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Microfinance Institutions and Corporate Social Responsibility. A scientometric study

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Abstract

This study investigates the integration of Corporate Social Responsibility (CSR) within Microfinance Institutions (MFIs) in relation to Sustainable Development Goals. Through a Systematic Literature Review (SLR) and bibliometric analysis of 281 Scopus-indexed articles from January 1999 to November 2023, we delineate seven essential thematic clusters that define the CSR paradigm in MFIs: performance dimensions, balanced social and financial goals, improved social performance, qualitative perspectives, mission drift determinants, environmental sustainability, and funding sources and lending techniques. The study uncovers emerging research areas including the impact of digital-fintech innovations, climate change adaptations, the rise of Islamic microfinance, and explores significant gaps such as internationalization, corporate governance, gender diversity, and alternative funding mechanisms. These insights are pivotal for framing future research and offer critical guidance for policymakers and practitioners aiming to maximize the societal impacts of MFIs. Our analysis not only maps the current landscape but also sets a comprehensive agenda for enhancing CSR's role in achieving sustainable development, thus providing a strategic framework for ongoing empirical and theoretical advancements.

Keywords Microfinance institutions (MFIs), Corporate Social Responsibility (CRS), Systematic Literature Review (SLR), Bibliometric analysis

Introduction

The eradication of poverty remains a major global challenge, especially in developing countries. The international community is actively engaged addressing social development, aiming to eliminate poverty and improve education, health and gender equality. These efforts align with the United Nations Sustainable Development Goals (SDGs) to eradicate poverty, ensure gender

equality and improve overall well-being by 2030. Sustainable development has become a central concern worldwide and the discourse on Environmental, Social, and Governance (ESG) criteria and corporate sustainability has gained momentum due to changing societal expectations [93]. Historically focused on shareholder satisfaction, corporate success has evolved to include corporate sustainability in strategic decision-making processes, influenced by various stakeholders (e.g., [23, 31, 37, 57, 65, 91, 102, 115]). Concepts related to Corporate Social Responsibility (CSR) and Stakeholder Theory [44] have become defining features of a new era of business ethics and organisational management [12, 75], where leading companies implement long-term strategies to create economic value for shareholders and social value for stakeholders [61]. Furthermore, integrating the concept of continuous improvement into microfinance practices and CSR initiatives could significantly contribute to achieving

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the SDGs, particularly in addressing poverty and enhancing social development [66, 67].

Microfinance Institutions (MFIs) were established to provide financial aid to the impoverished. By integrating microcredit, micro savings, and microinsurance, MFIs has the potential to improve the lives of lowincome individuals by reducing risk, enhancing management, increasing productivity, generating higher investment returns, and elevating incomes and the wellbeing of dependents [113]. Microcredit, a small-ticket loan offered by MFIs to the underprivileged for launching businesses [35], is highlighted by Singh et al. (2021) for its adaptability to the financial needs of individuals, in contrast to traditional financing. Bros et al. [19] emphasize that the impact of microfinance is more significant in regions with higher poverty levels, while Patil and Kokate [97] underline the higher likelihood of female living in poverty compared to male.

Microfinance is recognized as a development strategy in Asian, African, and South American countries for financing entrepreneurs [48]. It provides credit to underprivileged entrepreneurs, particularly women, serving as an effective means of revenue generation and playing a crucial role in poverty alleviation, thereby improving the living standards of the poor and contributing to entrepreneurial intentions of achieving independence [29, 43, 74, 82, 96, 103, 107, 111], Hossain et al., 2024). However, despite significant expansions in many nations, microfinance still needs to achieve widespread success [89]. Contracts requiring early repayment may discourage liquid and risky investments, thereby reducing the impact of microfinance on the growth of micro-enterprises and poverty [41]. Banerjee and Jackson [11] highlighted that microfinance exacerbated economic, social, and environmental vulnerabilities, raising levels of debt. In fact, avoidance of debt is a significant factor when minorities choose a funding source to start their business (Robinson, 2024). Microfinance is not a cure-all for poverty eradication and has generally not reached its intended target market of the poorest [73]. Microfinance should prioritize finding or creating conditions to effectively assist the poor, instead of assuming they all have inherent entrepreneurial abilities [5, 16, 118].

MFIs are distinctive because they balance social or developmental goals with financial objectives. With a double bottom line, these institutions aim to reduce poverty while remaining sustainable. The effectiveness of MFIs is doubted due to mission drift, trade-offs, and over-indebtedness. MFIs go beyond poverty reduction, integrating other dimension of CSR, such as the quality of governance and environmental issues [117]. Although there is a clear interest in the literature for the incorporation of CSR criteria in microfinance, García-Pérez et al.

[46] point out that there is a clear asymmetry between the different areas of study, economic and social fields tend to have more presence, while environmental and governance aspects remain on the one margin.

Previous bibliometric studies on MFIs have covered various issues, yet the intersection with CSR remains underexplored. To address this gap, our study combines a systematic literature review (SLR) and bibliometric analysis to examine the landscape of MFIs and CSR. Literature reviews serve as essential guides for future research endeavours, offering insights into performance, knowledge, and key research streams in the field [66, 67]. Similarly, bibliometric research provides a structured framework to understand the intellectual landscape, offering valuable insights for future studies [87]. By integrating these approaches, our study aims to provide a comprehensive overview of the field, identify research trends, and gaps that can inform both academic discourse and practical applications in the fields of microfinance and CSR. By emphasizing the intended benefits of our study, we aim to underscore its potential to contribute to the advancement of knowledge and practice in these domains. Specifically, we address critical questions² regarding the novelty, value, and importance of research in the context of MFIs and CSR.

In light of the increasing academic focus on this subject and the recent developments noted in the literature (Rassel and Win, 2020; [66, 67]) we pose the first question:

Q1 How have publications and citations evolved over time regarding CSR in MFIs?

Given that the existing literature offers the necessary tools to explore this historical development (de Bem Machado et al. 2022), we are prompted to ask another question to determine the landscape of the contributing research:

Q2 Which authors, journals, countries, and institutions have been most influential in shaping the CSR discourse within MFIs?

Research to date has progressed in exploring certain themes (de Bem Machado, et al. 2022), prompting the next question:

 $[\]overline{\ }^{1}$ A summary of bibliometric studies on IFMs is presented in Table I in the appendix.

² For the elaboration of research questions, papers such as Okoli [95], de Bem Machado et al. [30], or Rasel and Win [109] are of great interest.

Q3 What themes and topics have dominated the research on CSR within MFIs?

However, a comprehensive overview that defines the current state of knowledge and outlines a clear research agenda remains lacking [46], leading us to pose the final question:

Q4 What are the emerging areas and potential directions for future research in CSR practices within MFIs?

This study significantly enhances the application of CSR within MFIs. By identifying critical trends and emerging areas such as digital-fintech innovations, climate change adaptations, the rise of Islamic microfinance, along with addressing gaps like internationalization, corporate governance, gender diversity, and alternative funding mechanisms, it provides policymakers and practitioners with actionable insights to crafting more effective CSR strategies. Our methodology extends beyond traditional bibliometric analyses by incorporating advanced tools that allow for a deeper and more nuanced understanding of the data, setting our research apart in both depth and breadth of analysis. These insights are crucial for achieving balanced social and financial outcomes and contributing robustly to SDGs. Furthermore, our research adheres to the key criteria for solid conceptual papers as outlined by Whetten [124], ensuring it provides novelty, value, importance, timeliness, clarity, and methodological rigor. This adherence not only strengthens the theoretical underpinnings of our study but also enhances its practical applicability, thereby acting as a catalyst for theoretical advancements and practical improvements, fostering sustainable impacts within the communities served by MFIs.

The subsequent sections of this paper are organized as follows. Sect. "Bibliometric literature review" conducts a bibliometric review, followed by the methodology used in Sect. "Methodology". Sect. "Results" presents the results, with the first sub-section providing a descriptive analysis of the main authors, journals, institutional and country origins, and the second showcasing the conceptual and intellectual structure of MFI and CSR. Sect. "Discussion and Implications" discusses the results and the theoretical and practical implications. Finally, Sect. "Conclusions" presents the main conclusions, implications, and limitations of our work.

Bibliometric literature review

Several prior studies have conducted bibliometric analyses on MFIs, focusing on diverse topics (refer to Table I in the appendix). Some have reviewed the general literature on MFIs, while others concentrated on classic subjects

such as social and financial performance, efficiency, and social-financial trade-offs. Specific aspects, including sustainable development, Islamic finance, micro, small and medium enterprises (MSMEs), entrepreneurship, women's participation, and financial inclusion and innovation, have also been investigated.

In the group of bibliometric literature reviews on MFIs, Gutiérrez-Nieto and Serrano-Cinca [51] focused on the top 5% of most-cited microfinance papers. They identified distinct phases, noting that early papers were welfarist, followed by an era of institutionalist papers, and later, a group of generalist studies emerged. Future trends identified include financial inclusion, social entrepreneurship, and Islamic microfinance. Classic topics like efficiency, outreach, and sustainability persist. In a similar vein, Zaby [126] examined 4,409 articles, identifying three clusters related to institutional, governance, and organizational aspects, research methods, and microfinance initiatives' impact on social justice.

Another set of papers delves into the performance of MFIs. For instance, Nogueira et al. [94] analyzed 2,168 articles, emphasizing that the social aspects, economic effects, and performance of MFIs are crucial research areas. Additionally, they highlight that financial inclusion and entrepreneurship remain to be explored empirically. The meta-analysis conducted by Reichert [110] assesses the ability of MFIs to simultaneously achieve social and financial goals. Meanwhile, Copestake et al. [25] review doctoral research studies in microfinance, pointing to inconclusive empirical evidence on the successful or adverse financial inclusion of MFIs, as performance depends on the geographical environment, social relations, organizational culture, and regulation. Similarly, Hermes and Hudon [58] systematic review of the determinants affecting the financial and social performance of MFIs reveals mixed evidence on key factors, depending on the specific country context. Akter et al. [2], who conducted a bibliometric study on the financial and social performance of MFIs, highlight poverty alleviation, group lending, and credit scoring as main emerging research themes. They indicate that future research should focus on comparing the performance of MFIs with that of other financial institutions (traditional banks), analyzing the position of MFIs in achieving financial inclusion, economic growth, and development worldwide, and on aspects of institutional efficiency and financial stability. Fall et al. [39], using meta-regression analysis, study technical efficiency in African MFIs, noting that the level of efficiency of MFIs has improved over time. However, the overall efficiency of the sector, and especially social efficiency, remains low and must improve.

A separate category of studies focuses on the demand side of microfinance activity. Duvendack et al. [34] analyzed 58 papers and found they do not provide reliable evidence of the real impact of MFIs on impoverished individuals. Van Rooyen et al. [122] suggested both negative and positive impacts of microfinance on poverty. Ribeiro et al. [111] conducted a scientometric analysis and systematic literature review, highlighting persisting doubts about microfinance's ability to generate positive outcomes.

Competition among MFIs is another noteworthy topic. Nisa et al. [92] reviewed 67 articles, identifying four clusters related to social impact, performance, market structure, and relationships with other financial institutions. They highlighted positive and negative aspects of competition on MFIs, including improved portfolio quality and stable profits but also increased non-performing loans and reduced capacity to serve poor consumers.

Microfinance's significant role in supporting sustainable development, particularly in poverty elimination, is explored by Haidar and Satifa [53]. They emphasize its alignment with the primary objectives of the Sustainable Development Goals (SDGs). Conversely, García-Pérez et al. [46], through a systematic literature review employing content analysis, highlight a substantial research gap,they note that while economic and social domains have received considerable attention, environmental and governance aspects are relatively underexplored.

Studies on the role of Islamic finance in poverty reduction have gained traction. Mohamed and Fauziyyah [81] reviewed the impact of Islamic microfinance, highlighting positive outcomes in terms of economic development and social well-being. The great potential of Islamic finance in the fight against poverty is again addressed in the paper by Tijjani et al. [119], where they find that Islamic finance research has gained remarkable momentum in the literature. In the same vein, Hassan et al. [56] highlight four main topics: (1) principles, performance, and problems in Islamic microfinance, (2) sustainable development, (3) women's empowerment, and (4) the role of the banks. They suggest future research directions in Islamic microfinance, including sustainable development, the role of Islamic banks in providing Shari'ahcompliant services, and the development of financial technology (fintech)-based Shari'ah-compliant solutions. Another recent paper that analyzes the importance of Islamic Microfinance in the literature is Haerudin et al. [52], who identify and review definitions, theories/perspectives, research topics, and research methods, albeit focusing solely on Indonesia. Qudah et al. [105] also focus on Islamic finance but with an orientation towards financial technology. They state that the convergence of technology and Islamic finance offers various benefits but also creates issues that must be handled through careful analysis and regulation. One possible drawback is the prospect of financial exclusion, as those without access to or familiarity with technology may be left behind. There is also the issue of ensuring that fintech platforms follow Shariah principles and laws, which may be complicated and need rigorous monitoring. Furthermore, questions regarding the ethical implications of fintech, such as the use of artificial intelligence in decision-making and the possibility of bias in algorithms, need to be addressed.

Another recently relevant issue in relation to microfinance activity is its approach to MSMEs. Gora et al. [48] highlight four main themes: access to finance and schemes, women's empowerment and poverty alleviation, performance, and recent developments in MFIs. The paper also outlines future research agendas, including exploration into new financing options such as peerto-peer (P2P) lending, crowdfunding, private and public venture capital. Additionally, it emphasizes the balance between the financial and social efficiency of MFIs, the role of commercialized microfinance, and the determinants influencing MFI debt. Recent research on microfinance for SMEs, as identified by Lwesya and Mwakalobo [71], has evolved around eight thematic clusters encompassing various aspects like access to microcredit, economic empowerment, sustainability, creditworthiness, microfinance technology infrastructure, Islamic financial inclusion, credit assessment models, innovative business models, and gender and equity crowdfunding.

In line with previous papers, Coronel-Pangol et al. [26] analyze the trending topics and future lines of research on the relationship between the literature on microfinance and entrepreneurship. Future lines of research are: (1) the development and importance of MFIs,(2) the contribution of microfinance to the development of enterprises; (3) business microcredits as an answer to the financing problems of enterprises and SMEs; (4) improvement in the organizational development of enterprises through the use of microfinance resources; (5) support for female microenterprises; and (6) contribution to education, mainly financial education. Additionally, the following lines of research can become trending topics: contribution of microfinance to the economy; impact of microfinance on green development, youth initiatives, SMEs, capital structures of ventures and decision making. Finally, microfinance and technology, through crowdfunding, should not be forgotten as a line of research.

The issue of women's participation in financial markets has been addressed by several bibliometric papers. Kaushal et al. [63] review papers on MFIs and women empowerment. Mushtaq et al. [88] highlight the factors that hinder women's participation in financial markets: "voluntary exclusion" and women's unwillingness

to approach financial markets fearing rejection of loan application, male-dominant cultures, legal and contract enforcement infrastructure, lack of sufficient financial market knowledge or low levels of financial literacy or access to new technologies, and religious aspects.

Financial inclusion has recently been addressed as a central theme in several bibliometric analyses. Gálvez-Sánchez et al. [45] carry out a bibliometric analysis on financial inclusion, and MFIs are one of the most cited terms. Priyan et al. [104] do a bibliometric analysis in microfinance. Financial inclusion, fintech, microfinance, economic growth, financial literacy, mobile money, and remittances are some of the recent themes that are shown in the density map. Another relevant topic, which is addressed as a main theme in Liu et al. [69] is the role of Information and Communication Technologies (ICTs) in microfinance. It turns out that crowdfunding, P2P lending and mobile banking and the role of these platforms in entrepreneurship have been the favorite topics. Fintech, especially blockchain and other emerging technologies, to promote financial inclusion is one of the future research trends. Ali et al. [3] agrees on some emerging issues, such as financial literacy, financial technology including fintech, and crowdfunding. However, these authors deepen their analysis in the incorporation of technologies for MFIs with the ultimate goal of contributing to the eradication of poverty.

The issue of CSR performance is now central to all organizations. MFIs strive to achieve a double bottom line, balancing their social mission to reduce poverty with profitability, by integrating additional dimensions of CSR such as environmental issues and quality of governance [117]. Rasel and Win [109] conducted a systematic review focusing on the governance of microfinance. They discovered that while the body of literature on this topic is still limited, it is expanding. However, they noted that the existing studies present fragmented and often contradictory findings. Measuring and monitoring these aspects are crucial, not only for MFIs themselves but also for their stakeholders, including donors, socially oriented investors, policymakers, and the general public.

Upon reviewing existing bibliometric studies on MFIs, it is apparent that the microfinance industry primarily addresses the economic and social dimensions of sustainability, which align with its main objectives. However, recent attention to ethical concerns has been driven by the recognition of mission drift -where the social mission of these institutions may be overlooked (Hudon et al., 2018; Beisland et al., 2017).

From our perspective, further research should explore those areas currently underrepresented in the literature, particularly environmental performance and governance mechanisms, where MFIs need to be more proactive. Remarkably, no literature review has yet combined MFIs with CSR or ESG compliance, which are now defining features of the new era of business ethics and organizational management.

To advance knowledge on MFIs and align it with sustainability objectives, we propose a bibliometric study on MFIs and CSR using the previously described methodology. This study will analyse the relationship between literature on these two topics to address significant identified gaps and propose future research directions. Our aim is to provide a comprehensive understanding of the multifaceted relationship between MFIs and sustainability.

Methodology

This paper integrates bibliometric analysis with a SLR to investigate the intersection of MFIs and CSR. Bibliometric analysis, initially developed by pioneers such as Derek J. de Solla Price, Eugene Garfield, and Lotka, and further refined by Egghe in 2000 [36], assesses various aspects of scientific literature, including publication patterns, citation relationships, and the overall impact of research within a particular field. This approach involves examining bibliographic data, such as citation counts, authorship patterns, and publication trends, to gain insights into the structure and evolution of a specific body of literature.

Unlike traditional literature reviews, SLR adopts an organised, transparent, and replicable approach to minimise biases in the selection process of articles [49]. Defined by Rijal et al. [112] as a comprehensive and well-organized literature study backed by a sound methodology, an SLR ensures a meticulous evaluation and synthesis of available materials. Following the Scientific Procedures Rationales for Systematic Literature Reviews (SPAR-4-SLR) protocol [99], our SLR encompasses three stages: assembling (identification and acquisition), arranging (organization and purification), and assessing (evaluation and reporting). This methodological combination offers a profound overview of existing research, helping identify future research areas and enhance the understanding of the studied field. The different stages and sub-stages followed in our study are showed in Table 1.

In terms of data collection, selecting an appropriate bibliometric database is paramount. Among the databases commonly utilized in social sciences -Web of Science (WoS), Scopus, and Google Scholar- each serves distinct purposes and offers different benefits. Harzing and Alakangas [55] highlight that these databases provide stable coverage suitable for cross-disciplinary comparisons. However, Mongeon and Paul-Hus [83] have identified that Scopus offers more comprehensive coverage in the social sciences compared to WoS,

Table 1 SPAR-4-SLR protocol. Source: Own elaboration based on Paul et al. [99]

First stage: Assembling	9	
Identification	Domain	MFIs' CSR
	Research question	Q1 trends, Q2 contributors, Q3 topics and Q4 future themes
	Source type	Academic journals
	Source quality	Scopus
Acquisition	Search mechanism	Scopus
	Search period	Up to 07/11/2023
	Search keywords	"MFI" OR "microfinance" OR "micro finance" OR "micro-finance" OR "micro credit" OR "microfinance institution" AND "governance performance" OR "environmental performance" OR "social performance" OR "CSR" OR "ESG performance" OR "corporate social responsibility" OR "ESG" OR "ESG assessment" OR "sustainable development"
Second stage: Arranging	1	
Organization	Organizing codes	Citations, reference, journal title, author, year, number of citations, keywords, country, and affiliated institution, document type, in a single tab in an Excel document
Purification	Article type	Related to subjects: Business, Management and Accounting; Economics, Econometrics and Finance; Social Sciences. In English. Peer-reviewed articles. The search yield 302 hits, reducing to 281 after removing duplicates and erroneous entries
Third stage: Assessing		
Evaluation	Analysis method	Bibliometric: Performance analysis and science mapping. Software: Biblioshiny, VOSviewer and Excel
	Agenda proposal method	Retrospection and gap analysis
Reporting	Reporting convention	Figures (networks), Tables and Words. Data is limited to accuracy of Scopus. No funding received

encompassing over 20,000 peer-reviewed journals and hosting a greater number of indexed journals than WoS [13],de Bem Machado et al., 2022; [109]. Scopus is widely regarded as the "gold standard" for high-quality research reviews, praised for its extensive repository of social science research and its user-friendly interface [99, 100]. In contrast, Google Scholar, while expansive, often includes unaudited articles that may lack rigorous scientific validation.

Scopus was chosen over other databases due to its superior indexing quality and broader coverage of the social sciences. This extensive coverage is crucial for a holistic review as it includes a wider range of journals and conference proceedings that are pivotal in CSR and microfinance research. Additionally, Scopus updates its citation metrics more frequently. The choice of Scopus also aligns with its recognition in the academic community for its rigorous curation and maintenance of high standards in publication quality, which underpins the credibility of our bibliometric analysis. As shown in Table I in the appendix, a significant portion of the bibliometric studies on MFIs have relied on the Scopus database, among others, including Rasel and Win [109], Akter et al. [2], Haerudin et al. [52] and Ali et al. [3].

For data analysis, we employed the 'Bibliometrix' software package implemented in R, which is specifically designed for comprehensive bibliometric analysis. Complementing Bibliometrix, 'Biblioshiny' offers an intuitive web interface that greatly facilitates the visualization and interpretation of complex bibliometric data, making it accessible for both detailed qualitative assessments and broad quantitative reviews. Additionally, VOSviewer is utilized for its superior graphical capabilities in mapping and visualizing networks of co-authorship, co-occurrence, citation, and bibliographic coupling. This tool is instrumental in identifying and illustrating the central themes and collaborations within the field, providing visual insights that are not as readily discernible through tabular data alone [120]. Finally, Microsoft Excel is used for its ubiquitous availability and familiar interface, making the initial stages of data organization and preliminary analysis accessible and straightforward. Excel's robust functionality allows for effective data sorting, filtering, and preliminary analysis, making it an indispensable tool for preparing data for more advanced analysis in other software.

Together, these tools encompass a comprehensive suite of bibliometric methods and indicators essential for our analysis. We conducted a performance analysis, focusing on the contributions of research constituents, and a science mapping analysis, which examines the relationships between these constituents [32]. The results from these analyses were interpreted using the sensemaking approach of scanning, sensing, and substantiating (3Ss of sensemaking), a method proposed by Lim and Kumar [68] that enhances our understanding of the underlying structures and implications of our findings.

In the performance analysis, the total number of citations (TC) [123] was used, a conventional method in bibliometric analysis to evaluate the scientific quality of individual researchers. The normalized TC (NTC) were calculated by dividing the actual count of citing items by the expected citation rate for documents with the same year of publication. Other indicators include the h-index, where "h" indicates de number of articles published by an author that are cited at least "h" times each. The m-index is the h-index divided by the number of years that a scientist has been active, and the g-index is calculated based on the distribution of citations received by a given researcher's publications, such that given a set of articles ranked in decreasing order of the number of citations that they received, the g-index is the unique largest number such that the top g articles received together at least g² citations.³

In terms of social structure and geographic distribution, the analysis of the corresponding author' country shows the authors appearances by country affiliations, and Single Country Publications (SCP) and Multiple Country Publications (MCP) demonstrate the relevance of co-authorship with authors from other countries. The collaboration network and world map also contribute valuable information. These last two analyses introduce us to the second type of techniques, the science mapping ones.

Co-citation study, bibliographic coupling and co-word analysis are used to analyse the conceptual structure of the specific literature. The connections between various concepts, citations, publications and words, are examined to identify intellectual interactions, structural links and tracking phenomena [40].

Intellectual structure is specifically addressed through co-citation analysis and bibliographic coupling. Cocitation analysis is a common method used to unveil similarities among cited articles, indicating the degree of similarity between two different articles. This analysis operates on the premise that publications frequently cited together share thematic similarities. The connection between two publications occurs when they are cited together in the reference list of another publication. The fractional counting method was deemed more suitable than the full counting method, overcoming potential biases created by highly cited articles [47, 90, 121]. Cocitation analysis shows the foundational themes. Bibliographic coupling is based on the assumption that two publications sharing common references are also similar in content. This analysis provides a representation of the present state of the research field. Co-word analysis directly uses words, that is the actual document content, to identify co-occurrence interactions and build a framework. The words in a co-word analysis are often derived from "author keywords" and serve as a supplement to enrich the understanding of thematic clusters derived bibliographic coupling. This approach allows for the triangulation and enhancement of the study's validity and reliability. It elaborates on the content of each thematic cluster, providing insight into future research directions by analysing notable "words" from implications and future research directions in publications.

Additionally, the thematic map of keywords, that Biblioshiny offers, provides research topics, essential expressions, and their relationships. Four typologies of themes are defined based on centrality and density, creating the upper-right quadrant as the "motor theme," the upper-left quadrant as specialized themes, the lower-left quadrant as emerging or declining themes, and the lower-right quadrant as basic and transversal themes.

Results

Performance analysis: Sources, authors and documents

The CSR initiatives of MFIs have a publication track record spanning 24 years, demonstrating a consistent upward trajectory. The number of published papers has steadily increased over the years, reaching a peak in 2022 (see Fig. 1). Although complete data for 2023 is not available, a general upward trend has been observed since 2012, with the slope accentuating from 2019 onwards. It is possible that the health and financial crisis resulting from the COVID-19 pandemic have spurred increased interest in this topic. A summary of the search results is showed in Table II in the appendix.

Now, let us analyse the contribution of the most prolific authors on this research topic (refer to Table 2). A total of 600 authors have contributed to 281 articles. Among them, only eight authors have published four or more papers, totalling 42 papers (15%). Mersland is the most published author, with 11 papers, followed by Hudon with six. When considering the number of TC, Mersland is the most cited author with 313, followed by Hudon (308), Copestake (265), Randoy (198) and D'Espallier (179). Keywords such as 'microfinance,' 'corporate governance,' 'sustainable development,' and 'international development' feature prominently in their research profiles.

Table 3 presents the top 10 most prolific and influential sources. *Enterprise Development and Microfinance,* followed by the *Journal of Business Ethics,* are the journals with highest number of publications. Among the total publications, 21% (59 papers) are from the top 10 sources, with the rest spread across 158 journals. The

³ An author has a "g-index" when, among the "g" most cited articles by the author, the total number of citations accrued by these "g" articles surpasses "g" squared.

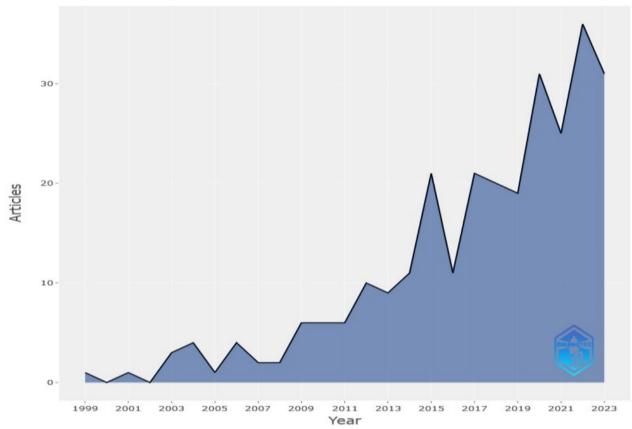


Fig. 1 Trends in publications. Source: Own elaboration

selection of prominent journals in the field of MFIs' CSR research indicates a strong acceptance of this research area within the scientific community, as several reputable journals have consistently published relevant studies on the topic.

The most relevant papers are outlined in Table 4. The most cited (444 TC) is titled "Micro-credit initiatives for equitable and sustainable development: Who pays?", by Ranman (1999). This seminal publication examines the effects of microcredit programs on development, particularly focusing on the Grameen Bank. It discusses the pressure on bank workers to increase loans and recovery rates, leading to intensified pressure on clients and household debt through loan recycling, exacerbating tension and societal violence. The second most cited article (230 citations) is "Mainstreaming Microfinance: Social Performance Management or Mission Drift?" by Copestake [24]. The third and fourth most cited articles are "Model for empowering rural poor through renewable energy technologies in Bangladesh" by Biswas et al. [18] and "The impact of international influence on microbanks' performance: A global survey" by Mersland et al. [79], respectively. The fifth most cited paper, with a similar number of citations as the previous two, is "Unsubsidized microfinance institutions" in Economics Letters by D'Espallier et al. [27]. The paper with the highest NTC, titled "Does corporate social responsibility pay? Evidence from social ratings in microfinance institutions" by Simo et al. [117], investigates the financial benefits of strong social performance in MFIs examining investor responses to social ratings. Commercialized funding sources (debt and equity) show no sensitivity to social ratings, while providers of subsidized capital increase support for MFIs with good social ratings. The research suggests that for-profit MFIs' capital structure is more responsive to social ratings than nonprofit MFIs, indicating that social investors prioritize social performance over ownership type in financial support to MFIs.

Turning to the geographic distribution of publications by authors' countries (see Table 5), India, Malaysia, USA, Spain, UK, Norway, and Belgium account for 53% of all author appearances. When considering collaborative output ratios (Fig. 2), India leads in SCP, followed by Malaysia.

At the institutional level (Table 6), the School of Management Universiti Sains (Malaysia) leads with 10 papers,

Table 2 Top 20 most publishing and important authors. Source: Own elaboration. Note: TC total citations, NP number of publications, PYS publication year start

	h_index	g_index	m_index	TC	NP	PY_start
Mersland R	8	11	0.615	313	11	2011
Hudon M	5	6	0.278	308	6	2006
Mia Ma	3	5	0.429	70	5	2017
Beisland LA	3	4	0.300	96	4	2014
Copestake J	4	4	0.190	265	4	2003
Dorfleitner G	3	4	0.429	49	4	2017
Forcella D	3	4	0.333	39	4	2015
Randøy T	4	4	0.308	198	4	2011
Amelec V	3	3	0.333	34	3	2015
Carmen V	3	3	0.333	34	3	2015
D'Espallier B	3	3	0.273	179	3	2013
Hermes N	3	3	0.500	142	3	2018
Huruta AD	3	3	0.600	39	3	2019
Jose S	3	3	0.273	32	3	2013
Lapenu C	2	3	0.100	27	3	2004
Mori N	3	3	0.300	58	3	2014
Sierra J	2	3	0.333	14	3	2018
Adair P	2	2	0.200	7	2	2014
Ali H	1	2	0.333	5	2	2021
Allet M	2	2	0.222	81	2	2015

Table 3 Top 10 most publishing and influential sources. Source: Own elaboration. Note: TC total citations, NP: number of publications, PYS: publication year start

Source	h_index	g_index	m_index	TC	NP	PYS
Enterprise Development and Microfinance	3	5	0.2	41	10	2009
Journal of Business Ethics	7	7	0.77	288	7	2015
Sustainability (Switzerland)	5	7	1.25	125	7	2020
International Journal of Social Economics	4	5	0.26	62	5	2009
Savings and Development	2	3	0.11	12	5	2006
Journal of Cleaner Production	4	4	0.57	110	4	2017
Journal of Management and Governance	4	4	0.4	54	4	2014
Mondes en Développement	3	4	0.15	31	4	2004
Sustainable Development	4	4	0.44	73	4	2015
World Development	4	4	0.16	707	4	1999

followed by the School of Business and Law (University of Agder, Norway) with 8 papers, and the University of Salamanca (Spain) with 6.

The collaboration network worldwide is depicted in Fig. 3, showcasing the productive countries in MFI and CSR publications. The red lines indicate the collaboration networks of the publishing countries. The most intense relationships occur between France and Cameroon; Colombia and Venezuela; Pakistan and Saudi Arabia; Spain and Italy; Belgium with Germany and Netherlands;

and Norway with Belgium, Ghana, Tanzania and Saudi Arabia.

Concluding the performance analysis and segueing into the next section on science mapping, Fig. 4 illustrates the collaboration network among authors and countries. Mersland, hailing from the University of Agder, Norway, stands out as the most collaborative and cited author. His primary collaborators include Mori (University of Dar es Salaam, Tanzania), Djan (School of Business, Kwame Nkrumah University of Science and Technology, Ghana),

Table 4 Top 10 cited publications. Source: Own elaboration. TC: Total Citations; NTC: Normalized TC. calculated by dividing the actual count of citing items by the expected citation rate for documents with the same year of publication

Paper	TC	TC per Year	NTC
Rahman A, 1999, World Dev [106]	444	17.7600	1.0000
Copestake J, 2007, World Dev [24]	230	13.5294	1.6974
Biswas Wk, 2001, Environ Sci Policy [18]	96	4.1739	1.0000
Mersland R, 2011, Int Bus Rev [79]	96	7.3846	5.1429
D'Espallier B, 2013, Econ Lett [27]	94	8.5455	5.2547
Serrano-Cinca c, 2014, Int Bus Rev [114]	85	8.5000	5.0541
Hermes N, 2018, J Econ Surv [58]	82	13.6667	5.2903
Patt A, 2010, Global Environ Change [98]	74	5.2857	2.4262
Maclean K, 2010, Dev Change [72]	70	5.0000	2.2951
Kauffman RJ, 2012, Elect Commer Res Appl [62]	66	5.5000	2.7500

Table 5 Authors appearances by country affiliations. Source: Own elaboration

Region	Freq	Region	Freq
India	73	Germany	21
Malaysia	67	Indonesia	21
USA	44	Italy	19
Spain	42	Netherlands	16
UK	35	Australia	15
Norway	32	Ghana	12
Belgium	25	Bangladesh	11
France	24	Pakistan	11
China	23	New Zealand	9
Canada	21	South Africa	9

Beisland (University of Agder, Norway), and Randøy (University of Agder, Norway). Additionally, D'Espallier from Hogeschool-Universiteit Brussel (Belgium) collaborates with Szafarz and Hudon, both affiliated with Université Libre de Bruxelles (Belgium). Prominent authors from Central European countries may have established extensive networks with novel researchers from developing nations such as Tanzania, Cameroon, India or Malaysia. These connections facilitate the exchange of knowledge and foster collaborative relationships, contributing to the dissemination of expertise on the subject matter.

Discussion: conceptual and intellectual structure of MFI and CSR

The conceptual structure of the literature on MFIs and CSR is systematically explored, unveiling a knowledge map through co-citation, bibliographic coupling, and co-word analyses. The results from these analyses were

interpreted using the sensemaking approach of scanning, sensing, and substantiating (3Ss of sensemaking).

Co-citation analysis reveals the intellectual structure and foundational themes of the research field, identifying shared thematic similarities among publications frequently cited together in the reference lists of other publications. Figure 5 displays the most relevant publications organized into four thematic clusters, offering insights into the intellectual structure.

- i) The red cluster (10 items), led by Hermes et al. [59] examines the trade-off between outreach to the poor and efficiency of MFIs. Copestake [24] analyzes the idea of mission drift and uses a model that distinguishes between institutions' financial and social performance possibilities, preferences, and assessment systems to review findings from an international sample of poverty-oriented MFIs. Mersland and Strong [78] investigate mission drift using average loan size as a main proxy and the MFIs lending methodology, main market, and gender bias as further mission drift measures.
- ii) The green cluster (8 items) is led by Harstarska (2005), who focuses on the impact of governance on outreach and sustainability. Hartarska and Nadolnyak [54] explore if regulated MFIs achieve better results than unregulated and find that regulatory involvement does not directly affect performance either in terms of operational self-sustainability or outreach.
- iii) The blue group (6 articles) is led by Armendariz and Morduch [8], who go beyond the usual theoretical approach in the microfinance literature and provide an overview for practitioners. Morduch [85], in addition to discussing the arguments and shortcomings of the win—win approach, emphasizes the necessity for innovative programs with varying degrees of outreach and financial sustainability. Furthermore, Mersland and Strom [77] examine the relationship between firm performance and corporate governance
- iv) The yellow cluster (4 items) is led by Morduch [84], who studies the diversity of innovative mechanisms beyond group-lending contracts and the potential to reduce poverty through savings programs rather than just credit. Ahlin, Lin and Maio [1] study how the success MFI's depends on the country-level context, in particular macroeconomic and macro-institutional features.

The co-citation analysis organized into four thematic clusters -trade-offs, governance, innovative approaches, and contextual dependencies within MFIs and CSR- reveals the complexities of balancing financial

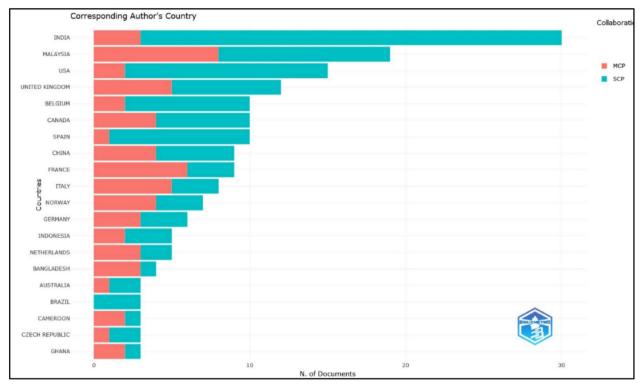


Fig. 2 Corresponding author's country. Source: Own elaboration Single Country Publications (SCP); Multiple Country Publications [MCP (It calculates the proportion of articles in which there is at least one author with an affiliation in a country other than that of the corresponding author)]

sustainability with social goals, the necessity for innovation beyond traditional models, and the impact of macroeconomic contexts on MFI strategies. These insights not only guide policy formulation and strategic planning but also enrich our understanding of the foundational themes in CSR and MFIs, emphasizing the need for tailored, innovative solutions in enhancing their effectiveness and societal impact.

While the co-citation analysis may overlook recent or niche publications, bibliographic coupling (Fig. 6) offers a snapshot of the current state of the research field. This method assumes that publications with shared references are thematically similar. In this instance, 7 clusters are identified, comprising the following most cited papers.

Cluster 1, red (7 items): Exploring dimensions of MFIs performance. The most cited and link-strong article in this cluster is Hermes and Hudon [58], which conducts a systematic review of determinants influencing the financial and social performance of MFIs. In a quantitative analysis of Islamic microfinance literature, Hassan et al. [56] map the field's evolution and structure, identifying key topics such as principles, performance, problems, sustainable development, women's empowerment, and the role of banks. Mori and Mersland [86] reveal the significance of stakeholders, such as donors, employees,

customers, and creditors, on boards and various aspects of performance. Lopatta et al. [70] empirically investigate mission drift and its consequences on MFIs' performance. Shifting focus to governance mechanisms, Estapé-Dubreuil and Torrequitart-Mirada [38] examine the relationships between diverse governance practices implemented by MFIs and their social and financial performance. Chahine and Tannir's [21] scrutinize the social and financial dimensions of NGOs Transforming into Microfinance Institutions (TMFIs). While such transformations enhance financial sustainability and outreach breadth, they concurrently limit the depth of services provided, particularly noticeable in bank-TMFIs, raising concerns about potential mission drift. Finally, Xu et al. [125] theoretically discuss macroeconomic influences on MFIs' depth of outreach and provide empirical evidence, indicating a positive association between average loan balance and operational self-sufficiency.

Cluster 2, green (7 items): Balanced social and financial goals. Building on existing literature, Reichert's [110] meta-analysis assesses the ability of MFIs to simultaneously achieve social and financial goals. The study identifies dimensions influencing trade-offs between financial and social objectives, emphasizing the importance of outreach depth, cost, and efficiency indicators. The

Table 6 Top 10 institutional and country affiliations. Source: Own elaboration

Affiliations	Articles
School of Management Universiti Sains Malaysia	10
School of Business and Law University of Agder Norway	8
University of Salamanca Spain	6
Faculty of Accounting and Finance University of Professional Studies Accra Ghana	5
School of Graduate Studies International Centre for Education in Islamic Finance (INCEIF) Lorong Universiti a Kuala Lumpur Malaysia	5
School of Management University of Quebec Montreal Canada	5
Universidad Católica Los Ángeles de Chimbote Perú	5
Czech University of Life Sciences Prague Institute of Tropics and Subtropics Czech Republic	4
Department of Agricultural Economics and Rural Development Georg-August-University Göttingen Germany	4
Massey University—School of Economics and Finance New Zealand	4

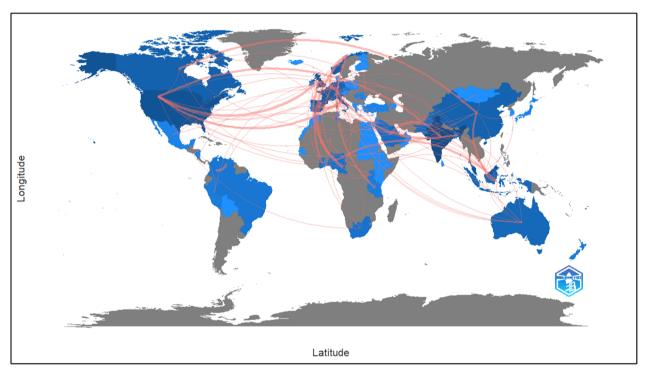


Fig. 3 Country collaboration and scientific production map. Source: Own elaboration

findings suggest that as the industry matures, trade-offs become less acute. The exploration of risk management, profitability, and appropriate banking practices in sustaining the social objectives of MFIs is conducted by Serrano-Cinca and Gutiérrez-Nieto [114]. They employ the long tail theory to identify a niche market where fulfilling social missions can coexist with sound banking practices. Addressing the escalating concern to mitigate risk in microfinance portfolios, Chakrabarty and Erin Bass [22] analyze the effects of different CSR practices and propose virtue ethics as the most effective approach. They

highlight the role of moral standing and character in mitigating portfolio risk, particularly in serving the poor in challenging contexts. Marwa and Aziakpono's [76] study focus on the financial sustainability of Tanzanian savings and credit cooperatives (SACCOs), offering insights into the viability of these cooperative structures in contributing to financial inclusion and community development. Examining the challenge of attracting funding for MFIs, particularly those unable to collect deposits, Dorfleitner et al. [33] suggest a positive relationship between an MFI's financial performance, adherence to

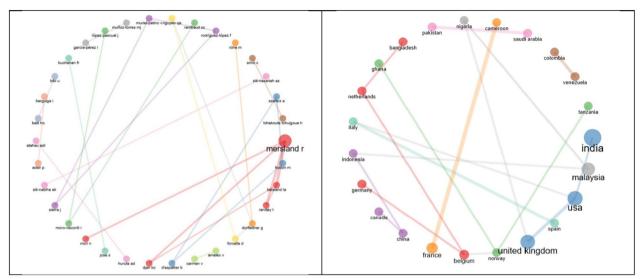


Fig. 4 Author and country collaboration network. Source: Own elaboration

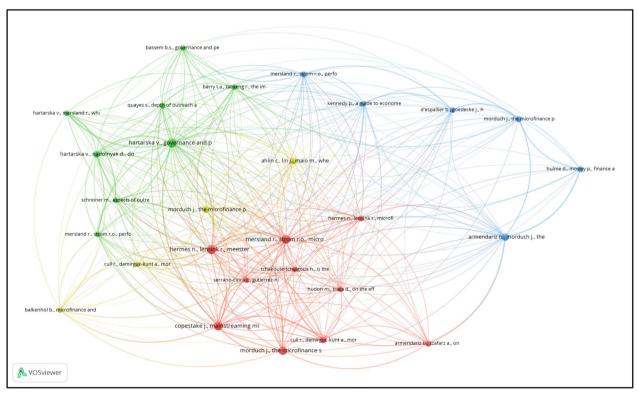


Fig. 5 Co-citation analysis, unit of analysis cited references. Source: Own elaboration

social missions, and its access to funding from microfinance investment vehicles (MIVs). Annim [7] investigates the multiple objectives of MFIs, highlighting a tradeoff between social goals and financial efficiency. The research emphasizes the positive role of external factors, such as credit information, property rights, and financial

development, and the social efficiency of MFIs. Moving to the role of ICT, Kauffman and Riggins [62] explore its significance in the maturing microfinance landscape. As the industry faces increased competition, MFIs must balance outreach and sustainability. ICT emerges as both a catalyst for change and a potential solution for MFI

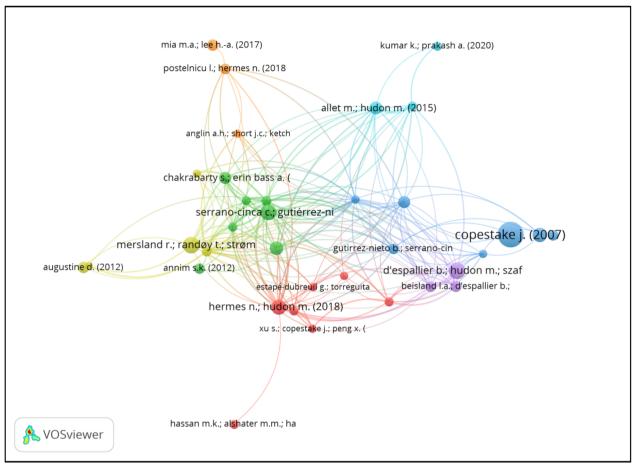


Fig. 6 Bibliographic coupling, unit of analysis documents. Source: Own elaboration

survivability. Their research encourages further exploration of the ICT impact at various levels within the microfinance industry.

Cluster 3, blue (7 items): Insights for improved social performance. The most cited article in this cluster, Copestake [24], delves into the integration of microfinance and commercial banking sectors, questioning the pursuit of explicit development goals and potential mission drift. Contrastingly, the article with the highest link strength is Randøy et al. [108] research, placing entrepreneurship in the spotlight. Their findings indicate that entrepreneurmanaged MFIs exhibit superior social performance, enhanced financial sustainability, and lower costs. Sigalla and Carney [116] explore women's experiences as entrepreneurs in microcredit schemes, emphasizing how learning processes associated with these interventions produced mixed feelings of success and failure. Hulme and Maitrot [60] argue that microfinance in South Asia has deviated from its social mission of poverty reduction, with loan officers mistreating clients, particularly poor women. Maclean [72] challenges the conventional view of

how MFIs use social capital, emphasizing gendered contradictions and complexities in the relationship between social capital, microfinance, and income generation in rural Bolivia. Gutiérrez-Nieto and Serrano-Cinca [50] venture into the realm of specialized MFI rating agencies, investigating the relationship between financial and social indicators and the assigned ratings. While larger, more profitable, and less risky MFIs tend to secure better ratings, the study calls attention to the need for ratings to accurately reflect the social mission of MFIs, given the observed disconnect between social performance and rating. In a more recent exploration, Beisland et al. [15] identifies factors influencing social performance ratings. The findings reveal a significant correlation between social ratings and financial performance, extensive outreach to rural areas, well-defined social objectives, staff commitment, service quality, and enhanced customer service. The study emphasizes the need for transparency among social rating agencies to mitigate information asymmetries and foster better alignment between socially motivated investors and MFIs.

Cluster 4, yellow (5 items): Qualitative perspectives on microfinance. Mersland et al. [79] infer that internationalization of MFIs significantly improves social performance but has a limited effect on financial performance. Augustine's dissertation [9] delves into the intricate relationship between corporate governance, transparency, and firm performance in the microfinance industry. The focus is on firm-level transparency as a proxy for good corporate governance, demonstrating its positive influence on financial performance. In the realm of gender diversity, Augustine et al. [10] explore its connection with economic performance in African microfinance. Their findings suggest that gender diversity positively influences economic performance. Bibi et al. [17] critically review outreach indicators for MFIs, introducing novel measures reflecting market shares. These indicators offer a more robust explanation of social performance than traditional metrics, contributing to a deeper understanding of the multifaceted nature of social impact in microfinance. Casselman et al. [20] find that MFIs with religious affiliation show higher social performance.

In collective synthesis, these studies provide detailed perspectives on microfinance, encompassing the effects of internationalization, the role of corporate governance, the impact of gender diversity, and the influence of religious affiliation on social performance.

Cluster 5, purple (3 items): Determinants of microfinance mission drift. Recent research sheds light on a concerning trend within MFIs, where an escalating focus on financial performance poses a risk to the social aspect of their dual objectives. Beisland et al. [14] delve into the concept of 'personal mission drift' at the credit officer level and its implications for serving vulnerable clients. The study reveals that more experienced credit officers tend to serve fewer marginalized clients, influenced by factors such as perceived client risk, preferences for increased time efficiency, and industry incentive schemes. The findings underscore the urgency of designing credit officer incentives and training to prevent mission drift at this critical level. In a related exploration, D'Espallier et al. [27] investigate how unsubsidized MFIs manage their social mission, revealing that the absence of subsidies negatively impacts social performances. Strategies for achieving financial self-sufficiency vary across regions, with different areas compensating for non-subsidization through methods such as higher interest rates, targeting less impoverished clients, or reducing the share of female borrowers. Building on this, D'Espallier et al. [28] scrutinize the impact of uncertainty in subsidies on mission drift. Their findings indicate that interest rates increase with aid volatility, suggesting that MFIs view average loan size as a signaling device for their social mission commitment while using interest rates as an adjustment variable to cope with uncertainty. The policy recommendation is clear: deliver subsidies predictably and transparently to mitigate the challenges posed by uncertainty in sustaining MFIs' social missions.

Cluster 6 light blue (3 items): Environmental sustainability within MFIs. The studies by Allet and Hudon [4], and Forcella and Hudon [42], collectively emphasize the increasing recognition of the environmental bottom line by MFIs. They explore the characteristics influencing the environmental performance of these institutions, pointing to factors such as investor and donor concern for environmental performance, size, registration as banks, and maturity. However, financial results are not related to environmental results. Additionally, they discuss the challenges and potential of MFIs in promoting environmentally friendly practices in microenterprises, highlighting the need for caution, internal skills development, and addressing psychological and financial barriers. The study by Kumar and Prakash [64] highlights a relatively slow response to sustainability issues in the Indian banking sector, public banks are more involved in addressing the social dimensions of sustainability and private sector banks in the environmental dimension.

Cluster 7, orange cluster (3 items): Funding sources and lending techniques in Microfinance. The studies conducted by Mia and Lee [80] and Postelnicu and Hermes [101] delve into key aspects of the microfinance industry, focusing on the challenges posed by mission drift and the relationship between commercial fund, social capital formation and the financial and social performance of MFIs. Mia and Lee's study analyzing data from 169 Bangladeshi MFIs (2009-2014), identifies that commercial funding contributes to mission drift, as reflected in the increase in average loan size relative to GNI per capita. In addition, the results show the impact of macroeconomic conditions and regulatory environments on mission drift, highlighting the need for policy measures to ensure sustained access to financial services for the poor. In contrast, Postelnicu and Hermes [101] reveals that microfinance is more successful, both financially and socially, in societies conducive to the development of social capital. The use of group loans with joint liability, used to substitute the lack of physical collateral for social capital, plays a pivotal role in the success of MFI-borrower relationships. These studies collectively underscore the challenges and opportunities within the microfinance sector, emphasizing the necessity of aligning financial interests with the mission of serving the poor and fostering social capital for sustained success in poverty reduction efforts. Utilizing leverage signaling theory, Anglin et al. [6] explore the role of MFIs in crowdfunded microfinance campaigns. Their analysis underscores the importance of an entrepreneur's MFI affiliation as a third-party signal influencing

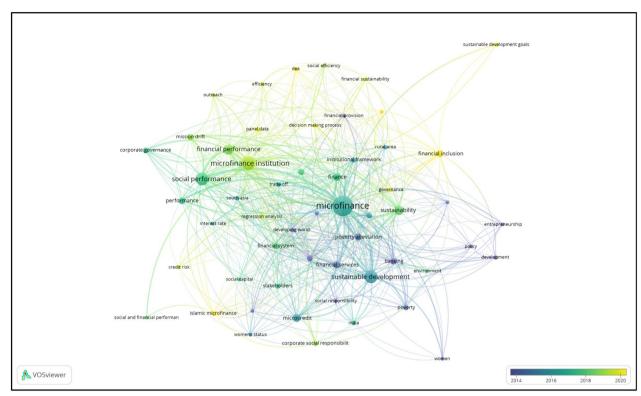


Fig. 7 Co-word, co-occurrence and all keyword. Source: Own elaboration

crowdfunding campaign performance. This provides insights into how investors balance social motives with financial concerns in crowdfunded microfinance.

The bibliographic coupling analysis segmented MFIs and CSR literature into seven thematic clusters, revealing deep interconnections among diverse research themes rooted in foundational CSR and MFI principles. It shows how studies explore operational dynamics, governance, and the balance between social and financial goals within MFIs, emphasizing the evolution of foundational concepts such as mission drift, governance mechanisms, and the trade-offs between outreach and efficiency. Key insights include the necessity for innovative practices that address local socio-economic contexts, and the emerging importance of environmental sustainability. These findings underscore the need for integrated approaches that align financial mechanisms with social impact objectives, highlighting areas ripe for further academic inquiry and practical implementation. For policymakers and practitioners, the analysis advocates for more holistic strategies that ensure MFIs can effectively fulfill their dual objectives, contributing to sustainable development in the microfinance sector, thereby enhancing the foundational themes of CSR and MFIs.

The results of the co-word analysis are shown below. This type of study, as opposed to the previous ones focused on cross-referencing and linking, is based on the study of "keywords".

The following co-word analysis, that assumes that words that frequently appear together have a thematic relationship with one another, shows the existing and future relationships among topics. Figure 7 shows the formation of 7 clusters defined by the main keywords shown below. In this case, a vision of topical evolution in MFIs' CSR research is also provided.

Early research on MFIs and CSR until 2016 focused on topics such as economic development, poverty alleviation, banking, non-governmental organizations, and financial provision, reflecting concerns about economic development and credit provision. A second stage, between 2016 and 2018, is characterized by topics such as microfinance, social performance, sustainable development, corporate governance, and trade-offs, indicating a transition towards more nuanced discussions on the social impact of microfinance institutions and the integration of CSR principles. The subsequent stage until 2020 is based on topics such as financial inclusion, Islamic microfinance, sustainable development goals, decision-making processes and Data Envelopment Analysis (DEA), suggesting a growing emphasis on inclusivity, Islamic finance principles, and aligning

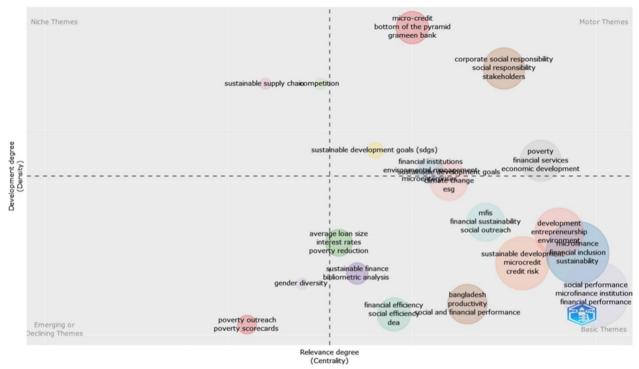


Fig. 8 Thematic map of research. Source: Own elaboration

microfinance initiatives with broader sustainable development objectives.

The analyses of Co-citation, bibliographic coupling, and co-word allow us to triangulate our conceptual and intellectual structure. These findings are further corroborated by the co-word analysis. This triangulation of results is additionally supported by the thematic mapping of keywords provided by Biblioshiny.

The thematic mapping of keywords (Fig. 8) presents research topics, essential expressions and the relationships between them. Four typologies of themes are identified based on the quadrant in which they are placed. Centrality indicates the degree of the relation among different topics, while density measures the level of development of a particular theme.

The upper-right quadrant represents the "Motor Themes", characterized by high centrality and density. CSR, stakeholders, and even sustainable development goals are the dominant topics. Closely related issues, environmental management, climate change and ESG are found in the lower part of this quadrant.

In the upper-left quadrant are sustainable supply chain and competition, subjects with high density but low centrality -indicating a stronger relation with each other but a weaker link with the keywords from other streams; they are "Specialized or Niche Theme". Moving to the lower-left quadrant are the "Emerging or Declining Themes", characterized by low centrality and density. In this quadrant, "gender diversity" as an emerges as a developing issue in MFIs governance.

Finally, the lower-right quadrant represents the basic and transversal theme(s) characterized by high centrality and low density, such as social and financial performance, poverty or Bangladesh, among many others, as depicted in the figure.

Discussion and Implications

This study conducted a SLR and a bibliometric analysis to gauge the extent of the literature on MFIs and CSR. Following the SPAR-4-SLR protocol [99], we offer an indepth review of the existing research. Using Excel, the R bibliometric tool via Biblioshiny, and VOSviewer, we reviewed 281 documents spanning from 1999 to 2023 indexed in the Scopus database. We complemented the existing literature with a performance analysis and a science mapping analysis (Donthu et al. 2017).

The observed upward trend in publications over the past 24 years reflects a growing interest in CSR's role in microfinance, particularly since 2012 with the slope accentuating from 2019, suggesting significant development potential considering the crisis resulting from the COVID-19 pandemic and the global geopolitical

situation. Prolific authors in Europe extend their collaboration with authors from developing countries, showing a broad network of highly productive interrelations. Countries such as India, Bangladesh, and Kenya stand out in their production.

The examination of the conceptual and intellectual structure through co-citation analysis, bibliographic coupling, and co-word analysis, interpreted using the 3Ss of sensemaking [68], reveals significant insights.

Theoretical Implications

The findings from this study on CSR within MFIs carry several important theoretical implications. The co-citation analysis highlights the complexity of balancing social objectives and sustainability, the need to go beyond traditional models, and the significant impact of macroeconomic contexts on MFI strategies. This aligns with the evolution of Stakeholder Theory [44] and the development of corporate strategic decision-making processes influenced by various stakeholders (e.g., [23, 31, 37, 57, 65, 91, 102, 115]).

The bibliographic coupling analysis highlights the progression of foundational concepts such as mission drift, governance mechanisms, and the trade-offs between outreach and efficiency [58, 125]. These findings underscore the need for holistic approaches and indicate that future research should increasingly focus on resilience and adaptability in CSR strategies, particularly in response to global crises.

The co-word analysis triangulates our conceptual and intellectual structure, showing a transition from topics like economic development or poverty alleviation to social performance or corporate governance, and in the latest stage towards SDGs, financial inclusion, and Islamic microfinance. This shift indicates an expanding scope of research, reflecting broader societal and environmental concerns [4, 15, 117].

This study also serves as a foundation for new research and educational endeavours by identifying key contributors and essential readings that help consolidate knowledge in the field. Additionally, the research highlights critical and underexplored areas such as digital-fintech innovations, climate change adaptations, and Islamic microfinance, providing a roadmap for future studies and informing policy and strategy development within MFIs [56, 105, 119].

By identifying gaps in internationalization, corporate governance, gender diversity, and funding mechanisms, it suggests focused attention on these areas to generate impactful future research [46].

In summary, our theoretical implications deepen the existing literature on CSR within MFIs, highlight future research topics, emphasize connections with related

study areas such as technology or social inclusion related to Shariah, and ultimately promote a framework for further research for academics and researchers.

Practical Implications

This paper has several practical implications, starting with its comprehensive and well-founded methodology. It employs various and complementary software tools, including Excel, Biblioshiny for R, and VOSviewer, and follows specific and rigorous protocols for data interpretation. These include the SPAR-4-SLR protocol and the 3Ss sensemaking approach. Such methodologies could serve as a guide for researchers conducting similar studies in their respective fields.

This work enables researchers and practitioners to pinpoint key authors, research centres, and publications in the field of CSR within MFIs, facilitating valuable connections. The analysis offers strategic insights that aid policymakers and practitioners in designing more effective CSR strategies, which could influence funding decisions, regulatory frameworks, and strategic planning in MFIs. Moreover, the detailed study serves as a robust basis for developing academic and training programs, enhancing the quality of education and preparing future leaders in the sector. It provides actionable insights for policymakers, practitioners, and academics aiming to enhance the societal impacts of MFIs.

One of the standout implications of this research is its potential to facilitate targeted impacts towards specific SDGs [53]. By linking CSR activities directly with efforts to achieve SDGs like "affordable and clean energy," "gender equality", and "industry, innovation and infrastructure", MFIs can prioritize resources, enhance reporting, and attract strategic partnerships. This not only helps optimize their contribution to the global sustainable development agenda but also positions MFIs as proactive participants in global efforts toward sustainable development.

In conclusion, this comprehensive contribution enriches academic discourse and supports practical application and strategic policy formulation in the crucial intersection of microfinance and CSR.

Conclusions

In a global context marked by the persistent challenges of poverty and inequality, Microfinance Institutions (MFIs) have emerged as key players in addressing the economic and social obstacles affecting disadvantaged communities. With over 700 million people living in extreme poverty worldwide, according to the United Nations, MFIs play a crucial role in mitigating financial vulnerability and promoting sustainable development. These efforts

aligned closely with the United Nations Sustainable Development Goals (SDGs), which aim to eradicate poverty, ensure gender equality, and improve overall well-being by 2030.

In this paper, we conducted a scientometric review of the literature on Microfinance Institutions (MFIs) and Corporate Social Responsibility (CSR), analyzing 281 publications from the Scopus database spanning January 1999 to November 2023. The need for this study became evident after a bibliographic review of existing bibliometric studies on MFIs revealed no specific focus on CSR within this sector, thus highlighting the significance of our research. Our analysis reveals a diversified body of knowledge that ranges from institutional performance and environmental sustainability to the integration of social and financial goals. The conceptual structure of this field has evolved, showing a shift from traditional operational and governance aspects to innovative practices that consider local socioeconomic contexts.

The "foundational" themes identified in the co-citation and bibliographic coupling analyses provide a robust base that emphasizes the need for innovative practices directly addressing local challenges, including environmental sustainability. This study highlights critical areas for future research and underscores the need for integrated approaches that align financial mechanisms with social impact objectives, aiming for effective and sustainable implementation in the microfinance sector.

We recommend further investigation into dimensions intersecting CSR and MFIs, with a special focus on the digital-fintech revolution, climate change, Islamic

microfinance, internationalization, corporate governance, gender diversity, and alternative funding techniques like crowdfunding. The integration of emerging technologies such as blockchain and artificial intelligence promises to reshape the financial services landscape, offering innovative products that have positive social or environmental impacts.

It is imperative that public policies consider the economic and financial challenges of these institutions, promoting their growth and sustainability. Corporate governance practices and policies play a crucial role in all organizations but are especially critical in MFIs, where cultural and social differences are key conditioning factors of economic development worldwide.

Regarding the limitations, this study was based solely on the Scopus database but could be complemented with Google Scholar and Web of Science for a broader perspective.

Finally, in terms of potential avenues for future research, there are promising opportunities for conducting framework-guided content analysis and meta-analysis. Such focused analyses can build upon the broad insights gleaned from this bibliometric analysis, providing a more comprehensive understanding of the role of MFIs in promoting corporate social responsibility and sustainable development.

Appendix

See Tables 7 and 8.

 Table 7
 Summary of bibliometric analyses on MFIs. Source: Own elaboration

Authors	Focus	Database	Documents	Period	Methodology
Akter et al [2]	Assess the performance of MEIs	Scopius	1 252	1995_2020	Ribliometric apalysis (R packade
אונפו פו מו. [2]	Assess the periorniance of mins	scopus	767,1	0202-2020	bibliometrix)
Ali et al. [3]	MFIs, micro-insurance, micro-savings, and financial inclusion	Scopus	4,681	1989–2019	Bibliometric analysis VOSviewer
Copestake et al. [25]	Review of historical accounts of microfinance over the past thirty years		6 doctoral research studies	2003–2012	SLR
Coronel-Pangol et al. [26]	Relationship between microfinance and entrepreneurship	WoS	486	2017–2022	Bibliometric study
Duvendack et al. [34]	Review the evidence of microfinance evaluations	EconLit, informaworld, ISI Web of Knowledge, JSTOR, AMED, Scopus, Zetoc, The Cochrane Library, Medline, Embase, Psychinfo	74		SLR
Fall et al. [39]	Technical efficiency in MFIs	Sciencedirect, Mendeley, Econlit, Springer, JSTOR, SSCI, Google Scholar, and Cairn	38		Meta-analysis
Gálvez-Sánchez et al. [45]	Analyse the research advances made in the field of financial inclusion	Scopus	1,731	1986–2020	Bibliometric analysis
García-Pérez et al. [46]	Investigate the contributions of microfinance to sustainability	WoS	475	1997–2015	SLR
Gora et al. [48]	Microfinance and its approaches in micro, small and medium enterprises	Scopus	631	1990–2023	Bibliometric analysis
Gutiérrez-Nieto & Serrano-Cinca [51]	Microfinance top 5% most cited papers	WoS	1,874	1997–2017	Scientometric analysis
[52]	Islamic microfinance in Indonesia	Scopus	37	2011-2022	Bibliometric analysis
[53]	Microfinance and sustainable development	Scopus	319	1996–2022	Bibliometric analysis VOSviewer
Hassan et al. [56]	Review Islamic microfinance literature	Scopus	122	2000–2020	Bibliometric approach plus content analysis
Hermes & Hudon [58]	Determinants of the financial and social performance of MFIs	EBSCO database	169	1990–2017	SLR
Kaushal et al. [63]	MFIs and empowerment of women	Scopus	395	1998–2021	Bibliometric analysis
[69]	Assess the role of ICTs for MFIs	WoS	347	1998–2021	Bibliometric
Lwesya & Mwakalobo [71]	Trends in microfinance for SMEs and MFIs	Scopus	338	2017–2022	Bibliometric analysis
Mohamed & Fauzlyyah [81]	Impact of microfinance and Islāmic microfinance on its borrowers and determinants of impact level. Focus on Bangladesh, India, Pakistan, Malaysia, and Indonesia	Emerald Management, Science Direct, Springer Link		No specific time period	SLR

Scientometric analysis and SLR Bibliometric analysis and SLR Bibliometric analysis Bibliometric analysis Bibliometric study Science mapping, Methodology Meta-analysis SLR SLR SLR 2012-March 2021 2001-mid 2019 to sep 2022 993-2019 999-2022 2001-2012 1939-2019 989-2018 2003-2020 2001-2021 Period Documents 1,210 4,049 2,168 SLR 235 891 918 524 67 75 61 Several sources (specialist systematic EBSCO, EconLit, Scopus and Science review libraries, electronic Scopus, Google Scholar and ScienceDirect Scopus and WoS Web of Science 2001-2010 Database Scopus Scopus Scopus Direct WoS WoS Results of micro-finance on vulnerable WoS Review evidence on the ability of MFIs Analyse and systematise the knowledge on gender disparities to achieve social and financial goals economic, and financial integration Review the impacts of micro-credit and micro-savings on poor people in sub-Saharan Africa Research about financial inclusion Review research on the corporate Review MFIs for promoting social, Review Islamic finance growth Islamic finance and financial Document the distribution of microfinance literature Competition among MFIs people, the demand side in financial inclusion governance of MFIs simultaneously technology Focus Table 7 (continued) Van Rooyen et al. [122] Rassel and Win, (2020) online databases, ...) Bibliometric review Nogueira et al. [94] Mushtaq et al. [88] Qudah et al., [105] Ribeiro et al. [111] Priyan et al. [104] Fijjani et al. [119] Reichert [110] Nisa et al. [92] Zaby [126] Authors

Table 8 Summary of the search results. Source: Own elaboration

Description	Results
Main information about data	
Timespan	1999:2023
Sources	187
Documents	281
Average years from publication	5.65
Average citations per documents	13.57
Average citations per year per doc,	1.921
References	12,887
Document types	
Article	281
Document contents	
Keywords plus (ID)	445
Author's keywords (DE)	737
Authors	
Authors	600
Author appearances	701
Authors of single-authored documents	63
Authors of multi-authored documents	537
Authors collaboration	
Single-authored documents	66
Documents per author	0.468
Authors per document	2.14
Co-Authors per documents	2.49
Collaboration index	2.5

Abbreviations

CSR	Corporate social responsibility
MFI	Microfinance institution
MFIs	Microfinance institutions
SDGs	Sustainable development goals
ESG	Environmental, social, and governance
SLR	Systematic literature review
MSMEs	Micro, small and medium enterprises
P2P	Peer-to-peer
SMEs	Small and medium enterprises
ICTs	Information and communication technologies
WoS	Web of science
TC	Total number of citations
NTC	Normalized total number of citations
MCP	Multiple country publications
SCP	Single country publications
TMFIs	Transforming into microfinance institutions
SACCOs	Savings and credit cooperatives
MIVs	Microfinance investment vehicles
GNI	Gross national income
DEA	Data envelopment analysis

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s43093-024-00374-w.

Additional file 1

Acknowledgements

For the time being we thank the editorial team of the Future Business Journal for accepting our manuscript for possible publication in the journal.

Author contributions

All the authors equally contributed to write the paper. All authors read and approved the final manuscript.

Funding

The study is not funded by any organization.

Data availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

Received: 16 January 2024 Accepted: 12 July 2024 Published online: 01 August 2024

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