

Microfinance: A Cure for Poverty - A Macro Perspective

Maja Marcus *

Introduction

In 2006 the Norwegian Nobel Committee awarded the Nobel Peace Prize to Muhammad Yunus, the “father of microfinance” with the words: “Yunus’s long-term vision is to eliminate poverty in the world. That vision can not be realized by means of micro-credit alone. But Muhammad Yunus and Grameen Bank have shown that in the continuing efforts to achieve it, microcredit must play a major part.” (The Economist, 2009; The Nobel Peace Prize, 2006). For more than thirty years microfinance has played a major part in poverty reducing policies. According to many studies, microfinance has had a tremendous, macroeconomic impact on poverty over the years. Recently, however, there has been a shift in findings and the excitement surrounding the magic of microfinance has simmered down. Critics have pointed out that many of the earlier studies have methodological and statistical errors and are therefore strongly biased (Bateman, 2011, p. 1ff.). As a significant amount of money from development aid, donations and governmental funds is being aimed towards microfinance, it is important to find out whether microfinance is in fact a cost-effective and beneficial policy for poverty reduction.

*Maja Marcus received her degree (B.Sc.) from the University of Bonn in September 2014. The present article refers to her bachelor thesis under supervision of JProf. Dr. Moritz Kuhn, which was submitted in December 2013.

With this in mind, the objective of this thesis is to identify the qualitative and quantitative impact of microfinance on poverty from a macro perspective as well as to determine the policy implications of the results of this analysis. In doing so, it will pose the overall question of whether microfinance is truly the cure for poverty as it has been deemed by earlier research.

Analyzing the current discourse on the impact of microfinance, this thesis finds that microfinance does not seem to affect poverty over the short- and medium-term. While, there is a strong correlation between microfinance and poverty, studies fail to convincingly identify causality. This thesis determines that the main reason why microfinance fails to have a significant impact is its surprising inability to promote microenterprises. The only significant effect of microfinance observed is a change in the inter-temporal consumption choices of borrowers (Duflo, Benerjee, Glennerster, and Kinnan, 2013, p. 3ff.). Yet, this thesis argues for a long-term effect of microfinance due to its likelihood of decreasing vulnerabilities to external shocks, positively impacting health as well as causing intergenerational spillovers. With this in mind, this thesis stresses the importance for policies that aim at increasing any observable effects of microfinance. One initiative proposed here is for microcredit schemes to be designed in a more sophisticated manner in order to target the specific needs of the borrower subgroups.

The thesis will be structured as follows: after introducing the prerequisites for the analysis in this thesis, two papers elaborating on the impact of microfinance with opposing views will be presented and analyzed. As a last step, policy implication will be identified. The conclusion will outline the results of this thesis and recommend possible future research proposals.

Prerequisites for an Analysis

In the last decades, microfinance has rapidly increased all over the world. At the same time, poverty has seen immense reductions in terms of global aggregates. The negative correlation between poverty and microfinance becomes quickly apparent, when scrutinizing the empirical data (compare figures 1 and 2). As microfinance has been created in an effort to reduce poverty, this thesis investigates whether their relationship extends beyond a correlation to the point of a causal linkage. In order to precisely analyze this it is vital to first define microfinance and poverty correctly.

While microfinance can describe a very broad range of basic financial services, this thesis primarily deals with microcredit in its most common form: group-lending. In a group-lending scheme, a microfinance institution (MFI) will lend money to a group of people that are lacking access to alternative means of borrowing as a result of their poverty. As the borrowers are treated as a single entity, a joint liability is induced that creates social pressure between the members to not default, making up for a lack in collateral and reducing the costs of borrowing (Todaro and Smith, 2011, p. 741f.).

The concept of poverty has many diverse dimensions and therefore definitions vary with different approaches. This thesis focuses on the definition most advantageous for quantitative comparison, which describes an individual living in poverty when his basic material needs are not being met (Hulme and Mosley, 1996, p. 105). The material well-being of an individual is often quantified by income and consumption (ibid, p.105f.). The classification of poverty occurs when income and consumption are below a standardized cut-off point such as a relative or absolute poverty line (The World Bank, 2013).

A Macroeconomic Approach by Imai et al.

The 2012 paper “Microfinance and Poverty - A Macro Perspective” by Imai, Gaiha, Thapa and Annim seeks to answer the question raised by recent research about whether microfinance truly has an impact on poverty reduction. The authors hypothesize that microfinance does reduce poverty at the macro level and verify this in the results of their study (Imai, Gaiha, Thapa, and Annim, 2012, p. 1675). Implying a very positive outlook for the significance of microfinance, the authors state that with a 10% increase in MFI loan per capita comes a 0.325% reduction in poverty (Imai, Gaiha, Thapa, and Annim, 2012, p. 1680). They conclude that microfinance is a viable poverty reduction policy and assert that recent research doubting the effect of microfinance on the macro level is highly inaccurate (Imai, Gaiha, Thapa, and Annim, 2012, p. 1684).

A Critique

With their research, Imai et al. provide promising results for the argument that microfinance leads to a decline in poverty. However, there are factors worth considering when evaluating their results.

To begin with, the authors recognized the need for an instrumental variable approach in order to deal with reverse causality. In their effort to measure the effect microfinance has on poverty, they utilize the gross loan product (GLP) of a country as an estimate for microfinance. Yet, as GLP and poverty are likely to influence each other, Imai et al. choose two instrumental variables for estimating GLP: the “cost of enforcing contract and a lag of 5-year average of gross loan portfolio weighted by the number of MFIs for each country” (Imai, Gaiha, Thapa, and Annim, 2012, p. 1677). However, it is questionable whether their choice in instruments eliminates the problem of reverse causality. For instance, the cost of enforcing contracts is a strong indicator for the economic institutions of a country.

Countries with higher income and less poverty can afford better institutions. Moreover, studies have shown that better institutions facilitate development and poverty reduction in a country (Todaro and Smith, 2011, p. 84ff.). Therefore, it cannot necessarily be assumed that the cost of enforcing contracts is not, to some extent, directly or through omitted variables cause or effect of poverty. This casts doubt on the causality implied in the results of this study.

Furthermore, it must be noted that the time frame used for the evaluation of this study, the years 2003-2007 (Imai, Gaiha, Thapa, and Annim, 2012, p. 1684), is set within a time of remarkably high growth in developing countries. Since 2000, GDP growth, consumption growth, and similar macroeconomic indicators have taken off (The Economist, 2013). This increases the possibility that there are variables omitted in the study's regressions that are the driving force behind economic growth and poverty reduction. Due to this omitted variable bias, a decline in poverty may then be falsely attributed to a rise in microfinance in their model. Taking this into account, the study of Imai et al. does not provide convincing evidence on a causal relationship between microfinance and poverty, but rather confirms their correlation.

Finally, even if one is to accept the results of this study, it shows very little insight into the economic mechanisms through which loaning to an individual or a micro-enterprise will decrease poverty on a macro scale. Microfinance could, for instance, lead to a rise in income if invested in microenterprises, the diversification of income sources and the like. It could also affect inter-temporal decision-making, smoothing consumption and decreasing vulnerability due to external shocks such as illness or natural disasters. Additionally it is possible, that microfinance has an impact on education, health or housing and will lead to positive spillover effects (Hermes and Lensink, 2011, p. 875). As a macroeconomic approach fails to achieve an understanding of the exact mechanisms that lead to poverty

reduction, the following study takes a more micro-founded approach in analyzing the effects microfinance has on poverty.

A Micro-Foundation by Duflo et al.

The paper “The Miracle of Microfinance? Evidence from a Randomized Evaluation” by Duflo, Banerjee, Glennerster and Kinnan reports on the execution and results of a randomized control trial (RCT) in which microfinance is introduced to parts of India. The objective of their study, carried out from 2005 until 2010, is to analyze the effect that microfinance has on consumption, business income, and creation, and thereby its alleged impact on poverty (Duflo, Banerjee, Glennerster, and Kinnan, 2013, p. 3ff.).

Results

As mentioned above, consumption levels are a good indicator of poverty. This implies that a rise in consumption may possibly be one channel through which microfinance could lead to poverty reduction. Consequently, Duflo et al. examine this factor closely in the evaluation of their RCT. Disappointingly, Duflo et al. could not find a macroeconomic poverty reducing effect of microfinance through increased consumption levels. However, they did detect a change in inter-temporal consumption decisions. While the level of consumption seems to be unaltered, they found a difference in composition. Spending on durable goods was significantly increased in the treatment group. At the same time, the expenses on festivals and temptation goods, such as alcohol and tobacco, were cut back. As Duflo et al. argue, this suggests that the households decreased unnecessary costs to finance the micro-loan as well as the subsequent investment on a durable good (Duflo, Banerjee, Glennerster, and Kinnan, 2013, p. 19ff.).

One other important channel through which microfinance can contribute to

poverty reduction is income. A major argument for the positive impact of microfinance is that it supposedly enables individuals to create micro- and small enterprises and to raise profitability of already existing businesses, giving them more lucrative sources of income. Hence, Duflo et al. pay close attention to this mechanism in their study, but do not find it verified in their results. The authors discover that borrowers' investments generally do not seem to translate into bigger business profits, a greater probability of becoming an entrepreneur or increased income. Duflo et al. explain this by arguing that the marginal business that begins through microfinance in an area already offering unprofitable opportunities will be even less lucrative. They found that the only considerable and significant boost in profits happened in the upper tail of previously existing businesses which were already comparably profitable and large (Duflo, Benerjee, Glennerster, and Kinnan, 2013, p. 22ff.). Taking this into consideration, the researchers' results provide important counter-evidence to much of the earlier literature claiming microfinance significantly reduces poverty through business growth.

Discussion

The results presented in the paper by Duflo et al. give much insight into the channels through which microfinance has an impact on poverty, and more importantly where it fails to have an effect. Nevertheless, this thesis argues for a more time-distinguished interpretation of their results. While the 5 year-long study of Duflo et al. gives insight into the short- and medium-term effects of microfinance on poverty, it might have neglected long-term effects that evolve over the life span of an individual or longer.

One argument for this addresses health issues of borrowers. As Duflo et al. have discovered, microfinance leads to a decline in expenditure for temptation

goods. The decreased consumption of alcohol or tobacco could have favorable long-lasting health effects for an individual. This, in turn, can decrease his lifetime health expenditures and increase his lifetime income, as studies have shown that healthier people are more productive and earn higher wages (Todaro and Smith, 2011, p. 399f.).

Another mechanism through which microfinance could have long-term effects is the possibility of decreasing the vulnerability of the poor arising from external shocks. Duflo et al. found in their study that microfinance changes inter-temporal consumption decisions. This can lead to consumption smoothing, crucial in times of an unexpected external shock or periods of cyclical downturns in order to cope with the crisis (Chowdhury, 2009, p. 8). Furthermore, Duflo et al. observe a boost in the probability that a household owns more than one business (Duflo, Benerjee, Glennerster, and Kinnan, 2013, p. 22ff.). This fact points to a diversification in income sources, which spreads the risk of being affected by a crisis. One study supporting the hypothesis that microfinance decreases vulnerability to external shocks finds microfinance acting as a recovery tool after a natural disaster (Hermes and Lensink, 2011, p. 877).

These are just some examples of the various ways through which microfinance may have an effect on the lifetime income of individuals and when aggregated on poverty on a macro scale. If microfinance does have a long-term impact, it could also potentially lead to intergenerational spillover effects. For instance, less poverty and less vulnerability in a household may positively affect the education of a child, which, in turn, will influence his future income. However, a sizable challenge to a more profound discussion on long-term effects is that an exact quantification of these on the macro scale may prove to be difficult to obtain.

Policy Implications

Taking the newest research into account, it becomes apparent that microfinance does not seem to be the cure for poverty. However, one should not neglect the aforementioned impact that microfinance does have. Regarding this, it is of value to address how any observed effects can be enhanced. While there are many suggested improvements and complimentary efforts for increasing the effectiveness of microfinance, such as various supply and demand side policies (Chowdhury, 2009, p. 2ff.), this thesis further points out the following consideration.

Targeting

Considering how fast the establishment of MFIs spread across the world, it is surprising to discover that many MFIs struggle with fairly low take-up and high dropout rates (Duflo, Benerjee, Glennerster, and Kinnan, 2013, p. 33). This points to a misunderstanding of the actual needs of borrowers and might add to an explanation of why microfinance is relatively ineffective.

One possible solution for this is a better targeting of borrowers. In the previous analysis it becomes apparent that microfinance has different effects on different levels of poverty. This stresses the importance of not treating the poor as one homogenous group, but to distinguish between the poorest of the poor, the so-called “core poor” (Hermes and Lensink, 2011, p. 876), and the relatively better off poor. For instance, the core poor, on the one hand, are much more risk averse and therefore rather invest in working capital and consumption over productive activities (Hulme and Mosley, 1996, p. 787). The relatively better off poor, on the other hand, might struggle more with transiting a microenterprise to a small and medium enterprise (SME) due to a lack of credit for SME’s (Bateman, 2011, p. 3). Addressing the specific needs of the relevant households should be a first priority for MFIs if their goal is to actively reduce poverty.

Not only the distinction of different poverty levels, but also the distinction of different employment sectors is important when considering how to increase the effects of microfinance. In her paper “Microfinance and Investment: A Comparison with Bank and Informal Lending” Lucia Dalla Pellegrina shows that MFIs have so far not been able to effectively engage the agricultural sector in borrowings. One major obstacle is that microcredit is usually given out over short periods of time, whereas the average production cycle in agriculture is much longer. The solely short-term investment possibilities are therefore not profitable for a borrower working in agriculture (Pellegrina, 2011, p. 882ff.). However, especially for the rural population, which is particularly prone to poverty (The World Bank, 2013), the agricultural sector is a key element in regard to poverty reduction. Therefore, designing microcredit schemes that are better at reaching this sector could lead to a much higher impact of microfinance.

Conclusion

The once prevalent assumption that microfinance has a significant impact on poverty from a macro perspective has recently lost some of its credibility. While discussions are still being shaped by controversial views, more evidence challenging the positive impact of microfinance is accumulating. This thesis has come to the conclusion that microfinance most likely does not have a significant effect on poverty over the short and medium run, but arguments can be made for a positive long-term influence.

Research shows that microfinance does not have a significant impact on microenterprises and thereby on disposable income. Nonetheless, it was determined that microfinance has an impact on the inter-temporal consumption choices of households. This however does not seem to translate into significant poverty reduction in the short and medium term. Yet, it is possible that microfinance

does have a macroeconomic impact on poverty in the long run, through intergenerational spillovers, decreased vulnerabilities, and health benefits for borrowers. Targeting the needs of the borrowers' subgroups might substantially increase any observed effects.

While recent research has provided more insight into the effects of microfinance, there is still plenty to be investigated. The robustness of the results of Duflo et al. should be further tested and extended to other micro-financial services. Additionally, the hypothesis of long-term effects as well as possible enhancements for any impact observed need to be further examined.

Microfinance does not seem to be the cure for poverty as it had once been lauded. However, there are some effects that are observable today and there may be others in the long run that remain undiscovered. Further identifying these effects and enhancing them with the right policy mix will not eradicate poverty on a macro scale, but it may have a positive impact on it in the future.

References

- BATEMAN, M. (2011): "Microfinance as a development and poverty reduction policy: is it every-thing its cracked up to be?," Overseas Development Institute Background Note.
- CHOWDHURY, A. (2009): "Microfinance as a Poverty Reduction Tool A Critical Assessment," *DESA Working Paper*, (89).
- DUFLO, E., A. BENERJEE, R. GLENNERSTER, AND C. KINNAN (2013): "The miracle of microfinance? Evidence from a randomized evaluation," *NBER Working Paper*, (18950).
- HERMES, N., AND R. LENSINK (2011): "Microfinance: Its Impact, Outreach, and Sustainability, in World Development," *World Development*, 39(6), 875–881.
- HULME, D., AND P. MOSLEY (1996): *Finance against Poverty*, vol. 1.
- IMAI, K., R. GAIHA, G. THAPA, AND S. ANNIM (2012): "Microfinance and Poverty: A Macro Perspective," *World Development*, 40(8), 1675–1689.

PELLEGRINA, L. (2011): “Microfinance and Investment: A Comparison with Bank and Informal Lending,” *World Development*, 39(6), 882–897.

THE ECONOMIST (2009): “A partial marvel. Microcredit may not work wonders but it does help the entrepreneurial poor,” Accessed: 21.11.2013.

——— (2013): “Not always with us. The world has an astonishing chance to take a billion people out of extreme poverty by 2030,” <http://www.economist.com/node/21578643/print>, Accessed: 22.12.2013.

THE NOBEL PEACE PRIZE (2006): “The Nobel Peace Prize for 2006, Oslo 13.10.2006,” <http://www.nobelprize.org/nobelprizes/peace/laureates/2006/press.html>, Accessed: 05.12.2013.

THE WORLD BANK (2013): “Choosing and Estimating a Poverty Line,” <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY>, 12.12.2013.

TODARO, M., AND S. SMITH (2011): *Economic Development*. 11 edn.

Appendix

Progress in Reporting, 1997-2010

Date	Number of Programs Reporting	Total Number of Clients Reached	Number of Poorest Clients Reported
12/31/97	618 institutions	13,478,797	7,600,000
12/31/98	925 institutions	20,938,899	12,221,918
12/31/99	1,065 institutions	23,555,689	13,779,872
12/31/00	1,567 institutions	30,681,107	19,327,451
12/31/01	2,186 institutions	54,932,235	26,878,332
12/31/02	2,572 institutions	67,606,080	41,594,778
12/31/03	2,931 institutions	80,868,343	54,785,433
12/31/04	3,164 institutions	92,270,289	66,614,871
12/31/05	3,133 institutions	113,261,390	81,949,036
12/31/06	3,316 institutions	133,030,913	92,922,574
12/31/07	3,552 institutions	154,825,825	106,584,679
12/31/09	3,589* institutions	190,135,080	128,220,051
12/31/10	3,652 institutions	205,314,502	137,547,441

* The small increase in the number of institutions reporting December 31, 2009 data is due, in part, to the fact that we subtracted from the list of "practitioners" more than 88 Networks who assist with the collection of practitioner action plans but have no clients themselves.

Figure 1: Global Increase of Microfinance. Source: Maes, J.P., L.R. Reed: State of the Microcredit Summit Campaign Report 2012

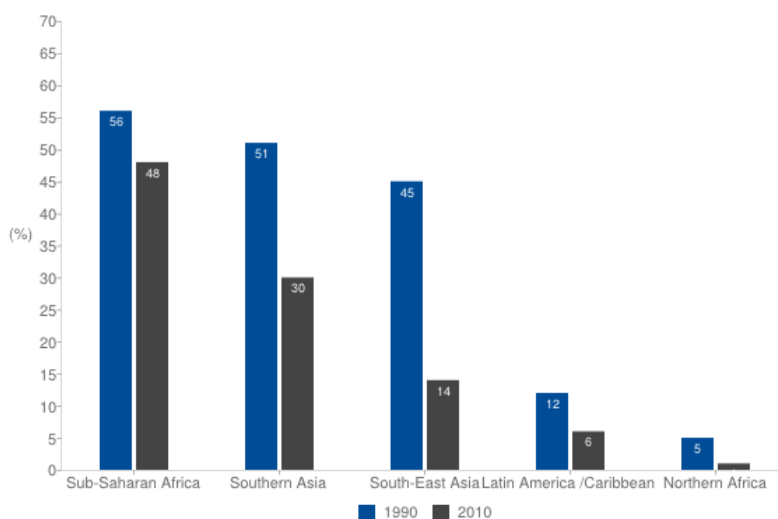


Figure 2: Regional Decrease in Poverty. Source: UNDP: Eradicate extreme poverty and hunger, in: http://www.undp.org/content/undp/en/home/mdgoverview/mdg_goals/mdg1/ (01.12.2013)

