

Mapping The Future Direction of Non-Profit Microfinance Institution Efficiency and Productivity Research: An Emerging Trend and Research Hotspot

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Abstract

This study provides a thorough analysis of published literature to investigate the progress and unexplored aspects of research on the effectiveness and efficiency of non-profit microfinance institutions (MFIs). The research employs a systematic review technique and bibliometric analysis of 233 publications indexed in Scopus from 2000 to 2023. It leverages VOS Viewer to map keyword associations, identify main themes, and reveal the evolution of publication patterns. The findings precisely identify important contributions and developing topics, highlighting regions that have been missed and proposing new routes for research. In theory, the study improves the comprehension of efficiency and production dynamics in non-profit MFIs, by giving a structured academic framework. Methodologically, it presents a novel technique to doing bibliometric analysis in the field of non-profit microfinance institution (MFI) research. The research implications suggest a growing academic interest in exploring

understudied aspects of efficiency and productivity in non-profit microfinance institutions (MFIs). The study offers important insights for policymakers, industry professionals, and researchers by highlighting the crucial role of non-profit microfinance institutions (MFIs) in providing microcredit to individuals who are not served by traditional banking systems. It emphasizes the necessity of enhancing the operational efficiency and productivity of these MFIs to maximize their social impact.

Keywords: DEA, SFA, Microfinance Institutions (MFIs), Non-Profit Organizations, Non-Banking

Introduction

The saying "Money begets money" holds true in the world of modern economics, with Smith (2010), considered the founding figure in the field, emphasizing this idea. However, the real challenge lies in securing that initial capital, a hurdle often insurmountable for those in poverty due to a lack of collateral, making traditional banking systems out of reach. Microfinance institutions (MFIs) step in as a crucial solution, providing the necessary capital to kickstart income-generating activities, and offering a promising avenue for addressing poverty. Respected researchers have coined the term as "un-bankable" to describe individuals who are regarded "un-bankable," and these microfinance institutions (MFIs) are acknowledged as valuable tools in breaking the cycle of poverty (Chowdhury & Mukhopadhyaya, 2012; Conning, 1999; Simanowitz & Walter, 2002; Widiarto & Emrouznejad, 2015). Many developing and underdeveloped nations have worked with MFIs to address challenges such as hunger, severe poverty, gender parity, and primary education to achieve their millennium development objectives.

Since the late 1970s, microfinance institutions (MFIs) have been bridging financial gaps for marginalized populations, effectively providing financial services to individuals and firms with low incomes (Hermes & Hudon, 2019). The expansion of microfinance has significantly contributed to reducing poverty, generating employment, advancing gender equality, and fostering local communities. Consequently, it has become an essential component of the financial systems in numerous countries (Tchuigoua, 2016).

In recent years, there has been a notable increase in scholarly attention to non-profit microfinance institutions, reflecting a growing interest in understanding their efficiency and productivity dynamics. This study aims to comprehensively map the evolution of non-profit microfinance institution efficiency and productivity research, using a thorough bibliometric lens. By evaluating publication patterns from 2000 to 2023, the research seeks to uncover temporal nuances shaping this domain. The study also aims to analyse the conceptual structure and thematic evolution within the literature on non-profit microfinance institutions, addressing questions about publication trends, top authors, subject areas, active journals, highly cited articles, and emerging keywords. The findings will not only assist researchers in identifying key contributors and trends but also highlight areas for future research and propose novel avenues for exploration. The subsequent sections of the paper will delve into a comprehensive literature analysis, methodology, findings, and discussions to provide a holistic view of the current state and future directions of research in this field.

The primary motivation for conducting this study on the efficiency and productivity of non-profit microfinance institutions (MFIs) stems from a critical need to address financial inclusion for the underbanked populations. Traditional banking systems often exclude individuals lacking collateral, thereby perpetuating cycles of poverty. By focusing on non-profit MFIs, this research aims to explore how these institutions can effectively provide microcredit to those who are not served by conventional banks, thus playing a crucial role in

poverty alleviation and economic empowerment. Furthermore, the study leverages bibliometric analysis to uncover trends, themes, and gaps within existing literature from 2000 to 2023. This comprehensive approach is designed to enhance understanding of the operational dynamics of non-profit MFIs, providing a structured academic framework for future research. It also aims to contribute methodologically by demonstrating a novel approach to bibliometric analysis within the context of non-profit microfinance.

Literature Review

Efficiency And Productivity of Microfinance Institutions (MFIs) Previous Studies

The examination of microfinance institutions (MFIs) that are not affiliated with banks or non-profit organizations highlights the significance of efficiency and productivity performance as key factors influencing their ability to cater to marginalized people, particularly in developing nations. In recent years, scholars have increasingly emphasized on the efficiency and productivity of non-profit microfinance institutions (MFIs) where a series of research articles delves into various viewpoint of this significant subject. The research conducted by Tchuigoua (2014) investigates the intricacies of the capital structure of microfinance institutions, which encompass cooperatives, banks, non-bank financial institutions (NBFIs), and non-governmental organizations (NGOs). The research highlights the importance of understanding this structure to evaluate the efficiency and productivity of microfinance institutions (MFIs).

Researcher, Abrar et al (2021) conducted a comprehensive study that examines the correlation between microfinance institutions and economic development in the context of the finance-growth nexus and address the critical importance of efficiency in achieving the desired results. Next, Mallika and Zhao (2017) conducted a study that evaluated the social efficiency of microfinance institutions in Sri Lanka. The research offers a contextualized comprehension of efficiency and productivity within the specific setting of Sri Lanka, as well as valuable insights into the function of these organizations in poverty reduction. In addition, Rahman and Mazlan (2014) redirect their attention to Bangladesh and investigate the factors that affect the financial sustainability of non-governmental microfinance organizations. The authors prioritize the concurrent pursuit of financial sustainability and poverty reduction as critical objectives. In Nigeria, the study conducted by Babajide et al (2017) examines the correlation between the financial sustainability and outreach programs of Microfinance Institutions (MFIs) and the credit distribution procedures utilized. The study highlights the critical need for implementing efficient credit delivery practices.

The study conducted by Cull et al (2007) explores the global perspective and offers a thorough examination of prominent microbanks. The research underscores the critical role of profitability in the effective reduction of global poverty, emphasising the substantial correlation between financial performance and outreach. Mallika and Zhao (2017) contend that social efficacy is crucial in Sri Lanka. Proposing that the potential to improve the social impact and effectiveness of microfinance institutions (MFIs) in the context of poverty reduction is also present when cost efficiency is improved. The study conducted by Babajide et al (2017) in Nigeria underscores the negative correlation between the financial sustainability and outreach programmes of microfinance institutions (MFIs) and credit distribution methods. The authors engage in a debate regarding the implementation of more efficient practices by non-profit MFIs.

The article "Practise What You Preach: Microfinance Business Models and Operational Efficiency" by Bos and Millone (2015) investigates the ongoing debate concerning profit-oriented and non-profit microfinance institutions (MFIs) which concludes that both types of

MFIs can achieve operational efficiency, suggesting that non-profit MFIs have the potential to match the efficiency levels of their profit-oriented counterparts. In conclusion, the academic literature stresses how crucial the efficiency and productivity are to microfinance institution (MFI) operations, separate from traditional banks or organisations that aim to generate more money. While the research carried out by Babajide et al (2017); Bos & Millone (2015); Cull et al (2007); Mallika and Zhao (2017) offers valuable insights into the various factors that affect the performance of non-profit microfinance institutions (MFIs).

These studies also propose strategies for improving the efficiency and effectiveness of these institutions. Collectively, these findings contribute to a comprehensive understanding of the efficiency and productivity performance of non-bank or non-profit microfinance institutions.

Previous research has consistently addressed the subject of efficiency and productivity, with a continuous stream of publications on the issue. To further enhance the discourse in this particular field, it is important to identify and delve into a growing trend issue and research hotspots. This study aims to support the researcher by utilising bibliometric analysis to obtain the necessary information.

Bibliometric Analysis of Microfinance Institutions (MFIs) Previous Studies

The utilisation of bibliometric analysis in research papers has increased. Various aspects of this analysis have been explored, including the application of Data Envelopment Analysis (DEA) in the banking sector. Cvetkoska and Savic (2021) conducted a thorough examination and visualisation of bibliometric data in their study on the application of DEA in banking where this article addresses the effectiveness of bibliometric techniques in the banking sector. In addition, by conducting a bibliometric analysis of publication patterns in microcredit research, Sang (2022) makes a scholarly contribution on a valuable resource for academicians in finance, economics, and business management by offering an impartial evaluation of the microcredit industry.

Moreover, Liu et al (2022) have made a significant contribution to the field of bibliometrics by investigating the correlation between microfinance and ICTs. Their research entails a bibliometric analysis designed to identify and analyse trends and patterns in research papers. This research underscores the critical importance of information and communication technology in shaping the microfinance sector. In their most recent study, Ingale and Paluri (2022) conducted a bibliometric analysis to investigate the correlation between financial literacy and financial behaviour and sought to identify novel themes and partnerships within this field. This investigation underscores the significance of financial education in developing individuals' financial decision-making.

Additionally, the bibliometric review of Islamic microfinance conducted by Hassan et al.(2021) is a valuable addition to the existing body of literature. The analysis of research trends and themes in this discipline is the primary objective of their research. The importance of mobile banking services in the promotion of Islamic microfinance solutions is underscored in this study. In their study, Ribeiro et al (2022) undertake an extensive bibliometric analysis and systematic literature evaluation to examine the extent to which microfinance contributes to the advancement of its clientele. This research examines the socioeconomic consequences, the division between social performance and mission drift, and the significance of entrepreneurship and financial innovation in mitigating poverty.

In their most recent investigation, Akter et al (2021) undertakes a comprehensive knowledge-mapping exercise to examine the existing body of research on microfinance

performance. The authors find several prominent themes that have emerged in this field, including poverty alleviation, group lending, and credit scoring. This study highlights the significance of comprehending the efficacy of microfinance organizations in attaining their objectives.

In general, the aforementioned publications offer significant contributions to the understanding of research patterns and focal points in the field of microfinance. These include the examination of the influence of information and communication technologies (ICTs), the importance of financial literacy, the exploration of Islamic microfinance, and the evaluation of microfinance's effects on client development and performance. The authors enhance the body of scholarly work through the implementation of bibliometric analyses and systematic literature evaluations, thus offering a comprehensive portrayal of the research terrain in the field of microfinance. However, it is important to note that despite the presence of bibliometric analysis in microfinance institutions (MFIs), there is a need for further contributions from researchers. This study primarily focuses on a specific aspect of MFIs, and it is crucial to explore other issues and viewpoints as well.

Methodology

Bibliometric Analysis and Indicator

The application of bibliometrics, a research methodology originating from the field of library and information sciences Huang & Ho (2011), is a robust approach to assess many interconnected elements of written discourse (Sengupta, 1992). Narin et al (1994) highlights the evaluative nature of bibliometrics, employing quantitative measures such as publication counts, patent counts, and citation counts to construct performance indicators within the fields of science and technology.

The emergence of this analytical technique can be attributed to the necessity of addressing the expanding scope of knowledge, which encompasses a variety of activities, including the quantification of scientific activity, the evaluation of the influence of articles through citations, and the visualisation of the connections between various articles (Narin et al., 1994). Bibliometric analysis is a scientific methodology that employs statistical techniques to evaluate a wide variety of published resources, including books, journals, and other publications, in its practical application.

Citation graphs are constructed as a visual representation of document citations in the analytical technique known as "Citation Analysis" (Linnenluecke et al., 2020; Schaer, 2013). This phase enables the identification of noteworthy publications within a specific research domain, as well as the comprehensive evaluation of multiple components, such as the selected study area and researchers (Donthu et al., 2021; Ellegaard & Wallin, 2015).

Data Sources and Sample Description

This study takes advantage of a systematic review and bibliometric analysis to visually represent and delineate the intellectual structure and emerging trends in the efficiency and productivity research of non-profit microfinance institutions (MFIs) from 2000 to 2023. Data retrieval from the Scopus database focuses on precision, using a specific query string and advanced search techniques outlined in the publication "Mapping the Future Direction of Non-Profit Microfinance Institution Efficiency and Productivity Research: An Emerging Trend and Research Hotspot." By applying the query: ((TITLE-ABS-KEY(microfinance OR microfinance OR microcredit OR micro-credit) AND TITLE-ABS-KEY(microfinance AND institutions OR mfis OR non-profit AND microfinance OR non-banking) AND TITLE-ABS-KEY(efficiency OR

productivity) AND NOT TITLE-ABS-KEY(bank OR banking)) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "cp")) AND (LIMIT-TO (SRCTYPE, "j") OR LIMIT-TO (SRCTYPE, "p")) AND (LIMIT-TO (LANGUAGE, "English"))), the study aim to minimize potential biases and distortions in the dataset. A total of 233 papers that met the search criteria were identified, and a screening procedure, involving abstract reviews and full-length document examinations, led to the exclusion of 41 articles related to profit institutions. The data, comprised of author details, article information, and cited references, undergoes thorough analysis using descriptive, bibliometric, and network analysis techniques. The process of searching for data is illustrated in Table 1 below.

Descriptive analysis is instrumental in calculating various data point frequencies, encompassing yearly publication rates, highly productive authors, closely related subject areas, active journals, highly cited papers, emerging keywords, influential institutions, and leading contributor countries. VOSViewer is then employed for co-occurrence analysis of keywords, revealing rising patterns and research focal points within the subject matter. Additionally, network analysis techniques, including network, overlay, and density visualizations, contribute to reinforcing trend identification. This comprehensive approach allows for a nuanced exploration of the efficiency and productivity research landscape of non-profit MFIs, offering valuable insights into the intellectual structure and evolving trends in this field.

This study employs both bibliometric analysis and a systematic review to delineate and visually represent the intellectual structure and emerging trends in the efficiency and productivity research of non-profit microfinance institutions (MFIs) from 2000 to 2023. Data retrieval from the Scopus database focused on precision, using a specific query string and advanced search techniques outlined in the publication "Mapping the Future Direction of Non-Profit Microfinance Institution Efficiency and Productivity Research: An Emerging Trend and Research Hotspot." By applying the query, the study aimed to minimize potential biases and distortions in the dataset. A total of 233 papers that met the search criteria were identified, and a screening procedure, involving abstract reviews and full-length document examinations, led to the exclusion of 41 articles related to profit institutions. The data, comprised of author details, article information, and cited references, undergoes thorough analysis using descriptive, bibliometric, and network analysis techniques.

Table 1

Systematic Literature Review characteristics

Research phase	Details
Development date	September 2023
Articles retrieved from SCOPUS	n=274
Scope and coverage:	Search field: Title, keywords, and abstract Time frame: All
Record identified, screened, and removed	n=41
Limit to:	Language: English Source type: Journal Document Type: Articles Subject area: Social science, econometrics, business, and finance, and multidisciplinary

Keywords and the search string:

((TITLE-ABS-KEY(microfinance OR micro-finance OR microcredit OR micro-credit) AND TITLE-ABS-KEY(microfinance AND institutions OR mfis OR non-profit AND microfinance OR non-banking) AND TITLE-ABS-KEY(efficiency OR productivity) AND NOT TITLE-ABS-KEY(bank OR banking)) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "cp")) AND (LIMIT-TO (SRCTYPE, "j") OR LIMIT-TO (SRCTYPE, "p")) AND (LIMIT-TO (LANGUAGE, "English")))

Records included for bibliometric analysis n=233

Descriptive analysis is instrumental in calculating various data point frequencies, encompassing yearly publication rates, highly productive authors, closely related subject areas, active journals, highly cited papers, emerging keywords, influential institutions, and leading contributor countries. VOSViewer is then employed for co-occurrence analysis of keywords, revealing rising patterns and research focal points within the subject matter. Additionally, network analysis techniques, including network, overlay, and density visualizations, contribute to reinforcing trend identification. This comprehensive approach allows for a nuanced exploration of the efficiency and productivity research landscape of non-profit MFIs, offering valuable insights into the intellectual structure and evolving trends in this field.

Results

Publication Trend by Year

For 37 years, from 1996 to 2023, Figure 1 below, visually illustrates the shifts in productivity and efficiency within non-profit microfinance institutions (MFIs). The number of publications has seen significant growth since its inception in 1996, reaching a total of 233 publications by 2023. Upon closer inspection, a consistent increase in publications is evident, with a slight rise from 2006 to 2011 and a steady upward trend from 2013 to 2015. During this period, annual publications ranged from 3 to 7 between 2006 and 2011 and increased to 12 to 20 from 2013 to 2015. This noteworthy rise in publication counts underscores the impact and importance of our research efforts.

Furthermore, there was a notable increase in publications from 15 to 23 between 2012 and 2022, constituting approximately 6.44% to 9.87% of the total. The figures reveal significant spikes in interest or research activity in 2010, 2013, 2015, 2018, 2019, and 2021. In particular, 2021 saw a substantial surge in publications, totalling 23 and representing 9.87% of all publications. Examining the cumulative percentage allows us to assess how each year's research has influenced the field. There has been a consistent rise in curiosity surrounding this specific area of study, as evidenced by an increasing number of dedicated scholars and educators actively exploring this subject.

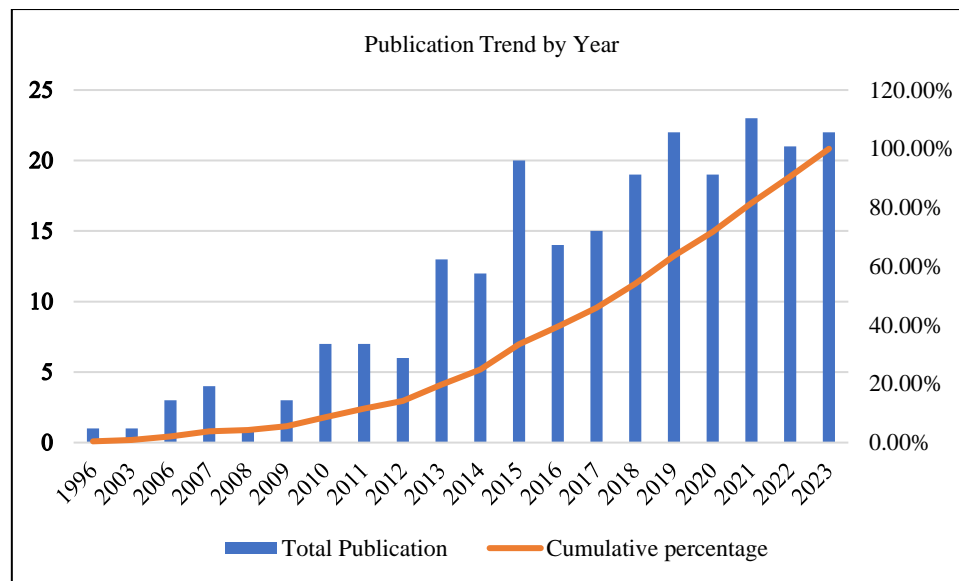


Figure 1. Publication trend by year

Overall, trend analysis, as indicated by Ribeiro et al (2022), reveals a continuous increase in publication numbers over the years. This suggests a growing interest in microfinance institutions as a subject of study. The heightened frequency of studies on microfinance institutions is attributed to their recognized importance in poverty reduction, the promotion of financial inclusion, and ensuring effective service provision by institutions (Abrar et al., 2021; Chikalipah, 2018; Lwesya & Mwakalobo, 2023; Morduch, 1999; Ribeiro et al., 2022).

Top 10 Most Active Authors

Table 2 below, serves as a key reference for identifying the primary contributors to research on efficiency and productivity in non-profit microfinance institutions (MFIs). Notably, Kamaruddin, F., and Mia, M.A. emerge as the most prolific authors in this field, each boasting 8 publications, constituting 3.43% of the total publications individually. These authors are affiliated with Universiti Putra Malaysia and Universiti Sains Malaysia, respectively, both based in Malaysia. Additionally, Hussain, H.I., and Mersland, R. share the third position, each with 7 publications, making up 3.00% of the total publications each. They are associated with Taylor's University Malaysia and Universitet i Agder, situated in Malaysia and Norway, respectively.

Furthermore, other contributors have fewer publications, ranging from 4 to 5 each, comprising 1.72% to 2.15% of the total publications each. These authors represent institutions in diverse countries, including Canada, Belgium, Italy, Ghana, and the United States. The active involvement of authors from a variety of countries, universities, research centres, and international organisations indicates that research on the efficiency and productivity of non-profit MFIs is a global collaborative endeavour that is conducted in a variety of settings and contexts (Parmeter & Hartarska, 2021). Furthermore, this discovery emphasizes a significant research concentration in Malaysia, suggesting a necessity for ongoing research ventures that could promote greater collaboration among countries and institutions, thereby creating partnership opportunities (Mansurali & Swamynathan, 2013).

Table 2

Top 10 most active authors

No.	Author Name	TP	%	Affiliation	Country
1.	Kamarudin, F.	8	3.43%	Universiti Putra Malaysia	Malaysia
2.	Mia, M.A.	8	3.43%	Universiti Sains Malaysia	Malaysia
3.	Hussain, H.I.	7	3.00%	Taylor's University Malaysia	Malaysia
4.	Mersland, R.	7	3.00%	Universitetet i Agder	Norway
5.	Wijesiri, M.	6	2.58%	Université du Québec à Montréal	Canada
6.	Hudon, M.	5	2.15%	Centre d'Etudes Economiques et Sociales de l'Environnement (CEESE)	Belgium
7.	Meoli, M.	5	2.15%	Università degli Studi di Bergamo	Italy
8.	Adusei, M.	4	1.72%	Kwame Nkrumah University of Science & Technology	Ghana
9.	Anwar, N.A.M.	4	1.72%	Universiti Sains Islam Malaysia	Malaysia
10.	Hartarska, V.	4	1.72%	Auburn University	United States

Subject Area

This wide range of study shows a lively cross-disciplinary exploration by going deeper into a lot of different topics. Beyond the major players, we find a tapestry of smaller subject areas, each contributing its unique brushstroke to the canvas of non-profit microfinance institution efficiency and productivity (Gudjonsson, 2017; Hartarska & Mersland, 2009; Liñares-Zegarra & Wilson, 2018; Luthans et al., 2010; Parwez & Patel, 2022; Ullah & Khan, 2017). For example, Environmental Science only has 17 publications, which is 7.30% of the total. This is a small but notable showing. This signals a growing awareness of the environmental implications tied to microfinance operations perhaps a nod to sustainability and the ecological footprint of these institutions (Luthans et al., 2010).

Next, Computer Science and Engineering, with 13 publications at 5.56%, suggests an increasing integration of technology into the landscape of microfinance research. This could encompass anything from digital platforms facilitating financial transactions to cutting-edge data analysis techniques shaping the future of these institutions (Luthans et al., 2010). Psychology, with its 10 publications at 4.29%, adds a fascinating dimension. It prompts questions on the psychological impact of microfinance on individuals and communities. The inquiry arises regarding the psychological ramifications of microfinance on both individuals and communities. The present inquiry seeks to explore the impact of financial empowerment on mental well-being, while also examining the extent to which psychology contributes to the outcomes of microfinance efforts (Luthans et al., 2010).

Down the list, Health Professions makes a cameo with 8 publications, contributing 3.43% to the total. This opens up inquiries into the intersection of health and microfinance—perhaps exploring how improved financial stability correlates with better health outcomes (O'Malley & Burke, 2016). Art and Humanities, though a smaller player with only 4 publications (1.72%), introduces a creative touch to the research landscape. Could artistic expression and cultural contexts be shaping the narrative of microfinance, influencing its efficacy in diverse communities? (Luthans et al., 2010).

This in-depth study goes beyond the limits of standard fields of study and paints a lively picture of how researchers can work together. It is not merely about numbers and ratios; it is

also about combining ideas from business, the social sciences, economics, and many other fields we might not expect. This tapestry of knowledge speaks volumes to the richness of perspectives contributing to our understanding of non-profit microfinance institution efficiency and productivity (Gudjonsson, 2017; Hartarska & Mersland, 2009; Liñares-Zegarra & Wilson, 2018; Luthans et al., 2010; Parwez & Patel, 2022; Ullah & Khan, 2017).

Table 3

Subject Area

No.	Subject Area	TP	%	No.	Subject Area	TP	%
1.	Economics, Econometrics and Finance	113	48.50%	10.	Arts and Humanities	11	4.72%
2.	Social Sciences	93	39.91%	11.	Energy	11	4.72%
3.	Business, Management and Accounting	83	35.62%	12.	Earth and Planetary Sciences	5	2.15%
4.	Decision Sciences	17	7.30%	13.	Medicine	2	0.86%
5.	Environmental Science	17	7.30%	14.	Multidisciplinary	2	0.86%
6.	Computer Science	16	6.87%	15.	Physics and Astronomy	2	0.86%
7.	Engineering	14	6.01%	16.	Psychology	2	0.86%
8.	Mathematics	12	5.15%	17.	Biochemistry, Genetics and Molecular Biology	1	0.43%
9.	Agricultural and Biological Sciences	11	4.72%	18.	Nursing	1	0.43%

Top 10 Most Active Journals

The Scopus database provides us with various metrics—CiteScore, SJR, and SNIP—to evaluate the quality of journal publications. In 2022, CiteScore for a document is the average number of citations it received since publication. SJR considers the importance of cited references, while SNIP compares actual citations to predicted ones for subject categories. Mongeon and Paul-Hus (2015) noted that three journals—Savings and Development, Enterprise Development and Microfinance, and Advanced Science Letters—are no longer in Scopus. However, the remaining journals in the table are still part of the database.

Looking at Table 4 below, "World Development" invests the most in researching non-profit microfinance organizations with 9 articles, comprising 3.86% of total publications in the subject area. Their CiteScore, SJR, and SNIP values (10.9, 2.504, 2.613) indicate significant citation impact. In 2022, "Savings and Development" ranked second with 6 articles (2.58% of total publications), but its citation values are relatively low (CiteScore 0.1, SJR 0.107, SNIP 1.106) compared to "World Development." Similar to Journals like "Annals of Public and Cooperative Economics," "Applied Economics," and "Enterprise Development and Microfinance" which contributed five articles each but have lower metrics than "World Development." In addition, other less active journals like "Advanced Science Letters," "Benchmarking," "IOP Conference Series Earth and Environmental Science," and "Journal of International Development" published four articles with lower metrics than "World Development."

Researchers in related fields are advised to submit to reputable journals like "World Development" or "Savings and Development" for higher impact. For the latest on non-profit

microfinance efficiency, check these journals, which offer a solid foundation for further research.

Table 4

Top 10 most active journals

<i>N</i> <i>o.</i>	<i>Source Title</i>	<i>T</i> <i>P</i>	<i>%</i>	<i>Publisher</i>	<i>Cite</i> <i>Score</i> <i>2022</i>	<i>SJR</i> <i>2022</i>	<i>SNIP</i> <i>2022</i>
1.	World Development	9	3.8 6%	Elsevier	10.9	2.504	2.613
2.	Savings And Development*	6	2.5 8%	Giordano dell'Amore Foundation	0.1 [2017]	0.107 [2019]	1.106 [2019]
3.	Annals Of Public And Cooperative Economics	5	2.1 5%	Wiley-Blackwell	3.2	0.542	1.042
4.	Applied Economics	5	2.1 5%	Taylor & Francis	3.4	0.59	1.089
5.	Enterprise Development And Microfinance**	5	2.1 5%	Practical Action Publishing	0.6	0.189	0.46
6.	Advanced Science Letters***	4	1.7 2%	American Scientific Publishers	0.4 [2016]	0.126 [2019]	0.318 [2020]
7.	Benchmarking	4	1.7 2%	Emerald Publishing	9.7	1.185	1.843
8.	IOP Conference Series Earth and Environmental Science	4	1.7 2%	IOP Conference Series	0.8	0.197	0.255
9.	Journal Of International Development	3	1.2 9%	Wiley-Blackwell	2.4	0.489	1.029
10	Strategic Change	3	1.2 9%	Wiley-Blackwell	3.7	0.58	0.761

Note: CS – CiteScore measures average citations received per document published in the serial in 2022; SJR – SCImago Journal Rank measures weighted citations received by the serial in 2022; SNIP – Source Normalized Impact per Paper that measures actual citations received relative to citation expected for the serial's subject field in 2022

* Scopus coverage years: from 1982 to 2016(coverage discontinued in Scopus)

** Scopus coverage years: from 2007 to 2022

***Scopus coverage years: from 2010 to 2017(coverage discontinued in Scopus)

Top 10 Most Cited Articles

In the world of academia, highly cited papers are distinguished by rankings within the top 1% for the number of citations compared to other papers in the same field and year. A higher citation count indicates the paper's quality, presenting a well-supported argument with rigour, originality, and academic significance in its respective field. Instead of Scopus Citation, this analysis employs Field-Weighted Citation Impact (FWCI), which assesses how well an article is cited in comparison to similar documents over three years. A value exceeding 1.00 signifies that the document surpasses average expectations, considering factors such as publication year, type, and associated disciplines.

According to Table 5 below, the leading paper in our research area is "Outreach and Efficiency of Microfinance Institutions" by Hermes, Lensink, and Meesters (2011), boasting 398 citations and an FWCI of 12.89. Followed closely with "Microfinance Mission Drift?" by Mersland and Strøm (2010) with 346 citations and an FWCI of 11.45. Other noteworthy papers include "On the Efficiency Effects of Subsidies in Microfinance: An Empirical Inquiry" by Hudon and Traca (2011), "Capital Structure and Sustainability: An empirical study of microfinance institutions" by Bogan (2012), and "Efficiency of microfinance institutions in Sri Lanka: A two-stage double bootstrap DEA approach" by Wijesiri, Viganò, and Meoli (2015).

Table 5

Top 10 most cited articles

No.	Author	Year	Title	Source	TC in SCOPUS	FWCI
1.	Hermes, N., Lensink, R., Meesters, A.	2011	Outreach and Efficiency of Microfinance Institutions	World Development, 39(6), pp. 938–948	398	12.89
2.	Mersland, R., Strøm, R.Ø.	2010	Microfinance Mission Drift?	World Development, 38(1), pp. 28–36	346	11.45
3.	Hudon, M., Traca, D.	2011	On the Efficiency Effects of Subsidies in Microfinance: An Empirical Inquiry	World Development, 39(6), pp. 966–973	132	3.84
4.	Bogan, V.L.	2012	Capital structure and sustainability: An empirical study of microfinance institutions	Review of Economics and Statistics, 94(4), pp. 1045–1058	129	3.44
5.	Wijesiri, M., Viganò, L., Meoli, M.	2015	Efficiency of microfinance institutions in Sri Lanka: A two-stage double bootstrap DEA approach	Economic Modelling, 47, pp. 74–83	127	8.17
6.	Blanco, A., Pino-Mejías, R., Lara, J., Rayo, S.	2013	Credit scoring models for the microfinance industry using neural networks: Evidence from Peru	Expert Systems with Applications, 40(1), pp. 356–364	126	4.74

7.	Hartarska, V., Shen, X., Mersland, R.	2013	Scale economies and input price elasticities in microfinance institutions	Journal of Banking and Finance, 37(1), pp. 118–131	103	4.01
8.	Tchakoute-Tchuigoua, H.	2010	Is there a difference in performance by the legal status of microfinance institutions?	Quarterly Review of Economics and Finance, 50(4), pp. 436–442	102	1.95
9.	Louis, P., Seret, A., Baesens, B.	2013	Financial Efficiency and Social Impact of Microfinance Institutions Using Self-Organizing Maps	World Development, 46, pp. 197–210	98	4.08
10.	Gertler, P., Levine, D.I., Moretti, E.	2009	Do microfinance programs help families insure consumption against illness?	Health Economics, 18(3), pp. 257–273	97	1.84

The analysis highlights reputable journals like World Development and Review of Economics and Statistics as the preferred sources for highly cited papers in non-profit microfinance institution efficiency and productivity. These papers, widely acknowledged by researchers, underscore the topic's high impact and relevance. Essentially, the analysis indicates a growing interest in non-profit microfinance institution efficiency and productivity, mirroring the increasing recognition of microfinance's role in fostering financial inclusion and alleviating poverty. There is an urgent need for these institutions to operate efficiently and effectively to achieve their objectives.

Top 20 Most Emerging Keywords

In Table 6 below, we present the leading 20 emerging keywords, ranked based on the total number of publications and their respective percentages. Among these, four keywords stand out, offering valuable insights for researchers and policymakers seeking to address the evolving challenges and opportunities in the field.

The key players in non-profit microfinance institutions' efficiency and productivity research are microfinance, microfinance institutions, efficiency, and Data Envelopment Analysis (DEA) and Sustainability. Microfinance takes the lead with 117 publications, constituting 50.21% of the total publications. Following closely are microfinance institutions, efficiency, DEA, and Sustainability, occupying significant positions with 63, 43, and 23 publications, contributing 27.04%, 18.45%, and 9.87% to the total publications, respectively.

Table 6

Top 20 most emerging keywords

No.	Keywords	TP	%	No.	Keywords	TP	%
1.	Microfinance	117	50.21%	11.	Financial Performance	16	6.87%
2.	Microfinance Institutions	63	27.04%	12.	Financial System	15	6.44%
3.	Efficiency	43	18.45%	13.	Efficiency Measurement	13	5.58%
4.	Data Envelopment Analysis	23	9.87%	14.	MFI's	12	5.15%
5.	Sustainability	23	9.87%	15.	Agriculture	11	4.72%
6.	Finance	20	8.58%	16.	DEA	11	4.72%
7.	Financial Efficiency	19	8.15%	17.	Institutional Framework	11	4.72%
8.	Productivity	19	8.15%	18.	Financial Inclusion	10	4.29%
9.	Outreach	18	7.73%	19.	Poverty Alleviation	10	4.29%
10.	Social Efficiency	18	7.73%	20.	Financial Services	9	3.86%

The analysis of these emerging keywords reveals a dynamic and multidimensional research landscape, exploring diverse themes within this research area. Furthermore, the findings suggest that researchers may continue to concentrate on key themes such as the utilization of DEA and other measurement tools, sustainability, and financial inclusion, along with a focus on poverty alleviation, agriculture, and the institutional framework.

Most Active Institutions

In Table 7 below, the top 18 institutions, as ranked by the total number of publications, reveal that the top 5 most influential institutions all hailed from Malaysia. Universiti Malaya, Universiti Sains Islam Malaysia, Taylor's University Malaysia, Universiti Sains Malaysia, and Universiti Putra Malaysia stand out with 9 or 8 publications each, contributing 3.86% or 3.43% to the total publications, respectively. This underscores Malaysia's pivotal role as a research hub in this field, with these institutions at the forefront of shaping its trajectory.

The remaining institutions had 3 to 6 fewer publications each, accounting for 1.29% to 2.58% of the total publications. Notably, these institutions are spread across a variety of countries, including Belgium, Italy, Poland, the United States, Ghana, Venezuela, the Netherlands, the United Kingdom, Spain, and Australia.

Table 7

Most active institutions

No	Institution	T P	%	Country
1.	Universiti Malaya	9	3.86 %	Malaysia
2.	Universiti Sains Islam Malaysia	9	3.86 %	Malaysia
3.	Taylor's University Malaysia	9	3.86 %	Malaysia

4.	Universiti Sains Malaysia	8	3.43 %	Malaysia
5.	Universiti Putra Malaysia	8	3.43 %	Malaysia
6.	Universitetet i Agder	8	3.43 %	Norway
7.	Université Libre de Bruxelles	6	2.58 %	Belgium
8.	Università degli Studi di Bergamo	5	2.15 %	Italy
9.	Akademia Ekonomiczno-Humanistyczna w Warszawie	5	2.15 %	Poland
10.	Universiti Teknologi MARA	4	1.72 %	Malaysia
11.	Auburn University	4	1.72 %	United States
12.	Kwame Nkrumah University of Science & Technology	4	1.72 %	Ghana
13.	University Polytechnic Antonio Jose de Sucre	3	1.29 %	Venezuela
14.	University College of Technology Sarawak	3	1.29 %	Malaysia
15.	Rijksuniversiteit Groningen	3	1.29 %	Netherlands
16.	KU Leuven	3	1.29 %	Belgium
17.	University of Southampton	3	1.29 %	United Kingdom
18.	Universidad de Granada	3	1.29 %	Spain
19.	Curtin University	3	1.29 %	Australia

In summary, the analysis sheds light on the prominence of Malaysian and European institutions in this field. It underscores the imperative for increased collaboration and diversity, given the concentrated research focus in Malaysia and Europe. This observation suggests that these regions function as key research hubs. Furthermore, the representation of institutions from other regions, currently underrepresented, emphasizes the necessity for expanded research initiatives, collaborative efforts, and knowledge exchange to propel the field forward.

Top 20 Countries

The analysis of nations that are actively engaged in studying the effectiveness and productivity of non-profit microfinance organizations demonstrates a wide-ranging international involvement in this area of research. Malaysia, India, and the United States are prominent leaders in this field, with several other countries also making noteworthy contributions. Malaysia has emerged as the most prominent participant, with a notable 36

publications (TP) and a significant proportion of 15.45%. Following closely behind is India, with 32 publications, accounting for 13.37% of the total. Furthermore, it is worth noting that the study domain under consideration demonstrates a strong presence in several countries, namely the United States, Indonesia, Belgium, France, Italy, and the United Kingdom. Each of these countries has made significant contributions to the field, with a publication count ranging from 10 to 25 publications. In contrast, several countries, such as Canada, Norway, Poland, Bangladesh, Pakistan, South Africa, Tunisia, China, Netherlands, Spain, and Vietnam, have made a relatively modest contribution of less than 10 papers.

Table 8
 Top 20 countries that contributed to publications.

No.	Country	TP	%	No.	Country	TP	%
1.	Malaysia	36	15.45%	11.	Poland	8	3.43%
2.	India	32	13.73%	12.	Bangladesh	7	3.00%
3.	United States	25	10.73%	13.	Pakistan	7	3.00%
4.	Indonesia	17	7.30%	14.	South Africa	7	3.00%
5.	Belgium	15	6.44%	15.	Tunisia	7	3.00%
6.	France	13	5.58%	16.	China	6	2.58%
7.	Italy	10	4.29%	17.	Netherlands	6	2.58%
8.	United Kingdom	10	4.29%	18.	Spain	6	2.58%
9.	Canada	9	3.86%	19.	Viet Nam	6	2.58%
10.	Norway	8	3.43%	20.	Ethiopia	5	2.15%

This analysis provides a detailed picture of the global distribution of research activities on the efficiency and productivity of non-profit microfinance institutions. It highlights key contributors and signifies potential areas for collaboration and knowledge exchange. The findings underscore the global nature of research efforts in this domain, with institutions from diverse regions actively contributing. Policymakers in these active countries can utilize research insights to shape policies aimed at enhancing the efficiency and productivity of non-profit microfinance institutions.

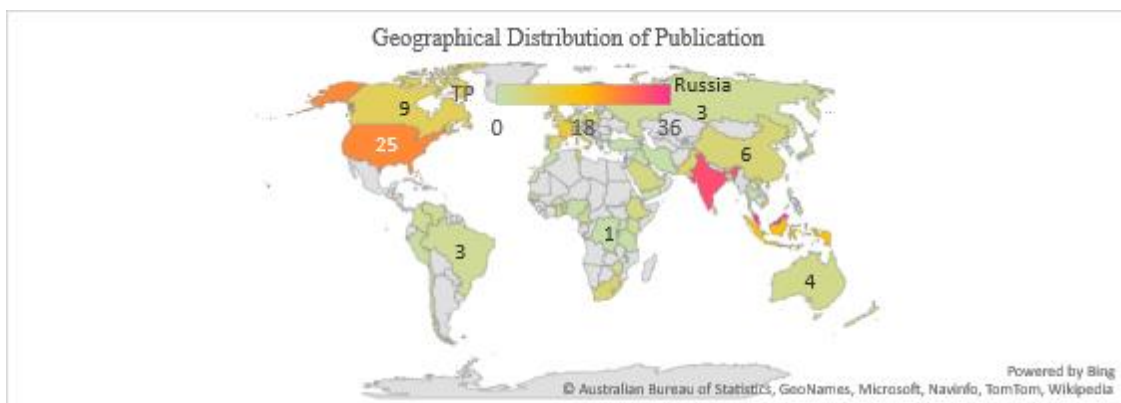


Figure 2: Distribution of Publication by country

The Divergence of Conceptual Structure

To clarify the underlying theoretical structure, this study initiates a thorough examination of keyword co-occurrence patterns based on the keywords selected by the author. The justification for using author-assigned keywords is based on their ability to accurately express the core content of articles. These keywords effectively capture the condensed conceptual and thematic essence of the individual articles. By utilizing network visualization, the analysis of co-occurring keywords conducted through VOSViewer reveals the dominant and often-used terms that are especially related to the effectiveness and efficiency of non-profit microfinance institutions.

Table 9

Top 20 link strength of keywords occurrence

No.	Keywords	Occurrence	Total link strengths
1.	Microfinance	82	110
2.	Microfinance institution	63	95
3.	Efficiency	37	72
4.	Financial efficiency	18	41
5.	Social efficiency	17	40
6.	Data envelopment analysis	17	39
7.	Outreach	18	38
8.	Sustainability	15	32
9.	Dea	11	30
10.	Mfis	12	30
11.	Financial performance	15	28
12.	Productivity	16	23
13.	Social performance	8	20
14.	Financial inclusion	10	19
15.	Bangladesh	8	15
16.	Mission drift	8	15
17.	Financial sustainability	9	12
18.	Performance	6	10
19.	gender	6	9
20.	agricultural	6	8

According to the approach employed in the study, Table 9 presents a comprehensive breakdown of the 20 most prominent keywords found in the 233 articles. The frequency of these phrases varies from 8 to 110 occurrences. The data analysis reveals that the phrases "microfinance" and "microfinance institution" demonstrate the highest frequency and aggregate link strength. Furthermore, several closely associated keywords had arisen, including efficiency, financial efficiency, social efficiency, data envelopment analysis, and outreach.

The network visualization in Figure 3 represents the relationships between keywords. The central node represents the most important term, while the edges connecting the nodes indicate the links between pairs of keywords. In addition, the colour of each node represents its association with a specific cluster, while the size of the circle indicates the frequency. Figure 3 depicts the categorization of these phrases into four distinct groups, namely red, green, blue, and yellow, as visualized using VOSviewer.

Cluster 1, represented by the red colour, is characterized by its focus on financial efficiency and social efficiency, which are strongly linked to sustainability, microfinance institutions, data envelopment analysis, and gender. The green cluster focuses on the functions and goals of microfinance institutions, encompassing key concepts such as microfinance, outreach, financial performance, and mission drift. The blue cluster encompasses a range of analytical methods commonly used to assess the performance of microfinance institutions. This includes concepts such as efficiency, data envelopment analysis, and productivity. Finally, the yellow cluster contains a wide range of subject areas that are interconnected with study domains in microfinance. These subject areas include financial inclusion, agricultural, and Islamic performance. In conclusion, this thorough examination reveals the predominant study emphasis on the effectiveness and efficiency of microfinance organisations worldwide, as seen by the presence of these five distinct clusters.

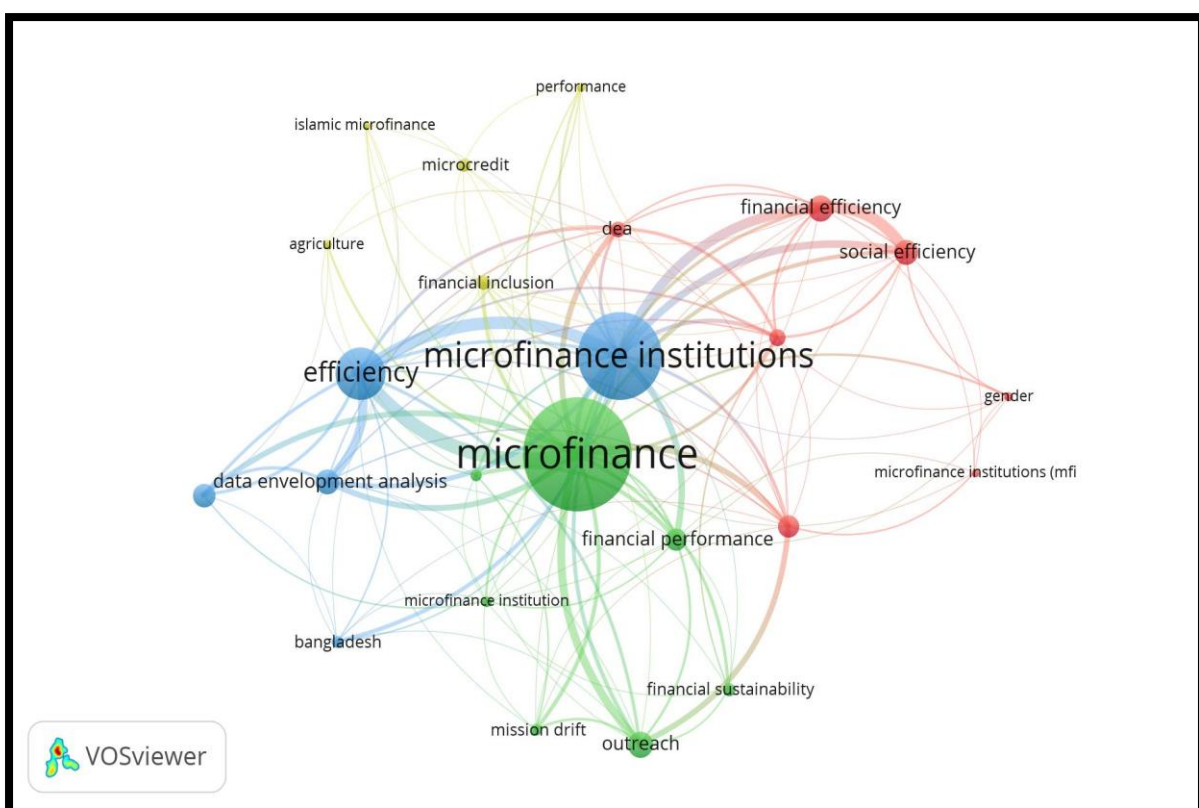


Figure 3: Network visualization map of Co-occurrence of keywords network visualization map in non-profit microfinance efficiency and productivity literature

The Historical and Emerging Research Hotspot

Validating the conceptual framework inside the designated domain is crucial in the context of microfinance research. Consequently, a vital component involves investigating the chronological progression of keywords to discern emerging patterns in research and identify major areas of focus. To achieve this objective, VOSviewer employs overlay and density visualisations, thereby positioning the bibliometric network within a two-dimensional framework and clustering it within the domain of microfinance research (Ribeiro et al., 2022).

The overlay visualisation produced by VOSviewer provides insights into the chronological development of keywords within the field of microfinance research. During the period spanning from 2016 to 2018, the prevailing keywords that emerged were outreach,

Bangladesh, MFIs, efficiency, and DEA. These keywords signify a research emphasis on examining the fundamental performance of microfinance institutions, with a particular emphasis on utilising DEA as the major analytical approach. The time frame in question aligns with the emergence of the microfinance movement spearheaded by Dr. Muhammad Yunus via Grameen Bank in Bangladesh.

This development significantly influenced scholarly research in this field (Ribeiro et al., 2022). However, there has been a notable change in the research focus since 2018, with a renewed emphasis on particular facets of microfinance institutions (MFIs), specifically their financial performance and institutional structure, as opposed to the programs implemented by these institutions. During this particular era, there was a notable surge in scholarly investigations on subjects such as Islamic microfinance and agriculture. It is worth noting that the Dominance-Based Efficiency Analysis (DEA) method continued to serve as the predominant approach for evaluating performance, as highlighted by Ribeiro et al. (2022).

Table 10

Clusters of high occurrences keywords related to non-profit microfinance institution efficiency and productivity

<i>cluster</i>	<i>Keywords</i>	<i>Weight <Links></i>	<i>Weight <Total link strength></i>	<i>Weight <Occurrences></i>
<i>1-red</i>	financial efficiency	11	41	18
	social efficiency	11	40	17
	sustainability	14	32	15
	mfis	12	30	12
	dea	12	30	11
<i>2-green</i>	gender	6	9	6
	microfinance	22	110	82
	outreach	11	38	18
	financial performance	11	28	15
	financial sustainability	7	12	9
	social performance	10	20	8
	mission drift	8	15	8
<i>3-blue</i>	microfinance institution	12	16	7
	microfinance institutions	18	95	63
	efficiency	16	72	37
	data envelopment analysis	12	39	17
	productivity	7	23	16
<i>4-yellow</i>	Bangladesh	9	15	8
	financial inclusion	13	19	10
	microcredit	8	8	9
	performance	6	10	6
	agriculture	6	8	6
	Islamic microfinance	6	7	5

As the temporal scope of this research extends from 2019 to the present, prominent themes encompass financial efficiency, financial inclusion, financial sustainability, gender,

and microcredit. The aforementioned themes highlight the current academic emphasis on improving the availability of financial services for marginalized people. Scholars advocate for the incorporation of financial and social indicators in the assessment of researchers, establishing a connection between the performance of microfinance institutions (MFIs) and overarching developmental objectives.

This approach underscores the necessity of inclusive financial practices (Ali et al., 2023; Ribeiro et al., 2022). The following bibliometric study employs density visualization, wherein the colours of the nodes represent the distribution of nodes in the underlying two-dimensional space. According to Ribeiro et al (2022), bright colours, such as yellow, are indicative of high node density, which in turn signifies highly investigated subjects. Conversely, dark colours are suggestive of underexplored issues, hence presenting prospects for further research.

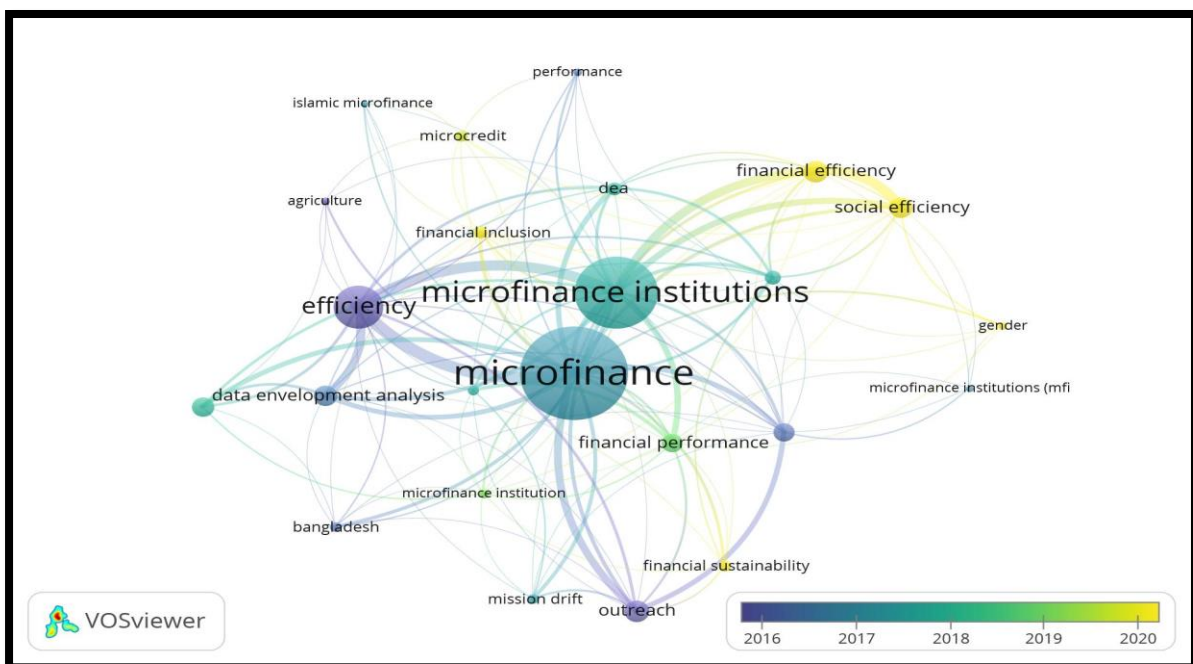


Figure 4: Overlay visualization map of Co-occurrence of keywords overlay visualization map in non-profit microfinance efficiency and productivity literature.

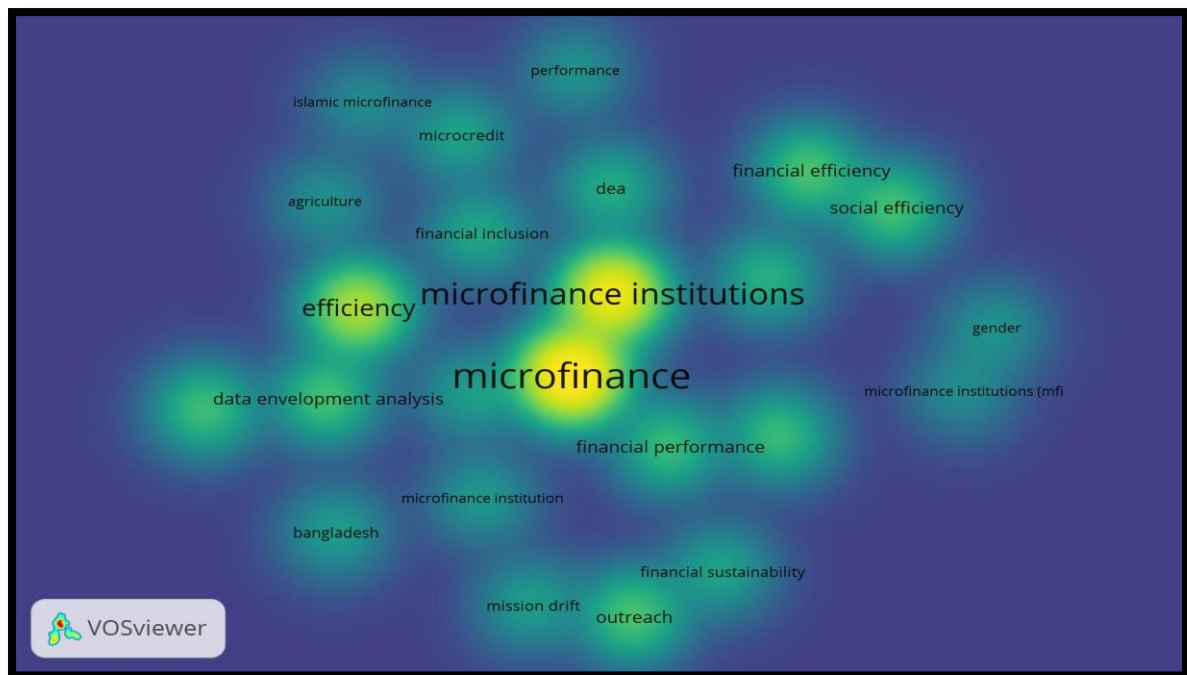


Figure 5: Density visualization map of Co-occurrence of keywords density visualization map in non-profit microfinance efficiency and productivity literature

Upon analysing the density visualisation, it becomes evident that there are fluctuations in the intensity of nodes associated with keywords such as Islamic microfinance, agricultural, financial inclusion, gender, MFIs, financial sustainability, and mission drift. According to Ribeiro et al (2022), the aforementioned subjects signify regions of active study interest that are still expansive and necessitate additional investigation. Consequently, researchers are presented with prospects to conduct more comprehensive inquiries within these domains.

In general, the bibliometric study of the microfinance research landscape elucidates the dynamic patterns and important areas of interest within the discipline. This statement underscores the significance of considering the social context, intentions and actions of key stakeholders, as well as the procedures involved in implementing microfinance, to comprehend the experiences and consequences linked with it. Moreover, it highlights the necessity for scholarly investigations that tackle the issue of financial inclusion, gender disparities, and the congruence between the performance of microfinance institutions and wider developmental objectives (Ali et al., 2023; Ribeiro et al., 2022).

Discussion

Microfinance, which appears to be an instrument that provides access to capital for the unbankable, was the priority. However, as the microfinance industry develops further, there are non-profit and profit MFIs that offer microfinance. This bibliometric analysis shows how in-depth the study's results are. It looks at non-profit efficiency and productivity by asking about yearly publication rates, authors who are very productive, closely related subject areas, active journals, highly cited papers, new keywords, influential institutions, and countries that send the most authors. In addition, the search for emerging trends in this research and the research hotspot are also being presented by visualization of co-occurrences.

The findings showed the number of papers published each year in the field of non-profit microfinance institutions (MFIs) is steadily rising, which is a strong sign of growing academic

interest. The information given by Ribeiro et al. (2022) backs up this trend, and many other studies have also shown the importance of MFIs for reducing poverty, making sure everyone has access to money, and providing services. The multidisciplinary nature of this research field is evident, with active contributions from environmental science, computer science and engineering, psychology, the health professions, and the arts and humanities, each bringing a unique perspective to the discourse on microfinance.

Meanwhile, the top institution that contributes more to the publication in this research area and any related to the scholarly dialogue is not only diverse in disciplines but also geographically, with Malaysia emerging as a particularly active research hub. The prominence of Malaysian institutions notably Universiti Malaya and others signals the country's strategic emphasis on microfinance as a subject of academic and practical interest. This concentration of research activity has positioned Malaysia as a leading contributor, commanding 15.45% of total publications, which is a remarkable figure compared to other nations in this research area.

To answer the research question on the most active journals in this arena, the findings showed that "World Development" and "Savings and Development," demonstrate a wide citation impact, indicating the quality and influence of the research they publish. To be specific, "World Development" is a lodestar for researchers striving to achieve visibility and impact in the field due to its high citation metrics. Subsequently, the most frequently cited papers, including those by Hermes et al (2011); Mersland and Strøm (2010), emphasise fundamental concepts in microfinance, including efficiency, outreach, and the potential deviation from microfinance objectives. These papers serve as reference points for new research and indicate the research centres, as evidenced by their substantial citation counts and field-weighted citation impacts.

Additionally, the landscape is dominated by keywords such as "efficiency," "Data Envelopment Analysis," and "sustainability," which are indicative of the primary research interests in this field. The research hotspot is revealed by the prevalence of these terms: the pursuit of quantifying and improving the performance of MFIs. Additionally, the emergence of new keywords, including Islamic microfinance and financial inclusion, serves as an indicator of the diversification of interests and the development of innovative subfields within microfinance research.

In conclusion, the research on non-profit MFIs is distinguished by a diverse assortment of interdisciplinary and international collaboration, with a distinct emphasis on sustainable practices and efficiency. The country has been propelled to the vanguard of this research domain as a result of the emergence of Malaysian institutions as influential nodes in this global network. The core economic and financial analyses of MFIs are being increasingly complexified by the integration of technological, environmental, and psychological perspectives. This is the emergent trend. This research sphere is characterised by a growing interest in technology and social impact, as well as efficacy and sustainability. This synthesis of results illustrates a dynamic field that is undergoing rapid evolution, which is being driven by global participation and multifaceted explorations of microfinance institutions.

Potential Contributions and Policy Implication

This study has important implications and shows that there is not an inherently better approach for microfinance. Thus, policymakers can use the advantages of both models of MFIs, which are non-profit and profit institutions, to achieve the goal of poverty reduction.

By synthesizing key themes and trends in existing literature, the research provides a structured academic framework that enhances the understanding of efficiency and productivity in non-profit MFIs (Bos & Millone, 2015). It not only identifies emerging topics and underexplored areas but also encourages further investigation and theory development within the realm of non-profit microfinance. This debate is crucial in shaping the direction of non-profit microfinance and underscores the significance of understanding the operational efficiency and business models of MFIs in driving their productivity and impact within the sector. By providing a comprehensive academic framework that advances the theoretical understanding of efficiency and productivity in non-profit MFIs, it not only enriches the academic discourse on microfinance but also lays the groundwork for future research endeavours in this evolving and critical field.

Additionally, this study introduces a novel technique for conducting bibliometric analysis in the context of non-profit microfinance (Cull et al., 2007). This approach utilizes tools like VOS Viewer to map keyword associations and publication patterns, enhancing the robustness of bibliometric research. The methodological innovation in the study has broader implications beyond non-profit microfinance, as it can be applied in various disciplines, contributing to the advancement of bibliometric research methodologies (Ribeiro et al., 2022). Notably, the research aligns with (Ali et al., 2022), emphasizing the importance of bibliometric analysis in identifying global research trends on microfinance institutions and microfinance, suggesting new research agendas. By leveraging bibliometric analysis, the study not only maps the chronological distribution of microfinance articles but also highlights productive journals, leading countries, and potential collaboration insights, providing a comprehensive overview of the research landscape in the microfinance domain. Through citation, bibliographic coupling, and keyword evolution analyses, the research sheds light on emerging trends and research trajectories within the microfinance sector, further underscoring the value of bibliometric approaches in advancing scholarly understanding.

Moreover, this study provides strategic insights for stakeholders interested in non-profit microfinance by identifying key contributors, influential publications, and research hotspots (Mersland & Strøm, 2010; D'Espallier et al., 2017; Bos & Millone, 2015). By offering a strategic roadmap, the research assists researchers, academicians, and practitioners in navigating the intellectual landscape of non-profit microfinance, facilitating new research endeavors and collaborations aimed at enhancing the effectiveness of Microfinance Institutions (MFIs).

To clarify, the literature that was consulted for this study's references helps to address important issues like mission drift in microfinance organizations (Mersland & Strøm, 2010), the effect of institutional change on business models (D'Espallier et al., 2017), and the discussion surrounding the future course of microfinance organizations (Bos & Millone, 2015). These insights provide stakeholders with a thorough understanding of how non-profit microfinance is changing, empowering them to take well-informed and calculated decisions that will enhance the effectiveness and influence of MFIs.

Conclusion

The review of the operational efficiency and output of non-profit microfinance institutions (MFIs) is a widely discussed topic in the fields of finance, economics, and development. This paper examines the scholarly structure of the microfinance sector, with a specific emphasis on the efficacy and output of non-profit MFIs, through a bibliometric evaluation. The research indicates a burgeoning scholarly interest in this field, as evidenced by the review of 233

documents listed in Scopus from 2000 to 2023. The investigation underscores a notable emphasis on research activities, a blend of various academic disciplines, and increased academic contributions in Malaysia. The important role of microfinance institutions (MFIs) in promoting financial inclusivity and reducing poverty is acknowledged, with leading journals like "World Development" contributing to the dissemination of impactful research.

The implications of this study are wide-ranging. From an academic standpoint, it deepens the understanding of the forces that shape MFI research, particularly noting the cross-disciplinary nature of these studies and the pivot towards embracing technology and sustainable practices. For practitioners within MFIs, the study offers guidance drawn from well-cited research and emerging terms, stressing the need for innovative and resourceful approaches. The focus on non-profit organizations also resonates with those in policymaking, as it aligns economic feasibility with societal goals.

This work contributes to a cohesive overview of past research, pinpointing key contributors and evolving themes, as well as identifying areas where knowledge is lacking. It reveals the multifaceted approach of microfinance studies, including environmental, technological, and psychological factors, and provides a comprehensive perspective on the sector's progression. Identifying leading journals and widely referenced papers provides valuable insight for scholars and professionals aiming to understand or boost MFIs' efficiency and productivity.

The analysis of current trends in this research underlines a dominant focus on evaluating the performance of microfinance organizations in terms of financial and social effectiveness, stability, and gender considerations. This focus is mirrored in the recurrent themes found in keyword patterns, with phrases such as "microfinance," "efficiency," and "data envelopment analysis" at the core of these discussions. Meanwhile, the present hotspots in research, like financial efficiency and gender's role in microfinance, signal the areas drawing significant scholarly attention, yet also suggest the potential for more in-depth exploration.

In terms of the study's limitations, it acknowledges the possibility of a wider and more inclusive approach that could incorporate a greater variety of databases, languages, and publication forms, which might have overlooked pertinent literature or emerging research not yet indexed. The potential bias toward English-language publications may also exclude substantial contributions from non-English-speaking researchers. Future studies are encouraged to broaden the bibliometric range and apply qualitative methods to capture the intricate experiences of MFI stakeholders more fully. Longitudinal research could trace the progression of trends and their tangible impacts over time.

As the microfinance domain evolves, future research should explore a more global perspective, considering broader data sources and linguistic inclusivity. The interplay of technology, environmental considerations, and psychological aspects is likely to become more central. Upcoming research paths might investigate digital microfinance mechanisms, the ecological effects of MFI initiatives, and the psychological impact of microfinance on entrepreneurs. The continual pursuit of efficiency and sustainability heralds a promising field for innovation, demanding collaborative efforts from researchers and practitioners to create pathways that balance financial success with societal welfare. Addressing these gaps, subsequent investigations can further our comprehension and influence the strategic advancement of non-profit MFIs.

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