# Impact Investing in Social Sector Organizations: A Bibliometric Analysis

Dr. Jyoti Paul<sup>1</sup> and Dr. Deepti Singh<sup>2</sup>\*

## Abstract

Impact investment is a relatively new area which has gained significance in the era because of focus on Triple Bottom Line reporting. The Governments today are not merely asking for reporting in areas of environment, social and governance but also looking into the impact that such investments are generating. This paper is an attempt to review the literature in the domain of Impact Investing.

The paper has used Biblioshiny to find answers to research questions viz the prolific authors, the significant countries, the most cited works in this domain. 1590 documents have been retrieved from Web of Science to have a bibliometric analysis of the data. There is an annual growth rate of 35.86% in the publications as observed in the area of Impact investing since 2006. USA is the leading country in terms of publications from authors in this domain. The emerging lines of research and motor themes were also found from the bibliometric analysis.

Keywords: Impact investment, Social sector, Bibliometric review, science mapping

## Introduction

The concept of social enterprise has attracted the attention of policy-makers and practitioners around the world (Wilson and Post 2013) and many research scholars have reflected their insights through an increasing number of publications in the area, many considering social enterprises as a as a distinct category of organizations (Cukier et al. 2011; Lepoutre et al. 2013; Lumpkin et al. 2013). To couple with this, concern for sustainable development has permeated development goals of most nations and keeping in mind the Sustainable Development Goals 2030 agenda, there have been various initiatives and reforms by the Governments worldwide. The classical goal of profit maximization, after repeated criticism, has fallen short in the theory of firm in the current economic

<sup>&</sup>lt;sup>1</sup> Associate professor, Dyal Singh College, University of Delhi

<sup>&</sup>lt;sup>2</sup> Associate Professor, Motilal Nehru College, University of Delhi

<sup>\*</sup>corresponding author

scenario. Investors derive nonpecuniary utility from investing in dual objective of profits with social impact, thus sacrificing returns (Barber et.al. 2021). In today's era of depleting natural resources, climate change challenges, socio-economic inequalities, food insecurities and other holistic development challenges faced by nations, the corporations are shifting to incorporate SDGs in their objectives. A very prominent vehicle for growth in the social development is the social sector organizations. These may be primarily seen as organisations that primarily aim to achieve some social objective. As per SEBI memorandum on Social Stock Exchange a social enterprise includes "An enterprise working in 15 broad eligible activities based on Schedule VII of the Companies Act, 2013, Sustainable Development Goals and priority areas identified by Niti Aayog." It further states that a social sector organization may or may not be for profit generation and "shall target underserved or less privileged population segments or regions recording lower performance in the development priorities of national/state governments." To fulfill this agenda, corporations need to invest judiciously while requiring funds for their projects and this is where the research about Impact Investing draws its relevance. Impact investing implies investments made into organizations, any funds and projects with the purpose of having some social impact (Nicholls, 2010). The term Impact investment was used for the first time in the ground-breaking book on its transformative power referring to it as a positive disrupting force in the business scenario (Bugg-Levine & Emerson, 2011). Impact investment is an emerging approach to financing social enterprises that aims to achieve blended value by delivering both impact and financial returns (Castellas, 2018). Impact investing is a relatively new concept in the annals of research, and this paper tries to find out insights into the same by studying Impact investing through the lens of a Bibliometric analysis.

## **Objectives**

With a growing importance to social sector given through the adoption of SDG goals throughout the world and recent setting up of social stock exchange in India in 2022 by the Government of India, Impact Investing will be the future cornerstone for success of the nascent social stock exchange and growing investment in the social sector. More and more investors will be interested to know the impact their investment is making towards achievement of SDG goals. Being a developing area in research, impact investing requires a review paper to uncover the work published in the realm so far, at the same time give insights to researchers about scope of future work in the area. To accomplish these objectives, the following research questions were framed for bibliometric review:

*Research question 1*: What is the bibliometric profile of the database, the growth trends, emerging themes in this domain and the geographical distribution of this domain of knowledge? *Research question 2:* Who are the most influential authors, journals, articles of this area of research?

*Research question 3:* Which geographic regions countries dominate publication in this area? *Research Question 4:* What is the co-citation network between authors?

*Research Question 5:* What is the thematic development of research in the area of Impact investment?

#### **Research methodology**

A bibliometric analysis was carried out for the research domain focusing impact investing in social sector organizations.

*Data Extraction:* The data from Web of Science database was used for Bibliometric analysis. Plain text file was downloaded from the Web of Science database for analysis. The extracted file has details viz. author's name, affiliation, article title, keywords, abstracts, and citation data. This file was used with Bibliometrix (R Studio).

*Data Search:* 2444 results came from Web of Science and they were limited to categories in Web of Science. TITLE-ABS-KEY ("Impact investment in Social Sector organizations") AND (LIMIT-TO (SUBJAREA, "BUS FIN") OR LIMIT-TO (SUBJAREA, "MGMT") OR LIMIT-TO (SUBJAREA, "BUSI") OR LIMIT-TO (SUBJAREA, "ECON")

Post this refine, 1590 results were used for analysis. These subject areas were selected to focus the data collection to the most relevant journal articles. The analysis using Biblioshiny was conducted on 18<sup>th</sup> Sep 2021. The Biblioshiny software was used to explore the motor theme or an emerging area with future scope. Further, the collaboration network between countries was also studied. So, it helps to gain knowledge on the broad work done in the area, prolific authors doing work in the area and the growth of work. The underlying review applied bibliometric analysis, to explore the knowledge base of role of impact investment in achieving sustainable development goals.

## **Data Collection**

Based on the above search criterion, the bibliometric profile of the domain was drawn and summarized in Table 1, throwing light on time span of development of research, sources tapped, document types, number of authors and collaborative efforts in the domain.

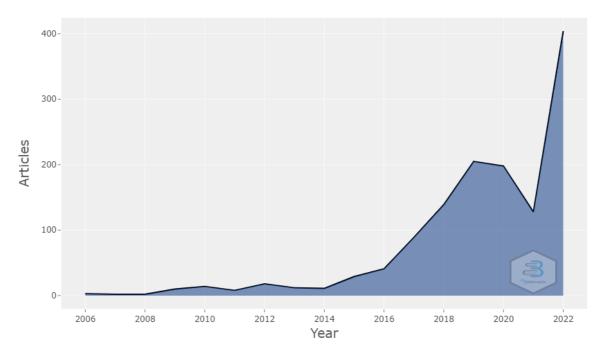
TIMESPAN	2006:2022		
Sources (Journals, Books, etc)	233		
Documents	1590		
Average years from publication	2.63		
Average citations per documents	28.56		
Average citations per year per doc	6.15		
References	62761		
DOCUMENT TYPES			
Article	1164		
article; book chapter	2		
article; early access	243		
article; proceedings paper	8		
book review	1		
editorial material	20		
editorial material; early access	2		
Review	118		
review; early access	32		
DOCUMENT CONTENTS			
Keywords Plus (ID)	2295		
Author's Keywords (DE)	2873		
AUTHORS			
Authors	2593		
Author Appearances	4657		
Authors of single-authored documents	108		

Table 1: Bibliographic	synopsis
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Authors of multi-authored documents	2485	
AUTHORS COLLABORATION		
Single-authored documents	162	
Documents per Author	0.613	
Authors per Document	1.63	
Co-Authors per Documents	2.93	
Collaboration Index	1.74	

Table 1 reveals the nascent nature of research in the field of impact investment as the time span takes all publications up to 2022 published in the stated domain yet the initial year of publication on impact investing literature was on social entrepreneurship (Mair & Marti, 2006). The total span of development of literature in arena is roughly last 16 years only. The maximum academic contribution in the domain comes from research articles category followed by review document types. Though 2593 authors have worked on the area directly or indirectly, there were 162 single-authored documents in the entire set written by 108 authors. The average citations are steadily growing with 6.25 as average per year per document. To decipher the growth of literature in a birds eye view , a graphical presentation of annual publications follows in figure 1.

Figure 1: Annual Scientific Production



Source: Author's own work and compilation using software

The above Figure 1 clearly shows that following an initial lean period of almost a decade, the research work is increasing in the field since 2015, the year, that saw the world adopt the sustainable development goals 2030 agenda (Colglazier, (2015) and growing furthermore in years following 2017. There is an annual growth rate of 35.86% in the publication in this domain. This upward graph as presented in the figure is showing encouraging concern of researchers and academicians towards this research area. The last one year has shown a spike in research publications in the area which may be contributed to the aftermath of COVID-19 pandemic, setting of ESG taskforce by the SEC in 2021 and increasing practitioner interest in the field of impact investment (Adams & Abhayawansa, 2022, Agrawal & Hockerts, 2021).

Three field plots have been prepared based on Sankey diagrams which show a particular flow depending on the variable chosen (Riehmann, 2005). The thickness of each edge also has a meaning showing that thickness is in proportion to the flow quantity that passes through that edge. The plot as in Figure 2 takes countries, keywords and authors into account as three parameters. For a clearer version, Three Field Plot was developed taking 10 items in each parameter viz countries, keywords and authors for the above Plot.

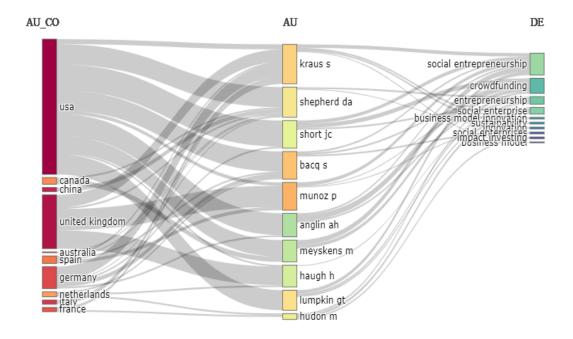


Figure 2: Three Field Plot using Authors, Keyword and Countries as Parameters

Source: Author's own work and compilation using software

The above Field plot is showing a confluence of counties publishing maximum research work related to the prominent authors in middle and most used keywords in the right. The Plot shows that U.S.A is working in a huge manner in topics like social entrepreneurship, Impact investing, business model innovation etc. followed by the U.K. and Germany. However, again, specific research on impact investing is quite limited and is dominated by allied areas. Kraus, Shephard, Short, Bacq, Lumpkin and Munoz are prominent authors from these top 10 countries researching on this area. None of the developing countries including India gained space in the above figure, showing that publications related to Impact investing is yet to gain momentum on global scale especially in developing economies of Asia, Africa and Latin America. It is also visible that impact investment itself has not retained the place of a dominant keyword in research, the research work has been more on social entrepreneurship than directly on impact investment.

The authors further collated the data on the journals that are contributing the most in the publication of research work in the area. The results are shown in Table 2 below.

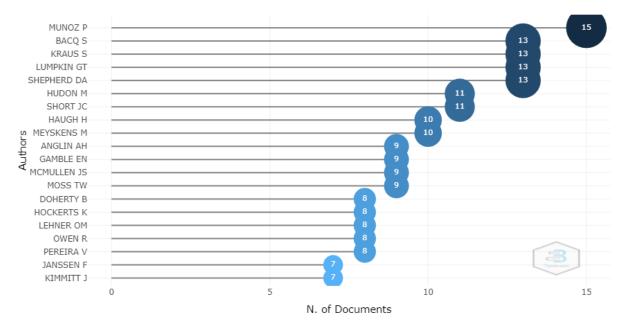
Number of Publications
95
88
74
69
47
42
36
34
32
30
27
26
25
24
21
21
20
19
19
19

## Table 2: Most Relevant Sources

Source: Author's own work and compilation using software

The above table shows that Journal of Business Reaearch (Elseiver) is publishing maximum work in this area with 95 number of documents being published by the journal so far. Journal of Business Ethics is ranked second having published 88 documents so far in this domain. Many Journals like Technological Forecasting and Social Change, Journal of Business Venturing, Accounting and Finance are also publishing various articles in the area of impact investing. After identifying the journals the most influential authors in th arena were identified with the number of publications as summarised in Figure3 below.

### Figure 3. Most relevant Authors



Source: Author's own work and compilation using software

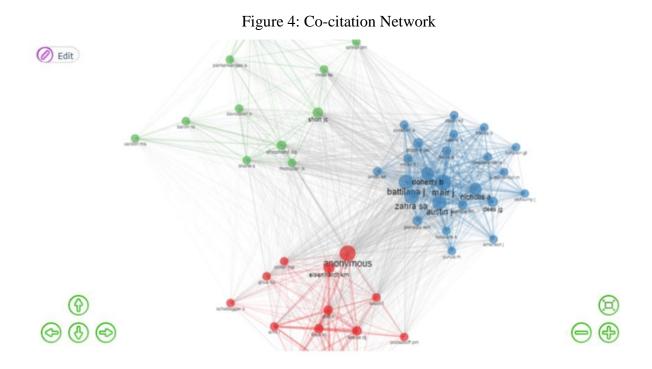
From the above chart it is evident that Munoz P has the highest number of publications being 15 followed closely by BacqS, Kraus S and Shephed Da having 13 publications so far each. However, not many authors have surfaced as being very influential in the area again indicating that it's a growing area with still a lot of scope for work. The most cited documents on a global scale are collated in the following Table3. However, again the most cited work is not direct work on impact investment but on social entrepreneurship (Mair & Marti, 2006).

Paper	DOI	Total
		Citations
MAIR J, 2006, J WORLD BUS	10.1016/j.jwb.2005.09.002	1619
MAIR J, 2006, J WORLD BUS-a	10.1016/j.jwb.2005.09.002	1619
ZAHRA SA, 2009, J BUS VENTURING	10.1016/j.jbusvent.2008.04.007	1137
BATTILANA J, 2014, ACAD MANAG ANN	10.1080/19416520.2014.893615	793
DACIN PA, 2010, ACAD MANAGE PERSPECT	10.5465/AMP.2010.52842950	751
DOHERTY B, 2014, INT J MANAG REV	10.1111/ijmr.12028	690
DOHERTY B, 2014, INT J MANAG REV-a	10.1111/ijmr.12028	690

SHORT JC, 2009, STRATEG ENTREP J	10.1002/sej.69	645
SHORT JC, 2009, STRATEG ENTREP J-a	10.1002/sej.69	645
COHEN B, 2007, J BUS VENTURING	10.1016/j.jbusvent.2004.12.001	634
SANTOS FM, 2012, J BUS ETHICS	10.1007/s10551-012-1413-4	589
SANTOS FM, 2012, J BUS ETHICS-a	10.1007/s10551-012-1413-4	589
HOCKERTS K, 2010, J BUS VENTURING	10.1016/j.jbusvent.2009.07.005	555
ADAMS R, 2016, INT J MANAG REV	10.1111/ijmr.12068	478
MILLER TL, 2012, ACAD MANAGE REV	10.5465/amr.2010.0456	475
NICHOLLS A, 2010, ENTREP THEORY	10.1111/j.1540-	467
PRACT	6520.2010.00397.x	
NICHOLLS A, 2010, ENTREP THEORY	10.1111/j.1540-	467
PRACT-a	6520.2010.00397.x	
EBRAHIM A, 2014, RES ORGAN BEHAV	10.1016/j.riob.2014.09.001	463
FULMER CA, 2012, J MANAGE	10.1177/0149206312439327	434
BACQ S, 2011, ENTREP REGION DEV	10.1080/08985626.2011.577242	391
Source: Author's own work and compilation using softwar	1	1

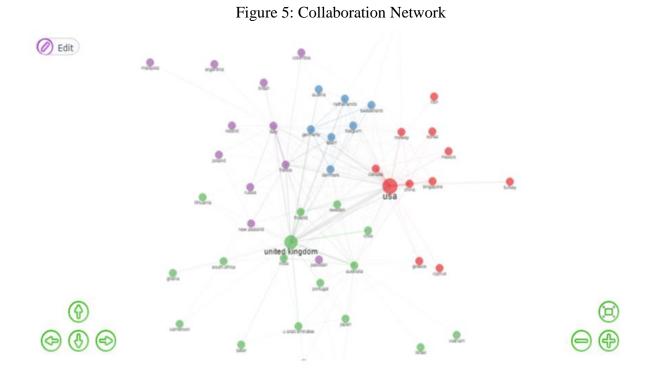
Source: Author's own work and compilation using software

Further, the co-citation analysis is used to determine the relationship between articles by finding out which articles are cited by other research together. The co-citation relies on the approach to find a network in which different articles are prominently cited in the similar research domain. The diagram below in figure 4 shows three broad distinct clusters. The first cluster has likes of authors Porter, Foss, Teece Di. The second cluster has authors Battilana, Zahra, Mair, Nichollas Doherty Bacq S which are prominent authors working in the area of social entrepreneurship and often cited together. The third cluster shows Shephard, Baron, Mollick, Davidson, etc who are being cited together because of the similarity of work. All these are often cited together by other authors working on social entrepreneurship and impact investing area.



Source: Author's own work and compilation using software

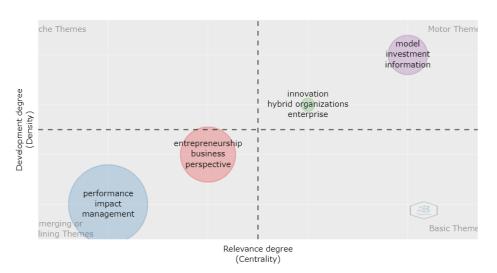
In order to throw light on the nature of author collaboration in this field of research, Figure 5 shows collaboration network by countries. Four collaborations can be seen in the network diagram. Prominent countries collaboration as seen from the Figure 5 are; firstly in Red cluster that shows collaborations of majorly developed countries viz USA, China, Canada, Singapore, Korea, Greece being together in one cluster. The second cluster has collaboration between European countries like Germany, Spain, Netherland, Switzerland, Denmark, Austria etc. Another cluster in Green has work from Asia, Oceania and one country from Africa viz India, Australia, Japan, Vietnam. UAE, Ghana, Indonesia etc. The last cluster has global collaborations viz France, Italy, Brazil, New Zealand, Argentina, Malaysia in Purple cluster.



Source: Author's own work and compilation using software

The authors further generated the thematic map in Figure 6 to depict the thematic development of the area of research. A thematic map represents the centrality on the X axis and density on the Y axis of the keywords cluster (Griivel et.al.1995). Centrality symbolizes the degree of interaction while density is about the "internal strength" of a cluster as shown in figure.

Figure 6: Thematic Map



Source: Author's own work and compilation using software

The above Figure 6 clearly shows that this is an emerging line of research. We can find that the themes like performance impact management are found in Emerging Lines Quadrant, even in the Motor themes quadrant, we can find themes like innovation, hybrid organizations which are looking into the area of impact investing. The lower left quadrant displays the emerging themes which means the topic "impact investing" is weakly developed with both low Centrality as well as density. The work done so far is mainly in concept building and in any field of study, for further development, it is imperative to move beyond conceptual conversation and move towards applied science (Agrawal & Hockerts 2021, Kuhn, 2012),

The word cloud depicted in Figure 7 shows the words being used in this domain of research and how this field has grown. The most significant words used are the ones with the largest fonts being use viz. innovation, impact, management, perspective are the most used ones in the domain of Impact investing.



Source: Author's own work and compilation using software

#### Conclusion

The domain of impact investment is still in the development stage of published research work and has foundational ties with social entrepreneurship. In initial development stage, prominent work has been done in social entrepreneurship (Mair & Marti 2006, Peredo & McLean 2006, Short et.al. 2009). Since then, it has seen significant changes and authors thereafter initiated work on hybrid organizations (Pache and Santos 2012, Doherty et.al. 2014) in more recent years and undertook

research on social finance (Nicholls 2015, Biancone & Radwan 2018, Kuchler & Stroebel 2021) and social innovation (Phills et.al. 2008, Moore et.al.2012, Dionisio & Vargas 2020) as with time common consensus on social benefit over profitability gained momentum (Grinols & Mustard 2001, Sentana 2017). Sooner global development of the United Nations laying down Sustainable Development goals laid the foundation of acquiescence on areas of social development across nations. Journal of Business Research, Journal of Business Ethics, Journal of Business Venturing and Entrepreneurship theory and Practice are the main Sources in this domain of research. USA is leading in the publication of impact investing and social entrepreneurship research. Battilana, Zahra, Mair, Nichollas, Doherty, Bacq S are prominent authors working on social entrepreneurship and are often cited together. The work particular to impact investment is steadily increasing and authors are studying both demand and supply sides of the same in recent years. An annual growth rate of 35.86% is seen in this research domain, particularly more in the realm of impact investment in recent years which came out to be predominantly an emerging field of research. There is ample scope for research on the theme in developing and under-developed countries as most prominent work is concentrated in developed world. Similarly author collaborations are also showing a pattern of collaborations in and among US, Europe and Oceania and further scope for greater global collaborations is suggested.

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