

Social Impact Bonds in Europe after COVID-19 Crisis: A Bibliometric Analysis

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Abstract

This study performs a bibliometric and content analysis on the development of Social Impact Bonds (SIBs) in Europe, which shows a gap, especially after the COVID-19 pandemic. The three key areas analyzed are: 1) the institutional and normative ecosystem for SIBs; 2) the investment process, especially regarding risk transfer; 3) the effect of SIBs on public benefit, focusing on the employment sector, which is the sector that showed the best results in Europe. Through the bibliometric analysis, the paper provides deep insight, identifying publication trends, research clusters, keywords, collaboration patterns, and key authors, among others. From a practical perspective, the study aims to give practical indications to policymakers and practitioners to make the outcome-based approach more efficient and resilient to crises. It also aims to provide academic researchers with a new direction for further research in this growing field.

Keywords: Social Impact Bonds, Payment by Success Bond in Europe, Impact Finance, SIBs.

1. INTRODUCTION

Collaborative arrangements between the public and private sectors, known as Public-Private Partnerships (PPPs), have gained broad acceptance and prominence in managing public services. During the 1990s, PPPs emerged as a central instrument of public policy on a global scale (Osborne, 2000), resulting from the principles of New Public Management (NPM). The spread of Public-Private Partnerships (PPPs) is strongly linked to the larger reforms inspired by New Public Management (NPM). NPM emerged in the 1980s, emphasizing efficiency, managerialism, and the incorporation of private sector principles into public administration (Hood, 1991). Within this context, PPPs were advocated as governance mechanisms capable of leveraging private resources, experience, and innovation to improve public service delivery (Osborne & Gaebler, 1992; Hodge & Greve, 2007). In this respect, PPPs can be viewed as a real application of NPM principles, shifting the emphasis away from hierarchical state provision and toward contractual, performance-oriented, and collaborative partnerships between public and private players. Public-private partnerships (PPPs) are better conceptualized as encompassing five distinct categories of governance structures. These categories include cooperative institutional frameworks, long-term infrastructure agreements, networks for public policy

coordination, urban revitalization projects, and community-driven initiatives. This approach reframes PPPs not as a singular model but as a collection of diverse governance arrangements, each tailored to different policy needs and social contexts (Casady et al., 2007). Six critical components define the PPP framework: clearly outlined roles and responsibilities, effective risk distribution, integration of specialized knowledge and resources, collaborative efforts, comprehensive service provision, and long-term contractual commitments (Ke et al., 2024). However, these partnerships have not always been managed effectively, and the anticipated results have sometimes fallen short (Whitfield, 2010; Akitoby et al., 2007; Hemming et al., 2006; Bain, 2009). This may be due to differing objectives: while the public sector typically aims for the public good, the private sector often focuses on profit maximization (Hall, 2015). The cooperation between the public and private sectors has become increasingly important over this crisis; it has been used to accelerate the development and distribution of vaccines, increase access to healthcare services, and support economic recovery efforts. Social impact bonds, an idea theorized in 2010 (Cohen, 2011), are an innovative way to encourage a more effective public-private partnership to tackle social challenges. SIBs are contracts based on the social outcome and establish a partnership between three main actors: an investor who assumes the risk, a service provider, and an outcome payer, which is the government representing the targeted group (Chiappello & Knoll, 2020). There is lack of a recurring and internationally shared pattern for public-private cooperation that fits the interconnected challenges of today's context, more specifically there is a gap in the literature about SIBs after the COVID-19 pandemics. This gap is particularly noticeable in recent investigations. Indeed, the discussion about SIBs in recent years has centered on themes such as the importance of intermediary work for SIB success (Logue, 2024), ethical concerns, particularly regarding risk transfer and bureaucratic burden (Fraser, 2023), and the proliferation of SIBs that entrench the value basis and governance dynamics of NPM rather than facilitate a transition to NPG (French, 2023). Other topics studied include SIBs' performance and political issues influencing stakeholders (Hevenston, 2023). Collectively, these studies show that, despite increased attention, there is still a limited understanding of the factors shaping successful SIB implementation after the COVID-19 crisis and their uneven adoption across European countries.

Therefore, it is important to investigate the existing gap in the literature. Epidemic prevention is widely recognized as a universal public good, impacting societies globally and transcending regional boundaries (Shomaker et al., 2017). The public and private sectors have frequently engaged in collaborative models to tackle significant public health challenges, such as epidemics. This cooperation is vital, given the considerable expenses related to global health initiatives, including those for research and development of drugs and vaccines, healthcare services, and the procurement of medical devices. The COVID-19 pandemic, in particular, has placed unprecedented pressure on healthcare systems across various nations, underscoring the importance of joint efforts. The purpose of this research is to answer the following research questions: what is the current status of the literature on social impact bonds in European countries after the COVID-19 crisis? Could social impact bonds become a shared pattern in Europe to efficiently measure the social impact of public-private partnership? Why were SIBs implemented in some European countries but not in others? With this objective in mind, this study performed a bibliometric analysis of 50 academic papers and a content analysis to answer the main unanswered questions and offer directions for future studies. The aim of this paper is to address this gap by analyzing content and data on SIBs and focusing on the main geographical areas in which this instrument was developed in Europe as individuated by the Government Outcomes Lab, a specialized center of academic research on this topic. Indeed, this study suggests that, starting in 2020, this type of investment has so far been concentrated in Portugal, France, Belgium, the United Kingdom, and the Netherlands, while in some other countries, such as Italy or Eastern Europe, this instrument has not been implemented yet. The total number of SIBs in Europe is thirty, and the leading countries are Portugal and the United Kingdom. The sector in which SIBs have been implemented more and have proven their effectiveness is employment and training. The paper also discusses academic ramifications, practical

implications, and policy recommendations. Academically, the study addressed a gap in the literature on SIBs after COVID-19 by mapping research clusters, trends, and theme networks. From a practical standpoint, it demonstrates how SIBs can be integrated into the CSRD's logical structure, ensuring transparency and standardization when assessing social outcomes. Finally, the study recommends that policymakers create strong evaluation criteria that coincide with the principles of CSRS, and to target more job and training programs, while also focusing on the implementation of health and social care.

2. LITERATURE

The literature on social impact bonds is still emerging, and there is a gap in the future use of this tool and its potential effectiveness in different contexts (Broccardo et al., 2019). Scholars are divided between the pros and cons of these investments, especially because of their contractual complexity (Tan, S., Fraser, A., McHugh, N., & Warner, M. E. 2021). SIBs have been included in the theoretical framework of New Public Management, which spreads the idea that public administrations could be managed as businesses (Albertson, K., Fox, C., O'Leary, C., & Painter, G. 2020). The literature review on SIBs mainly focuses on their characteristics (Rizzello et al., 2018); their risks, related to the fact that the payment depends on the success of the project (Scognamiglio et al., 2018); the problem of their transaction costs (Maier et al., 2018); and their ethical evaluation (Morley, 2019). Indeed, the main issue with this new type of PPP is the measurement of its impact and the difficulty of putting together the interests of many counterparts. Even if recent crises, especially the pandemic of COVID-19, affected SIBs and their service delivery, overall, the literature suggests that SIBs are an effective tool and their impact evaluation has been proven (Hevenstone et al., 2023). Focusing on European countries, it can be noticed that SIBs are not used everywhere; there are some leading countries and some others in which the model is not used at all. As a consequence, there is a gap in the literature regarding the development of SIBs in European countries, especially after COVID-19.

3. METHODOLOGY

The study analyzes academic literature only; the databases used were Scopus and World of Science, which I cross-checked for accuracy. In order to perform a bibliometric analysis through the software Bibliometrix, the final research and retrieval were made using Web of Science only.

In the phase of paper acquisition, I discarded documents that were not written in English; I identified some keywords constructed into search strings, as well as the exclusion criteria; and I decided to include only peer-reviewed articles. The strings of research used were: "Social Impact Bonds*" OR "Payment by Success Bond in Europe*" OR "Impact Finance*", and the keyword used was "SIBs". After performing the research, I collected the papers using a PRISMA scheme (Moher et al., 2009). In this first phase, the result was a total of 7,122 papers. The research was conducted in April 2023 with a time filter: papers published between 2020 and 2023, to be able to map the period of the COVID-19 crisis. This choice was made because the COVID-19 pandemic had a severe impact on the economy of the European Union. For this reason, I wanted to investigate this impact on the development of new forms of public-private partnerships. After adding the time filters, the papers found were 2,533. The theme of social impact is vast and includes many things, so in order to answer my research question, I used some specific exclusion criteria. I decided not to include "green finance" "sustainable bonds" or "environmental impact bonds", given the specific focus of these papers on the environment only. I also excluded "social finance" because this term includes not only SIBs but also other research clusters such as social entrepreneurship, social innovation, and impact investing (Carè & Weber, 2023). I discarded the strings "social value" and "social impact" since, in these papers, the focus was primarily on social responsibility and it was given a marginal mention to SIBs. I decided not to include "developing impact bonds" since I studied SIBs in European countries only, and none of them is a developing country. After this stage, I retrieved 70 papers and analyzed their titles as well as their abstracts. Following my inclusion and exclusion criteria and after reading the full papers, in the last stage of

my research, I considered only 50 articles to be included in my bibliometric analysis. Thanks to the data visualization performed in the bibliometric analysis and the analysis of the content, I was able to determine the most important emerging themes related to my research topic and provide directions for future research.

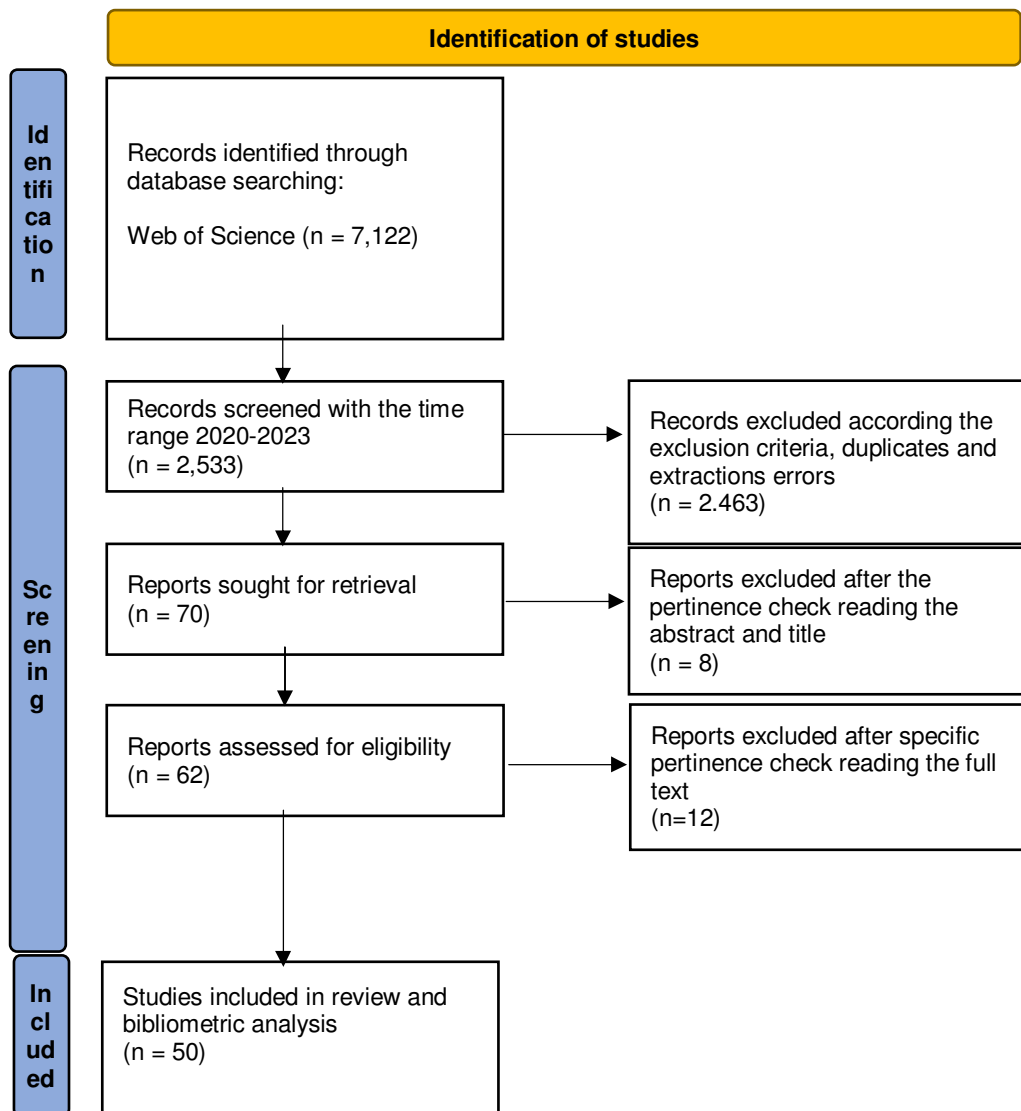


FIGURE 1: Methodology of research.

4. BIBLIOMETRICS ANALYSIS

In order to answer the research questions, we performed a bibliometric analysis, which covers the following specific objectives:

- to identify the most relevant authors in the field, their production over time, as well as the most productive journals and universities.
- to identify the most relevant keywords and keywords plus.

- to examine the most prominent themes in order to give an overview of the researched subject.

The role of the most frequently referenced authors and journals is crucial in shaping and advancing the discussion on Social Impact Bonds (SIBs) within Europe. These influential sources provide foundational insights, contribute to theoretical frameworks, and drive scholarly dialogue, which collectively fosters a deeper understanding and progression of the SIB concept across European contexts.

Authors

The present study comprises 50 contributions from 117 authors published in 29 journals from 2020 to 2023. It can be noticed that most of the documents are co-authored; indeed, only seven documents have one single author. The average number of authors per document is 3. Figure 3 shows the publication trend: in 2020, the interest of scholars in the fields of SIBs in Europe was at its highest point. This trend showed a decrease in 2021, due to the effects of the pandemic on the global economy as well as on the implementation of these new instruments. However, starting in 2022, publications have started increasing significantly again, showing that this research field is growing.

Description	Results
Timespan	2020:2023
Sources	29
Documents	50
Authors	117
Keywords plus	76
Author's Keywords	144
Single-authored docs	7
Co-Authors per Doc	3.1

TABLE 2: Descriptive statistics of literature.

(Source: Author's own computation based on data processed with Biblioshiny)

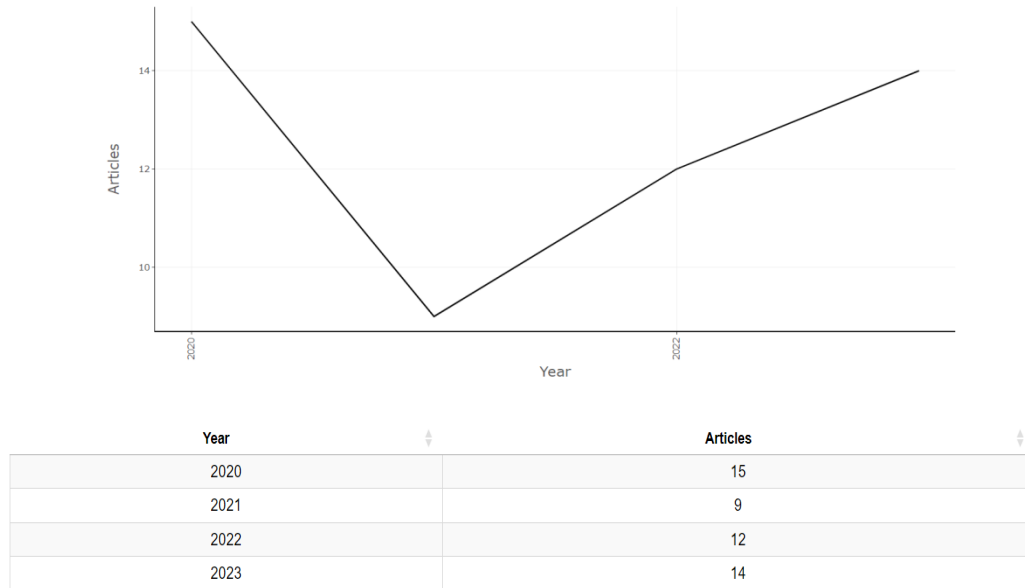


FIGURE 3: Publication trend.

(Source: Author's own computation based on data processed with Biblioshiny)

As mentioned in Figure 3, the most productive author in the literature on social impact bonds in Europe after the COVID-19 crisis is Fraser, A., who published seven papers. He is followed by Kimmit, J., and Williams, JW., with four papers each. Figure 5 represents the author's production over time; the color intensity of the bubbles shows the total citations per year (Mchugh, N. is the most cited author with 19 total citations per year). The bubble size is proportional to the number of documents produced by that author, and the line represents the author's timeline (Fraser, A., and Kimmit, J. have the biggest sphere and the longest timeline).

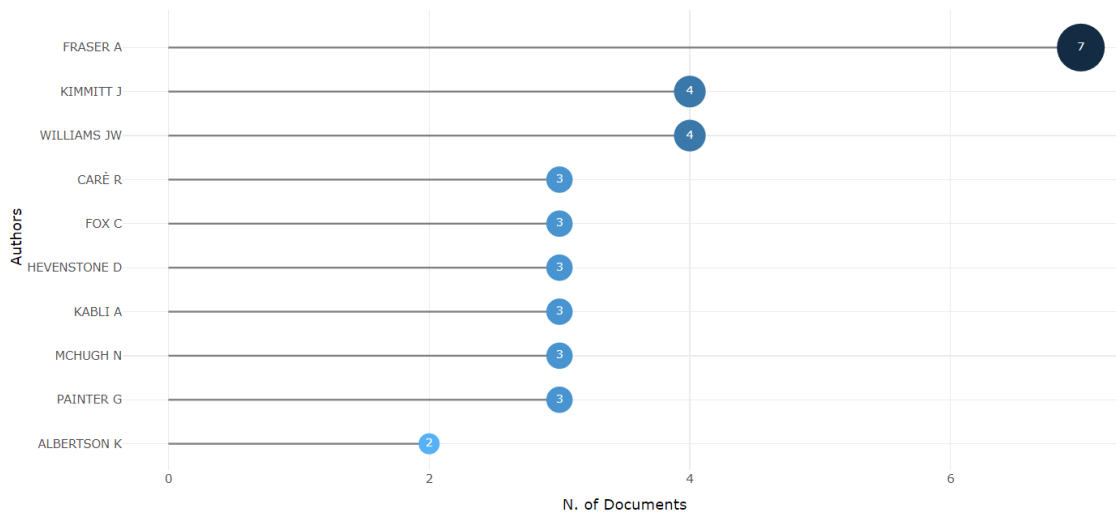


FIGURE 4: Most productive authors.

(Source: Author's own computation based on data processed with Biblioshiny)

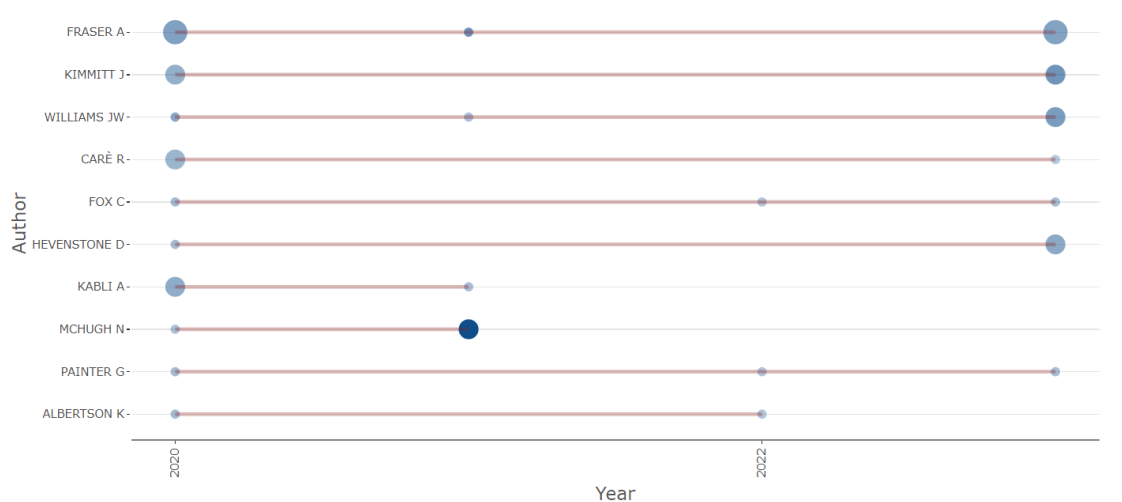


FIGURE 5: Author's production over time.

(Source: Author's own computation based on data processed with Biblioshiny)

5. MOST PRODUCTIVE JOURNALS AND UNIVERSITIES

In figure 6, it can be noticed that the International Public Management Journal has the highest number of documents published related to the domain (6), followed by Corporate Social Responsibility and Environment as well as Public Money and Management. The fact that the publications are distributed among ten distinct journals further demonstrates the journals' rising interest in the subject. All these journals were listed in the SCImago Journal Ranking Database, which is scientifically recognized as a sign of academic prestige and visibility. The most productive organizations publishing in the field are King's College London with 7 papers and the University of London with 6 papers.

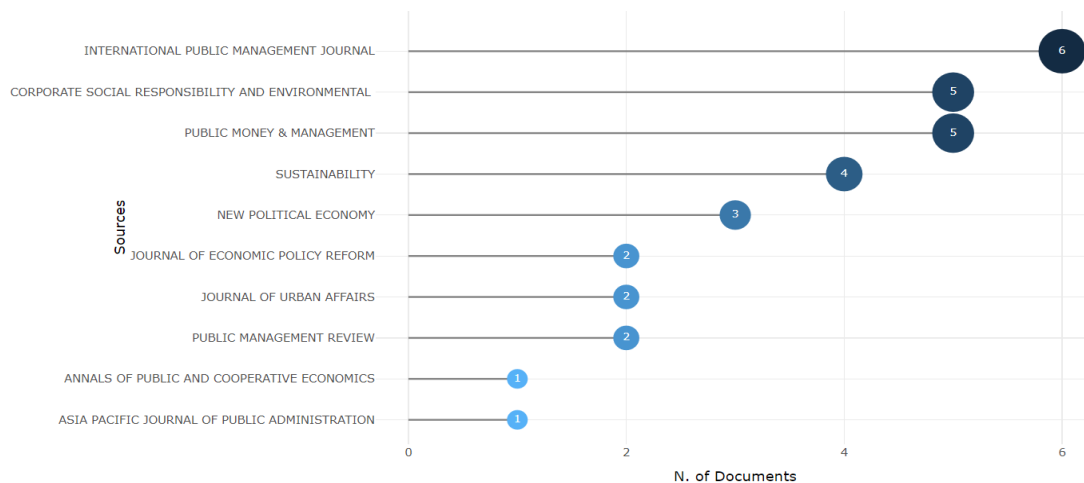


FIGURE 6: Most productive journals in the field

(Source: Author's own computation based on data processed with Biblioshiny)

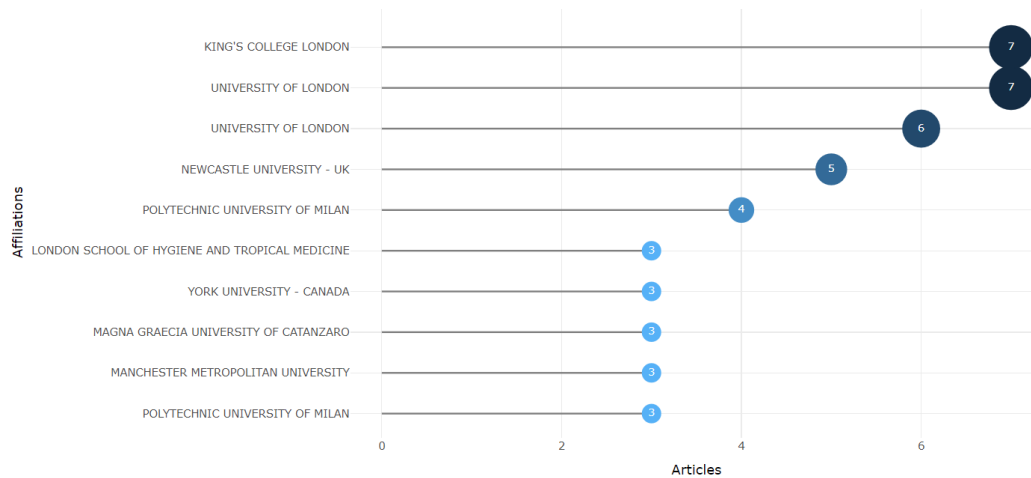


FIGURE 7: Most productive universities in the field.

(Source: Author's own computation based on data processed with Biblioshiny)

Citation analysis enables the evaluation of academic influence, highlighting the most impactful publications, authors, and journals in a field (Grant, Cottrell, Cluzeau, & Fawcett, 2000; Waheed et al., 2018). Additionally, examining keyword frequency and co-occurrence helps to identify recurring themes and emerging research directions, providing insights into shifting academic priorities and developing trends. There are two different parameters that emerge from the bibliometric analysis: the global citation, which is the number of citations received by a document from the entire database of research (World of Science in this study) and measures its global impact (Aria & Cuccurullo, 2017); and the local citation, which is the number of citations received by a document within the documents selected in the current analysis. By utilizing this differential in the literature study of a certain topic, one can ascertain the actual impact of a work or author in the particular research field under investigation. Stated differently, it facilitates the identification of the documents that attract multidisciplinary interest and those that provide a critical conceptual foundation for the research field (Canino et al., 2023). Figure n.8 shows that the top journals in terms of citations per document are the Journal of Economic Policy Reform with 89 citations per document and the Public Money and Management Journal with 82 citations per document. The most local cited authors are Fraser, A., with 32 citations per document; Mchugh, N., with 29 citations per document; and Tan, S., with 18 citations per document. It should be noticed that Fraser, A., also appears as the most productive author in the field, as demonstrated in Figure 5.

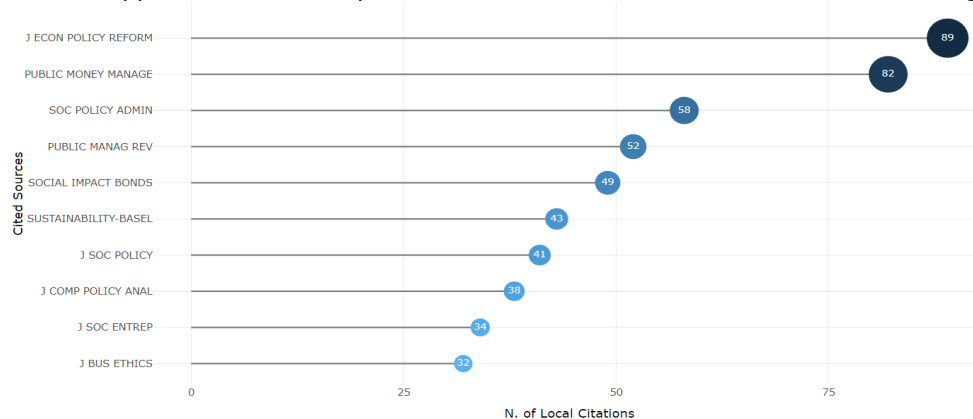


FIGURE 8: Most local cited sources.

(Source: Author's own computation based on data processed with Biblioshiny)

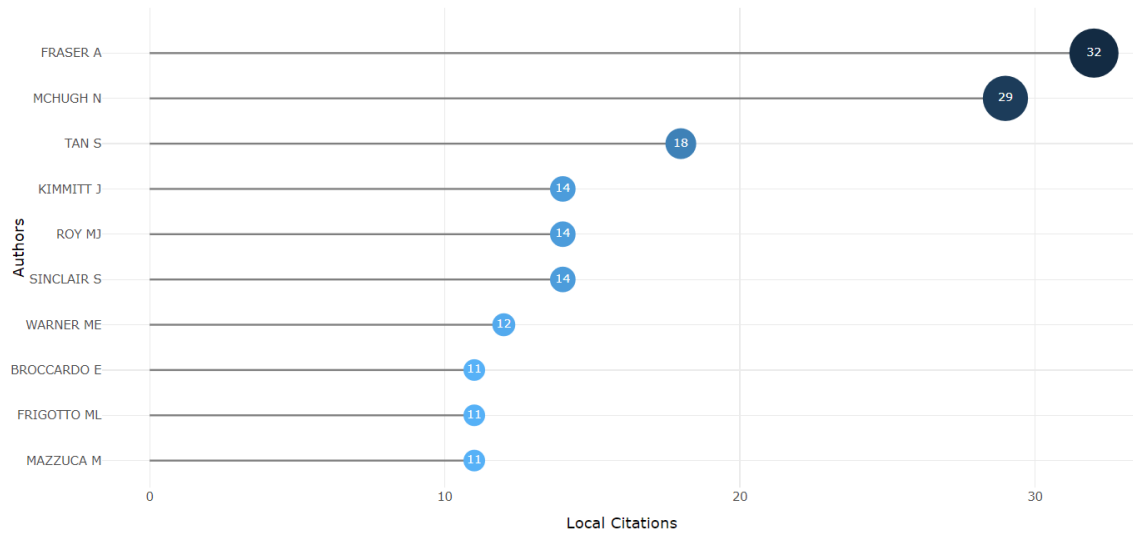


FIGURE 9: Most local cited authors.

(Source: Author's own computation based on data processed with Biblioshiny).

It is widely recognized that papers with a high number of citations influence the discourse on a topic.

In this study, three are the most globally cited documents, which correspond with the most locally cited documents:

-Sinclair, S., 2021, Social innovation, financialization and commodification: a critique of social impact bonds with 33 citations.

-Tan, S., 2021, Widening perspectives on social impact bonds, with 29 citations.

-Broccardo, E., 2020, Social impact bonds: The evolution of research and a review of the academic literature, with 18 citations.

Paper	DOI	Total Citations	TC per Year	Normalized TC
SINCLAIR S, 2021, J ECON POLICY REFORM	10.1080/17487870.2019.1571415	33	11.00	3.34
TAN S, 2021, J ECON POLICY REFORM	10.1080/17487870.2019.1568249	24	8.00	2.43
BROCCARDO E, 2020, CORP SOC RESP ENV MA	10.1002/csr.1886	22	5.50	2.64
WILLIAMS JW, 2020, J URBAN AFF	10.1080/07352166.2018.1511796	21	5.25	2.52
RIZZELLO A, 2020, SUSTAINABILITY-BASEL	10.3390/su12135362	12	3.00	1.44
FITZGERALD C, 2020, J COMP POLICY ANAL	10.1080/13876988.2020.1726177	12	3.00	1.44
DE GRUYTER E, 2020, PUBLIC MONEY MANAGE	10.1080/09540962.2020.1714312	10	2.50	1.20
HULSE ESG, 2021, BMJ GLOB HEALTH	10.1136/bmjgh-2020-004127	9	3.00	0.91
FRASER A, 2020, PUBLIC MONEY MANAGE	10.1080/09540962.2020.1714303	9	2.25	1.08
BENGO I, 2022, CORP SOC RESP ENV MA	10.1002/csr.2235	8	4.00	3.69

FIGURE 10: Most global cited documents.

(Source: Author's own computation based on data processed with Biblioshiny)

6. KEYWORDS

The analysis of the publications under review, showed a total of 144 keywords as well as 76 keywords plus, which are those words useful for investigating the knowledge structure of scientific fields (Zhang et al., 2015). According to the world cloud, the most frequently used author's keywords are: "impact investing" (AK-9), "social impact bond" (AK-5) and "social innovation" (AK-4). The most frequently used Keywordsplus are: "finance" (KP-13); "challenges" (KP-11); "state" (KP-10) and "payment" (KP-7).



FIGURE 10: World Cloud-based on AK and KP.

(Source: Author's own computation based on data processed with Biblioshiny).

Year	SOCIAL IMPACT BONDS	IMPACT INVESTING	SOCIAL IMPACT BOND	SOCIAL IMPACT BONDS (SIBS)	SOCIAL INNOVATION	SUSTAINABLE FINANCE	PAYMENT BY RESULTS	SOCIAL FINANCE	BIBLIOMETRIC ANALYSIS	ESG
2020	6	4	3	3	1	1	1	1	0	0
2021	11	5	3	3	1	1	2	1	0	0
2022	18	8	5	4	3	3	3	3	0	1
2023	21	9	5	4	4	4	3	3	2	2

FIGURE 13: AK over time.

(Source: Author's own computation based on data processed with Biblioshiny)

In figures 13 and 14, it is possible to see the use of AK and KP words over time. The table shows that in 2023, there has been a steady increase in keywords, which demonstrates that this research field is growing. The last figure (14) shows the co-occurrence network of keywords: a stronger connection between keywords is represented by thicker lines, while thinner lines represent a weaker association. Keywords that are not connected by lines indicate the absence of any established relationship.

Year	FINANCE	CHALLENGES	STATE	PAYMENT	MARKET	POLICY	SECTOR	INVESTMENT	PRIVATE FINANCE	ASSESSING MISSION
2020	3	2	3	2	3	0	1	2	2	0
2021	5	3	5	2	4	2	2	2	2	1
2022	6	6	7	3	4	3	3	3	2	2
2023	13	11	10	7	6	5	5	4	4	3

FIGURE 13: KP over time.

(Source: Author's own computation based on data processed with Biblioshiny)

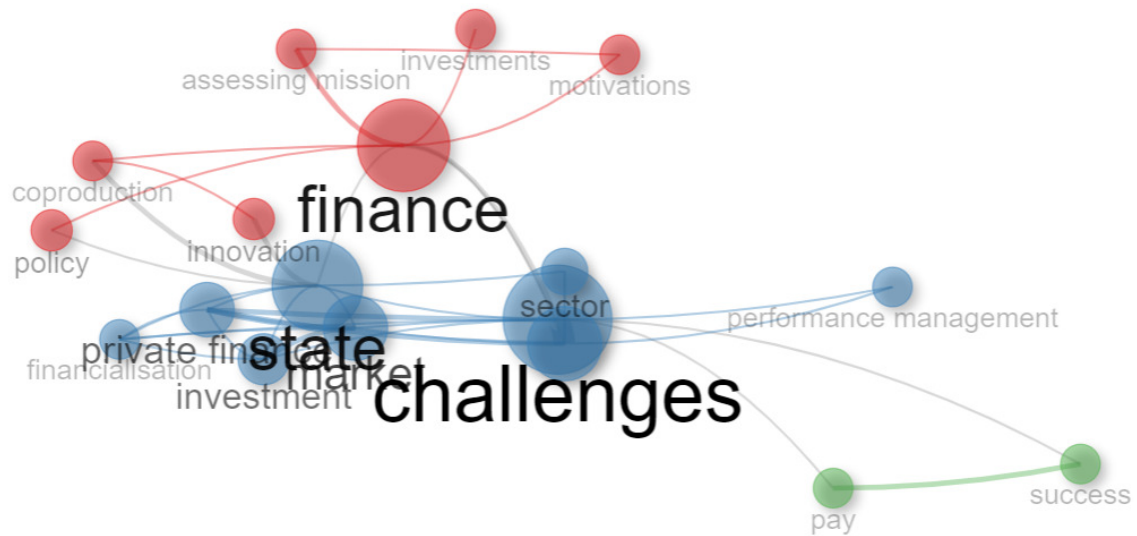


FIGURE 14: Co-occurrence network of keywords.

(Source: Author's own computation based on data processed with Biblioshiny)

7. THEMATIC MAP

The thematic map shows four quadrants: the Basic Themes quadrant; the Niche Themes quadrant; the Motor Themes quadrant; and the Emerging or Declining Themes quadrant.

In the upper right quadrant, there are dominant themes, while the lower right quadrant contains latent themes. The upper left quadrant houses highly specialized themes, and the lower left quadrant encompasses emerging or diminishing themes. The purpose of creating a thematic map is to obtain an understanding of the current state of a field and to explore its prospects for the future. This analysis serves as a valuable tool for researchers and stakeholders to recognize the possibilities for future research advancements within specific thematic areas of the field. In thematic analysis, clusters of authors' keywords and their interrelationships are examined to extract thematic patterns. These patterns are defined by specific attributes, with density represented on the vertical axis and centrality on the horizontal axis. Centrality reflects the extent of correlation between various topics, while density quantifies the cohesion among the nodes. From this analysis, the main driving themes present in the upper right quadrant are: "finance", "assessing-mission" and "business models"; "state", "market" and "policy"; "challenges", "payment" and "governance". "Pay for success" is considered an emerging theme.

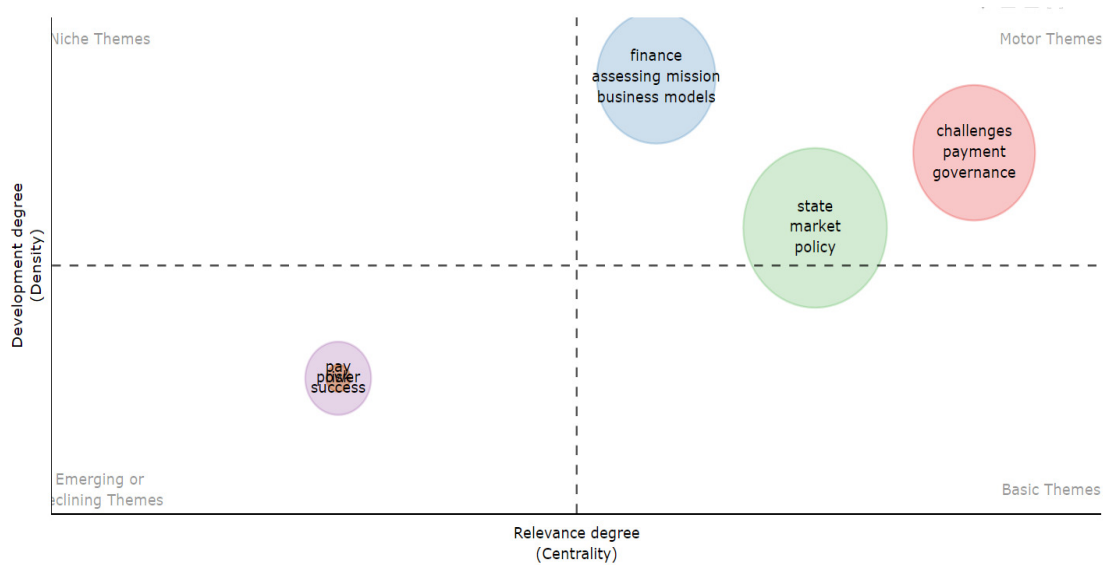


FIGURE 15: Thematic Map.

(Source: Author's own computation based on data processed with Biblioshiny).

The most central cluster in the Motor themes is the one that comprises the keyword “challenges”, characterized by a Rank Centrality of 6 and a Cluster Frequency of 26. The largest cluster with a Rank centrality of 5 and a Cluster Frequency of 46 is the one that comprises the concept of “state”.

Cluster	CallonCentrality	CallonDensity	RankCentrality	RankDensity	ClusterFrequency
All	All	All	All	All	All
challenges	0.9915584415584415	64.93506493506493	6	5	26
finance	0.2583416583416583	71.6880341880342	4	6	24
state	0.7226190476190476	64.46464646464646	5	4	46

FIGURE 16: Thematic clusters- based on AK.

(Source: Author's own computation based on data processed with Biblioshiny).

8. DISCUSSION

The bibliometric analysis answered the research questions, showing that the literature on SIBs in Europe after the COVID-19 crisis is growing; however, it is still considered an emerging theme. As emerged from the thematic map, the most cited keywords are “challenges”, “state,” and “policy,” and this reflects the main aspects that characterize this new financial instrument. A content analysis reveals that the fact that SIBs are grounded in a tangible result makes them useful tools. However, there are still some challenges in the implementation of SIBs in Europe. This may be associated with the challenges that have affected the global economy in recent years, including natural disasters, the COVID-19 pandemic, and economic downturns. The results offer several interesting insights and contribute to building up knowledge about three key areas that emerged as the most pressing themes.

The three key areas are:

- 1) the institutional and normative ecosystem for SIBs;
- 2) the investment process, especially regarding risk transfer;
- 3) the effect of SIBs on public benefit, focusing on the employment and education sectors, which are the sectors that showed the best results in Europe.

1) As regards the institutional and normative ecosystem, the study shows that the total number of SIBs in Europe is thirty, and the leading countries are Portugal and the United Kingdom. This is due to differences in bureaucracy, legislative prescriptions, and job markets. The growing development of SIBs in the UK has been related to the austerity measures implemented at the political level and, also, to the fact that the country developed a strong method to evaluate the outcome. The Portugal case shows that the institutional framework is essential for this kind of investment. Indeed, the country created an entity, Portugal Inovação Social (PIS), which aims at managing these funds, and a group of implementing entities that measure the outcome and report the results to the PIS. In both cases, the fact that the impact was easy to measure has been an important motivation for all the parties involved (Christopolous et al., 2022). Moreover, in the other countries in which SIBs are present (Switzerland, Germany, and the Netherlands), New Public Management reforms were implemented in order to promote market mechanisms, target regimes, and performance indicators (Fraser et al., 2023). This shows that in order to function, these investments need a strong institutional background that is able to create a comprehensive national strategy of implementation.

2) Social enterprises, financial intermediaries, and advisors regard Social Impact Bonds as a means to access new markets and achieve a competitive edge (Carè et al., 2020). Private investors benefit from SIBs when their investment is equivalent to obtaining an asset that is either above or below the efficient frontier. When it produces higher returns than the direct funding option, it is beneficial to the government. This is made possible by the SIB mechanism, which mobilizes a limited amount of government resources, up to the guarantee fund's amount, by leveraging private capital and shifting some of the risk to it (Becchetti et al., 2022). An enhanced degree of autonomy from the managing partners enables service providers to try out strategies that depart from the traditional commissioning contracts. Based on a review of four SIBs put into place in the UK, it emerged that interventions encouraged more co-production, and placed a high priority on developing relationships based on trust (Fox et al., 2022). Overall, the process of creating and implementing social impact bonds shows several challenges based on the financial complexity of this instrument, the fact that there are many actors involved, and the measurement processes (De Pieri et al., 2023). For instance, in some parts of Europe, such as Italy, the process tends to focus more on outcomes and outputs than the social impact (Borrello et al., 2023). One key challenge that emerged regards evaluators that differ a lot among them. Indeed, evaluators could be non-profit organizations, university-based evaluators, research centers, and private or independent corporations (Wang et al., 2022). Another process-related finding is that SIBs typically perform better when financial gains are kept modest and real risk and returns are kept to a minimum. (Fraser et al., 2022).

3) As regards public benefit, a study conducted in the Netherlands and Switzerland shows that social impact bonds have a positive impact on public benefit, especially on employment and income (Hevenstone et al., 2023). Indeed, the sector in which SIBs have been implemented more and have proven their effectiveness is employment and training. SIBs appear to be especially well-suited to efficiently address quantifiable educational results. The use of quantifiable educational outcomes makes it possible to seek funding for programs that have hitherto lacked public budget resources. Additionally, the positive educational outcomes observed can be effectively reproduced to address the emerging challenges in education caused by the impact of

the pandemic (Kabli et al., 2021). Torricelli et al. define the "social premium", which is the difference in yield between a social bond and a conventional bond. The study analyzes a selection of bonds for the period from October 16, 2020, to October 18, 2021, focusing on the peak of social bond issuances that occurred after the outbreak of COVID-19. The examination of fixed effects, serving as a measure of the social premium, reveals the presence of a noteworthy and positive social premium. Other sectors such as health and housing have faced additional difficulty in the implementation of SIBs. According to Katz (2018), because health systems are complicated, outcomes typically take a long time to obtain, complicating the outcome evaluation process. Furthermore, unlike the job and training sectors, where successes in lowering prison recidivism have been demonstrated, there are currently no empirical outcomes for the health sector, housing, or social policy in general, making it difficult to judge their effectiveness. Wang (2022) also mentions the challenge of selecting the appropriate measures and actors. One of the primary issues in housing is that programs tend to select young people who are easier to judge rather than children or elders, despite the fact that data show that children and seniors make up the vast majority of the homeless population.

9. ACADEMIC IMPLICATIONS

This study contributes to the academic discourse on Social Impact Bonds (SIBs) by integrating insights from social finance, public administration, and corporate sustainability reporting. By mapping research clusters, trends, and thematic networks, it addresses a gap in the existing literature on SIBs, with particular attention to the aftermath of the COVID-19 crisis. By identifying the sectors with the strongest evidence of positive outcomes, the study provides a sector-specific perspective for theoretical development, laying a foundation for future comparative analyses across different contexts.

10. PRACTICAL IMPLICATIONS

The Corporate Sustainability Reporting Directive (CSRD), which entered into force in January 2023, enhances corporate transparency by mandating detailed disclosures on environmental, social, and governance (ESG) factors. This Directive establishes the European Sustainability Reporting Standards (ESRS), specifically the Impact, Risk, and Opportunity (IRO) management framework, aligning corporate accountability with sustainability objectives and encouraging business to integrate social impact considerations into their operations. It also introduces the principle of double materiality which considers both the financial implications of sustainability matters on a company and the company's impact on society and the environment. SIBs inherently reflect the principle of double materiality, as they require a dual assessment of both financial returns and social outcomes given the directive's emphasis on double materiality, which requires organizations to assess both their financial risks and societal impacts, SIBs present a compelling mechanism for integrating social impact into corporate strategies in a measurable and transparent way. The metrics and targets (MT) component of the CSRD further establishes that organizations must define and measure their performance against sustainability targets. Social Impact Bonds (SIBs) rely on outcome-based funding models to address social challenges. The outcome-based approach of SIBs mirrors the accountability mechanisms embedded in the CSRD, where companies must report on their progress in managing sustainability-related risks and opportunities. The CSRD's emphasis on verifiable impact, by reinforcing accountability and transparency, could strengthen investor confidence in SIBs by providing standardized sustainability disclosures. By integrating the IRO and MT principles into the design and implementation of SIBs, organizations can enhance the credibility and effectiveness of impact investments. The structured reporting requirements imposed by the CSRD may also contribute to greater transparency and standardization. In the assessment of social outcomes, further aligning corporate sustainability efforts with innovative financial instruments aimed at addressing societal challenges. This would position them as viable tools for achieving both regulatory compliance and social good.

11. POLICY RECOMMENDATIONS

SIBs can be valuable instruments for governments to cut public spending. The paper shows that the institutional framework plays a key role in the successful implementation of SIBs in a country. Policymakers and European institutions should join forces and implement impact evaluation criteria that facilitate the outcome measurement. In this sense, it could be useful to align SIBs' design with the principle of the CSRD—particularly double materiality and standardized reporting metrics. In order to make these investments appealing to social enterprises and financial intermediaries, entities like Portugal Inovação Social (PIS), which directly manage funds, must be created. This will help not only to smooth the process but also to have only one actor to interact with, as one of the main challenges in the implementation of SIBs is the presence of many different stakeholders. Policymakers should also target more employment and training programs, as they appear to be the most profitable sector for SIBs. At the same time, in light of post-pandemic challenges, governments should also experiment with new domains such as health and social care. The disclosure of data about SIBs that have been put into force are limited and often vague. In order to involve more the stakeholders, and reduce the risk of the investment, governments should disclose more detailed information about SIBs, the outcome metrics and the actors involved.

12. LIMITATIONS OF THE STUDY

One of the limitations of this study is that to perform a bibliometric analysis, we had to use Web of Science only, excluding contributions from other databases and grey literature. We choose one specific time frame (2020-2023) to target mainly the COVID-19 crisis. From one side, this was useful for the purpose of the study, but on the other hand, it may not fully reflect longer-term trends in SIB implementation. The bibliometric analysis is a valuable tool for mapping academic production and identifying key clusters; however, a detailed case study would be useful to capture local implementation dynamics. The study focuses only on the European context; this limits the generalizability of findings to broader international contexts.

13. CONCLUSION AND FUTURE RESEARCH PERSPECTIVES

This study provides a crucial starting point for analyzing the European market for Social Impact Bonds (SIBs) and identifies three key themes that are central to advancing the debate. SIBs have demonstrated significant potential, particularly in leading countries and in the employment sector for vulnerable individuals, which represents the most prominent area of application. Indeed, data analysis revealed that over 70% of SIBs have been implemented in the employment sector, yielding remarkable results. This underscores that, when applied effectively, SIBs can drive meaningful social transformation. Moreover, SIBs hold strong potential as an instrument for companies seeking to align with the new regulatory requirements established by the Corporate Sustainability Reporting Directive (CSRD). The findings of this study aim to contribute to the ongoing discourse on the development of this innovative public-private partnership across Europe. Future research should focus on further exploring the potential of SIBs, particularly in the context of corporate sustainability and compliance with emerging regulations. Additionally, there remains a critical need for harmonized impact measurement principles across Europe, along with standardized criteria for evaluators, to ensure consistency and credibility in assessing the effectiveness of these instruments. Future research should further explore the dynamics of Social Impact Bonds through comparative perspectives, both across EU and non-EU countries and between different temporal phases such as the pre- and post-COVID-19 periods. Such analyses would allow for a deeper understanding of how varying institutional environments, regulatory frameworks, and socio-economic contexts shape the design, implementation, and outcomes of SIBs. Moreover, examining changes triggered by the pandemic could provide valuable insights into the resilience and adaptability of outcome-based financing mechanisms in times of crisis. In conclusion, the gap in understanding the future use of SIBs in different regions and sectors presents an avenue for future research. Policymakers, practitioners, and researchers

can draw on these insights to refine and optimize the implementation of SIBs for meaningful social impact and public value.

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