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▶ To cite this version:

Mohamed Arouri, Adel Ben Youssef, Mounir Dahmani, Varatharajan Durairaj, Nakubyana Mungomba. Microfinance: A powerful tool for human development in Africa. in "One Billion People, One Billion Opportunities" Soucat, A., and Mthuli, N. (eds) (Chapter 26), African Development Bank. Tunis, 2014. hal-03721790

HAL Id: hal-03721790 https://hal.science/hal-03721790

Submitted on 12 Jul2022

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African Development Bank

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Suggested citation

Arouri, M., Ben Youssef, A., Durairaj, V., Dahmani, M., and Mungomba, N. (2014), 'Microfinance: A powerful Tool for Human Development in Africa', in "One Billion People, One Billion Opportunities" Soucat, A., and Mthuli, N. (eds) (Chapter 26), African Development Bank. Tunis.

April 2014

For many poor people, finding a way out of poverty is limited by their inability to access finance (save, borrow or insure) due to limited infrastructure, constraining regulatory and legal environments, limited understanding and awareness of financial services and perceptions among others that lending to or insuring them is risky and commercially unviable.

Building inclusive financing systems offers a route out of poverty and system traps characterized by persistent poverty, limited economic opportunities and poor health and education. People, particularly the poor and women, can be economically and socially empowered through enhanced access to well-functioning and efficient financial services, allowing them to better integrate with the country's economic activity and contribute to economic growth.

Microfinance is one of the most significant innovations in development policy of the past three decades. Providing microfinance services to the poor (those earning less than USD 2 a day) has been hailed by advocates as an effective poverty alleviation and human development tool.¹ It provides poor and marginalized households with access to financial services including credit, savings and insurance by linking them to the formal banking and insurance sector. It facilitates income-generating self-employment activities, financial risk protection and access to essential education and health services. It enables micro-entrepreneurs to build businesses and increase their income—and improves the general economic well-being of the poor and marginalized. It enhances financial outcomes of the poor such as savings and asset accumulation.

At the same time it generates nonfinancial outcomes such as health, food security, nutrition, education, women's empowerment, housing, job creation and social cohesion.² Microfinance is thus considered a powerful tool to build human capital in developing countries, especially in Africa. The *Human Development Report 2005* attributed Bangladesh's relative success in human development to microfinance that had expanded economic opportunities, particularly for women, providing them with greater empowerment and choice.³ However, as microfinance is still evolving, its impact on human capital development is not yet known or fully realized.

Given its current progress, microfinance can be viewed as a step closer to taking formal financial services to the poorest. Its current beneficiaries are mostly the middle class and marginal poor. The poorest are left behind, less involved in microfinance and less able to move to a sustained labor and consumption pattern. Perhaps, the next logical step would be to make it suitable for the poorest so that financial inclusion is universal. There is also an increasing need for more systematic evidence of the positive link between microfinance and human capital development.

Starting from these observations, the objectives of this chapter are threefold. First, it seeks to provide a conceptual framework summarizing the theoretical links between microfinance and human capital development. Second, it extends the systematic review of van Rooyen, Stewart and de Wet (2012) of microfinance impact in Africa by including works related to North Africa and focusing mainly on human capital development. Third, it discusses key policy issues and strategic directions in order to increase the human capital effects of microfinance in Africa.⁴

What is microfinance?

Microfinance has emerged largely as a community or nongovernmental organization (NGO) response to market and government failures. Formal banks fail to provide services to poor clients, and governments are unable to ensure that needed financial services reach the poor. It is a promising way to allow the poor and disadvantaged to save, as well as to provide them with access to credit to improve their income-earning potential. Indeed, it has become an important tool in fighting poverty.

Microfinance is made up of a set of small financial products that include savings, credit and insurance, and that suit people with low incomes and who live in places where the financial system is not so well developed. These people were initially excluded from the classic or formal banking system. A review of data from 47 countries reveals that microfinance services are provided by large networks of development banks, big institutions (each reporting more than 100,000 clients) and numerous small institutions that vary by size, degree of organization and legal status. The first two categories of institutions, which are either state-sponsored or not-for-profit institutions (NGOs, associations, mutual insurance companies/cooperatives, limited companies) meet about 90% of the demand, particularly from the poorer population groups.⁵

Some institutions, primarily engaged in other businesses, extend microfinance as a means to generate community goodwill so as to enjoy a competitive edge through the banking–social sector linkage. Altogether, microfinance resources are estimated to constitute about 2.5% of total banking resources. The microfinance markets appear to be greatly segmented and with weak links among market segments. Funds of different lenders can hardly be substituted for one another. As a consequence, deposits mobilized—as well as credit facilities—differ in structure, associating demand with distinct socioeconomic groups.

Microcredit

The most common microfinance tool is microcredit, which extends small loans (USD 50–1,500), often without collateral, to impoverished people. Microcredit provides loans at relatively low interest rates that could be used to generate income or be used to pay for services. First explored in Bangladesh in 1976 when the Grameen Bank was established, microcredit substitutes borrower collateral with social collateral through peer pressure support using small informal groups (largely female) to ensure repayment. The essence of microcredit lies in its low-cost procedures replacing sophisticated credit-evaluation techniques and collateral regulations. Loan interest rates (18–61% a year), while seemingly high by commercial credit standards, are generally far below rates (reportedly 36–5,000%) charged by informal credit sources such as money lenders in the same settings.⁶ The most recent estimate of the median size of a microloan per borrower ranges from USD99 in South-East Asia to USD 1,254 in Europe (table-1).

	Microloan size per borrower			
WHO region	USD	International \$		
Africa	203	779		
Americas	636	1,428		
Eastern Mediterranean	257	674		
Europe	1,254	3,120		
South-East Asia	99	453		
Western Pacific	282	1,073		

Table-1: Median size of a microloan, by WHO¹ region

Source: Durairaj and others 2010b.

Micro-saving

Micro-saving offers a safe, convenient and accessible saving platform for the poor and introduces sound financial, organizational and institutional practices that align with household needs. Through micro-saving, the task of smoothing consumption is made easy for those, particularly women, who are unable to store money safely otherwise. Developed in the 1990s, it allows people to deposit money in small amounts for future use, without minimum balance requirements and often in conjunction with credit. Saving by the poor often comes in such small increments that conventional banks are not prepared to offer services to them, either because the transaction costs are unprofitable or because of other more lucrative investment opportunities. Although micro-saving does not change the need for people to pay service providers (such as health care) when they get sick, it is a form of prepayment. Micro-saving accounts work like any formal saving account in a bank, but are designed to accommodate smaller deposits.⁷ The minimum balance requirements are often waived, or kept low, allowing users to save small amounts.

Micro-saving encourages poor people to save for education, health care or other future investment. People who participate are usually better prepared to cope with any financial risks, which would otherwise force low-income individuals to borrow at high-interest or suffer from lack of service access. But the ability to save through a microfinance institution (MFI) is often limited to people who are willing to borrow from it. A survey of 166 MFIs in 2009 revealed that only 27% of MFIs offered saving products.⁸ The total number of deposit-taking nonbanking financial institutions was 40,000 in 2011 even while the number of commercial banks declined from 16,000 in 2004 to 14,200 in 2011;⁹ 20% of them were in low-income countries. In Burundi there were 124 deposit accounts per 1,000 adults in nonbanking financial institutions against 32 deposit accounts per 1,000 adults in commercial banks.¹⁰ In an attempt to boost micro-saving coverage, the Bill & Melinda Gates Foundation offers grants worth USD38 million to 18 MFIs in Africa, Latin America and South Asia.

¹ WHO denotes World Health Organization

Micro-insurance

Micro-insurance relates to risk pooling and financial risk protection. Although it is risky for MFIs with a smaller risk-base to offer insurance products, as larger risk pools facilitate better risk pooling, MFIs do provide them to cover health and agriculture risks. An insurance product can be termed micro-insurance if it targets low-income or excluded populations, and the premium is adjusted based on affordability.¹¹

What does microfinance offer to human development?

Microfinance impacts human development through six complementary instruments (figure 1): women's empowerment; income generation; education; employment creation; social and financial inclusion; and access to services.

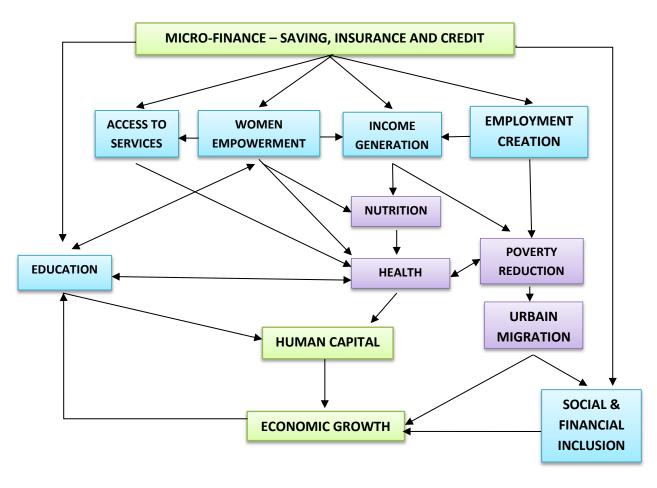


Figure-1: Conceptual framework

Source: Authors.

Several MFIs have sought to provide additional inputs to their financial products such as basic health services, health education or health insurance products.¹² "Such integrated package may

provide both the means (income/empowerment) and the knowledge to address priority health concerns, and present the possibility of substantial cost recovery from microfinance providers."¹³ Studies suggest these models can lead to higher immunization rates, the adoption of healthy breastfeeding practice and better management of childhood diarrhea.¹⁴

Education and skills building

Despite a huge change in the educational system in Africa, enrollment in rural areas and fragile states is still lagging². Microfinance has strong potential impacts on education and enrollment, especially in primary schools.

According to Maldonado and Gonzaléz-Vega (2008), microfinance may influence education through five channels. First, access to microfinance influences the household income. Given the positive income elasticity of the demand for education, we expect an increase of education demand especially in rural areas. Income-generating activities from microfinance permit higher investment in education. Second, income volatility does not allow sustained enrollment over time. Microcredit can help stabilize household revenue and avoid child labor in order to increase household revenue. In fact, most rural African households take their children out of school in such periods.

Third, women are supposed to have stronger preferences for educating their children than men; microcredit is meant to benefit women more and change their power in their households. Therefore, the education of children is improved by this effect. Women may dedicate more time to educating their children than alternative activities. "If preferences are gender-related and microfinance improves direct access to loans by women, thereby changing their power to influence household decisions, the rate of human capital formation may be affected (gender effect)."¹⁵ Fourth, since microcredit improves the opportunities for educated household members and allows them to realize higher incomes and wages, the incentive for education will be strengthened. Incentives for education may be transmitted from one generation to another. This effect may be observed in the long term but not in the short term.

And fifth, microcredit may change demand for child labor within households and allow more time for education. The poor are used to involving their children in revenue-generating activities, even labor, because of lack of revenue. Because microfinance may allow sustainable revenues, the incentives to use child labor may change.

These five potential effects work together to improve the education outcomes (enrollment rates, time spent on education and knowledge acquisition). Several international reports, especially for Asia, Latin America and Central Europe, demonstrate such effects.

² Refer Bongjoh, F., Foko, B., Ndem, F., & Gueye, M. (2014), "Making National Education systems work for Africa", in "One Billion People, One Billion Opportunities" Soucat, A., and Mthuli, N. (eds) (Chapter 17), African Development Bank. Tunis.

Access to essential services

Microfinance has the potential to make essential health services more accessible and to allow people to either save for future needs or to repay the costs slowly over time. By facilitating early case detection through timely financing of outpatient care, it can minimize risk of hospitalization, thus reducing costs, and allow people to continue working.

The interdependence of poverty, health and development might seem obvious, but crosssectoral experience on how and where to intervene remains limited. Microfinance is at the center. Access to financial services allows rural and poor persons to borrow and save and can change their behavior toward health care. They can pay for medicines and clinics visits more easily. MFIs are used to operating in slums, villages and neighborhoods where poverty and unemployment are high. Combining health and financial interventions can be powerful. Pronyk, Hargreaves and Morduch (2007) discuss the potential of MFIs to contribute toward achieving the Millennium Development Goals, especially those involving health.

At least four channels are mentioned to discuss the link between microfinance and health for the poor. The first is linked to the section below. Improving education access can have profound effects on health and well-being (lower rate of illness, malnutrition and childhood mortality). Access to primary schools is sometimes accompanied by free nutrition programs for under- or malnourished children, as in Mauritius and many other countries.

The second channel is nutrition. Increased access to microfinance can raise food consumption, especially for children. Microfinance increases nutritional outcomes. Several studies show that in Bangladesh significant effects on nutrition, especially for children between 6 and 72 months old, have been reached following microcredit initiatives.¹⁶ Helping the poor generate sustainable revenues improves their access to healthier nutrition and by this process improves their children's health.

The third channel is linked to the gender effect. Evidence supports a positive correlation between microfinance and enhanced health through improvement of social status of women. As women become active and more financially sustainable, they tend to improve their health conditions.

The fourth channel is linked to empowerment of women, which leads to less violence and HIV/AIDS infections.

Microfinance programs allow the poor to have better attitudes and reflexes about their health, especially the health of their children. One therefore expects to see a decrease in child mortality and improved sanitation conditions in general.

Financial inclusion and risk protection

Advocates of microfinance argue that access to finance can help substantially reduce poverty. Microfinance has been recognized as one of the most efficient tools to alleviate poverty, considering its significant contribution to job creation and revenue generation for a government.¹⁷ This is due to the empirical finding that accentuated the vast potential of

microfinance in improving the quality of life of poor people.¹⁸ Given this, microfinance has become a prominent tool for poverty reduction, especially in Malaysia, Indonesia, Bangladesh and the Philippines. The contribution of microfinance to reducing poverty has convinced many governments, NGOs and individuals to support MFIs and their activities. Longitudinal studies from Bangladesh have found an association between poverty reduction and greater consumption attributable to microfinance participation.

One of the main criticisms of microfinance is the claim that it does not reach the poorest of the poor¹⁹ or that the poorest are deliberately excluded from microfinance programs.²⁰ The core poor are generally too risk averse to borrow for investment in the future. They benefit only to a very limited extent from microfinance. Even when they do benefit from microfinance the most important part of the loans is dedicated to immediate consumption. An increasing objective of sustainability pursued by MFIs leads them to exclude the poorest and to focus on the "high fringe" of the poor and on the middle class. Only subsidized programs have tried to reduce poverty and to include them. The tradeoff between outreach and sustainability is becoming obvious worldwide.²¹

Women's empowerment

Microfinance has been celebrated for its ability to reach out to women and enhance their welfare, offering them the possibility to move toward entrepreneurship and to abolish the poverty circle. While microfinance does not target women only, they form the majority of beneficiaries. At the end of 2005 it was reported that more than 3,000 MFIs were active and provided services to more than 113 million people worldwide, 84% of them women.²² Women typically benefit from smaller loans than men.²³ D'Espallier, Guérin and Mersland (2010) survey performance data of 350 MFIs in 70 countries over 11 years and confirm that female borrowers are associated with better credit risk. One of the explanations consists in affirming, according to multilateral development agencies and MFIs, that women are good credit risks. The World Bank (2007, 124) argues that "experience has shown that repayment is higher among female borrowers, mostly due to more conservative investments and lower moral hazard risk." Some authors like Armendàriz and Morduch (2005) recommend targeting women to reduce the default risk for MFIs. Several empirical studies have found that women are more conservative or cautious in their investment strategies and thus have better repayment records. Another argument is that women have fewer credit opportunities than men and must repay their loans to ensure continued access to credit. Agier and Szafarz (2013) show that in Brazil, there is no evidence of gender bias in loan attribution by MFIs and the hypothesis of "ghetto-izing" women with small loan programs is invalid. Since microcredit is benefiting women's empowerment and entrepreneurship, this leads to several human capital improvements in the household like better education for their child, better health and more investment in social activities (building social capital).

This discussion shows that microfinance has a great potential in theory to develop human capital in Africa by targeting the poor. It improves their financial, economic and social inclusion in such a way that increases their education and skills. As the development of their human capital increases their employability increases, permitting better jobs and lives. This process also allows the creation of new businesses. Microfinance is considered nowadays one of the main policy tools to reduce poverty and boost human capital. The empirical literature has showed such impacts in Asia (particularly in India, Cambodia and Indonesia) and Latin America (Venezuela and Peru). Since they were first adopters of this financial technology, their experience is very useful for Africa.

But at least four issues remain over the link between microfinance and human capital formation worldwide. First, microfinance has not exceeded its borders to include the poorest.²⁴ Finding an appropriate way to target the poorest is still open and needs innovative solutions. Second, pushed by the need to be sustainable, many MFIs today are targeting the middle class. As many workers are poor (the working poor) and some middle class people are restricted in accessing credit and finance, they are asking for loans from MFIs. They consider MFIs as competitors of classical finance institutions with higher interest rates and easier loan conditions. As the target population for MFIs is changing, this may induce MFIs to prefer them over the initial target population.

Third, as most MFIs are financial institutions, cooperatives or NGOs, some are operating without the necessary skills. This emerging industry needs skilled employees for better performance. While the industry has existed for more than four decades, few higher-education institutions propose degrees and training in it. This is particularly true in Africa, which has a huge need for skills development and professional training in this industry. And fourth, the paradox is that the poor use MFIs more for saving than credit, to adjust their savings and smooth consumption over a longer period.

Microfinance in Africa

Despite serious structural obstacles such as lack of infrastructure, currency stability and high inflation, Sub-Saharan Africa recorded the largest increase in microcredit of any region, surpassing the South Asian portfolio for the first time since 2006.²⁵ Moreover:

Sub-Saharan Africa looks set to be the fastest growing market over the next couple of years and perhaps beyond. This is good news for a continent that has some of the lowest financial inclusion levels, but is enjoying the political stability and demographic dividend that may provide a strong base for solid economic growth in the coming decade. With the right market conditions, this may be an excellent opportunity for microfinance investment, but here again it's worth noting that current growth in the continent is taking place in a relatively small number of countries and regions.²⁶

Microfinance is still evolving and the actual number of poor people linked with formal banking institutions through micro-banking is not yet known. Estimates of the number of savings and credit accounts with alternative financing institutions in 2004 indicated about 650 million micro accounts serving about 500 million clients worldwide, with a predominant (84%) presence in the Asia-Pacific region. Demand-side estimates indicate that microfinance has so far reached between 2% and 13% of the target (that is, the poor) population in different settings.

Some institutions, primarily engaged in other businesses, extend micro-banking as a means to generate community goodwill so as to enjoy a competitive edge through the banking-health linkage. Altogether, micro-banking resources constitute about 2.5% of total banking resources.

Despite structural problems and deficiencies, microfinance is progressing in Africa. Many funds and MFIs are entering this market for the first time despite the serious problems that still remain. Sub-Saharan Africa is still a difficult environment, with the less developed countries and Tier 2 and Tier 3 MFIs remaining inaccessible due to lack of market infrastructure.

Aryeetey (2005) reports that microfinance markets in Africa face several market failures. The most important one is the lack of market integration. As a result of fragmentation, and because each lending unit cannot alter the structure of its operations and products in the short to medium term without additional flows of resources, there are few lenders in Sub-Saharan Africa that meet the needs of borrowers. In Côte d'Ivoire, Togba (2012), using 2002 data, found that MFIs collect a much larger amount of savings than what they give out in loans, and that informal loans through microcredit institutions have a particular role to play in the financial sector in that country. Ethnic networks, especially religious ones, are important.

Country	Population coverage (%)		
Namibia	55.8		
South Africa	54.5		
Swaziland	12.0		
Zimbabwe	11.0		
Tanzania	7.3		
Ghana	7.0		
Mauritius	6.1		
Senegal	6.0		
Uganda	4.6		
Kenya	3.2		
Тодо	3.1		
Ethiopia	2.6		
Comoros	2.6		
Benin	2.3		
Tunisia	1.9		
Malawi	1.7		
Cameroon	1.7		
Botswana	1.2		
Burundi	1.1		

Table-2: Population covered by micro-insurance in Africa, 2011

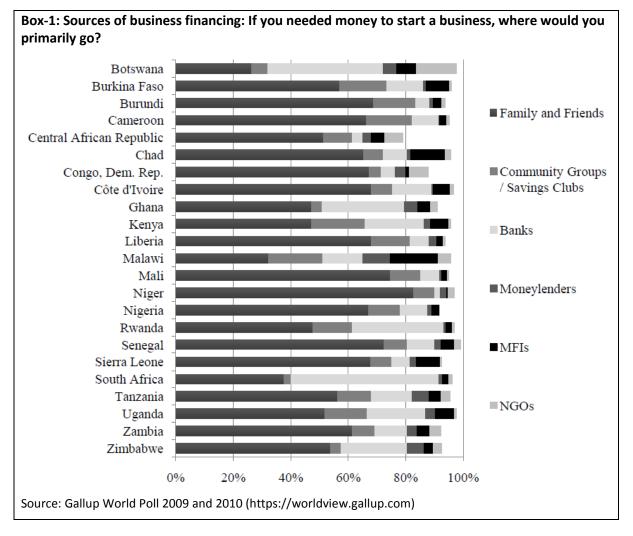
Source: Making Finance Work for Africa 2013.

Microfinance can foster the human capacity to accelerate Africa's economic transformation and to move to more inclusive and green growth. In fact,

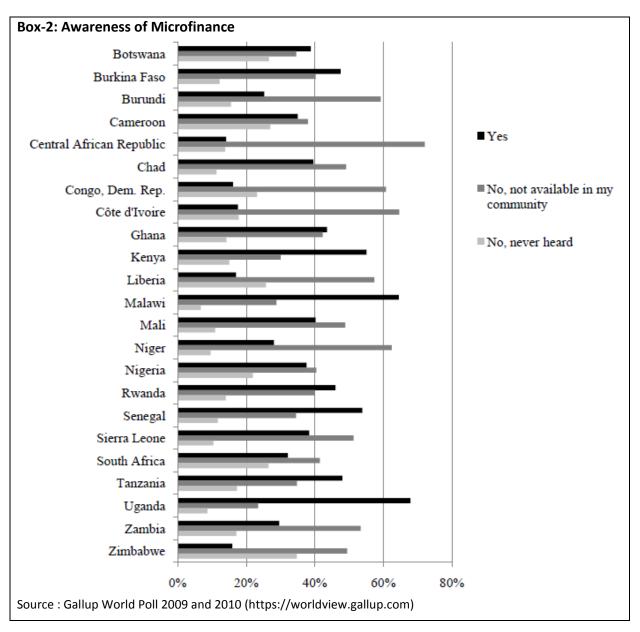
Access to finance may contribute to a long-lasting increase in income by means of a rise in investments in income generation activities and to a possible diversification of sources of income; it may contribute to an accumulation of assets; it may smooth consumption; it may reduce the

vulnerability due to illness, drought and crop failures, and it may contribute to better education health and housing of borrower. ... Microfinance may have positive spillover effects such that its impact surpasses the economic and social improvement of the borrower.²⁷

Self-funded groups are an increasingly common way of delivering microfinance services. In Africa several international NGOs are promoting village savings and loans associations as member-driven, local institutions. Although micro-insurance is growing very fast in Africa, its coverage of lives and properties in still low (table-2). According to a survey in 2011, South Africa accounted for 60% of the insurance coverage in Africa.²⁸ The coverage is low in Africa despite the large number of community-based initiatives; formal commercial insurers accounted for 78% of the lives covered in Africa.²⁹



The Gallup World Poll asks what sources of financing individuals would consider using to start a new business. The data show that 42.3 percent of all responders in Sub-Saharan Africa state family as the primary source of funds for potential business needs (box-1). Community savings groups, through which groups of people save money together, are a popular mode of savings in parts of Africa and are cited as



a source of funds by about 10 percent of those surveyed. Importantly, commercial banks are reported by about 20 percent of responders.

To illuminates potential reasons for the low take-up of microfinance. The Gallup World Poll asked if they are aware of any institutions in their community that help people obtain small business loans, 16.2 percent of the responders stated that they had never heard of such institutions (box-2). An additional 46.2 percent stated that such institutions are not available in their community. Certainly, a percentage of those reporting that microcredit was unavailable in their community might also simply be unaware of its presence.

Scope for human development through microfinance

This section summarizes the key empirical findings in the area of human capital impacts of microfinance. Our main concern is to address the question of "what works?" We survey the main findings of the literature and try to identify the trends and best practices. But one of the main problems in microfinance is methodology. There is great debate about how to measure the impacts of microfinance programs (impact evaluation), especially on human capital, with which we start. We then examine the main findings, drawing heavily on a systematic review by van Rooyen, Stewart and de Wet (2012).

Methodological issues in measuring the impact of microfinance on human development

Most researchers in microfinance start their work by asking how to identify the marginal changes in the lives of microfinance users. Most measure the impact of microfinance by comparing recipients of microfinance with a control group that has no access to microfinance. In most cases the studies apply nonrandomized approaches. But the choice of the control group was criticized and the economic literature shifted to randomized approaches. These studies use randomized controlled trials (or experiments), in which two groups—the treatment group and the control group—are exactly the same along all relevant dimensions, except access to microfinance. The allocation of individuals in the treatment and control groups is random. Roodman and Morduch (2009) conclude that both randomized and nonrandomized approaches have weaknesses and strengths, and therefore both could be useful when analyzing the impact of microfinance. (Studies using randomized and nonrandomized approaches in fact lead to mixed effects of microfinance on human capital.)

New methodologies are also used. McIntosh, Villaran and Wydick (2011) developed the retrospective analysis of fundamental events contiguous to treatment. According to the authors this allows them to measure welfare changes—due to a treatment such as access to microfinance—based on a single cross-sectional survey in which questions are included on fundamental events in the history of respondents.

Education

A systematic review was made by van Rooyen, Stewart and de Wet (2012) of microfinance impacts on Sub-Saharan Africa. Their search found more than 6,000 studies on the web. They narrowed the sample to 383 "probably relevant" reports. Reading the full texts of these enabled them to identify 69 relevant impact evaluations. They excluded those that did not relate to Sub-Saharan Africa—showing how relevant the methodology is and the need for caution. Limited research has been conducted on the effects of microfinance on education. And wherever studies have been carried out, the results and trends are not always clear. Becchetti and Conzo (2010) found that microfinance generated positive effects on child schooling only when the income of the parents was above a certain threshold. In situations where the increased access to microfinance failed to raise income to a level higher than the threshold at which parents do not send their children to school out of necessity, there was no significant effect. Microfinance effects depended on income and schooling costs.

Augsburg and others (2012) looked at the effects of microfinance on education from the change in the way time was spent after receiving a loan. This was in light of the fact that most microfinance loans went toward financing businesses to be run by the household. They found that in households where the head's highest level of education was primary school level, children between ages 16 and 19 ended up spending more time helping run the family business. In some cases this led to a decrease in school attendance.

In Africa there is an even less systematic evaluation of microfinance impacts on education. Several studies reported contrasted effects. Studies from Uganda show that participation in microfinance is associated with increased investment in children education.³⁰ But findings from South Africa provided little evidence for increased enrollment.³¹ Beneficial effects may therefore be context specific. For Mosley and Roch (2004), microcredit often enhances human capital through increased expenditures on education and related improvements in health, which may then extend to poor individuals through intra-household and intergenerational effects.

The most robust studies reported in annex 16.1 show that microcredit seems to have a positive impact on education,³² while others show a negative effect for primary schools.³³ The remaining studies show positive and negative impacts depending on gender or district. It seems difficult to generalize and to argue for a clear effect of microfinance on education in Africa. More research into the implications of microfinance on education is clearly needed to better understand why the theoretical channels mentioned above do not always work in practice.³⁴

Health

All the studies mentioned in annex 16.1 indicate that microfinance has a strong positive effect on health, whether the study was centered on microcredit only, microsavings only, or both. Microcredit improves the health budget of the household and in some cases awareness of health care of children. In some programs the MFI uses its position to give health information to its clients.

Interventions that improve financial access may complement interventions to improve health conditions.³⁵ In cases where MFIs deliver health-related services through microcredit groups, for example, there is strong evidence of a positive impact on health. These positive health outcomes are not only general, but include maternal and child health too.³⁶ In Ghana, MFIs have contributed to both community and national malaria initiatives by increasing the level of knowledge dissemination.³⁷ In Uganda 32% of women who received education about HIV/AIDS prevention through microcredit groups tried at least one HIV/AIDS prevention practice, versus 18% of non-clients.³⁸ And a positive impact was found in South Africa where comprehensive training and education programs on microfinance group members, for whom the risk of physical or sexual abuse by intimate partners was reduced by more than half compared with a control group of microcredit-only members and with the general public.³⁹

Another improved dimension is the positive impact of microfinance on nutrition, as seen in longitudinal studies in Ghana.⁴⁰ Similar results were found in South Africa.⁴¹ Annex 16.1 also shows that a fair number of the studies have found a positive impact of microfinance on food security. Improving nutrition, especially for children under 5, is vital for their health.

These findings strengthen the social effect of microfinance and are used by those who are in favor of subsidizing MFI. In recent debates, social benefits from improved health for MFI clients can be compensated by subsidies. But recommendations on sustainability of MFIs may lead to less impact on health if the MFI cares more about income than the social benefits (improved health). Further, small loans used for income generation can reduce poverty directly, while simultaneously causing wider benefits, including better health. Access to reliable borrowing and saving mechanisms makes it easier to pay for medicine and clinical visits.⁴²

Poverty reduction

Several studies have shown the positive impacts of microfinance on poverty reduction in Africa. Microfinance has been described by Morduch and Haley (2002) as an instrument that, under the right conditions, fits the needs of a broad range of the population. Chipeta and Mkandawire (1991) have shown the positive impacts of microcredit in Malawi. Mosley and Roch (2004) present six case studies in Africa. They examine the indirect effects of microfinance (mainly micro-savings) on the poor as they believe benefits to the poor are more likely to be felt in this way. They conclude that microcredit to the non-poor can reduce poverty by drawing very poor people into the labor market as employees of microfinance clients, and that microcredit enhances social capital and helps the poor build social networks.

Most African poor especially in rural areas have no access to energy services and providing agencies. Rao and others (2009) show how energy microfinance is helpful, arguing that "energy has strong links with poverty reduction through income, health, education, gender and the environment. Without ensuring minimum access to energy services for a broad segment of the population, countries have not been able to move beyond a subsistence economy." These results confirm those of Saghir (2005) who shows that the energy sector has strong links to poverty reduction.

Women's empowerment

Empowerment of women is a complex process of change with power being rooted in social systems and values. The concept of empowering women through microfinance is therefore not a straightforward one with available evidence giving a mixed picture of both success and limitations. Empowerment is often viewed, among other things, as increased participation in decision making, increased political power and rights, and increased self-esteem.

As Cheston and Kuhn (2002) show, microfinance empowers women in several ways. Access to credit and participation in income-generating activities is assumed to strengthen women's bargaining position in the household. There is also evidence of them having an increased decision making role in family planning, education of daughters and other such household

matters. Further, through their own businesses set up using microfinance loans, they have decision making power in these businesses.

Women also appreciate the non-income benefits of a group lending program as much as or more than credit. This includes the expanded business and social networks, as well as the increased respect and prestige they receive from both male and female family members and the community at large. Kim and others (2007) also show evidence that economic and social empowerment of women can contribute to reductions in intimate partner violence. But Kabeer (2005) points out that while access to financial services makes important contributions to economic productivity and social well-being of poor women, it does not automatically empower women.

Afrane (2002) conducted a study on impact evaluations in Ghana and South Africa that focus on impact results. Microfinance interventions achieved significant improvements in business incomes, access to life-enhancing facilities and empowerment of women.

Impact summary

Microfinance has adverse impacts on human capital in Africa. While its effects on health and women's empowerment are well established, there is a lack of evidence about the impact on education. There is a need to run a systematic impact evaluation of microfinance programs in Africa. The recent debate worldwide about the need to assess MFI interventions only on a financial basis (sustainability) may lead to targeting the middle class and keeping the poor out of the scope.

Moreover, recent studies show adverse effects of microcredit. Crépon and others (2011) report the results of a randomized experiment designed to measure the impact of microcredit in rural areas of Morocco. The experiment was based on the assignation of a large set of villages to treatment villages where Al Amana, the largest MFI in Morocco, offered credit and control villages where no credit was offered. They find that providing access to microcredit did not lead to new business creation, only to an expansion in the scale of existing businesses. Households with no business at the baseline merely increased consumption once they got access to credit. (This again reminds us that credit, by itself, cannot spawn entrepreneurs.)

They also find that treated households decreased their wage employment and increased their consumption of leisure, offsetting the income gains realized from the scale expansion of businesses. If this finding has external validity, it not only casts a shadow on the income generating potential of microcredit, but also raises longer term questions about the borrowers' ability to repay their loans and the possibility of chronic indebtedness.

Policy implications

Despite the debate about the impacts of microfinance on human capital formation, most NGOs and governments advocate its use to empower women and to fight poverty. Following our analysis, in Africa at least three challenges need to be addressed. First, this industry—unlike

that in Asia and South America—needs to strengthen its skills. Second, while the industry needs to be sustainable in Africa, its human capital impacts need to be considered by policymakers. Third, there is a need to develop the micro-insurance services in Africa that are particularly needed in areas prone to climate-change effects and to natural disasters.

Building skills

One of the most recurrent issues in this developing industry in Africa is its need of skills to face its challenges. In fact, each country has specific needs. There is a strong need for local skilled workers in this industry to have basic skills but also particular knowledge of the area covered or the population's needs. Most MFIs do not have the ability to train their staff or build the skills locally. This is particularly true for cooperatives, NGOs and small MFIs that face financial constraints. Setting programs and training sessions for microfinance workers in their local context will increase the efficiency and human capital impact of microfinance. This industry needs to work closely with the national education system to develop curricula³. Each country has its own characteristics and microfinance-industry needs to reach the target population.

Strengthening sustainability of MFIs and targeting the poor

The tradeoff between sustainability and achieving social goals by MFIs is at the center of current debates in microfinance. While Africa is a promising continent for microfinance, generalization of overcautious practices may minimize its human capital impacts and may lessen any benefits to the poorest. Starting from these considerations, the long-run sustainability of microfinance may lead MFIs to target the middle class and the upper fringe of the poor that offers better returns. Sustainability may indeed be achieved by this shift in the target population, but microfinance will become less inclusive. Policymakers need to reverse these trends if the target is financial and social inclusion. Specific actions, programs or institutions are needed for the excluded populations, especially the poorest populations. NGOs are better positioned for this market segment and need to be helped by local bodies. The health and educational dividend for society surpasses the subsidy costs to these NGOs.

Promoting micro-insurance

Micro-insurance in Africa is less developed than micro-saving and microcredit, due to lack of awareness among the poor, financial constraints and absence of insurance promotion by MFIs, as well as economic viability.

Developing micro-insurance is vital for Africa. Severe climate change is provoking migration of the poor from rural areas to towns where they often live in slums. Increasing access to micro-insurance may limit these trends. Most rural poor are making their living from agriculture

³ Bongjoh, F., Foko, B., Ndem, F., & Gueye, M. (2014), "Making National Education systems work for Africa", in "One Billion People, One Billion Opportunities" Soucat, A., and Mthuli, N. (eds) (Chapter 17), African Development Bank. Tunis.

where income is highly variable. Micro-insurance will protect these populations from such swings by pooling and protecting against financial risks. These instruments may increase enrollment of children in school and limit the scope for child labor. The micro-insurance mechanism will act as a safety net allowing the poor to invest more in human capital (health and education)⁴. Promoting micro-insurance needs strong partnerships between public and private sectors.

Conclusions

While there is a well-established consensus about the potential positive impact of microfinance on human development, especially for the poor, voices are also heard about its practical limitations. Negative voices focus particularly on the functioning of MFIs and the microfinance crisis triggered by them in India, Bosnia, Morocco, Pakistan, Nicaragua and Nigeria. MFIs are under tremendous pressure to become self-sustainable. There are also concerns about public health services offered by some of them because MFIs lack expertise in this area and offering such services is cost-ineffective.

While microcredit and micro-savings are developed to a degree in Africa, micro-insurance requires further attention. Africa's poor, like those in the rest of the world, appear to have a strong preference for micro-savings, but we need a more systematic evaluation of human development effects of microfinance programs. The health dividend seems well established, though education outcomes are less observable. But microfinance is still evolving in Africa and its real impact may be felt only once it reaches optimal coverage.

There is also a strong need to better assess evaluation studies by encouraging scholars to set better research settings and to carry more systematic and in-depth studies. Observing the human capital dividends needs long-term studies for a cohort of individuals (a generation at least) to make conclusions on the real impacts of microfinance, including its sociocultural and ethnic dimensions.

⁴ Durairaj, V., Jehu-Appiah, C., Dukhan, Y., Bilal, N., Lannes, L. and Sergent, F. (2014), "Transforming People's Lives in Africa through financial Inclusion in Health", in "One Billion People, One Billion Opportunities" Soucat, A., and Mthuli, N. (eds) (Chapter 23), African Development Bank. Tunis.

Source of evidence				Evidence of impact		
Study	Type of impact	Microfinance type	Microfinance model	Health	Food	Education
	study				Security	
Impact of microcredit						
Adjei, Arun and Hossain	With and without	Credit with business management	Group-based lending to			
(2009)	study	training and client welfare scheme	men and women	(+)		(+)
Barnes, Keogh	Control trial	Credit with business management	Group- and individual-	(+)		(+) (boys)
Nemarundwe (2009)		training	based lending to men	(in terms of range of		(–) (girls)
		and women	income sources to		(especially for	
				smooth health shocks		continuing clients)
Doocy and others (2005)	With and without	Credit	Group-based lending to		No effect	
	study		men and women			
Gubert and Roubaud	With and without	Credit	Group-based lending to			No effect on
(2005)	study		men and women			enrollment
Lacalle Calderon and others	With and without	Credit	Group-based lending to	(+)	(+)	(+)
(2008)	study		men and women			
Nanor (2008) With and without study	With and without	Credit with financial training	Individual loans for		Varied	Mixed (+) in some
	study		women			districts
					(–) in others)	
Pronyk and others (2008) Control trial	Control trial	Credit with gender and	Group-based lending to	(+)		
	HIV/awareness training and	men and women	(but not attributed to			
	community mobilization support		microcredit element			
				of the program)		
Shimamura and Lastarria-	With and without	Credit with financial training	Group- and individual-		(+)	(-) (for primary)
Cornhiel (2009)	study		based lending to men		(only in	No effect (for
			and women		specific	secondary)
					instances)	
Impact of microsavings		÷	•			
Dupas and Robinson (2008) RCT	RCT	Savings with scope to purchase	Individual savings	(+)	(+)	
		shares	accounts			
Ssewamala and others	Cluster RCT	Savings dedicated to paying for	Individual savings	(+)		(+)
(2010)		postprimary schooling alongside	accounts for young			
. ,		training and mentorship programs	people (boys and girls)			
Combined impact of microcre	edit and microsavings					
Barnes, Gaile and	Control trial	Credit and savings with nonformal	Group-based lending to			(-)
Kimbombo (2001)		education in health, nutrition, family	men and women			
,		planning and HIV/AIDS prevention				
Brannen (2010) Control tr	Control trial	Credit and savings with business	Group-based lending to	(+)	(+)	No effect
		training	men and women		.,	

Annex-1: Findings on impact of microcredit models on health, food security and nutrition, and education

Source: van Rooyen, Stewart and de Wet 2012.

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Notes

Team leader and work coordinator.

¹ Robinson 2001; Yunus 1999.

² Afrane 2002; Khandker 2001; UNICEF 1997.

³ UNDP 2005.

⁴ van Rooyen, Stewart and de Wet (2012) provide a synthesis of what works in microfinance in Sub-Saharan Africa and their financial and human capital effects. Their methodology is to assemble the main findings (bringing together the best quality, most relevant evidence (DFID 2011). Starting from their findings, we tried to discuss the link between human capital and microfinance. Two main changes, however, were added. While they discussed the broader impacts of microfinance on economic development, we focused only on human capital. We also extended their approach to the whole of Africa by adding contributions for North Africa.

⁵ Durairaj and others 2010b.

¹⁰ By way of comparison, a recent survey of 18 African countries shows that use of formal financial products ranges between 1% in Niger and the Democratic Republic of Congo and 49% in South Africa (Beck and others 2011).

- ¹¹ Making Finance Work for Africa 2013.
- ¹² Dunford 2002.
- ¹³ Pronyk, Hargreaves and Morduch 2007.
- ¹⁴ Dunford 2002.
- ¹⁵ Maldonado and Gonzaléz-Vega 2008, 2441.
- ¹⁶ Pitt and others 2003.
- ¹⁷ Norma and Jarita 2010.

¹⁸ Some of the numerous studies on microfinance include Khandker and Pitt (1998), Khandker, Samad and Khan (1998), Park and Ren (2001), Afrane (2002), Khandker (2003) and Rahman, Rafiq and Momen (2009).

- ¹⁹ Scully 2004.
- ²⁰ Simanowitz 2002.
- ²¹ Hermes and Lensink 2011.
- ²² Daley-Harris 2006.
- ²³ Armendàriz and Morduch 2010.
- ²⁴ Scully 2004.
- ²⁵ MicroRate 2012.
- ²⁶ MicroRate 2012, 11.
- ²⁷ Hermes and Lensik 2011, 875.
- ²⁸ CGAP 2012.
- ²⁹ CGAP and IFC 2013.
- ³⁰ Barnes, Gaile and Kimbombo 2001.
- ³¹ Pronyk, Hargreaves and Kim 2006.
- ³² Adjei, Arun and Hossain 2009; Lacall Calderon and others 2008; Ssewamala and others 2010.
- ³³ Shimamura and Lastarria-Cornhiel 2009.
- ³⁴ Ahlin, Lin and Maio 2011.
- ³⁵ Pronyk, Hargreaves and Morduch 2007.
- ³⁶ Leatherman and Dunford 2010.
- ³⁷ de la Cruz and others 2009.
- ³⁸ Barnes, Gaile and Kimbombo 2001.
- ³⁹ Pronyk, Hargreaves and Kim 2006.
- ⁴⁰ Dunford 2002.
- ⁴¹ Pronyk, Hargreaves and Kim 2006.
- ⁴² Pronyk, Hargreaves and Morduch 2007.

⁶ Durairaj and others 2010b.

⁷ Durairaj and others 2010a.

⁸ The Economist 2010.

⁹ CGAP and IFC 2013.