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MICROFINANCE IN BANGLADESH: EVALUATING THE INSTITUTION

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Abstract

The objective of my thesis project is to evaluate the different aspects of the microfinance sector and determine whether this strategy is effective in alleviating poverty. I chose to focus on Bangladesh because of its rapidly growing microfinance sector which is considered to be one of the fastest and most efficient in the world. However, there is evidence that people remain excluded even with the presence of microfinance institutions (MFIs). MFIs provide small loans to impoverished people to help them start businesses and escape poverty. Certain aspects of the microfinance model make it difficult to reach the very poorest of the poor.

My research addresses several key facets of the microfinance model like group lending, frequent repayment installments, and an emphasis on women. While these features can hinder the full effect of microfinance loans, they are necessary for MFIs to remain self sufficient. Loans granted to poor people are considered to be more risky and expensive. In order to achieve profitability, microfinance institutions must account for this and take measures to reduce the risk of default. I also focus on several key debates in the microfinance sector like the use of subsidies, emphasis on saving, and competing incentives.

Ultimately, I concluded that, while there are suggestions for improvement, microfinance is an effective method for alleviating poverty. While traditional microfinance may not reach the very poorest of the poor, MFIs consistently reach individuals with a severe credit constraint. Microfinance is not the solution to poverty but it is certainly an effective tool for poverty alleviation.

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Chapter One

Introduction

In 2005, one-fifth of the world population, roughly 1.1 billion people, lived on less than 1 dollar per day (World Resources Institute, 2005). Economists use this 1 dollar per day mark as a measure of extreme poverty. It is evident that a huge percentage of the world population experiences this kind of poverty. Recently, world poverty has become a major focus of the international community. While no single solution to poverty has been identified, there are certainly ways to begin to alleviate this burden.

Economists recognize microfinance as an effective poverty-reducing tool in today's world. Microfinance institutions (MFIs) provide small loans to impoverished people to help them start or expand their businesses. Through these actions, microfinance offers the extremely poor an opportunity to generate an income and perhaps pull themselves out of poverty. The primary goal of MFIs is to reach the very poorest of the poor and encourage growth in poor, struggling areas.

The notion of microfinance developed in the 1970s. Muhammad Yunus, an economics professor at Bangladesh University, sparked this initiative. He viewed "credit as a fundamental human right" and recognized that poor people would benefit exponentially from a small loan (Grameen Foundation, 2010). Yunus' hope was that these loans would encourage entrepreneurship and eventually pull these individuals out of poverty. After successful field research, Yunus started the Grameen Bank in 1983. Considering the efforts of Yunus and other microfinance pioneers, Bangladesh became the heart of the microfinance initiative. While microfinance has greatly expanded around the world, Bangladesh is still considered to be one of the fastest and most efficient microfinance sectors. For this reason, I will focus on Bangladesh in this paper and on the Grameen Bank, in particular.

While Muhammad Yunus certainly brought increased attention to the idea of microfinance, the concept of encouraging poor individuals to save and borrow is not new. Microfinance has its roots in the notion of rotating savings and credit associations, ROSCAs. In their book, *The Economics of Microfinance* (2005), Beatriz Armendariz De Aghion and Jonathon Morduch detail the presence of ROSCAs in history. This practice, like microfinance, encourages poor individuals to form groups between 5 and 20 members. Each week, members put a specified amount of money into a collective group "pot." One member will then take the pot for that week. This process continues until every group member is able to take the pot once. ROSCAs encourage poor individuals to save and provide them with a substantial amount of money that can be used for entrepreneurship or other activities. While this practice is closely aligned with microfinance, there are some issues that reduce its effectiveness. Microfinance allows providers to reach more people and communities and gives poor individuals more flexibility in regard to loan size and terms.

Microfinance has grown in size and scope since the use of ROSCAs. The microfinance movement is now present on 5 continents and there are replications of the Grameen Bank in 30 countries worldwide (De Aghion and Morduch, 2005). As of 2006, there were more than 3000 microfinance institutions in developing countries (MicroPlace, 2009). Clearly, the microfinance movement has grown substantially since Muhammad Yunus began the Grameen Bank. In the 1990s, MFIs even began to use private investors instead of government subsidies and aid. An effort to become sustainable and profitable is on the forefront of the microfinance agenda.

Microfinance has transformed since its inception; however, its mission remains the same: to reach the poorest of the poor. MFIs reach the extremely poor by providing them with financial services they otherwise would not have. This raises an important question: why are the poor so credit constrained? The answer is lack of collateral. Most mainstream banks require borrowers to have collateral to receive a loan. Since poor individuals cannot provide collateral, two problems arise: moral hazard and adverse selection. Moral hazard occurs when the borrower's incentives change because of a lack of collateral. Without collateral, borrowers will be more likely to default. Adverse selection is the result of lenders not being able to distinguish between safe and risky borrowers. These problems are significant for banks trying to remain profitable. Collateral relieves this concern since borrowers will make conservative financial choices to protect their investment. As is evident, the moral hazard and adverse selection problems make mainstream banks wary of poor borrowers. This creates a significant credit constraint.

Since formal lending institutions are not an option for the extremely poor, many will turn to informal moneylenders. Moneylenders charge high interest rates and provide unfair conditions. In their paper, "Is Microfinance Too Rigid", Dean Karlan and Sendhil Mullainathan claim that at times poor individuals spend 50 percent of their income on interest rate payments (Karlan and Mullainathan, 2006). Combined with these exorbitant interest rates, moneylenders often do not provide poor borrowers with enough money to generate additional income. This can create a serious debt trap for the extremely poor (Angel Partners, 2005). Clearly, informal moneylenders are not a preferable loan source for poor individuals. However, a lack of collateral and a nonexistent credit record leave few options for the extremely poor.

As highlighted above, poor borrowers have very few options. This notion is the basis for the development of microfinance. There is enormous potential for poor individuals with access to credit. In this paper, I will evaluate microfinance as an institution; focusing first on several unique aspects of this practice and then on several common debates surrounding this institution. After this evaluation, I will discuss several opportunities to improve the impact of MFIs. My hope is to gain some insight on the effectiveness of microfinance in helping solve the issue of poverty.

Chapter Two

Facets of the Microfinance Model

I. Group Lending

Group lending practices are recognized as a vital part of the microfinance model. As previously discussed, MFIs are faced with significant uncertainty when serving poor individuals with no collateral. Group lending addresses the two issues identified earlier: moral hazard and adverse selection. In this practice, poor individuals with no collateral form groups of generally 5 to 10 members to receive a loan. The loans are staggered within the group and increase over time if repayments habits are strong. Generally, if one person in the group defaults, the whole group is denied future loans. Often times, group members will cover for each other so they do not lose future loans, but this is not required.

While group lending practices appear rather stringent, they are essential for alleviating the moral hazard and adverse selection problems. A moral hazard arises for MFIs because lenders are unable to fully observe the actions of a borrower who, as a result, may undertake riskier projects. Since MFI clients generally have no collateral to secure their loan, this predicament is even more serious. However, group lending practices force group members to monitor each other. If one member defaults on their loan, the whole group is penalized. As a result, group members will absorb responsibility for monitoring their peers and assuring they're making sound decisions with their loan funds. It is clear that group lending not only solves the moral hazard problem but also reduces the cost of monitoring for the MFI.

Group lending can also alleviate the costs MFIs face regarding screening borrowers. Adverse selection occurs when lenders cannot distinguish between safe and risky borrowers. However, the group lending model penalizes all members of a group for one borrower's risky behavior. Therefore, safe borrowers will group with other safe borrowers. This means that the risky borrowers group together with other risky borrowers. Their interest rate in theory will be higher since group members have a higher chance of defaulting. Group lending practices enable MFIs to sort borrowers and charge higher interest rates to risky borrowers with no costs associated.

While group lending practices clearly have tremendous advantages for MFIs, there are several issues with this model. Group members can conspire to simultaneously default on their loans. If all members agree to default, no one will monitor this behavior and the bank will lose out. Often times, there are multiple banks in the area and defaulting group members will not be affected by future loan restriction. Another issue with this model is social in nature. Group lending practices can create peer pressure within small communities. Access to credit is incredibly important to the extremely poor. When their fates are interconnected, significant social pressures can occur when some struggle to repay their loans. If they default, the poorest borrowers will not only lose their own access to credit but also access for their group members. This pressure is considerable and will often deter the extremely poor from accepting a loan.

While the social pressures and opportunity for collusion are certainly significant, the evidence is overwhelming that group lending practices are crucial for MFIs. Without some way to address the moral hazard and adverse selection problems, banks would not be able to lend to individuals without collateral. The majority of clients are extremely poor and without MFIs would have no access to credit. In order to reach these poor individuals, group lending practices are necessary. It is my position that the group lending model is fundamental to microfinance; however, several economists advocate the use of individual lending for some borrowers.

II. Individual Lending

I have discussed the importance of group lending methods in the microfinance model. However in her 2008 paper, Maria Lehner offers a different take on group versus individual lending technologies. While she agrees that group lending methods are essential, Lehner suggests that there is a place for individual lending in microfinance. Lehner develops three distinct hypotheses regarding lending technologies. She suggests that group lending methods are more effective in the case of: (1) large loans, (2) high refinancing costs, and (3) little competition between MFIs. This is currently the situation for most MFIs. However, recent research suggests that more MFIs are gaining greater access to financial markets and are beginning to invest in screening and other technologies (Lehner, 2008).

Recent progress by MFIs is making individual lending more of a reality. However, this raises an important question: why abandon an effective mechanism like group lending? There are several limitations of group lending. Individual lending practices better address a poor borrower's specific needs which will provide additional flexibility for repayment and increase their potential return from the loan. Individual lending methodologies will also ease the social pressures resulting from group liability.

Individual lending clearly has advantages for poor borrowers; however, I have already discussed the necessity of group lending practices to mitigate the moral hazard and adverse selection problems. Without collateral, it is very risky for MFIs to offer the poorest borrowers individual loans. One possibility is that the poorest borrowers begin with group loans or simple savings accounts until they can build up collateral. After this, they can graduate to individual loans where they can achieve higher returns and more personalized repayment plans.

It is evident that the microfinance sector is growing and evolving. There will be opportunity in the future for MFIs to employ individual loans to borrowers who fit the qualifications. Individual loans provide borrowers with added flexibility and, in some cases, a higher potential return. Microfinance will continue to grow and perhaps the need for group lending technologies will diminish. However, presently group lending is essential for MFIs when reaching out to new borrowers with little collateral.

III. Repayment Structures

Microfinance institutions typically lend to the poorest of the poor. In order to reduce risk, they employ several measures like group lending to lessen the potential threat of non-repayment of loans. Another important aspect of the microfinance model is the frequent and public repayment schedule.

A. Public Repayment Structure

A public repayment schedule is a byproduct to the group lending methodology. MFIs repayments occur in large group settings within the communities. This practice reduces the costs of MFIs in several respects. Transaction costs involved with a loan agent's time and travel are significantly lowered as well as the costs related to training and educating the borrowers and loan officers. Public repayment schedules also eliminate potential loan officer fraud and the costs associated. A public setting makes it difficult for officers to pocket the money themselves and claim a borrower did not repay. Large group meetings also allow loan agents to observe the borrowers and provide a more relaxed atmosphere for the borrowers.

The empirical findings regarding public repayment schedules are mixed. These settings can lead to peer pressure and in turn make borrowers more conservative. While MFIs generally view conservative borrowers as a positive, this lessens the potential return to the borrower. The mission of microfinance is to help alleviate poverty. Discouraging higher potential returns for borrowers may be an unintended consequence of MFIs.

Peer pressure and social issues are significant concerns for MFIs. However, economists suggest that peer pressure is hardly present in the Grameen Bank model (Kimenyi et al., 1998). Loan officers can work to ease social tensions but, ultimately, public repayments are important parts of the microfinance model through reducing costs and improving client repayment rates.

B. Frequent Repayment Schedule

MFIs typically serve low income individuals with insecure and unpredictable incomes. Banks can transform their lending terms and conditions to better serve these individuals and eliminate default risk. One way banks achieve this is through a frequent borrower repayment schedule. Dean Karlan and Sendhil Mullainathan discuss the pros and cons of this system in their paper, “Is Microfinance Too Rigid” (Karlan and Mullainathan, 2006).

The frequent repayment schedule is one tool MFIs use to protect their long term sustainability. This notion reduces operating costs for the MFI by making it easier and less expensive to train their staff along with reducing the opportunity of internal fraud. Loan agents are given strict guidelines for administering and collecting loans and the frequent nature of this collection makes it very hard for theft and corruption among these agents. This structure also makes it difficult for borrowers to strategically plan defaults. Frequent repayments notify loan agents of this suspicious behavior and identify those intending to default before they are able to do significant damage.

Another important notion is that banks need these funds, especially in tough times, to continue lending to other individuals. Frequent repayment allows MFIs to receive these funds more quickly and make more productive use of them. A strict repayment schedule also enforces positive savings behavior by borrowers. Borrowers are aware of their frequent repayments and are forced to closely monitor their financial activities and deliver an immediate return. This structured methodology has significantly reduced costs to MFIs as well as provided borrowers with a strong savings routine.

While a frequent repayment schedule certainly benefits MFIs, Karlan and Mullainathan argue that it also lessens potential returns for borrowers. When the poorest borrowers consider taking out a micro-loan, they must determine what they can afford to repay. Frequent repayment installments put pressure on the extremely poor. To avoid defaulting, the poorest borrowers must base their loan size and repayment terms on their incomes during financial “tough times.” Without established savings or savings routines, poor borrowers can not consider average earnings throughout the year or they will risk being short during the “tough times.” This frequent repayment schedule also limits the extremely poor from taking any risk, even miniscule, in their projects or investments. As a result, the very poorest borrowers will take out smaller loans and avoid risky endeavors. While this is good for the sustainability of a MFI, it hampers the extremely poor’s ability to make a large return on their investment and eventually escape poverty. As a result, the poorest of the poor may turn to informal moneylenders with exorbitant interest rates for their increased flexibility (Karlan and Mullainathan, 2006).

According to Karlan and Mullainathan, less frequent repayment schedules are favorable to borrowers in terms of seeing a high return on their investment. The question remains: can MFIs use less strict repayment schedules and still remain sustainable? The empirical evidence comparing these two strategies is sparse. In their book, *The Economics of Microfinance*, de Aghion and Morduch cite a study where the Bangladesh Rural Advancement committee moved from 1 to 2 week repayment installments. This change caused delinquencies to rise (De Aghion and Morduch, 2005). While the evidence is limited, I feel that this study portrays a more likely scenario. Poor borrowers typically do not have established savings routines. It is essential for microfinance organizations to provide the structure and guidance for repaying these loans. These thoughts aside, different repayment methods are worth investigating.

While structured repayment schedules are imperative for the health of a MFI, Karlan and Mullainathan (2006) suggest several ways to increase the flexibility of the repayment schedule with minimal harm to the banks. One such notion is to identify the "tough times" throughout the year and have fewer repayments during those periods. Another strategy includes providing borrowers with several opportunities to skip payments throughout the loan term. We can assume borrowers would use these "free passes" (Karlan and Mullainathan, 2006) during difficult financial times. In each scenario, borrowers would pay a higher interest rate during the other time periods to offset these concessions from the bank. These ideas appear promising. This increased flexibility will benefit poor borrowers without depriving them of a structured repayment cycle. This will also increase client retention by reducing their risk of default and need to use a moneylender for more flexibility. Research into relaxing loan repayment standards would definitely benefit the advancement and development of MFIs.

IV. Lending to Women

A. Why Lend to Women?

I have highlighted several distinct differences between MFI and mainstream bank practices like group lending practices and frequent repayment schedules. The last significant contrast involves the client base composition. In general, MFIs lend primarily to women. In particular, females make up 94 percent of Grameen Bank clients (Srinivas, 2010). This percentage is comparable to that for MFIs worldwide.

It is evident that an overwhelming majority of microfinance clients are women. Targeting women serves several strategic purposes for MFIs. Primarily, psychological characteristics of women make them more attractive borrowers. Women are generally more conservative by nature and more frightened by the social stigma attached to defaulting on a loan. Along with psychological generalities, lower work mobility also makes women more attractive borrowers. In the article, "Empowering Women with Micro Finance: Evidence from Bangladesh," Mark Pitt et al. found that 53 percent of women would only leave their village if accompanied by their husband or son (Pitt et al., 2006). This decreased mobility simplifies the monitoring process and eases financial and time burdens on loan agents. Clearly, lower mobility and a conservative approach to borrowing lead to significantly higher repayment rates for women.

While high repayment rates are a significant incentive for MFIs to reach women, there are several additional reasons to target female borrowers. The mission of microfinance is to reach the very poorest of the poor. Evidence suggests that women are an overwhelming majority of the extremely poor. The *United States Development Fund for Women* reported that women are 70 percent of the world's poor and that "women's nominal wages are 17 percent lower than men's" (United States Development Fund for Women, 2009). These statistics are shocking. It is obvious that to reach the poorest of the poor MFIs must target female borrowers. Contributing to their poverty, extremely poor women face a serious credit constraint. They lack many of the basic options provided to their male counterparts. Microfinance affords women with financial services like loans, saving vehicles, and insurance. Considering their credit constraint, female borrowers will have a significantly higher return on their capital. This higher return will have a greater impact on overall growth and poverty alleviation.

In addition to relieving their credit constraint, microfinance promotes gender empowerment for women. Access to microfinance programs provides women with increased bargaining power within their household. When women begin to contribute financially, they gain some control over the fiscal household decisions. This increased female influence has several key advantages. The International Labour Office reports that when women gain more control of household decision making investments in human capital will significantly increase. Evidence suggests that households with women involved in microfinance have higher rates of school enrollment and lower drop-out rates for children. They also will invest more in their children's health and nutrition (International Labour Office, 2008). Mark Pitt et al. also studied this same phenomenon and even conclude that lending to men has no effect on the collective household health and education (Pitt et al., 2003). It is evident that when attempting to improve the welfare of an entire household women are the smarter and more productive choice as borrowers.

While the effect on a woman's bargaining power is significant, microfinance empowers women in several additional ways. As women gain the ability to earn an income, many are choosing to have fewer children. De Aghion and Morduch highlight this phenomenon and report that in Bangladesh fertility rates have fallen from seven children per women in 1970 to three children in 2000 (De Aghion and Morduch, 2005). This steep decline can be explained by the substitution effect from a change in women's market wages. As women's wages increase, the opportunity cost of having children will increase. This leads to a decrease in fertility rates. On the other hand, an increase in wages for men will have the opposite effect and will lead to an increase in the fertility rate. The income effect is responsible for this increase. When children are viewed as consumption goods, an increase in wages will make the family effectively richer and able to afford more children. It is clear that increases in the wages of men and women have very different effects. Figure 1 below illustrates the income and substitution effects from an increase in women's wages. Cleary, the substitution effect, represented by the dotted-line arrow, dominates the income effect, represented by the solid-line arrow, creating a net decrease in the fertility rate.

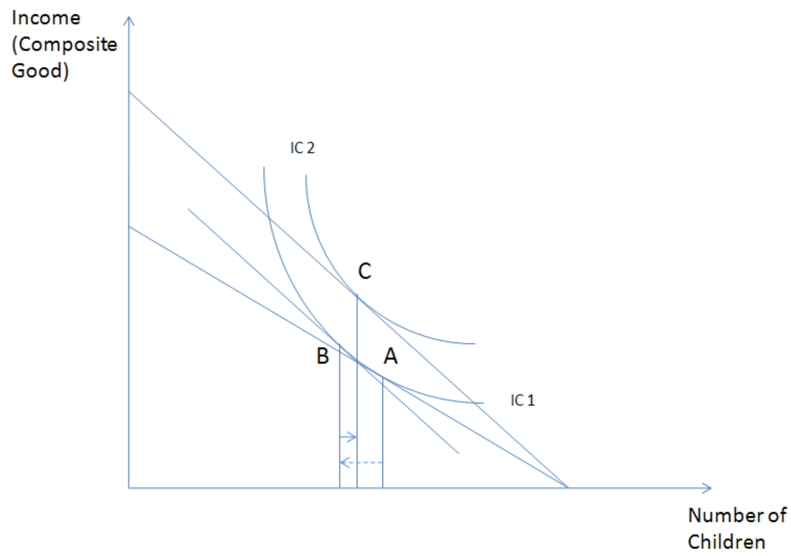

Figure 1: Substitution effect from an increase in women's wages.

Along with reducing fertility rates, microfinance provides women with an improved self image. Mark Pitt et al. emphasized this in a household survey they completed in Bangladesh. They found that 94 percent of women believe their husbands are "superior to them in qualities and education" (Pitt et al., 2006, 799). These women cite educational and occupational differences as the driving factors in this opinion. However, microfinance offers women an income and gives them an opportunity to educate themselves and their children, especially their daughters. This will increase a women's view of herself and empower women of the future. Microfinance clearly empowers women all over the world and provides them with an opportunity to improve their self image and the futures of their children.

B. Disadvantages of Lending to Women

While lending to women enables the microfinance mission in several key ways, issues with this practice do arise. A key problem concerns the control of loan funds. Economists are finding that women using microfinance often have little or no control over the loan funds. Pitt's household survey (1998-1999) found that in Bangladesh approximately 78 percent of husbands claim "they use their wives' loans for their own projects" and that 38 percent of women say their husbands have total control over their loan (Pitt et al., 2006, 796-97). When microfinance is limited to female borrowers, husbands often need their wives to obtain loan funds. With their husbands controlling the money, the expected benefits highlighted above of lending to women will diminish. This severely limits the perceived impact of these funds.

When women are involved in microfinance, their husbands are often threatened by their financial empowerment. Evidence suggests that households using microfinance services often experience increased domestic struggles. In their book, *The Economics of Microfinance,* De Aghion and Morduch cite evidence suggesting that microfinance involvement has led to a 70 percent increase in domestic violence (De Aghion and Morduch, 2005). It is clear that the empowerment effect is not immediate. While significant progress has been made in improving social attitudes toward women, this change is not universal. The International Labour Office bulletin suggests that society as a whole has not embraced the plight of women (International Labour Office, 2008). For the empowerment effect to be sustainable, MFIs must find ways to reinforce this message.

C. Promoting Female Empowerment

The question remains: how can MFIs promote the empowerment of females? The International Labour Office (2008) bulletin highlights several strategies. The first is to hire female employees within the MFI as loan agents or other positions. This practice emphasizes the value MFIs place on females and attracts notice from the community regarding female potential in this market. Another suggestion involves adding social programs to the scope of microfinance. These programs will take the form of support groups focusing on literacy and health initiatives. This notion is imperative for sustained female empowerment initiatives. In order for microfinance to be effective in pulling women and their families out of poverty, societal attitudes toward women must change in these poor countries. MFIs can spark this initiative and cause some real and significant change.

Muhammad Yunus' notion when creating microfinance was to reach the poorest of the poor. In order for MFIs to embrace this mission, they must specifically target female borrowers. This is vital since women are such a large percentage of the world's extremely poor. As highlighted above, lending to women has a much greater effect on the welfare of the entire family especially in the areas of health and education. Improving human capital is imperative in making these increases in income and welfare sustainable. Clearly, the practice of lending primarily to women is vital for the microfinance model. MFIs must continue to promote female empowerment for this effect on poverty to be sustainable.

Chapter 3

Common Microfinance Debates

I. Subsidizing MFIs

Serving the poor is a key objective of MFIs. Some depend heavily on subsidies from independent donors and governments to achieve this goal. Subsidization is a valuable tool for reaching those in predominating poverty. However, economists disagree on the effects subsidies have on the long term stability of MFIs. In 2003, the *Microfinance Bulletin* reported that roughly half of all MFIs and only 34% of those focusing specifically on the "poorest of the poor" are actually financially sustainable (De Aghion and Morduch, 2005).

Microfinance institutions employ both direct and indirect forms of subsidy. Subsidies can exist in many forms including direct loans, "soft loans" with flexible repayment schedules, and tax holidays. While subsidies can alleviate the financial burden for MFIs when trying to reach the extremely poor, they have some definite disadvantages. In their book, *The Economics of Microfinance,* Morduch and De Aghion argue that relying on subsidies can significantly limit the impact of microfinance. This dependence leads to inefficiency and lower repayment rates.

While subsidization presents significant issues, economists have identified smart uses of subsidy funds (DeAghion and Morduch, 2005). Issues arise when MFIs depend on subsidies as a continued source of aid. Often times, donors will get restless and move on to another initiative. However, in theory, smart subsidization definitely exists. One viable method is to limit subsidy funds to the transaction costs facing an MFI. The fixed, administrative costs are a huge financial burden for MFIs. It is more expensive for banks to provide small, micro-loans than larger loans because of a lack of economies of scale. With comparable fixed costs, a smaller loan size, and smaller subsequent interest rate payments, MFIs need to charge high interest rates for their poor borrowers. Relieving this financial constraint will allow MFIs to relax the high interest rates charged to borrowers.

An alternative is to subsidize the very poorest borrowers in the short term. This action will eliminate, or at least significantly lessen, high interest rates and allow borrowers to generate a return on their loan. When they are able to accumulate capital and develop a successful business plan, the funds can be reallocated. Both of these methods show promise for MFIs trying to reach the poorest of the poor.

In theory, subsidization is a reliable poverty-reducing tool for MFIs; however, very little research exists regarding its effectiveness. Subsidy research requires donors who are willing to sponsor the experiment. As a result, little empirical evidence exists and drawing conclusions about subsidies is difficult. While concrete evidence on subsidization is not readily available, MFIs should still make use of these funds. Research on the subject should be a priority but, for now, smart subsidization should be used to help reduce poverty.

This is a common theme in development economics and regarding aid in general. In order for funds to truly make a difference, donors must be willing to allow projects to fail and learn from these mistakes. Not all aid will be directed into successful projects. However, in the realm of development economics, even failures provide opportunities to learn and advance in the mission to alleviate world poverty.

II. Saving

In the early stages of the microfinance movement, it was more commonly referred to as microcredit. There is a key difference between these two terms. Microcredit is defined as giving small loans to poor individuals to promote entrepreneurship. Microfinance represents a broader range of financial services including loans, insurance, money transfers, and saving instruments (Kiva, 2010). As is evident, there has been a general movement within MFIs away from solely promoting credit. This transition is evident when considering the history of the Grameen Bank. Since inception, the Grameen Bank has offered savings products to poor customers. However, these products were complicated and too difficult to be useful for the very poor (De Aghion and Morduch, 2005). However, in 2001, the Grameen Bank introduced GBII, a new version of the historic MFI. GBII offered easier and more flexible savings and loan products to poor borrowers. The Grameen Bank has taken considerable strides to make saving easier for the extremely poor.

A. Why Should People Save?

Clearly, MFIs encourage saving by their borrowers and it is important to understand why this is the case. De Aghion and Morduch point to a life-cycle savings model to explain this significance. This model highlights consumption and saving patterns over a person's lifetime. Generally, individuals borrow when they are young, save in middle age, and dissave in old age with a relatively flat consumption over time (De Aghion and Morduch, 2005). This explanation makes sense economically. By borrowing at a young age, loan funds are used to create an income generating activity. After generating some income, individuals can begin to save for retirement. These built up savings will provide financial stability during old age. It is evident that savings are important for all people not just poor clients.

B. Saving and the Poor

It is clear that saving is essential; however, the question is raised: Why is it so difficult for the poor to save? De Aghion and Morduch (2005) suggest that poor households are often multigenerational. With children, parents, and grandparents all under one roof, expenses increase and saving becomes very difficult. As mentioned previously, the extremely poor often live on less than 1 dollar per day. This income barely provides enough to survive much less save. How can poor borrowers afford to put aside money to save when they barely make enough to feed their children and provide shelter?

Since they are barely scraping by, some economists point to credit as the answer for the extremely poor. They do not have the extra funds to set aside and save. Therefore, a loan provides the poor with extra income they can use to create an income generating activity. After they begin making money, then they can begin to save. This behavior fits well with the "Savings Behavior Model" mentioned previously. However, the logic behind this model is weak. Considering the extremely poor are barely making ends meet, they may choose to use loan funds to buy food and other necessities. This creates a serious debt trap. Without creating a source of income, there is no way to repay this debt. As a result, I believe the "Savings Behavior Model" is less applicable to extremely poor borrowers.

In their paper, "Microcredit vs. Microsaving: Evidence from Indonesia," Johnston and Morduch (2007) emphasize the importance of saving and borrowing as being complementary. They suggest the extremely poor begin to save first and build up their financial assets.

Marguerite Robinson reiterates this strategy in her book, *The Microfinance Revolution* (2001). In this strategy, the extremely poor will first gain employment and then open small savings accounts. After a period of saving, they can begin to take out small loans. If they are successful and able to expand, these individuals will take out larger loans (Robinson, 2001). In my opinion, this strategy serves the poor more effectively than a life-cycle savings model approach. Saving primarily will allow the extremely poor to develop a safety net. With some collateral, poor individuals can obtain loans with lower interest rates and more flexibility. Another reason developing savings is important relates to a common affliction, debt aversion. Many people, not just the poor, are uncomfortable taking on debt of any kind. Having this safety net will ease their worries and many poor borrowers may choose to self-finance projects rather than taking out a loan. Making saving a primary concern greatly benefits poor borrowers when they do decide to pursue credit options.

While this theory appears to be preferable, a nagging concern resurfaces: where will the extremely poor find the extra funds to set aside and save? This is certainly a valid anxiety. For the very poorest of the poor, this may not be an option and other theories need to be pursued. However, some poor individuals may be able to set aside even the smallest amount each month. Often times, they neglect to do so because savings accounts are too complicated or not considered secure. It is imperative that MFIs eliminate this expectation by making saving easier and safer for borrowers. If they are successful in this endeavor, more poor individuals will begin to save and the impact of microfinance will grow.

While complicated and insecure saving mechanisms are a concern, extremely poor borrowers may face additional obstacles. In some countries, poor people are even forced to pay interest on their own savings. In his article, “Putting the Microsavings in Microfinance”, Nicholas Kristof highlights a common operation in West Africa that "charges an annual interest of 40 percent for accepting savings" (Kristof, 2009). This is a huge deterrence to saving for poor individuals. Kristof argues that developing banks with even zero interest will benefit the extremely poor. I agree with this assessment. It is essential to eliminate all barriers to saving for the extremely poor for them to have any chance of escaping poverty.

Emphasis on saving is an important part of the microfinance agenda. By making saving easier for poor borrowers, MFIs will achieve higher repayment rates and their borrowers will enjoy higher returns on their investments. A main concern regarding microfinance is creating a debt trap. Focusing on saving will greatly alleviate this worry. For microfinance to be effective, saving and borrowing must be complementary actions. It is important for MFIs to encourage this notion.

III. Competing Incentives: Profitability versus Serving the Poor

The *International Year of Microcredit 2005* website defines microfinance as "loans, savings, insurance, transfer services and other financial products targeted at low-income clients." A major goal of MFIs is to provide the poorest individuals with access to credit and other financial services. As a result, most microfinance clients are usually small-scale farmers, women, and other low-income individuals. However, this objective of MFIs often clashes with another essential aspect of the model, profitability. Microfinance institutions must remain profitable in order to be effective in the long term.

Considering a client base comprised of impoverished people, it is reasonable to wonder whether microfinance can be profitable in reality. The November 2001 issue of the

Microbanking Bulletin provides some insight on this question. Data collected on 62 self-sufficient microfinance institutions yielded an average return on assets of 5.5 percent. This rate is similar to most commercial banks. High average returns for microfinance institutions may attract private investors and retail bankers (Kiva, 2010). However, these high returns also suggest a heavy focus on profitability which can impact the type of client MFIs are serving. MFIs experience higher returns when lending larger amounts to clients who are more financially stable and already productive.

Research suggests that MFIs primarily serving clients with some sort of income-generating activity can be profitable. However, the norm for MFIs reaching poor clients is still subsidization (De Aghion and Morduch, 2005). The *Microfinance Bulletin* argues that there is recent improvement for MFIs reaching the poorest individuals when they claim "microfinance programs like Bangladesh Rural Advancement Committee and the Association for Social Advancement in Bangladesh have already demonstrated that very poor clients can be reached profitably" (Kiva, 2010). As of 2000, these MFIs have achieved profits of more than 4 percent. While this evidence shows potential for MFIs to serve the poor, the debate regarding their apparent profitability still exists.

A. Costs Associated with Micro Loans

With a chief goal of serving the poor, it does not seem necessary for microfinance institutions to be profitable. However, sustainability is an essential aspect of the microfinance model. MFIs face significant costs when providing financial services to poor individuals. These costs include: (1) cost of capital, (2) cost of default, and (3) transaction costs associated with screening borrowers, hiring loan officers, and monitoring loan payments. The costs relating to capital and default are directly proportional to loan size. Transaction costs, on the other hand, are fixed regardless of loan size. Monitoring costs are a large portion of transaction costs. The costs associated with monitoring small loan clients can be especially pricy considering their lack of collateral and geographic distance from the lender. An article in *Donor Brief*, “Making Sense of Microcredit Interest Rates,” presents an interesting example about transaction costs. A $25 fixed transaction cost per loan would only be 0.25% of a $10,000 loan; however, it would be 25% of a $100 loan (CGAP, 2003).   Evidently, transaction costs are much higher for small loans and, as a result, total costs of small loans are significantly greater as a share of the loan amount relative to those of large loans.

As highlighted above, small loans generally are more costly for lenders to disburse and monitor. In order to remain profitable, microfinance institutions must charge a high interest rate for these microloans. Basic reasoning would suggest that charging high interest rate would exclude the poor from obtaining microloans. Economists argue that these interest rates are only a small proportion of a micro entrepreneur’s total costs. With interest rates significantly less than a money lender’s, microfinance clients consider these loans to be a small price for access to capital (Yearofmicrocredit.org, 2005). This rationale is accurate for poor clients with documented productivity; however, without an income source, these interest rates can be increasingly difficult to repay. This could theoretically begin a debt trap where poor individuals would get sucked further into poverty. Many economists argue that profitable MFIs are either charging very high interest rates or not reaching the poorest of the poor. This statement certainly has merit; it does not appear that either objective is possible without disregarding the other.

B. Managing MFIs

From a management perspective, balancing these conflicting incentives is increasingly complex and difficult to control. In their book, *The Economics of Microfinance,* Morduch and De Aghion (2005) described the principal-agent or management-loan officer theory for microfinance institutions. MFI management struggles to provide efficiency incentives for loan officers. While microfinance institutions have two distinct goals, profitability and serving the poor, only one is measured easily. An MFI's financial well being is easy to observe and regulate, whereas the average well being of their clients proves more difficult to track. Offering incentives based on number of clients and loan size leads to increases in profitability. However, loan size increases will most likely have a negative impact on the proportion of poor clients. Incentives based on repayment rates can also inversely affect efforts to reach the poorest individuals. Loan agents have little incentive to lend to the extremely poor (De Aghion and Morduch, 2005). Their repayment expectations will be significantly lower considering their apparent lack of collateral and source of income. Clearly, the MFI goal of serving the poor is often secondary to profitability.

C. Donors Funds

While measurable progress certainly impacts a MFI's focus on profitability, there are other factors as well. Many MFIs depend heavily on foreign aid, especially the ones trying to reach the extremely poor. However, these funds often come with strings attached and generally the social initiatives of MFIs become less important. International donors emphasize self sustainability when allocating their funds. These standards are nearly impossible for MFIs to achieve in the short term. In an excerpt, "The Myth About Microfinance and the Poor," Harvard

University students claim that MFIs that meet these strict standards typically have "5% or less of their clients fall below the poverty line" (Adropintheocean.org, 2009). This approach taken by donors makes it difficult for MFIs to reach the poorest of the poor, especially when these funds are so necessary.

D. Commercialization

Another factor impacting the social agenda of microfinance is the increasing commercialization of the industry. As previously discussed, high average returns on microfinance loans attract foreign investors and mainstream commercial banks. These investors also emphasize profits can potentially conflict with the value placed on reaching the poorest individuals. Whether this trend towards commercialization is good or bad continues to be debatable. While reaching the poor clearly becomes a secondary concern, foreign investments greatly improve a MFI's chances of remaining self sustainable.

E. When is Microfinance Not Effective?

Even if MFIs are not reaching the poorest of the poor, they are still lending to poor clients with significant credit constraints. Economists argue that microfinance serves as a more effective poverty-reducing tool when the borrowers have documented potential for productivity and entrepreneurship. Opponents of microfinance suggest that this method is not conducive for pulling people out of poverty but rather keeping their situation from worsening. In the article regarding popular microfinance debates, Aneel Karnani argues that the extremely poor need stable jobs to develop a consistent income and strong financial routines (Weaver, 2009). However, microfinance generally promotes entrepreneurship which most people would agree involves some risk. Karnani's concern is that microfinance provides the extremely poor with insecure and unpredictable incomes. We can argue that the risk involved depends on the type of projects and the alternatives available in the market and that, perhaps, MFIs can work with poor borrowers to lessen this risk.

While microfinance institutions attempt to provide excluded groups with access to credit, evidence suggests that microfinance is not an appropriate method for relieving poverty in some situations. Microfinance loans are often meant to spur entrepreneurship. However, there are some demographic groups that would not benefit from this type of activity. These groups include the old, sick individuals along with those in extreme poverty. These individuals are barely surviving and primarily need funds to satisfy basic needs like food, water, shelter, etc. Making loans to such individuals often leads to a debt trap. Without some sort of income generating activity, borrowers will be unable to repay the loan. Missing loan payments coupled with high interest rates can cause the extremely poor to fall further into poverty. Another factor excluding these poor individuals from microfinance is the group lending standard. While this feature is essential to the microfinance model, it is increasingly difficult for the extremely poor to find people willing to form groups with them for loans.

While traditional microfinance may not be an effective poverty-reducing method in the above cases, there are other ways to reach those in extreme poverty. Foreign aid directed toward improvements in education, infrastructure, and health services is more useful. Another option for the poorest individuals is subsidized microcredit. As we discussed earlier, a smart use for grants or subsidies is to finance the poorest of the microfinance customers. This allows lenders to lower the interest rate and borrowers to gain capital. These factors alleviate the financial burden on the extremely poor and better equip them to make loan repayments.

Another feasible method of subsidizing these poor borrowers occurs within the MFI. Lenders can use profits from their more productive loans to subsidize the extremely poor. This would create redistribution within the microfinance operation and allow poor borrowers to face lower interest rates. Subsidizing those in intense poverty, whether it be with donor funds or within the MFI itself, provides a more effective way for MFIs to reach the poorest individuals. These measures do, however, affect a MFI's self sustainability.

The conflicting incentives of profitability and serving the poor are clearly a problem for MFIs. Strategies to help alleviate the problem exist but their potential is limited. One such strategy is to enforce interest rate ceilings on microfinance institutions. This initiative would alleviate the hardship high interest rates present to the extremely poor. However, these ceilings combined with a lack of collateral would create a moral hazard problem. Since MFIs are unable to observe the actions of borrowers, they will be less likely to lend to the extremely poor because of their default risk. Instead, MFIs would focus on less risky poor. These people are still considered to be very poor but have established businesses and lower default risk. Interest rate ceilings also reduce profits and, as a result, put off potential investors. Evidently, efforts to alleviate the issue of competing incentives are not promising.

While competing incentives are a significant issue, the net impact of microfinance is still positive. Even if the financial standards of MFIs make it impossible to reach the poorest of the poor, microfinance still aids people who would otherwise be credit constrained. These individuals would be forced to use moneylenders with especially high interest rates. Microfinance is just one tool available in the fight against poverty. The poorest of the poor may be better suited to make use of the other methods we discussed above. In that case, microfinance certainly improves the financial stability of poor individuals even if they are not considered the poorest of the poor.

Chapter 4

Conclusion

In this paper, I have conducted a thorough investigation of the microfinance model by evaluating several aspects of this practice along with addressing several key issues plaguing this institution today. I focused specifically on the group lending practice, strict repayment structures, and focus on women as well as the debates surrounding subsidization, saving methods, and competing incentives. In each section, conclusions were drawn regarding these issues and potential improvements were suggested.

Throughout my research, it became clear that poverty alleviation is an extraordinarily difficult task. Most criticisms of MFIs are valid; however, circumstances make them nearly impossible to address. For instance, the group lending practice often leads to social tension and peer pressure within a community. However, amending this practice creates a serious moral hazard issue leading to an increase in default rates and costs to MFIs. While this criticism certainly has merit, its alternative as a general rule is even more problematic. I encountered situations like this several times in my research. Ultimately, it is essential to make decisions that will benefit the most people and allow the microfinance effort to be sustainable.

While I conclude that the facets of the microfinance model are vital, I was able to identify several opportunities to focus the impact of MFIs on the extremely poor. Structure is essential to poor borrowers who are trying to develop smart financial habits. At the same time, increased flexibility for borrowers could increase the return on their investment. Clearly, this tradeoff can sometimes be difficult. Another potential improvement involves the ease of saving for poor borrowers. Saving and borrowing should be complementary. Making saving easier and safer for the poor is essential.

My last major suggestion regards female empowerment. The statistics are overwhelming involving women and poverty. My opinion is that women are key in the battle against poverty. Reaching these poor women and empowering them through microfinance leads to enormous benefits.

Microfinance concerns are often not black and white. While I have weighed the benefits and disadvantages of my suggestions, future empirical evidence may prove them too difficult to implement. This reasoning highlights an important notion plaguing the effort to alleviate poverty today. Projects and efforts that involve aid are often not allowed to fail because private donors and governments generally are not interested in funding projects that might not succeed. This is a serious issue. Without addressing these potential research areas, little progress can be made. It is clear that there is no single solution to poverty and that a diverse, multifaceted approach is needed. Learning from past mistakes will help economists identify new ideas and approaches and continue to get closer to worldwide poverty alleviation.

World poverty is at the forefront of economic thought today and microfinance is a key achievement in recent efforts. In the final chapter of my thesis, I addressed a common debate regarding competing incentives. MFIs attempt to reach the very poorest of the poor; however, this often conflicts with their goal of remaining profitable. Most economists would argue that microfinance is not achieving its key objective of reaching the poorest people. However, it is my opinion that, while this may be true, MFIs still make a significant impact on the world's poor. Poverty exists on many levels and MFIs still reach individuals who otherwise would be severely credit constrained. While traditional microfinance may not be appropriate for the very poorest, there are other ways to reach these individuals, like subsidized loans. This argument should not diminish the effectiveness of microfinance. Microfinance is just one tool in the fight against poverty.

Ultimately, my evaluation of microfinance as an institution was positive. The circumstances surrounding world poverty in general are increasingly difficult to address. MFIs are able to achieve a sustained impact by employing several techniques to reduce cost and increase repayment rates. While MFIs are effectively reducing poverty in poor areas, it is essential that this sector remains open to new ideas. Economic progress will allow microfinance to continue to grow in its efforts to reduce poverty worldwide. Microfinance is just one method in the effort to alleviate poverty and its impact throughout history is substantial.

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