

A Bibliometric Analysis of Microfinance Studies

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Abstract

Microfinance is a social entrepreneurship related topic that gained the academic researchers' attention in the past 10 years because of its adoption in the less developed financial access area. The article aims to map the previous research direction and provide the guidance for further research by conducting a bibliometric analysis from SCOPUS database with co-citation analysis technique. There are 2077 published articles in the SCOPUS indexed journal within 1996 – 2016. Among these articles, we analyzed 90 articles that have 10 co-citations or more. The results shows that there are 3 main clusters in microfinance studies including the impact of microfinance in developing countries, strategic management and organizational behavior of microfinance, and the economic of microfinance. The future research direction is discussed in the concluding remarks section.

Keywords: Microfinance, social entrepreneurship, microlending, bibliometric analysis, co-citation analysis, areas of knowledge

1. Introduction

The development of social entrepreneurship literature is closely related with the development of microfinance study since there are various social entrepreneurship activities that rely on microfinance. Since early 2000s, the publication of microfinance is increased rapidly along with the growth of microfinance practice by social entrepreneurs such as Grameen Bank as well as corporate firm such as Bank Rakyat Indonesia. After several conceptual papers produce by microfinance expert (Murdoch, 1999; Murdoch, 2000), the empirical studies about microfinance also grow rapidly especially for developing countries context.

This paper wants to map the current microfinance research area and create the guidance for the future research direction. The next section will discuss about the concept of microfinance. The concept of microfinance, methodology, as well as the result of bibliometric analysis will be presented afterwards. The future research direction will be discussed based on the findings.

2. Theoretical Review

Microfinance has existed for a long time for the unbanked access in informal form. For example, at the client level of poor city dwellers housed in slums or squatter settlements, often living in appalling overcrowded settings, lacking access to basic services such as health, microfinance at the purpose of alleviating poverty (Otero, 1999). Besides alleviating poverty, microfinance related to institutional level to develop institutions and help the poor, hence deepening the reach of government financial institutions to the poor (Otero, 1999). Those three intersections of microfinance are to achieve development of a country.

Furthermore, in the past 30 years, there are growing formal microfinance institution that serves up to 200 million world’s poor (Christen et al; 1995). Basically, microfinance has ideal form since it provides the financial access for the poor that has potential to alleviate poverty. On the other hand, it also a good business since it has better interest rate than the conventional banks. However, it is packed with weekly or other periodically repayment terms that suitable with the beneficiaries financial capability. The current microfinance service provided by microfinance institution has expanded into several areas such as savings, lending, and also insurance.

Even though in the past microfinance exclusively focused on credit and savings became a forgotten hall for microfinance, Fiebig, Hannig, and Wisniwski (2009) described that households will deposit their surplus capital in appropriate financial institutions that offered savings products that meet their specific needs. Thus, if deposit (savings) facilities an appropriate institutional setting, the customer achieve a level of outreach and impact that credit-only facilities cannot achieve (Fiebig, et. al., 2009). However, as exclusively focused, microfinancing has made to small businesses and entrepreneurs in developing countries to achieve success which is alleviating world poverty (Galak, Small, & Stephen, 2011). Thus, the programs of microfinance provide credit to the poor (joint liability group lending or individual-based lending) that compares to traditional banking, involving a direct relationship between the programs and an individual, the joint liability lending approach uses groups of borrowers to which loans are made (Hermes & Lensink, 2007). Through savings, credit, and insurance, it would help society by smoothing out income fluctuations and maintain consumption levels even during the lean periods (Littlefield, Morduch, & Hashemi, 2003).

3. Material and Methods

3.1. Data collection

In this research, we search the titles, abstracts, and also keywords for “microfinance” or “microlending” on SCOPUS database. We limit the search on peer-reviewed academic journals within 1996 – 2016. There are 2077 published articles retrieved by implementing this setting. The growth of the microfinance research publication can be seen in Fig 1. There are remarkable growth in this area from 2005 – 2013. However, the growth is declining in the past three years. The key information for retrieved articles include document title, year, citation information of the authors, document type, citation count, DOI, keywords, abstract, and also the references.

Documents by year

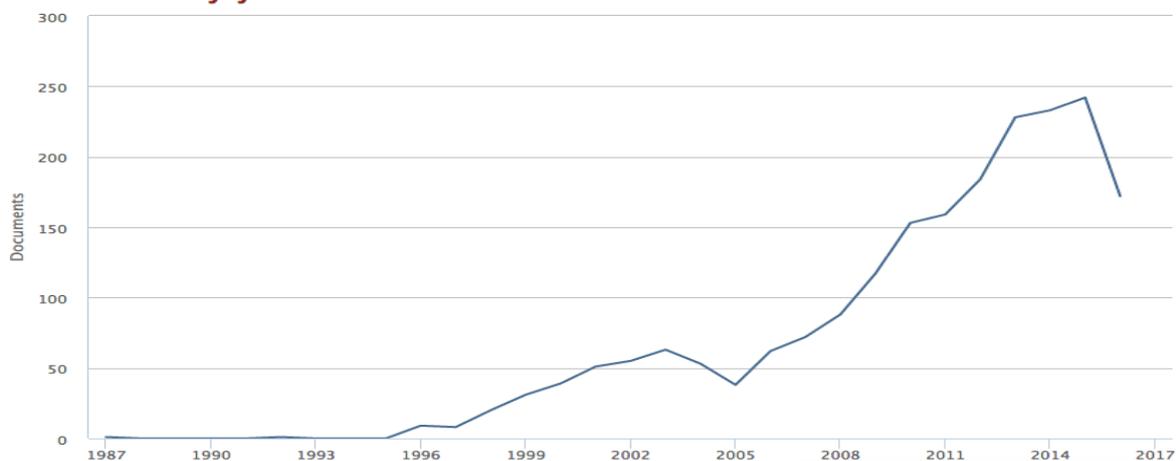


Fig 1. Articles on Microfinance from 1996 - 2016

The peer-reviewed academic journals are the premium outlet for publication for academic advancement. Hence, the assessment of the journals references can strengthen the reliability through co-citation analysis (Ramos-Rodriguez and Ruiz-Navarro, 2004).

3.2. Data Analysis

A bibliometric analysis includes implementing statistical method to determine quantitative and qualitative changes in any research topic (De Bakker et al., 2005). One of the well-known bibliometric analysis technique is co-citation analysis. It has been adopted widely as a valid method by academic communities in many scientific areas (Ramos-Rodriguez and Ruiz-Navarro, 2004). This method examines the frequency of two articles cited in a pair that represent the relationship and also signal their influence (Ramos-Rodriguez and Ruiz-Navarro, 2004). Hence, it enables the researcher to examine the structure, pattern, and theoretical foundation of any school of thought by exploring the affinity and proximity between the articles (White and Griffith, 1981). In this case, the documents that have more frequent cited together will be more likely to have better influence the discipline and also more similar concept than the less frequent (Culnan, 1986; White and Griffith, 1981).

The co-citation analysis results are visualized by a network map based on number of co-citations, the distance between the articles (showed by path length), and also the number of citation of the sole articles (showed by bubble size). Based on this result, we use VOSviewer grouping algorithm to create the cluster of microfinance studies. Both the co-citation analysis and visualize the network results are conducted by VOSviewer software as well.

4. Results

In order to get the visualization of significant co-citation impact, we analyze the article that has 10 co-citation or more. By using this setting, we got 90 articles to be analyzed. The highest number of co-citation is the Microfinance of Promise (Morduch, 1999). The article become the center attention of microfinance studies since it provides both of the theoretical foundation and empirical studies that explain why and how different practice from conventional banking, a microfinance practice, can be implemented for expanding the financial access for the unbanked citizen. In the empirical studies explanation, the author also mention the players who conduct the microfinance business can be social enterprise such as Grameen Bank or corporate firm such as Bank Rakyat Indonesia. The second highest co-citation is also the article from Morduch (2000) that explain the practice of microfinance about win-win situation that allow the microfinance to alleviate the most concerned social problems, poverty. The list of the highest co-citation can be seen on Fig 2. The authors with the highest citation can be seen on Fig 3.

Cited Reference	Citations
Morduch, J., the microfinance promise (1999) <i>Journal of Economic Literature</i> Vol. 37, No. 4 (Dec., 1999), pp. 1569-1614	92
Morduch, J., the microfinance promise (1999) <i>Journal of Economic Literature</i> Vol. 37, No. 4 (Dec., 1999), pp. 1569-1614	79
Morduch, J., Morduch, J., schism (2000) <i>world development</i> , Volume 28, Issue 4, April 2000, Pages 617–629	69
Cull, R., Asli Demirgüç-Kunt, , J. Morduch, (2009), <i>Microfinance meets the market</i> , in Todd A. Watkins, Karen Hicks (ed.) <i>Moving Beyond Storytelling: Emerging Research in Microfinance</i> (Contemporary Studies in Economic and Financial Analysis, Volume 92) Emerald Group Publishing Limited, pp.1 - 30	49
Rahman, A., <i>Micro-credit initiatives for equitable and sustainable development: Who pays?</i> <i>World Development</i> Volume 27, Issue 1, January 1999, Pages 67-82	44

Kabeer, N. (2001). Conflicts over credit: re-evaluating the empowerment potential of loans to women in rural bangladesh. World Development. Volume 29, Issue 1, January 2001, Pages 63–84	39
Besley, T. & Coate, S. (1995). Group lending, repayment incentives and social collateral. Journal of Development Economics. Volume 46, Issue 1, February 1995, Pages 1–18	30
Hulme, D., Mosley, P. (1996). Finance Against Poverty. London, Routledge, 1996, pp. 221 and pp. 451.	29
Hartarska, V., & Nadolnyak, D. (2007). Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence. Applied economics, 39(10), 1207-1222.	28
Conning, J. (1999). Outreach, sustainability and leverage in monitored and peer-monitored lending. Journal of Development Economics. Volume 60, Issue 1, October 1999, Pages 51–77	26
Besley, T., Coate, S.. (1995). Group lending, repayment incentives and social collateral. Journal of Development Economics. Volume 46, Issue 1, February 1995, Pages 1–18	25
Sharma, M., Zeller, M. (1997). Repayment performance in group-based credit programs in Bangladesh: An empirical analysis. World Development. Volume 25, Issue 10, October 1997, Pages 1731-1742	25
Copstake, J. (2007). Mainstreaming Microfinance: Social Performance Management or Mission Drift? World Development. Volume 35, Issue 10, October 2007, Pages 1721–1738	25
Hashemi, S., Schuler, S. R., & Riley, A. P. Rural credit programs and women's empowerment in Bangladesh. World Development. Volume 24, Issue 4, April 1996, Pages 635-653	24
Mcintosh, C. Wydick. B. (2005). Competition and microfinance. Journal of Development Economics. Volume 78, Issue 2, December 2005, Pages 271–298	23

Fig 2. Articles with 10 or More Co-citations

The SCOPUS data also show that the main citations of microfinance research come from economic and development journals. Even though microfinance practice is conducted within social entrepreneurship activities, apparently there are still few entrepreneurship journals that have main attention in this area from the scholars. Fig 4 shows the source of the analyzed articles.

Selected	Author	Citations	Total link strength
√	Murdoch, J.	1673	59904
√	Demirguc-kunt, A.	497	20645
√	Karlan, D	444	20310
√	Mersland, R	499	18563
√	Cull, R	368	15059
√	Hulme, D	495	14380
√	Khandker, S.R	424	13544
√	Lensink, R	314	12642
√	Mosley, P	396	12274
√	Hartarska, V	300	11996
√	Duflo, E	298	11982
√	Gathak, M	278	10444
√	Hermes, N	263	10220
√	Banerjee, A	229	10064
√	Armendariz, B	248	10036
√	Schreiner, M	317	10033

Fig 3. Authors of Co-citations Articles

Selected	Source	Citations	Total link strength
√	World devopment	2551	46099
√	Journal of development economics	1069	21138
√	Journal of international development	639	12555
√	American economic review	448	11175
√	Economic journal	298	7511
√	Econometrica	326	7451
√	Journal of development studies	362	7448
√	Journal of economic literature	341	7213
√	Quarterly journal of economics	294	7045
√	Journal of political economy	318	6992
√	Journal of banking and finance	276	6336
√	The economics of microfinance	314	6304
√	Academy of management journal	187	6281
√	The economic journal	250	5383
√	Development and change	264	5356
√	World bank economic review	234	5215

Fig 4. Cited Journal Sources

The clustering algorithm produce four cluster about the microfinance studies within 1996 – 2016. The network map can be seen on Fig. 5 below. Each clusters is shown by different color. The first cluster is shown by red bubble. The green and indicate second and third cluster. Apparently, the yellow bubble repeats the blue bubble that represent the second cluster.

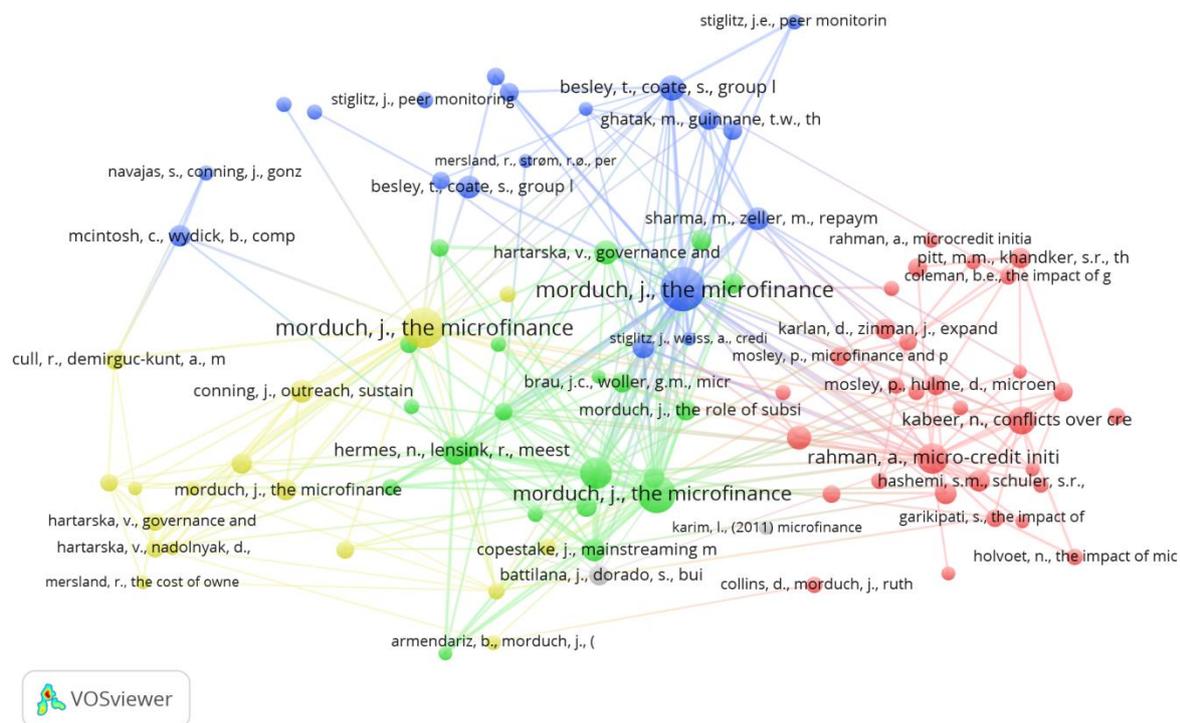


Fig 5. Visualized co-citation Network

The first clusters consist of the empirical studies from developing countries about the impact of microfinance studies. It is ranging from impact as well as pros and cons implementing microfinance in Africa and Asia (Buckley, 1997; Chemin, 2008; Coleman, 2006; Collins et

al., 2009; Goets and Gupta, 1996; Holvoet, 2005; Hulme, 2000), group lending impact (Coleman, 1999; Pitt et al., 1998), poverty alleviation with microfinance (Copestake, 2001; Hulme & Mosley, 1996; Khandker, 1989; Khandker, 2005), to women empowerment with microfinance (Hashemi et al., 1996; Johnson, 2004; Kabeer, 2001; Leach & Sitaram, 2002; Mayoux, 2001, Rankin; 2002).

The second cluster discuss about the strategic management and organizational behavior of microfinance. It is ranging from microfinance institution performance (Ahlin et al, 2011; Copestack, 2007; Cull et al., 2009; Cull et al., 2011), sustainability (Hartarska & Nadolnyak., 2007; Hermes & Lesink, 2007; Quayes, 2012), competitive dynamic (Mcintosh & Wydick, 2007) to social benefit (Schreiner, 2002).

The third cluster focus on economics of microfinance. The topic mostly chooses the micro-entrepreneurs or the beneficiaries as a unit of analysis. It is ranging from the fundamental economics (Armendariz & Murdoch, 2005; Morduch, 1999), beneficiaries selection & social collateral (Besley & Coate, 2005; Ghatak, 1999) to repayment performance (Godquin, 2004; Sharma & Zeller; 1997). Even though there are less microfinance study that appears in the past 5 years, these three clusters also can represent them.

5. Discussion

As shown by the co-citation analysis results, microfinance studies have three main clusters including the impact of microfinance in developing countries, strategic management and organizational behavior of microfinance, and the economic of microfinance in the past 20 years. As technology development grow rapidly, the practice in microfinance also grow toward different trajectory. For example, there are growing research stream that discuss the adoption of microfinance in crowdfunding business model (Moss et al., 2014; Allison et al., 2014; Sun and Im, 2015; Chakravarty & Shahriar, 2015). This research stream can expand the research cluster in strategic management and organizational behavior of microfinance to enhance the understanding of the innovation of microfinance in different way. In this matter, the technology takes the role as enabler for the new form of business model that does not exist in the past. Furthermore, the entrepreneurial action of the social entrepreneurs can be another future research direction due to different business model.

The second current growing research stream is about micro-entrepreneurs participation in sharing economy platform (Hamari et al., 2016; Freiburger and Sundararajan, 2015). As mentioned in previous research, microfinance has remarkable role for the micro-entrepreneurs performance by providing entrepreneurial finance both in early stage or growth stage and even mature stage (Godquin, 2004; Sharma & Zeller; 1997). Enhancing the microfinance research cluster about the impact of microfinance and also adopting strategic entrepreneurship theory about internal-external resource configuration (Rindova et al., 2012), the future microfinance research direction can be examined how sharing economy platform and microfinance can be integrated or aggregated to enhance the performance of micro-entrepreneurs.

In the strategic entrepreneurship literature, there are also growing research stream about the entrepreneurial orientation in discovery and creation context (Alvarez & Barney, 2007). Alvarez & Barney (2013) mention that the creation opportunities can help the micro-entrepreneurs to escape from poverty. Therefore, by combining these creation theory and the

economic of microfinance clusters, it can enhance the understanding about the development of unbanked people and their area.

Finally, the contribution about this bibliometric study can enhance the understanding about the future research direction of microfinance. There will be another future research direction beside the three direction above for this area. Moreover, it can increase the microfinance publication that stagnant in the past 3 years and even decreasing in the last years.

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