Micro-Finance: a Miracle no More? The Jury is Out

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While often being praised as a tool for poverty alleviation, Shauna Fitzmaurice takes a look at the real-life performance of micro-finance mechanisms. She shows that while there may be some benefits in the short run, micro-credit services' long run benefits are not well demonstrated in developing countries. In order to give a wider picture, she includes a discussion about micro-insurance and micro-savings. While micro-saving mechanisms are not as well studied as micro-credit, the paper shows that this limited research does point towards a more positive impact on poverty.

Introduction

The poor require financial services suited to involving small amounts of money, earning the name micro-finance. Numerous constraints/difficulties in accessing financial services exist for the poor, who are marginalised by mainstream financial institutions (Hishigsuren, 2007). Nevertheless, informal financial services that are selectively available to the poor have not succeeded in providing any miracle-like result of poverty alleviation in less developed countries. Notably, financial services have a lower penetration and lack widespread access in these countries. Financial markets are challenged by imperfections, holding market failures primarily stemming from the absence of perfect information. This manifests in financial services unsuited to meet the demands of the poor. The results of intervention of financial services in less developed countries have been mixed. Hence, it is questionable if further access to and various formal financial services will alleviate the problems of the poor.

This paper examines each of the three financial services individually that comprise micro-finance, namely; credit, insurance and savings. The impact of each financial service as well as its ability to alleviate poverty is evaluated. This paper concludes that while neither of the three financial services have significantly aided poverty alleviation, savings is the most promising approach. Other poverty reduction mechanisms e.g. cash transfers, may offer a better poverty reduction mechanism.

The Argument for Micro-Finance

The poor face numerous problems due to their low income which makes them poor by definition. Most of their problems stem from the poverty trap. Income uncertainty leads to greater risks in daily life, yet many developed countries boast social security nets that help reduce this uncertainty. Financial services can ensure consumption smoothing, guaranteeing more predictability and stability of income, reducing the risk of lower income.

Due to their proximity to the poverty line, any negative exogenous income shock can have detrimental effects. The poor's reliance on the primary (agricultural) sector for income, which is highly dependent on exogenous weather conditions, acts as an ongoing risk to income. Generally, greater weight is placed on negative income shocks which cause problems of lower consumption from a baseline of subsistence. Positive income shocks are problematic if they are consumed, rather than smoothed, due to temptation and time-inconsistent preferences in human behaviour (Read & van Leeuwen, 1998). This relates to the mixed evidence on the Permanent Income Hypothesis and how it might fail (Fuchs-Schuendeln & Hassan, 2015).

Micro-finance targets the issue of risk associated with uncertain income. Nevertheless, other structural diversity problems exist for the poor that are not targeted for improvement by micro-finance. The poor possess lower human capital which causes problems relating to education, health and skills. School attendance by children depends on income and whether child labour is required to supplement this income. Information problems exist in financial markets and may be particularly acute in less developed countries owing to the low education levels and the often weaker institutional context. The poor live in primarily rural areas, which are isolated and underserved by formal institutions/basic services. Due to the adverse geography and resource endowment of less developed countries, coupled with the poor's rural setting and dependence on agriculture for income, climate change is an unavoidable threat. Because of many countries' colonial past, much private property and resources are owned by a few elites and whom the institutions are biased in favour. In contrast, the poor have little ownership of assets, inhibiting enterprise creation and thus stable income streams. These further problems need to be tackled to achieve the miracle of poverty alleviation.

Microcredit

It is apparent that individuals can prevent deterioration of their position on the poverty line by consumption smoothing. As positive and negative exogenous income shocks balance out over time, access to borrowing when income is low and repaying the borrowing when income is high, ensures that consumption remains more constant over time. This would alleviate the risk of a negative income shock that problematically entails reduced consumption from the subsistence baseline. However, this is contingent in the balancing of positive and negative income shocks which are exogenous. Micro-finance provides this vehicle for consumption smoothing.

The micro-finance service of credit (microcredit) aims to solve the poor's problem of increasing their income and escaping the poverty trap, through enterprise creation and human capital investment. Credit could alleviate poverty amongst the poor. Notably, enterprise creation requires upfront capital/liquidity which is problematic for the poor due to their variable income and lack of savings. Access to the financial service of credit can allow enterprise creation for the poor, yet current access is limited to them.

Informal networks, generally community-based, may provide some access to credit but this access is selective. Social stigmas often exist. Availing of this informal credit may indicate poor financial management, possibly causing shame/embarrassment. For the poor, access to informal credit is primarily concentrated on men, due to the often patriarchal-based society in less developed countries (Attanasio et al., 2015). Men generally own the assets, allowing cheaper borrowing rates. Intervention in formal access to microcredit is particularly focused on women, who are generally most left out of the financial market. Access to group loans for women in Mongolia led to a 57% group loan take-up, with remarkably high take-up by uneducated women (Attanasio et al., 2015).

Microcredit is founded on the belief that the poor have a desire and aptitude for entrepreneurship i.e. the 'Lost Einsteins' concept (Chetty et al., 2017). This is questionable as enterprise created due to access to formal credit by women is generally small and not highly profitable (Attanasio et al., 2015). Furthermore, loan take-up and investment in business is more likely if the individual already owns a business, suggesting those with high entrepreneurial ability already own enterprises (Banerjee et al., 2015a). Individuals who do not currently own a business may have access to microcredit but choose not to avail of it. This owes to their lack of entrepreneurial ability which would hinder business success (Banerjee et al., 2015a).

Spandana, a micro finance institute in India, required a business return of over 24% on formal loans, propelled by the poor's lack of collateral, acting as a disincentive to business risk-taking (Banerjee et al., 2015a). Even if the poor own land/assets, they may not hold title deeds to them. However, default rates amongst the Mongolian poor are minimal and delayed repayment is only 7% (Attanasio et al., 2015). The requirement for substantial collateral could be questioned. The high interest rates favour better businesses which are more profitable and can afford the high interest rates, resulting in survival of the fittest (Banerjee et al., 2015a). Nevertheless, credit markets are not efficient and lack observability. The initial wealth of individuals affects future productivity and hence income levels. This means that richer individuals above the poverty line enjoy easier access to entrepreneurship as they can fund investment using their wealth/endowments or can borrow at cheaper rates, due to reduced risk from owning the required collateral. It may thereby be plausible that the credit markets originating from micro-finance can make the underlying inequalities between the rich and poor worse. This refers to the stylized fact where the rich are treated differently in credit markets (Banerjee, 2001).

Overall, the results of formal microcredit have been mixed. Microcredit has not had broad impacts on other problem areas for the poor, e.g. health, that still require addressing. The low take-up rate depicts that access to credit is not what many poor people need to solve their problems. Individual loans tend to be used more for immediate consumption than business investment, which increases current utility but does not aid in increasing future income (Attanasio et al., 2015). Many poor individuals do not wish to be entrepreneurs (Banerjee et al., 2015a). Enterprises creation produces no short-run income effect, owing to the high interest repayment rates and low profitability of the businesses which are small in scale (Attanasio et al., 2015). Micro-credit encourages increased indebtedness, which adds to the problems faced by the poor. The increase in borrowing, from a baseline of 69% of households holding debt (Banerjee et al., 2015a) impacts the likelihood of repayment and resulting social sanctions for repayment difficulties. This caused an increase in farmer suicides in India (Financial Express, 2017). Other supports such as business training may be required with the loan to ensure more successful businesses (Banerjee et al., 2015a). The short-term loan repayment structure ensures better repayment rates but is unsuited to business investment, which is best suited to long-term repayment structures. Nevertheless, while there is little evidence that microcredit is bad for the poor (Banerjee et al., 2015a), it has not produced the transformative effects on the average borrower as anticipated by the expansion of micro-finance (Banerjee et al., 2015b).

Insurance

While access to credit is beneficial to the poor when they face a once-off random negative income shock, the possibility of a series of independent negative income shocks always exists. Credit is deemed insufficient in this case due to the short repayment duration which may be overcome with negative income shocks, resulting in the inability to repay the loan. Additionally, access to small savings is inadequate. A series of negative income shocks inhibits consumption smoothing causing detrimental effects to the poor living close to subsistence who are pushed below the poverty line. Insurance could solve this problem by reducing the risk of this occurring as a pay-out would be received, allowing constant consumption. If poor people come together and pool their income, thereby risk-sharing, they can smooth their income, but not fully. Changes in household income will still cause some effect on consumption. Yet, owing to the reduced risk to income, insurance makes the poor better-off. Pooling income improves an individual's situation when a negative shock occurs but worsens the situation when positive shocks occur.

Micro-finance faces challenges in building insurance schemes/networks amongst the poor, because of the lack of diversification in occupations (primarily agricultural-based) and hence income streams (Townsend, 1994). This causes correlated income outcomes which reduce the returns to be made by the insurance provider, acting as a disincentive to provide this financial service (Townsend, 1994). The poor can be affected by aggregate shocks to the agricultural network e.g. drought. Informal insurance which is generally community-based is often in place but it only works if incomes are not perfectly correlated. Larger insurance networks that expand across different villages are required to ensure less income correlation due to different villages facing different shocks. However, expansion of the insurance network makes enforcement of repayments more difficult due to information asymmetries and weak legal enforcement of contracts. Moral hazard and fraud in reported outcomes generally occur with insurance (Deaton, 1992), acting as further barriers for the poor creating their own informal insurance network. Thus, this opens the door for formal micro-finance.

Evidence from ICRISAT villages in India indicates that the income of the poor is not perfectly correlated as they have different plots of land and engage in slightly different activities (Townsend, 1994). This provides scope for insurance. Due to consumption being relatively smooth over time despite random shocks to income, it is apparent that there is some informal insurance happening. Morduch's (1995) further research suggests that small farmers and landless labourers (the poor) are not participating in informal insurance as much as well-off individuals. Instead the poor try to eliminate risk themselves by being proactive in their production decisions. Furthermore, Deaton (1992) found that informal insurance may not occur in certain villages, preventing them from risk-sharing.

Formal micro-finance weather insurance might solve the problems of moral hazard and adverse selection which occur with crop insurance. Because of formal insurers' larger size, they benefit from reduced transfer costs and administrative costs stemming from economies of scale. Although the poor cannot afford to pay much for insurance, because of the vast number of poor people, micro-finance insurers can charge a fair price suited to their low income but yet generate substantial profits to remain sustainable. Formal insurers hold specialised expertise on how to price and manage insurance products. They can diversify risk better to attain high returns.

Take-up rates are however low (Carter et al., 2014). This centres on mistrust of poor individuals for large profit-based financial institutions who also apply strict rules/conditions to their insurance products. A recommendation by family, a friend or previous village experience with insurance, particularly if a pay-out was received, leads to increased likelihood of insurance uptake, reducing the trust barrier (Cole et al., 2013). Micro-insurers need to address the demand side factors that are inhibiting the take-up of formal insurance by poor people. Awareness, financial literacy, willingness and ability to pay, affordability and delayed consumption are crucial demand side factors that require reciprocal supply-side initiatives for the sustainability and success of micro-insurance (Mazambani & Mutambara, 2018). Micro-insurers should better tailor their insurance products for the poor. For example, new insurance products are essential to meet the demand for insurance related to increasing climate change shocks, requiring insurance coverage to be expanded to improve disaster resilience (Mills, 2009). Until these factors are considered, insurance will continue to not be sufficient in alleviating poverty in its current form.

Savings

While credit and insurance encounter information problems, savings avoid these information problems. The poor face difficulties in consumption smoothing i.e. transferring resources to future periods. Consumption smoothing is important as the future is uncertain and has high associated risks. This highlights the role for precautionary savings. A negative income shock could be overcome by withdrawing savings. Nevertheless, the poor find saving problematic due to consumption temptation, informal transfer requests by family/friends and time-inconsistent preferences. The poor lack formal saving instruments which causes increased risk of the savings being stolen or spent. The poor tend to use inefficient instruments to save e.g. bullocks, which generate low returns often less than the discount rate (de Janvry & Sandoulet, 2015).

Arguably, the saving instruments best suited to many of the poor are small deposit accounts that allow frequent deposits. This stems from the poor holding micro amounts of money, and frequent deposits prevent the money being spent on consumption. The poor generally live in rural areas and are underserved by banks, limiting access to formal saving accounts. Proximity to a bank is crucial to allow for making these small deposits. Long distances can result in delays in lodging the deposit until a sufficient amount built up. Yet, this may never happen due to the tempting desire to consume, especially with a very low income level. Aportelo's (1998) study of the Mexican government's 'Pahnal' saving programme expanded access to formal saving accounts through local post offices, reaching the poor in rural areas who were otherwise inaccessible. This access to short and long term formal saving instruments with guaranteed real rates triggered the average saving rate of the poorest to rise by more than seven percentage points. This suggests that formal and local saving deposit accounts are often desired.

Another problem faced by the poor which hinders saving relates to time-inconsistent (hyperbolic) preferences. Individuals want to indulge today to maximise current utility by increasing consumption and putting less weight on utility in future periods. Immediacy is an evident problem in human behaviour affecting self-control. The poor need to impose constraints on the individual's future self to follow through on today's preferences for the future, i.e. to save instead of acceding to increased consumption temptation. Education could help provide this sophistication (Ashraf et al., 2006). Intervention of micro-finance offering formal saving accounts entailing commitment mechanisms of a fixed time or amount could help overcome self-control difficulties. This occurred in the Philippines where a study on women whose societal role involves controlling household finances, found that they were over fifth-teen percentage points more likely to take-up the saving commitment instrument (Ashraf et al., 2006). This indicates that individuals are at least partially aware of their hyperbolic preferences and want formal saving commitment devices to supersede their self-control issues.

It is noteworthy that studies from Cameroon focused on introducing formal saving accounts illustrate that despite the poor making deposits, they are reluctant to use these savings to finance business investment or consumption (Baland et al., 2011). Instead they take out loans ('excess borrowing') which entail high interest rates (Spandana charges 24% interest) to spend on increased consumption or business investment that could have been funded with their savings, avoiding interest costs. This is economically inefficient. However, due to strategic reasons derived from the social signals that borrowing holds i.e. financial strain, debt obligations also act as a protective measure against their future or other selves from consuming savings. Nevertheless, microcredit generally tends to be affordable as the amount is generally half the amount of their savings, which lowers risk. It also allows for a formal credit rating to be built up, aiding subsequent cheaper borrowing (Baland et al., 2011). Despite the poor individual repaying the loan with high interest, they still retain most of their precautionary savings and are therefore more prepared for risks associated with the future.

Conclusion

Micro-finance faces challenges in the roll-out and success of each of the three financial services (credit, insurance and savings) at solving the problems of the poor. In general, the results of microfinance have been mixed, with access to the financial services not resulting in the ultimate aim of poverty alleviation. The financial services of credit and insurance encounter informational problems and generally weak institutional and legal context. To date, the evidence highlights that savings are the most beneficial to the poor until credit and insurance better develop to suit their needs.

This paper has argued that evidence on formal micro-finance expansion has not had significant effect on poverty alleviation. In addition, formal micro-finance firms are deviating from their social mission by exploiting the poor. Because of the minimal successes of access to financial services for the poor, academics are also researching other poverty reduction mechanisms e.g. cash transfers, graduation programmes. These poverty reduction programmes are depicting positive short-term effects but the long-run effects have yet to be thoroughly analysed.

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