because the B Corp movement began then. The joint analysis of B Corps and SBEs started in 2017 because the first study was published on this year.

^bTotal documents after applied quality criteria.

^cWe only describe the number of articles for sources with higher number of publications.

Description	B Corp	SBE	B Corp & SBE
Timespan ^a	2006-2024	2006-2024	2017-2024
Documents (total)	421	2047	37
Documents (final) ^b	298	361	37
Sources (Journals, books, etc.) ^c	8	8	5
Article	203	262	27
Book	11	6	5
Book chapter	52	40	3
Conference paper	11	24	1
Review	8	24	1
Average citations per document	17.58	28	17.41
Total citations	5240	10,110	644
Average publications per year	16.55	24.77	4.63
Authors	627	1252	89

Source: Scopus and Web of Science (2024).

research line. These results are correlated with the number of certificated firms in the country, showing the relationship between research and firm context.

Table 5 shows that out of a total of 1968 authors (registered up to January 2024) who developed research related to the topics of interest, the most articles published per author concern SBEs, with B Corps and especially joint analyses being of more recent interest to researchers.

An analysis of the author citation index of B Corp research was conducted to measure the impact and influence of authors in the scientific community. Figure 2a shows 111 items grouped into 16 clusters, segmented by research focus identified by colour. In this case, red and yellow clusters refer to empirical studies on economic and corporate social responsibility issues in a European context; orange denotes studies of the literature reviews; green indicates empirical studies on social, environmental and legislative issues; and blue indicates qualitative research, analysis of reports, interviews and surveys. Similarly, Figure 3 analysed authors citations for B Corps according to the temporal evolution.

To analyse the productivity of articles by journal, the SubjectBibliography tool of the EndNote 20 program was used, which allows lists of data from the databases created with the program to be exported. The results comprise 492 articles distributed among 114, 132 and 15 journals (for B Corps, SBE and both concepts, respectively), as shown in Table 6. It is worth noting that Sustainability, Corporate Social Responsibility and Environmental Management and Business Strategy and the Environment are at the top of the B Corp sample. Similarly, studies related to SBE journals such as Sustainability, Journal of Cleaner Production, Ecosystem Services, International Journal of Sustainable Development and World Ecology cover the greater attention of this term. Finally, for the joint analysis of both

concepts, journals like Business Strategy and the Environment, Sustainability and Organisation & Environment cover this research line. The journals with the most published articles mentioned above are those where the triple bottom line approach, shared value creation theory, living systems approach, strong sustainability theory and sustainable business theory have a large impact. These articles also cover aspects such as corporate social responsibility, stakeholders, the multi-stakeholder collaboration approach, business ethics and the signalling theory.

Subsequently, the production of articles per year was analysed in Figure 3. It is important to note that in the case of the topics referring to B Corps, some research laid the foundations for a considerable increase in studies on these topics from 2016 onwards, and they have increased exponentially during the last three years.

A fundamental aspect of the research is the keyword analysis of the samples. From the 203 articles analysed, more than 2000 keywords were extracted (B Corp = 418, SBE = 1898, B Corp + SBE = 148), ranked and ordered based on frequency (Table 7).

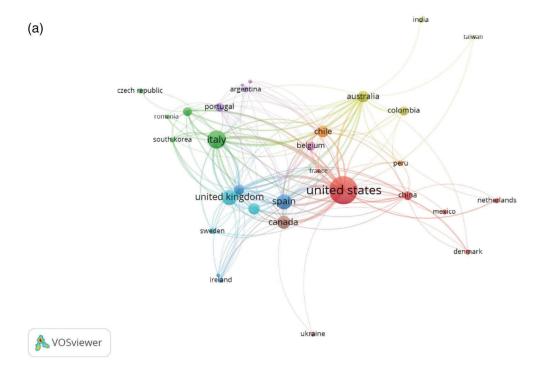
The joint analysis between the concepts of B Corps and SBEs considers key elements such as the Sustainable Development Goals (SDGs), social entrepreneurship, sustainable business models, sustainability, business ecosystems, innovation and climate change. Aspects like corporate social responsibility, responsibility and accountability suggest that firms in general, including B Corps, are being assessed and held more accountable for their social and environmental impact.

In Figure 4a,b, VOSviewer software was used to graphically portray the relationships among the keywords and their occurrence in recent years. Each of the themes has been analysed individually, and a keyword network has been developed for each of the themes. Records exported from the Scopus and WOS databases, including full references, were used. These records were processed by the

^aThe analysis started in 2006 because the B Corp movement began then. The joint analysis of B Corps and SBEs started in 2017 because the first study was published on this year.

^bTotal documents after applied quality criteria.

^cWe only describe the number of articles for sources with higher number of publications.



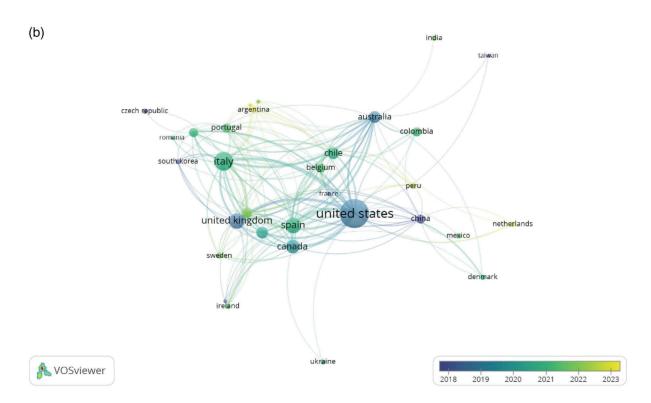


FIGURE 1 (a) Network of article relationships by country for B Corps. (b) Network of article relationships by country for B Corps temporal evolution.

VOSviewer software with a citation degree of 2 to reduce dispersion and avoid skewing the sample with isolated or unrepresentative results.

In Figure 4a, the terms *B Corp*, *Social Entrepreneurship*, *CSR*, *SDGs* and *Hybrid Organisation* and *B impact* are highlighted due to their close connection to each other and other terms in the network. This

TABLE 5 Productivity by authors (Scopus and Web of Science).

B Corp		SBE	SBE		B Corp and SBE	
Authors	Publications	Authors	Publications	Authors	Publications	
Gazzola, Patrizia	7	Fu, Bojie	6	Bonfanti, Angelo	2	
Nigri, Giorgia	6	Mao, Dehua	6	Chen, Shuting	2	
Acevedo-Duque, Ángel	5	Wang, Zongming	6	Dahlmann, Frederik	2	
Gehman, Joel	5	Jia, Mingming	4	Mion, Giorgio	2	
Grechi, Daniele	5	Tian, Yanlin	4	Raven, Rob	2	
Stubbs, Wendy	5	Fenwick, Mark	3	Stubbs, Wendy	2	
Borchardt, Miriam	4	Gao, Guangyao	3	Yu, Dengke	2	
Ferioli, Matteo	4	Hong, Huasheng	3	82 Authors	≤1	
Gamble, Edward N.	4	Hossain, MD Sarwar	3			
Grimes, Matthew G.	4	Ma, Ying	3			
Moroz, Peter W.	4	Man, Weidong	3			
Pereira, Giancarlo Medeiros	4	Shen, Qin	3			
Tabares, Sabrina	4	Wang, Jing	3			
Wilburn, Kathleen	4	White, Alan	3			
Wilburn, Ralph	4	Xia, Jihong	3			
558 authors	≤3	Zhang, Luoping	3			
		Zhao, Sheng	3			
		1235 Authors	≤2			

Source: Scopus and Web of Science (2024).

indicates that these terms are closely related and are central themes in business and social responsibility studies.

Figure 4b shows the emergence of more recent terms, such as sustainable supply chain, social values, consumer, country brand, sustainable business model, fashion industry and circular economy. These terms reflect how research is incorporating new elements and approaches to determine the potential impacts and differences between business and corporate social responsibility. This suggests an evolution in the field of study, where new perspectives and analysis methods are being explored. Similarly, we can see that research on corporate social responsibility is relevant, ranking close to the centre of the sample, along with the triple bottom line approach. The analysis identifies 16 clusters with 164 elements, 1644 links and a link strength of 3040. To some extent, this can be explained by the fact that this area is constantly developing, and the community has not yet accepted a single line but variants and approaches that increase dispersion. This has given rise to new scientific incorporations in the area. From the 16 clusters, 3 of them emerge as very relevant. The first cluster is linked to B Corp certification and the economic, social and environmental impact of firms. In this cluster, concepts such as the circular economy, fashion industry and country brand are also present. The second cluster is related to Hybrid Organisations, social entrepreneurship. sustainable business models and innovation. Finally, the third cluster includes traditional concepts such as accountability, CSR, the institutional and stakeholder theories and non-profit and gender aspects. Sustainable business models, sustainable supply chains and environmental aspects are found at the extremes of the sample in

separate clusters, indicating that despite being represented to a certain degree, they are not as widely addressed.

4.3 | Productivity and historical evolution of SBEs

Similarly to Figure 1a, a bibliographic linkage analysis at the country level has been conducted for SBEs to determine the interconnections among the scientific papers and identify the influence and impact of the articles by country (Figure 5a). According to the data, there are 11 clusters and 63 items. The most important cluster includes countries such as India, Turkey, Romania and South Korea. The other four relevant clusters have China, the United States, the United Kingdom and Australia-Canada as country references of each cluster. These results are quite similar to those obtained in the B Corp analysis. However, there are some differences arising from the greater relevance of Asian countries such as India, China, Japan, Malaysia and South Korea. The figure also shows isolated countries like Colombia, Morocco, the United Arab Emirates and Sri Lanka. The temporal analysis presents a clear picture of the worldwide evolution of the literature. The United States and European countries like Finland, Italy and France were the first to explore the topic of SBEs. However, more attention is currently being paid in the clusters with India and Spain as reference countries (Figure 5b).

Figures 6a,b show an analysis of the author citation index of SBE research in order to measure the impact and influence of authors in the scientific community. In both Figures, 76 items are grouped into

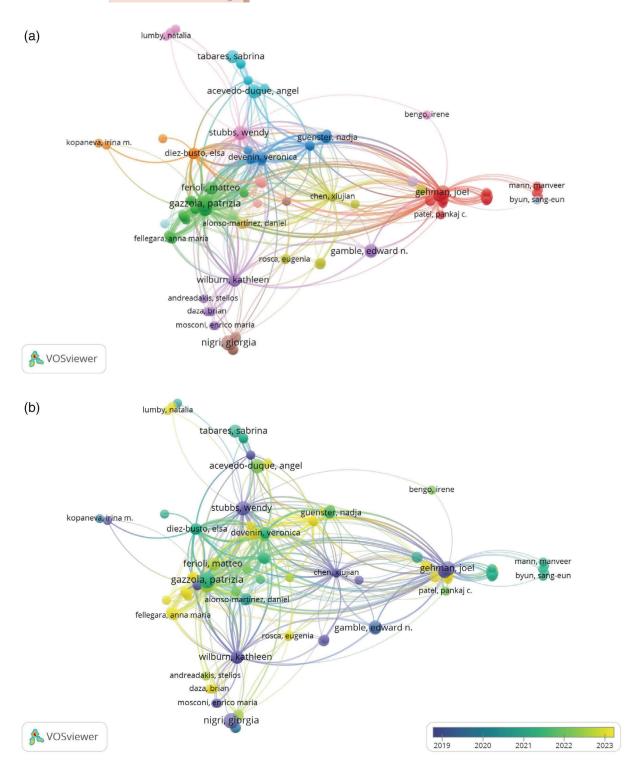


FIGURE 2 (a) Network of citation relationships by authors for B Corps. (b) Network of citation relationships by authors for B Corps temporal evolution.

11 clusters, with 799 links and a total link strength of 17,297. Fu Bojie emerges as a reference author in this literature with his studies related to Service Ecosystems. The works by Mao Dehua are also relevant as they analyse environmental effects on ecosystems. Finally, the cluster including Wang Jing as a reference author is related to the role of agents in ecological ecosystems. Figure 6b provides specific

information on the temporal evolution. In this case, the abovementioned authors seem to have originated the concept. Currently, authors like Dong Yuhong and Li Xiaoshun are references in the SBE literature. These authors also analyse Ecosystem services but from a multilevel perspective or focusing on the demands of sustainable supply chains.