
Innsbruck Student Papers in Economic and Social History

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ISPESH 6

*Non-traditional development aid and poverty
reduction: Based on the example of microcredit*

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submitted August 2016, reviewed November 2016, published February 2017

*A series of the research field "Economic and Social History" (at the same time working area "History of Globalization" in the Research Centre Empirical Economics and Econometrics **EmpEc**) at the School of Economics and Statistics of Innsbruck University (Austria).*

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*Eine Reihe des Forschungsfeldes „Wirtschafts- und Sozialgeschichte“ (zugleich Arbeitsbereich „Geschichte der Globalisierung“ im Forschungszentrum für Empirische Wirtschaftsforschung und Ökonometrie **EmpEc**) an der Fakultät für Volkswirtschaft und Statistik der Universität Innsbruck (Österreich).*

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*Non-traditional development aid and poverty reduction:
Based on the example of microcredit*

*by Hannes Spieglmayr**

Microcredit is often referred to as an alternative to traditional development aid. However, is microcredit really an effective poverty reduction tool? In the paper, this question is evaluated from an economic perspective by taking a look at the existing evidence and analysing the validity of these findings. One of the main outcomes shows that the impact of microcredit is still unclear. Sequentially, some arguments are provided trying to explain the lack of evidence. Moreover, the underlying dynamics of microcredits are discussed, including relations to other approaches and directions for future research.

Modern development aid has changed a lot from its beginning in the period of post-World-War-II until nowadays. In the 1980s, development aid was mainly conditional. That means that recipient countries had to make structural adjustments in order to receive capital flows. In some cases, this approach ignored the underlying functionality of national institutions and therefore, could not reach the desired outcomes (Rodrik, 2008, pp. 1-2). Out of the need for more sustainable approaches, alternatives to the traditional development aid emerged. One of these alternatives is microcredit, the provision of small loans to people, which are excluded from the formal financial sector. This idea fitted well into the market-oriented development approach of the 1990s. In a sense, microcredit empowers people to alleviate poverty. In addition, the growth of microcredit has been enhanced, as the organization of aid changed from the 2000s onwards. Especially, profiting from the new donor structure, which includes many private foundations, as for example the Bill & Melinda Gates Foundation. Given these circumstances, microcredit has become a huge success story from its early beginnings as a social experiment in 1979 to receiving the Nobel Peace Prize in 2006 up to two hundred million customers nowadays (Reed, 2014, p. 8) and thus helping millions of people to alleviate poverty. For a long time the effectiveness of microcredit has been proven by the high repayment rates and inspiring success stories of individuals (Armendariz and Morduch, 2010, p. 267). The first empirical impact evaluation was made by Mark M. Pitt and Shahidur R. Khandker in 1998 (Goldberg, 2005, p. 6), which caused huge controversy in science. After more than three decades of microcredit, one might think that the evidence on poverty reduction is clear by now. Whether this turns out to be true, will be elaborated in this paper.

The drawbacks of conventional development aid have created the need for alternative approaches. With respect to this, the effectiveness of such approaches is analysed, based on the example of microcredit. Especially the main claim of microcredit, which is poverty alleviation, will be evaluated by taking a look at the economic effects of microcredit on its customers, for example increased profits or income. To achieve this goal, a literature review will be conducted. To take into account that microcredit is used as an alternative to development aid, only studies, which were made in low- and medium income countries will be considered. This

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classification will be carried out according to the “World Bank Atlas Method” (World Bank, 2013). Afterwards the displayed results will be discussed.

The structure of the paper is as followed: At the beginning, an insight into the history of microcredit is given. Sequentially, a definition of the main characteristics of microcredit and its theoretical outcomes on the lives of the poor is provided. Afterwards, the results of the literature review will be presented. Followed by a section, where the advantages and disadvantages of microcredit with respect to other development approaches will be discussed. At the end, conclusions and recommendations for future research will be displayed.

HISTORY OF MICROCREDIT

The roots of microcredit can be found in many places, however the most famous example is the one by Muhammad Yunus (Armendariz and Morduch, 2010, p. 10). In 1979, the US educated economy professor started to grant small loans to self-employed women. These women have previously been rationed out of the credit market, as traditional lenders were unwilling to accept the risk associated with these loans. In total an amount of \$27 was spread to 42 persons (Yunus and Jolis, 2003, pp. 142-44). The results of this experiment were striking. The borrowers were not only able to repay their loans in time, but also to improve their financial situation by expanding their business. As the experiment continued to be successful, Yunus wanted to expand his idea, in order to alleviate poverty in Bangladesh. Therefore he founded the first Microfinance Institution (MFI), namely the Grameen Bank in 1983 (Yunus and Jolis, 2003, p. 174). In the following years, a lot of MFIs were established, based on the model of the Grameen Bank. As a result, the 1990s can be seen as the beginning of the microfinance industry (Robinson, 2001, p. 54).

In the middle of the 1990s the bilateral development aid “discovered” microcredit programs as a tool for poverty reduction (Cramer, 2014, p. 104). Which led to a major increase of MFIs funding. Regarding this, the first Microcredit Summit in 1997 can be seen as a milestone. The World Bank and the United Nations organized this event and numerous celebrities like Hillary Clinton, or Queen Sofia from Spain attended. One of the main outcomes of the Summit was to set a development goal: Until 2005, hundred million poor families should receive microcredits (Microcredit Summit Campaign, 1997, p. iii). To achieve this goal, an annual growth rate of 38.1% was needed. With an average growth rate of 34% this ambitious benchmark could not be reached (Daley-Harris, 2006, p. 2). A main contributor to this growth was the international year of microcredit in 2005, which had already been announced by the United Nations in 1998 (United Nations, 1998). In 2006, another important occasion favoured the microfinance-movement. Muhammad Yunus and the Grammen bank were honoured with the Nobel Peace Price (Nobel Media, 2006).

However, the history of microcredit cannot be considered as an entire success story. In the same year as the Nobel Price was granted, the first microfinance crisis occurred. Numerous borrowers from India became unable to repay their loans. This over-indebtedness had tremendous consequences on the living conditions of the borrowers (Mader, 2013, p. 50). Afterwards, the Indian microfinance-sector seemed to stabilize again. Until 2010, another repayment crisis followed. The consequences led from payment struggles to suicides of microfinance borrowers (The Economic Times, 2010). In comparison to the crisis in 2006, these phenomena were also captured by the international media (Klas, 2011, p. 188). Until now, microfinance crisis have been reported in Pakistan (Chen et al., 2010, p. 1), Bolivia (Rhyne, 2004, p. 89), Nicaragua, Bosnia-Herzegovina, Morocco and India (Mader, 2013, p. 47).

In order to get a better understanding of the underlying dynamics of microcredit, and how it affects the lives of the poor, the following part will elaborate the main characteristics of microcredit.

A DEFINITION OF MICROCREDIT

As already pointed out, the provision of loans to the poor, which are usually excluded from the formal banking sector, is called microcredit, where “micro” refers to the small loan amount. This amount is adjusted to the general price level of a country.

Another difference to the formal banking sector is the organization of the modalities. Microcredit usually got shorter amortization terms. This is the case, as lenders want to detect decreasing payment behaviour early, in order to react correspondingly. Usually payments are made weekly, biweekly or monthly. In addition, credit periods are shortened as well. The general case ranges from three months up to one year (Ledgerwood et al., 2013, p. 213-14).

Basically, one can distinguish microcredit into two types, namely individual loans or group lending (Waterfield and Duval, 1996, p. 80). The former requires the borrower to possess securities or a loan guarantee. Therefore, the creditworthiness of the borrower is checked in advance. Based on this analysis and the demand of the customer, the loan amount and the conditions are calculated. During the time of loan repayment a regular contact between the lender and the borrower is needed to keep up the payment behaviour (Ledgerwood, 1999, p. 68). In comparison, more people taking up a loan and mutual guarantees characterize group lending. The borrowers themselves decide with whom they will take up a loan. Thus, the borrowers, not the lenders, check the creditworthiness. As the borrowers account for the default of other individuals, fewer securities are needed. Hence, social pressure is used to guarantee repayments (Armendariz and Morduch, 2010, p. 128).

In reality, microcredit is usually granted to groups of women (Vaessen et al., 2014, p. 13). Women are targeted as they are considered to spend the loan more for family purposes rather than their own. Sequentially some kind of “cascade effect” is created from which the whole family is profiting and finally also the communities (Yunus et al., 2008, p. 67).

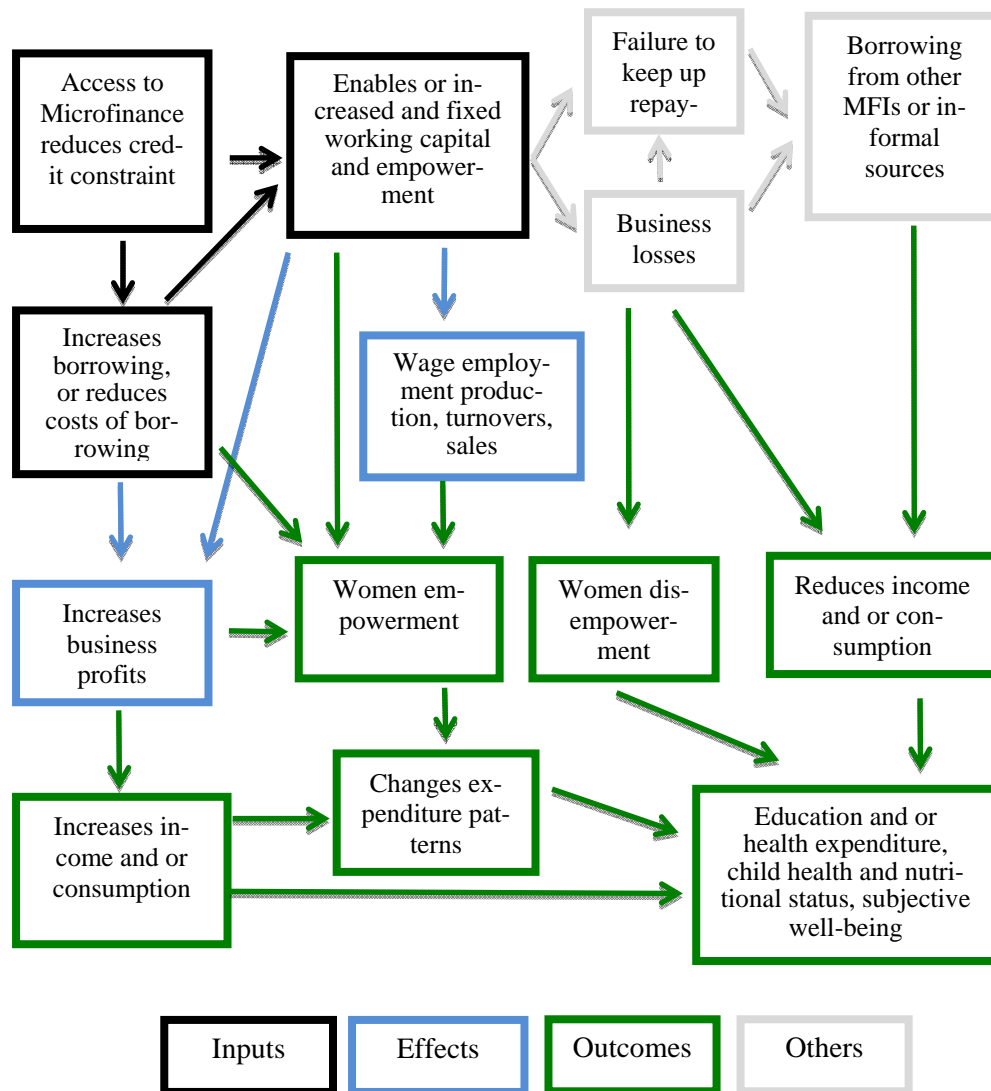
With this in mind, possible channels through which microcredit influence the lives of its users can be identified. The line of argument follows the thinking of Maren Duvendack et al. (2011, pp. 12–13). The authors summarized the potential pathways and outcomes of microcredit (figure 1), based on the results of their broad literature review.

Starting from the upper left corner, the access to credit enhances people to take up loans, or roll over loans, which have worse credit conditions. This amount can be invested into the business and sequentially increase production and/or sales respectively. If this investment is successful, more income is generated and the consumption patterns might change. In case the business is unsuccessful, this can worsen the financial situation of the borrower. If this process continues for a long time, then the business might fail, leading to an increased debt burden of the borrower. As a result, the pathways can influence the lives of the borrower in both, a negative and a positive way, which is displayed by the plus and minus signs in the figure. Broadly speaking, the outcomes of microcredit can be split up in three categories: Firstly, economic effects, including revenues, profits, income and so on. Secondly, social outcomes like changed expenditure for nutrition or health and their consequences. Lastly, microcredit can enhance women’s empowerment.

However, how valid are these outcomes in reality? To answer this question, a literature review will be presented in the following part. As the analysis of the

whole pathway would go beyond the scope of this paper, the focus will be on the economic effects and outcomes.

Figure 1: The paths and outcomes of microcredit



Source: M. Duvendack et al., 2011, p. 13

LITERATURE REVIEW

Regarding the empirical evidence on microfinance, there is an on-going discussion about its effects and outcomes (Fouillet et al., 2013, p. 3). On the one hand, there are numerous studies that report positive results, for example Joseph P. Kaboski and Robert M. Townsend (2005); Khandker (2005); Signe-Mary McKernan (2002); Pitt and Khandker (1998). On the other hand there are studies, which state non-significant or even negative results, for instance Brett E. Coleman (1999); James Copestake (2002); Xavier Giné and Ghazala Mansuri (2014).

A prime example for the controversy in the literature is the study by Pitt and Khandker (1998). This study is claimed to be the first empirical valid study, which found poverty reducing effects (Goldberg, 2005, p. 6). However, the methodology was criticized by David Roodman and Jonathan Morduch (2009), as well as Duvendack and Richard Palmer-Jones (2012), since the authors have been unable to replicate the results by Pitt and Khandker. As a result the authors publicly debated

to justify their results, for example Pitt (2012); Pitt (2011a); Pitt (2011b); Roodman (2011a); Roodman (2011b).

The debate resumed with the publication of six Randomized Controlled Trials (RCTs) in the *American Economic Journal* at the beginning of 2015.¹ RCTs are usually used in medicine to test the effectiveness of new medical products. Within this experimental study design, the participants are assigned randomly to two groups: the treatment group, which receives access to microcredit and the control group, which does not have access. The big advantage of this methodology, if used properly, is that it minimizes selection bias and displays causal links. This is crucial, as the avoidance of inherent differences between clients and non-clients plays a central role in the microcredit impact evaluations. There is some controversy if RCTs should be used in social science, especially regarding ethical concerns (Stern et al., 2012) in the sense that poor people are denied access to finance. However, the six studies published in the journal were conducted in six different countries, which are located in four different continents. These independent studies are designed in a way that a comparison of the results is possible (Banerjee et al., 2015b). Out of the six RCTs, four evaluate group lending, one analyses individual lending and one focuses on both lending types. In half of the programs, women are the target group. The microcredits were provided by for-profit as well as non-profit organizations. The average loan size ranged from \$450 to \$1,800 in Purchasing Power Parity. The average loan maturities were between four and six months, whereas in four cases the loans lasted from 12 to 16 months. In addition, there was a mixture between rural and urban regions. Given these diverse characteristics, the sample seems representative for the microfinance industry. Another issue regarding RCTs is the randomization process: all experiments used randomized program placement, beside one study, where individual level randomization was used. The main difference between these two designs is that in the former case, communities get assigned randomly to the treatment or control group whereas in the latter case, randomization is carried out by selecting single individuals. As randomized program placement was used in most of the cases, some more details are given about this process. At the beginning, the lenders identify communities in which microcredit has not already been established. Afterwards, these communities get randomly assigned to the control or treatment group. In addition, the lenders employ measures to guarantee that the treatment areas will actually take up more loans than the control communities. This is done in several ways, with marketing activities in the treatment areas as well as actions that prevent the control group from borrowing. Usually, the data is generated by a baseline-survey at the beginning of the experiment and a follow-up survey at the end. These surveys include numerous variables, such as investment, consumptions, income, socio-economic status and so on. After the experiment the obtained data was analysed with econometric methods.

Thus, what are the results?² The findings are categorized by key “outcome families”. Firstly, micro-entrepreneurial activity, which includes effects on intensive and extensive margins. In half of the studies, microcredit did not lead to an increased likelihood of setting up a business. The other half did only find a modest effect on the establishment of new businesses. Other indicators in this category include investment, profit and business size. In terms of investment, eight of the ten coefficients are positive with two statistically significant at a 10% level. Moreover, revenues and/or expenses were captured by 13 measures in which all of them are positive and six reach a 10% significance level. Profits are measured by all studies.

¹ Studies were conducted by Manuela Angelucci et al. (2015); Orazio Attanasio et al. (2015); Britta Augsburg et al. (2015); Abhijit Banerjee et al. (2015a); Bruno Crépon et al. (2015); Alessandro Tazzoli et al. (2015).

² Note that not a complete list of the evidence will be presented, as this would be beyond the scope of this paper. The focus is on the economic effects.

In this case seven estimates are positive and one is zero, although only one could reach significance. This evidence suggests that microcredit may not encourage people to establish businesses, but to increase their existing business activities. Secondly, we turn to the effect on family income, which was measured by all studies. None of the RCTs could identify a significant correlation between the access to microcredit and income. However, it has to be mentioned that two third of the corresponding indicators show positive values. Nevertheless, microcredit has an effect on the income composition, in the sense that an increase in business income compensates a decrease in wage income. Thus, the evidence suggests that microcredit may not alleviate its users from poverty, but it enhances their freedom of choice, because microcredit customers are more flexible, when choosing their occupation. Finally, with respect to consumption, there are no findings indicating an expansion in total household expenditure. In addition, there is only modest evidence that consumption patterns change. To be more specific, there are mixed effects on food consumption and no significant effects on money invested in either education or health. However, microcredit has a negative effect on discretionary spending. Meaning, that its users spend less on for example temptation goods or entertainment.

To conclude, it seems that microcredit can contribute to the expansion of businesses, thus the evidence of profit is rather suggestive. In addition, as the effects on income are very limited, there is no clear evidence that microcredit alleviates poverty and the living standard of its users does not improve considerably. Although, it has to be mentioned that the results of these studies have to be viewed with caution, because the take up rates in the treatment group were modest in most of the studies (Banerjee et al., 2015b, p. 10). Moreover, the six studies focused on markets, which were not penetrated by MFIs before the experiments. Sequentially, it is possible that the findings could be different in communities where microcredit is already well established.

After analysing the evidence from the RCTs, one might wonder how these results fit into the existing literature. Duvendack et al. (2011) provides an extensive literature review on the evidence of microcredit. In their systematic review, the authors evaluate quantitative studies of microcredit and “microcredit plus” programs.³ Another inclusion criterion is that studies consist of evaluations with comparison and control groups. Furthermore, the examined individuals, households or microenterprises must be located in low and upper-middle income countries. In addition, a sample size of at least a hundred participants is required and the microfinance program had to last for at least three years. To identify the relevant literature, a systematic search was conducted. Thereby, numerous academic research databases, websites of NGOs and PhD thesis were screened. After removing the duplicates, 2,643 items were identified. Subsequently, the titles and abstracts were checked via a standardized form, with respect to the inclusion criteria. This process led to an exclusion of 2,442 records. In the following step, the remaining 201 articles were assessed for eligibility in full text. Thus, the research team found that the majority of the papers are based on observational data, which mostly contains research design and analytical problems in a sense that the data and/or the econometric procedures were faulty. In order to take the different quality of the papers into account, the authors rated the studies with respect to research design and statistical procedure. Afterwards, they combined the score into an index,⁴ where low numbers refer to high validity. Based on this index, papers with high scores were excluded. As a

³ The term “microcredit plus” refers to formal microcredit products, which are combined with other services, for example a savings account, or business advice.

⁴ Index = $\ln(\text{design}) + \ln(\text{method})$. Whereat *design* ranges from 1 (RCT) to 5 (Observational) and *method* from 1 (Instrumental Variable etc.) to 3 (tabulation).

result, 58 papers with data from 29 different studies remained and were used in the systematic review. At the end, the results of these studies were compared. Thus, what are the economic effects and outcomes of microcredits?

In general, most of the studies analysed group lending and credit only programs, while a total of 26 studies examined economic outcome indicators. The authors distinguish the results by research design and method of analysis. Firstly, the two included RCTs are on focus. At the beginning, Duvendack et al. (2011) discuss the quality of the papers and criticize some errors with the randomization process. The results of these studies showed few significant estimates. Most of the significant indicators were found in the early stage of the pathway, indicating that microcredit has positive effects on borrowing and business activities, but does not relate to an improved well-being of the individuals. Secondly, papers get evaluated, where the pipeline design with random allocation of participants was used. The authors criticize the implementation of this research design in all of the cases. In their opinion, the results of these papers suffer from selection and program placement bias. Therefore, the findings have to be viewed with caution. However, the majority of the coefficients are not significant. Similar to the results of the RCTs, most of the effects of microcredit were found in the early pathway. Thirdly, with or without research design and panel studies were assessed. Thereby, the authors discuss the study of Pitt and Khandker (1998) and three studies of the United States Agency for International Development in detail, as the data from these studies are used in most of the analysed papers. According to Duvendack et al. (2011) the data quality of these studies is insufficient, especially with respect to the sampling distribution and the lack of appropriate baseline data. Given the diverse econometric techniques that were used in the papers, for example Propensity Score Matching, it is not surprising that the results differ in the numerous publications. Due to this mixed results, the authors had difficulties finding a common thread.

To conclude, more than the majority of the analysed estimates in this systematic review are insignificant. In addition, the authors found that most of effects occur in the early stage of the pathways. This is a crucial finding, as for example business profits do not generally translate into an improved well-being of the individuals and as a result, the poverty alleviation potential of microcredit gets questioned. Therefore, the results seem to be in line with the ones found by Banerjee et al. (2015). Nevertheless, one can argue that the inclusion criteria of Duvendack et al. (2011) might be too strict and consequently there is the probability that relevant studies were not considered in their review.

Ruth Stewart et al. (2010) performed a similar systematic review as the one presented above, in which the authors focused on the impact of microcredit and micro-saving in Sub-Saharan Africa. Two years later, Stewart et al. (2012) published a more comprehensive systematic review, which tries to elaborate the effectiveness of different microfinance products from a global perspective. Both papers show mixed effects with respect to microcredit, adding up to the finding, that the evidence on the potentials of microcredit is not quite clear by now. This result was further confirmed by the literature review of Abhijit Banerjee (2013). More positive literature reviews were published by the Asian Development Bank (2011), Nathanael Goldberg (2005) and Kathleen Odell (2010). However, it has to be mentioned that these three reviews were commissioned by MFIs and therefore the results might be biased. Thus, one can ask why there is such a controversy about the outcomes of microcredit?

Firstly, for decades the effectiveness of microcredits was justified by anecdotal evidence (Armendariz and Morduch, 2010, p. 267). Sequentially, it took some time until proper impact evaluations were carried out. The first empirically valid study was released in 1998. However, other researchers still question the validity of this study. In the following years, it was common practice for MFIs to finance researchers to evaluate the effectiveness of their own microfinance activities.

This raises the possibility of placement bias, meaning that researchers might have performed different analysis on the data, but only report those that were in line with the objectives of their sponsors.

Secondly, the microfinance sector is a very heterogeneous market. As has already been pointed out, microcredit products can differ heavily in their design, for example in the interest rates or in the liabilities. In addition, the products are different in the locations where they are offered. It may be a rural or an urban region, Asia, or Africa and so on. It is difficult to measure and compare the diverse loans and their outcomes, as there is no such thing as “the microcredit” (Odell, 2010, p. 6). This is problematic, as many researchers in the microfinance sector failed to take this diversity into account. Therefore, the outcomes always depend on the context.

Thirdly, when analysing the outcomes of microcredit, numerous different variables can be used to capture the effect on the dependent variables. This makes the measurement of the multiple outcomes difficult and vulnerable to measurement errors. To give an example, some people might use microcredit for business activities, while others use it for consumption smoothing, sequentially this can lead to a diffusion of the outcomes (Banerjee et al., 2015b, p. 11). Another methodical problem arises when causal links are established. For example: was the increase in income caused by microcredit, or was it influenced by other factors like entrepreneurial spirit? Therefore, it is crucial for researchers to eliminate reverse causality (Orso, 2011, p. 10). One way to tackle this problem is the creation of treatment and control groups. Although this can lead to another problem, namely selection biases. This is the case when the individuals’ reasons for participating in the program are correlated with the outcomes. As a result the outcomes of such analysis are only moderately comparable. Reverse causality and selection bias are certainly one of the main challenges in microfinance impact evaluation. By now, only few researchers were able to overcome this issues, as has been pointed out in the previous section of this paper.

With that in mind, the following section elaborates on microcredit as a development tool. The strengths and weaknesses of microcredits are pointed out, especially with respect to some other alternatives to development assistance.

DISCUSSION

Despite the controversy regarding the empirical evidence of microcredits, the microfinance industry has grown rapidly. In 2001, the worldwide microcredit volume was about \$3 billion. Ten years later it increased to \$90 billion (Klas & Mader, 2014). This enormous growth rates were partly driven by international financing. In 2009, the microfinance sector received \$21,3 billion of cross-border investments (El-Zoghbi, Scola, & Lauer, 2011). These funds include loans, grants, guarantees and other debt funding by public as well as private donors and investors. In comparison the net official development assistance of the Development Assistance Committee of the OECD accounted for about \$119,6 billion in the same year (OECD, 2009). Given this massive financial support for the microfinance sector, it is important to discuss microcredit in a broader development context.

The poverty alleviation potential of microcredit heavily relies on the idea, that the borrowers invest their loans into business activities. One might wonder which businesses are actually owned by the poor. Usually these micro-entrepreneurs work in the informal sector, for example they run a corner store, are street vendors, or drive a rickshaw. In addition, these businesses do not have employees and barely differ from their competitors (Banerjee and Duflo, 2011, p. 279). As the compound yield of these business activities is marginal, only few are able to overcome poverty. Consequently, this might be a reason why microcredit

sometimes fails to deliver the desired outcomes. However, as microfinance customers do not necessarily invest into profit creating activities, they do use their loans for consumption smoothing. Thereby giving the poor more freedom of choice and the possibility to deal with unexpected expenditure, for example health shocks (Islam and Maitra, 2012, p. 242). This is certainly an argument for the usage of microcredit as a development tool. However, the same effects of consumption smoothing might also be produced by other alternatives, for example insurance or precautionary savings. Compared to microcredit the main advantage of such alternatives is, that its users can avoid making debts. For instance, a health insurance holder receives treatment in case of illness, whereas an uninsured has to take up a loan in order to deal with the costs of the illness. This loan worsens the financial situation of the borrower, especially if the ill health lasts for a long time and thus no income can be generated.

As already pointed out, microcredit targets people that are excluded from the formal financial sector. Thus, microcredit is helping people in terms of financial inclusion, which is certainly relevant for poverty alleviation. In absence of microcredit the poor mainly have to rely on informal sources for receiving loans. Therefore, these people usually face interest rates, which are way above the market rate. As there is no legal claim for the repayment of the loans, defaulting borrowers might even be exposed to violence. The legal structure of the microcredit contracts and the interest rates excel borrowing of informal sources. However, one might criticize the social dynamics that are embodied in microcredit. Loans are usually granted in form of group lending with joint liability (Vaessen et al., 2014, p. 13). Meaning that the group members mutually guarantee the repayment of the single loans. Therefore, peer pressure is used to minimize default rates. On the one hand, this can have negative effects on individuals that are unable to repay, especially in small communities, in a way that they might lose their local safety nets (Giné and Karlan, 2014, p. 72). In addition, it enhances the probability of multiple lending from different sources and might sequentially lead to over-indebtedness. On the other hand, the remaining group members could be driven into financial struggles, when they have to cope with the defaults of others. To overcome these problems, it would be possible to create access for the poor to the formal banking sector. In order to do so, investments in the market infrastructure are needed, especially in rural regions. Additionally, subsidies and guarantees for the banks are required to take on the risk associated with the poor. Given the rise of technology during the last decade, new digital platforms, like mobile phone banking, could be used to minimize transaction costs and widen accessibility.

In general, one might argue that development aid should be organized based on the needs of the poor. Banerjee and Esther Duflo (2011, p. 294) conducted a survey in which they asked the poor around the world, what they wanted their children to become in the future. Nearly all of the parents answered, that they wanted their children to work in public service, whereas entrepreneurship was an exceptional answer. This suggests the desire for a stable job with a regular income and thereby granting people security and enabling them to plan future investments for themselves and their families. This could be achieved by creating incentives for small and medium enterprises. The advantage compared to microcredit comes visible by an example as imposed by Karnani (2007). In the first scenario five hundred persons take up microcredits of \$200 each, buy sewing machines and start their own business. In the other case \$10,000 are lent to a single entrepreneur, who sets up a sewing manufactory and employs five hundred people. In the first scenario the borrowers have to compete in the same market and earn enough money to repay their loans and create income. In the second case the employees earn a steady income and do not face expenditures for a loan. Additionally, the economy of scale can be used to cut prices and increase efficiency.

After discussing microcredits from a broader development perspective, the following section will summarise the main findings of this paper. Moreover, some concluding remarks will be given and some recommendations for future research will be stated.

CONCLUSION

From its beginnings in the late 1970s microcredit has gained huge popularity. With financial support of multilateral organisations as well as private and public investors, the microcredit sector became eligible to serve more than two hundred million customers worldwide (Reed, 2014, p. 8). Thus, giving people the possibility to alleviate poverty by their own. In theory, microcredit affects the well-being of the individuals in three dimensions. One can distinguish between social and economic outcomes as well as women's empowerment. The latter is the case as women are the main target group of the MFIs. In reality, these claims are only partly true.

In recent years new evidence was contributed to the microcredit impact literature. With respect to quality of these studies, especially the six randomized controlled trials should be mentioned. These independent studies were conducted in six different countries and under different settings in order to cover the diversity of the microfinance sector. When comparing the results of these papers, it becomes visible that microcredit does not encourage people to set up businesses, although existing businesses get expanded. However, there is only suggestive evidence that this increased business activity leads to higher profits. With respect to income, which is an essential indicator for microcredits biggest promise, the situation looks less promising. None of the six RCTs found a significant effect between the access of microcredit and family income. Moreover, there are only modest findings that the consumption patterns change, for instance with respect to health or education. As a result, the poverty reducing effects of microcredit get questioned.

Similar results were found by Duvendack et al. (2011). In their systematic review, the state of the microcredit impact literature was evaluated. Based on numerous inclusion criteria the authors systematically screened more than 2,643 items. Afterwards they assessed the quality of this papers based on the research design and the analytical methods that were applied. One of the main outcomes is that most of the analysed studies suffer from errors either in the data, the econometric methods applied, or in both. In addition, more than half of the economic estimates were insignificant. The largest share of the significant results was found in an early stage of the pathway⁵. This is crucial, as the poverty alleviation potential gets greater at the end of the path, while effects in the early stage, for example business investment, do not necessarily translate into an increased well-being of the individual.

To conclude, the findings of the paper at hand suggest that the economic effects of microcredit on the lives of the poor are still unclear by now. However, the existing evidence indicates that the outcomes of microcredit might be smaller than assumed. This is surprising if one considers the enormous growth rates microcredit sector has achieved. Nevertheless, financial services for the poor can contribute to the alleviation of poverty. However, the effectiveness strongly depends on the accessibility and modality of these services. With respect to different alternatives to development assistance, there are some tools that could overcome the problems of microcredits and focus more on the needs of the poor, as has been argued in the discussion section. The most promising ones are savings and insurance as well as investments in small and medium enterprises.

⁵ See figure 1 for a more detailed description of the paths and outcomes of microcredit.

Given the problems regarding microcredit impact evaluation, one can give recommendations for further research. As the evidence base is far from being complete, future research is needed to fully understand the underlying dynamics of microcredits. Thereby, researchers should be very careful to eliminate the stated biases. As already pointed out, microcredits are often used for consumption smoothing. It would be interesting to evaluate if other microfinance products, like savings, are more suitable for this purpose. There are already some studies⁶ focusing on this issue, but the state of the literature is still in its early stage.

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⁶ See, for example, Nava Ashraf et al. (2006); Gunhild Berg, (2010); Lasse Brune et al. (2011); Pascaline Dupas and Jonathan Robinson (2009); Julian Jamison et al. (2014); Silvia Prina (2015).

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