Source of Funding as Determinate of Microfinance’s Impact on Informal Sector

A Comprehensive Exercise

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Over the past 35 years, non-governmental institutions dedicated to providing the poor with the means to improve their lives have emerged as one of the most important agents for reducing systemic poverty in developing nations. These programs, known as microfinance institutions (MFIs), place working capital in the hands of impoverished citizens giving them the ability to raise their standard of living by their own hard work. Two forms of microfinance institutions exist: those that operate on funds received through donation and those that operate on funds received from outside investment. Once an MFI decides how to fund its operations the interest of the primary funding source determines whether the MFI will place emphasis on creating social change or maintaining fiscal solvency. This choice in turn forces the MFI to adopt patterns of behavior that ultimately determine its success or failure in the core goal of allowing previously excluded economic actors to raise their standard of living. I will argue that the policies followed by the donation-funded MFIs lead to a higher standard of living for their clients and to a much lesser extent the entire informal sector.

Researchers have traditionally followed the division of MFIs, evaluating microfinance’s effectiveness from either a purely economic or social standpoint. Analysis using an economic framework treats MFIs as a derivative of formal financial institutions (FFIs) and focuses narrowly on the institutions’ ability to maintain fiscal sustainability. Analysis that uses a public policy framework sets aside the fiscal solvency aspect, focusing shallowly on MFIs as social welfare programs. The drawback of these perspectives is that one can select a specific type of MFI to validate any theory (Woller and Woodworth, 2001:8), rather than using a unified approach to evaluate all MFIs. Researchers should realize that while each MFI chooses a particular institutional structure, method of service, and segment of the informal sector, these organizations make these choices to maximize their ability to eradicate systemic poverty.
Therefore each MFI should be examined for its success in the core goal, namely improving standard of living.

One school of thought, known as the Institutionalists, posits that MFI must act as a new type of FFI (Woller and Woodworth, 2001:8). At the core of their fiscally focused position sits a belief that the market can provide for the social good by recognizing and rewarding the skills of the entrepreneurs of the informal sector. To maximize their impact on the informal sector, MFIs should push individuals and groups to invest their time, money, and effort in the future by gradually expanding their microenterprises. The Welfarists address the goal of increased earnings and standard of living by focusing on how to improve quality of life in the present (Woller and Woodworth, 2001:8). This vision of microfinance places MFIs closer to the realm of government relief programs, but in the Welfarists’ view MFIs still depart radically from other programs by attempting to make participants self supporting rather than dependent on aid funds.

Both schools agree in examining the degree to which MFIs can reach the informal sector, although they differ in how outreach should be measured. A common approach to outreach identifies six aspects: worth to clients, cost to clients, value of client, number of clients, time frame, and types of financial services (Schreiner, 2002). In the Institutionalists view, since MFIs are institutions that seek financial solvency, MFIs should maximize value of clients by targeting those poor most likely to succeed in using microfinance to create sustainable enterprises that can then employ other members of the informal sector (United Nations Secretariat in Khandakar, 2004:648; Mosley and Hulme, 1998:787). By contrast, the Welfarist school focuses on the number of clients hoping to reach all members of the informal sector in need of the tools to radically raise their standard of living (Montgomery and Weiss, 2006:34).
Each school evaluates the effect of MFIs in a different manner dependent on their particular conceptualization of the intent of microfinance. The Institutionalist school views microfinance as a method of wealth creation, similar in nature to capital on larger scales in more developed countries (Khandakar and Danopoulos, 2004:62; Hoque, 2004:33) and judges success by participants’ ability to consistently pay back loans, expand the operations of their microenterprises, and eventually graduate out of the MFI into the formal financial sector as their microenterprises become self sustaining (Wright, 2000:43). The Welfarist school does not view MFIs as an exact equivalent of capital in more developed countries, where capital is used to increase and not to stabilize returns. These theorists view microcredit as a separate system which increases income by smoothing consumption (Matin et al, 2002:276; Zohir, 2004: 318; Weber, 2004:367) and allowing participants to draw progressively larger amounts to expand their enterprises (Yunus, 1999). MFIs should not transition individuals and groups onto more traditional types of financial institutions. Instead, MFIs act as a system that lessens the frequency and severity of household budgetary shortfalls and provides insulation from macroeconomic shocks.

Since the Institutionalist and Welfarist approaches disagree on almost all the core issues of microfinance any study that seeks to utilize their respective theories undermines criticism and dialogue. Therefore, I will utilize literature from both schools to create a “charitable model” and a “finance model” to evaluate the relative achievement of both types of MFIs in giving previously economically excluded actors the ability to raise their standard of living. Instead of focusing a priori on what each school purports to be the most important aspect of microfinance (social change or fiscal solvency), I will evaluate which model’s practices actually affect their clients’ standard of living. These effects may occur at the individual level, raising or stabilizing
income, or at the social level, reconfiguring the market system to provide more mutually beneficial transactions between members of the informal sector.

A thorough examination of the practices of the two types of MFIs will show that the charitable model has the greatest impact on the living standards of the poor. The charitable model succeeds in its own goal of providing loans large enough to allow clients to increase their finances in a manner that protects clients from macroeconomic shocks. As the evidence demonstrates, the financial model, due to its inability to insulate clients from shocks, can not provide a means to raise standard of living in the informal sector.

The Charitable Approach

The donation funded MFIs utilize a charitable outlook that places the needs of the client ahead of the financial solvency of the MFI. These institutions start by acquiring capital from microfinance funds, development banks, and socially minded individuals, all of whom surrender their financial assets in order to benefit society. By this arrangement the goals of the donors, administrators, and clients are perfectly aligned. These institutions then find members of society who are most excluded from the formal economy due to a lack of assets and skills. Taking the most active role possible, the MFI socializes their clients into the market system, provides advice about setting up microenterprises, and organizes clients into “solidarity groups.” The MFI makes loans to these groups as a whole, not to individuals and so these groups act as networks of support due to their mutual responsibility for loan payments. The only necessary return on investment of time and capital is a positive effect on the living conditions of their clients.

The Grameen Bank is the archetypal example of the charitable approach to microfinance. This MFI sets aside the conventional wisdom about the capabilities of the poor and seeks to include as many potential participants as possible. Rather than attempting to find entrepreneurs
just outside the formal financial sector, the Grameen Bank seeks out the landless and destitute
(Yunus, 1999). The institution does not simply disperse funds to client groups and then expect a
return on the investment. Instead, the staff maintains close contact with their clients and
attempts to socialize participants into behavior centered on the principles of discipline, unity,
courage, and hard work (Yunus, 1998:135-136) that will ultimately allow them a better life
(Karim & Osada, 1998:264-265). The Grameen bank clearly demonstrates the most important
aspects of the charitable approach: high degrees of oversight and involvement in the well being
of the clients.

In order to study the Grameen Bank as the outgrowth of an economy lacking the
complexity of a developed economy, which would complicate my study, I will examine the
bank’s operations in its home nation of Bangladesh. Unlike most nations in which the
government acts as a source of security and regulation for economic activity, widespread
instability and famine caused by Bangladesh’s war of independence severely limited the abilities
of the new Bangladeshi government in the 1970’s. In this institutional vacuum Professor
Muhammad Yunus began using his Rural Economics Program at the University of Chittagong to
bring aid and opportunity to the poor of Bangladesh. Eventually the government of Bangladesh
recognized the success of Yunus’s programs and aggregated the numerous village banks he
established into the Grameen Bank Project (Grameen Bank, 2002). Since this institutionalization
occurred in 1983, the bank has functioned as an independently administered organization
providing for the public good in a way that the government can not.

The Financial Approach

At the other end of the spectrum are MFIs that operate with the mentality that microcredit
should be treated with the same expectations as other forms of financing. Typical MFIs using
this financial model start by acquiring the use of capital from sources that do not surrender but
loan their financial assets, establishing a permanent disconnect between the goals of the investors
and administrators and their clients. These institutions seek out already successful entrepreneurs
of the informal sector whose assets and skills place them just outside the realm of
“creditworthiness” as defined by the formal financial sector, and are prevented from acquiring
the capital needed to enlarge their businesses. Since their clients have previously demonstrated
an ability to manage their enterprises’ finances, these “financial” MFIs offer few services to their
clients and focus instead on obtaining payment from their clients in order to remunerate their
underwriters and maximize institutional fiscal solvency. These institutions seek to provide the
poor with an increase in standard of living but they place equal importance on their ability to
continue this service as long as possible.

BancoSol provides the best example of an MFI that utilizes the financial approach,
demonstrating the ability of MFIs to maximize financial sustainability and even create profit
while seeking to create better conditions for the poor. BancoSol has kept arrears rates low with
only 4.8 percent of total loans issued by Bolivia’s financial institutions remaining unpaid past
their due dates in 1996 (Van Tassel, 2000:930). More significantly, in 1997 BancoSol issued
dividends to shareholders, doling out $162,857 at $.45 a share (Acción International, 2005). In
maintaining a low rate of arrears and returning profit to share holders BancoSol makes an ideal
financial MFI for comparison with the Grameen Bank.

To reduce the complexity of macroeconomic factors I have selected an MFI that grew out
of the first stages of structural redevelopment. Just as Bangladesh’s struggle to solidify its
economy prompted the creation of the Grameen Bank, neoliberal restructuring in the Bolivian
economy during the late 1980’s prompted the appearance of institutions that could undercut the
shocks of adjustment. The World Bank and the Bolivian government attempted to provide microcredit to “support and facilitate the adjustment process” (Weber, 2004: 367); however, this governmental program could not develop a functioning MFI and since 1992 BancoSol has organized, commercialized, and sustained one of the highest levels of profit in the world (Navajas, Conning and Gonzalez-Vega 2003:748). The Bolivian economy, as the direct opposite of the symbiotic relationship found in Bangladesh, aids comparison since the financial model by definition features a large degree of separation between the MFI and government.

Methodology

In order to compare trends in performance across national boundaries, I have chosen to evaluate both MFIs during the period 1997 to 2001. At the beginning of this period several Asian markets and currencies contracted, noticeably affecting rates of growth and investment around the world for the rest of the period. This global shock reached Bolivia in 1999 with recovery more or less occurring in the next two years (Marconi and Mosley, 2006:239). The shock did not impact Bangladesh as severely since the country witnessed an increase in growth in GDP during the years 2000 and 2001(WDI, 2006). Thus by examining the period 1997-2001, one should expect three years of recession and moderate growth in Bolivia and Bangladesh respectively, followed by two years of increased growth. Comparing the performance of the MFIs under these conditions will reveal their respective abilities under both favorable and unfavorable conditions.

My study will entail a direct qualitative and quantitative comparison of the ability of the MFIs to raise the standard of living of excluded actors from the informal sector. First, I will evaluate how each MFI’s funding source determines their intended and actual client base. After characterizing the clients of each MFI, I will then examine whether the Grameen Bank or
BancoSol gives clients greater ability to raise their standard of living as measured by loan size adjusted for purchasing power parity and whether these newly employed entrepreneurs actually succeed, indicated by rate of savings. To account for the necessity of participation in microfinance to raise standard of living I will compare returns from microfinance with evolution of real wages in the formal sector.

In order to assess the positive externalities of microfinance on the wider informal sector I will examine how the policies of each MFI create benefits for participants in the economic and social spheres. I will compare the benefits of each MFI with its cost as measured by cost per borrower and number of borrowers per employee. As the data will show the charitable model has a more substantial effect on the client’s standard of living, a more positive effect on the informal sector as a whole, and operates more efficiently that the financial model.

**Outreach**

Microfinance institutions operate at the periphery of the informal economy with each type of MFI bridging the gulf in a different direction and degree. By knowing the number of people reached by these MFI, comparison of success by other measures can be made with greater validity. The financial institutions with ties to investors far from the impoverished sectors of the economy seek to minimize their risk and cost (Kritikos and Vigenina, 2005:213) by selecting a limited number of previously or potentially successful microentrepreneurs who have a high likelihood of repaying loans and creating profit for the MFI. In contrast, the charitable model, which does not maintain a duty to provide their donors with financial compensation, reaches deep into the informal sector seeking to impact as many clients as possible (Montgomery and Weiss, 2006:34). Given the previously stated perspectives of the two models, one would expect the charitable model to have more customers representing a larger portion of the informal sector.
than the financial model but only by accounting for the uniqueness of the individual cases can distinctive differences between the models be made clear.

While both Bangladesh and Bolivia had sizeable informal sectors during the years 1997-2001, which allowed for the appearance of MFIs, the size of each varied in both absolute terms and in relation to the wider economy. Comparing the difference in the working age population and the labor force, both statistically and dynamically, yields a figure of those members of society not seeking employment in the formal sector, an approximate measure of the informal sector. As Table 1 shows, in Bangladesh the informal sector grew from 16.9 million to 19.4 million while in Bolivia, the informal sector grew from 10.6 million to 11.1 million. The Grameen Bank not only started out with a larger potential client base to serve but this pool also grew at a higher rate (12.88 percent) than the client base of BancoSol (4.33 percent).

Against this difference in demographics, the size and growth of each MFI takes on new meaning. The Grameen Bank grew from 2.27 million to 2.37 million, an overall growth rate of 4.46 percent, while BancoSol failed to retain 19 percent of its clients, falling from 76,219 to 61,338, as seen in Table 2. A T test reveals that the two MFIs had distinctly different rates of success in reaching the informal sector at a significance level of less than .001. This difference in clients served as a proportion of the informal sector fits with the respective histories of the two MFIs: the Grameen Bank had twenty five years to build its client base while BancoSol started operations only five years before the period under study.

However, taking into account the relative growth rates neither the Grameen Bank nor BancoSol performed as well as expected. In 1997 the customers of the Grameen Bank represented 13 percent of the informal sector and five years later only 12 percent, a slippage not expected from the world’s premier MFI. At the same time BancoSol saw a decrease in their
presence in the informal sector reaching 7.14 percent of clients in 1997 but only 5.5 percent by 2001. The Grameen Bank had apparently reached institutional capacity by 2001 but BancoSol, a new firm without an established market share, should have increased its number of clients in relation to the informal sector.

These trends demonstrate an important distinction between the models and the cases. New financial MFIs focused on establishing profitability and sustainability should attempt to create a sizable client base. Nonetheless, after initial progress BancoSol faced a general downturn in economic conditions and lost approximately 8,000 clients despite microfinance’s primary goal of allowing a method for excluded actors to maintain or expand their livelihood. The Grameen Bank performed as expected for a charitable MFI that has existed for a number of years. While one would expect a new charitable MFI to pursue the goal of poverty alleviation to a degree that creates exponential growth rates, the Grameen Bank had firmly established its mission and presence with the according absolute participation levels and growth rates.

**Increasing the Capability of Clients**

While the degree to which each MFI has engaged members of the informal sector in their programs does demonstrate success in the first step of microfinance’s goal of giving economically excluded actors the ability to raise their standard of living, participation in microfinance alone does not ensure progress toward a better life. Although microfinance arose in opposition to traditional aid programs that required only passive participation from those in need, microfinance may itself fill this basic role, acting as nothing more than a complex aid delivery system. For microfinance of either the charitable or financial outlook to function as a force for poverty reduction and not just alleviation, microfinance must make the market system work for its clients.
To this end, microfinance must either provide or reconfigure the four basic needs of an enterprise for microfinance clients to function in an otherwise unwelcoming system. Charitable and financial MFIs take the same stance on land and labor. Neither type attempts to provide clients with additional land, believing their clients should focus on activities not requiring such high start up costs. Both models expect that the client has sufficient labor either in persona or, for the established entrepreneurs sought by financially focused MFIs, that the microentrepreneurs can find and train additional employees.

The two models diverge on their provision of capital and entrepreneurship. As previously discussed the financially attuned MFIs are more careful in their distribution of funds, parceling out loans to microentrepreneurs with experience and collateral. Charitable MFIs distribute funds as widely as possible, giving loans of smaller sizes to borrowers with a range of risk potential and training them to be better entrepreneurs (Montgomery and Weiss, 2006:34). The divergence of policy on providing capital and entrepreneurship creates the most substantial difference in effect between the two models: whereas the charitable model attempts to introduce new actors into the market while insulating them from the traditional consequences, the financial model applies the same incentives and consequences of the formal financial sector to a slightly different group of actors than more established financial institutions.

BancoSol’s policies, which use the normal rules of finance in order to satisfy actual and potential investors, limit the MFI’s effectiveness in improving client’s capability. Historically, BancoSol does not take on clients in order to teach them how to make a better life for themselves, rather “[potential clients] must own [their] own legal business…and must not have a bad record with other lending institutions” (Van Tassel, 2000:930). This stringent requirement, which effectively nullified the possibility that the MFI could act as an agent for change, resulted
from BancoSol’s attempt to satisfy both investors and clients. In firmly establishing a requirement of previous success, BancoSol severely limited its ability to impart to any sizeable proportion of the informal economy the capability to raise standard of living through enterprise.

The Grameen Bank offers a more radical departure from the traditional rules of the banking game replacing the requirement of entrepreneurial experience with increased oversight and the need for collateral with a more involved staff and group loan program. The Grameen Bank does not simply issue loans and demand repayment, rather staff members go to the borrowers to check on their well being and give advice about their client’s enterprises even when a payment is not due (Yunus, 2006). Furthermore, when clients fall into difficulty paying back loans, staff members are expected to increase their presence, not to recover the Bank’s principal but to ensure that that client can succeed despite her/his difficulties (Yunus, 2006). Most importantly the Grameen Bank’s policy of group lending “places substantial group pressure on the other members to make scheduled payments” (Hassan, 2002:230) and also acts as a support network in which members can cover one another’s payments. Through an on-the-ground-presence, peer support, and peer pressure the Grameen Bank substantially increases the capability of its clients to provide for their own wellbeing and raise their standard of living.

While these policies impart differing levels of capability to clients, comparing the size of each MFI’s loans with per person levels of purchasing power quantifies how participation can affect income. As the Table 3 demonstrates, BancoSol did not provide its clients with larger loans in real terms than the Grameen Bank as expected for an MFI serving already successful microentrepreneurs, a difference backed up by a T test at the .001 significance level. The size of these loans ranged from 38.82 percent to 54.10 percent of per person gross domestic product at purchasing power parity. In essence, BancoSol issued loans equal to approximately half of what
an average worker could produce in a year. Given the goal of BancoSol to fund already successful microentrepreneurs, this loan size does not indicate that BancoSol issued funds in allotments sizeable enough to sustain microenterprises with a significant number of employees (Van Tassel, 2000:930).

The Grameen Bank, despite choosing to distribute funds more widely than BancoSol, created loans approximately the same size as BancoSol’s in real terms but much larger in purchasing power terms. From 1997 to 2001 the average loan issued by the Grameen Bank rose from representing 73.11 percent of per person gross domestic product at purchasing power parity to 91.27 percent. Even after recognizing the larger degree of inequality found in Bolivia, which would affect the distribution of GDPPPP, the Grameen Bank’s loans seem capable of supporting larger microenterprises than those of BancoSol.

**Increasing Success of Clients**

Examination of loan size adjusted for purchasing power parity indicates an ambiguous relationship between the source of an MFI’s capital and participation’s impact on clients. The larger loans issued by the Grameen Bank may impart an increased ability to impact the finances of clients or this magnitude may indicate that charitable loans are just sources of income for the clients. Comparing how well clients repay loans, obtain larger loans, and are able to save earning for later consumption will indicate how well clients succeed in each model. Such data will reveal the degree to which clients improve their own lives, that is whether clients merely confirm or improve their standard of living.

The simplest indicator of whether or not clients are succeeding in making a profit at their microenterprises and raising their standard of living would seem to be the rate at which a MFI’s clients repay their loans. In theory, only successful microentrepreneurs could pay back their
loans. However, the basic structure of microfinance invalidates this presumption. Since microfinance clients represent an extremely high risk, both financial and charitable MFIs take measures to ensure repayment. In Bolivia policies that stressed “loan payment as first priority, ‘capital’ accumulation (materials, supplies, etc) as second, and household expenses as third” (Brett, 2006:15) created the idea of the “sacred payment.” Clients would sell household furniture, borrow from relatives, or cut back on food to keep up on payments. On the charitable side, the Grameen Bank envisions repayment as merely making payments and will continue to roll over loans in order to safeguard clients from destitution (Yunus, 2006). Since both Bolivia and Bangladesh support multiple MFIs, clients may have used loans from one organization to pay off other loans artificially inflating the repayment rate (McIntosh, 2005a: 987). While on the books both MFIs have extremely high repayment rates in reality these repayment rates alone do not indicate that all clients are improving their standard of living.

Unlike repayment rates, which may or may not reflect an increase in standard of living, examining how quickly and often clients graduate to larger loans demonstrates how well clients are learning the rules of the market, increasing their productive capacity, and increasing their income. In the financial model, even if clients make payments despite a failing microenterprise these unsuccessful clients will not be able to increase the size of their loans. Financial MFIs may not use the degree of oversight practiced by charitable MFIs but the need to placate investors forces them to examine each new loan carefully and avoid funding unsuccessful microentrepreneurs. Similarly, since the charitable focused MFIs have an explicit commitment to provide their clients with a basic survival income none of these MFIs would allocate funding to unsuccessful entrepreneurs (Hassan, 2002: 229).
While neither BancoSol nor the Grameen Bank release detailed information about the rate at which clients graduate to larger loans, comparing increases in total membership with increases in funds distributed offers a degree of insight although the data is clouded by the acquisition of new clients with initially high capital needs. As Table 4 shows, BancoSol’s change in average loan per borrower demonstrated higher volatility and a lower average change than the Grameen Bank. From 1997 to 2001, the average loan of BancoSol grew at a rate of 9.62 percent per annum. Since the largest raise occurred in the year the Asian Financial Crisis hit Bolivia this pattern indicates that rather than encouraging clients to seek larger loans, BancoSol seeks out only clients who can repay larger, more profitable loans.

As expected the Grameen Bank followed a different trend which not only has a greater social impact than BancoSol but also had a greater individual impact. The Grameen Bank’s average loan per borrower increased more or less constantly, at approximately 9.9 percent per annum. When combined with the Bank’s policy of seeking out potential clients most in need of their services, rather than previously successful entrepreneurs, this evidence indicates that the bank does encourage borrowers to increase their loan size, and by extension their productive capacity and income. While BancoSol safeguards the interest of the institution as influenced by investors, the Grameen Bank serves as a stabilizing force for its clients, allowing for the success of microenterprises in both favorable and unfavorable conditions.

In addition to the difference in dynamic lending strategies, the two MFIs also diverge in the degree to which their clients are able to set aside profits for later consumption. If clients are able to fully repay loans of increasing magnitude while making savings then undoubtedly microfinance provides a sufficient method for economically excluded actors to increase earnings and raise their standard of living. As the Table 5 demonstrates, the models continue to exhibit
their previously described effects. The financial model as represented by BancoSol demonstrated greater savings but since no definite trend occurs the model may or may not encourage savings. Given BancoSol’s policy of only accepting previously successful entrepreneur, the more likely scenario is that BancoSol attracts clients already able to save. A sharp drop in saving (US$ 1,838 per client to US$ 1,143) from 2000 to 2001 indicates that BancoSol could not even protect their more capable customers from the shocks of the business cycle. The charitable model represented by the Grameen Bank holds more promise for members of the informal sector. After an initial drop the savings per client gradually increased, indicating that the Grameen policy of melding the well being of the client with the overall goals of the institution does allow and encourage members to increase their savings at a sustainable rate, creating a more manageable income and better standard of living.

Necessity of Participation

While the difference in savings rate serves as an indication that participation in the Grameen Bank provided a sufficient means of increasing one’s standard of living and participation in BancoSol did not, the question of necessity remains open. Participation in the Grameen Bank or other charitable MFIs raised a client’s standard of living but the possibility remains that alternative paths existed for similar gains. Although participation in BancoSol or another financial MFI alone does not guarantee a rise in standard of living, participation may be necessary for obtaining access to skills and resources essential to a rise in standard of living. In order to prove microfinance as necessary in either case, microfinance must have offered more favorable returns, either due to stability or magnitude, than any alternative employment.

While some sources of income are inferior to both models of microfinance in terms of provision of livelihood, others provide equal if not greater returns than participation in
microfinance. Dependence on aid and subsistence farming offer no ability to increase standard of living due to an intrinsic lack of control over returns. The true alternatives to participation in microfinance lie on the opposite side of the formal/informal divide from microfinance. Many capable economic actors prefer to remain part of the formal sector, usually as agricultural or industrial workers, than to endanger the risk associated with self employment. If microfinance is necessary to raising one’s standard of living then wage labour in either the agricultural or informal sector will not offer the same security and magnitude of income as participation in a microfinance program.

Wage labour in the formal sector offers the most likely alternative to microfinance. In Bolivia approximately one fourth of the formal workforce population is employed in industrial employment (WDI, 2006). As Table 6 shows, had a potential BancoSol client chosen employment in the formal industrial sector over the period 1997-2001, she/he would have earned approximately US$ 12,000.¹ In comparison the average BancoSol client over the same period would have paid off loans totaling US$ 5,390 (MIX Market, 2006). Although the possibility exists that one member of the household must engage in microfinance while the others engage in wage labour to achieve a rise in standard of living, the drop in BancoSol clients during the period under study the necessity of such an arrangement seems unlikely.

In Bangladesh both the agricultural sector and the industrial sector employ significant portions of the economically active population. On average, the two thirds of the economically active population work in the agricultural sector earned US$ 1,800 over the period under study while the ten percent engaged in the industrial sector earned approximately US $3,355 apiece (WDI, 2006). In Bangladesh these amounts are not only small but also volatile due to the country’s vulnerability to cyclical famine and other extreme weather conditions. Under such conditions

¹ Using estimates of annual wages from 1995-1999 provided by the World Bank.
conditions, industrial and agricultural workers would have found difficulty in obtaining a high enough level of earnings and savings to improve standard of living. In contrast, a client of the Grameen Bank would have obtained and paid off some US$ 6,250 in loans. Even without including interest payment and accrued savings, participation in the Grameen Bank obviously offers the best alternative to members of Bangladeshi society at the bottom of the economic ladder.

These trends alone indicate the preeminence of the Grameen Bank as a force for increasing standard of living in the informal sector in Bangladesh and BancoSol’s inability to offer an exceptional alternative for most of the informal sector, but only placing this information in the context of the wider economic situation can answer the question of whether or not participation in microfinance is necessary for raising standard of living. If BancoSol truly offered an alternative that could cause previously excluded economic actors to seek out microfinance rather than wage labor, a loss in earning power would be compensated with necessary insulation from macroeconomic shocks. As evidenced by the large loss of clients during the 1999 downturn, BancoSol offered no such protection and as such is not a necessary precondition for raising standard of living in Bolivia.

In the Grameen case the response of potential clients after the global downturn of 1999 answers the question of necessity. As Table 7 shows, amidst the global economic slump of 1999 the Grameen Bank lost .4 percent of their clients but in 2000 the bank reached its largest number of clients ever. This quick rebound indicates that a significant portion of Bangladeshi recognized the ability of the Grameen Bank to help them recover financially beyond the ability of any other institution underscoring the necessity of participation in the Grameen Bank for financial security.

**Wider Economic Effects**
Although on the individual level the charitable model has proven both sufficient and necessary for improvement in standard of living and the financial model has failed to display either, the financial model may still have an overall greater effect on the economic wellbeing of the informal sector. While charitable MFIs provide members with a secure source of income, financial MFIs attempt not just to support microenterprises but also to create the small and medium sized enterprises (SMEs) “associated with but not a cause of, higher growth” (Ageibor, 2006:36) in most developing nations, including Bangladesh and Bolivia. If this association holds true then BancoSol’s operations serve to select and strengthen those enterprises most likely to graduate from the breakthrough stage, in which the entrepreneur prove the profitability of their business, to the growth stage of SMEs (Ageibor, 2006:39). If BancoSol increased the number of firms in the growth stage then by extension BancoSol’s stringent selection process increased the total number of economics actors who received their income primarily from employment in microfinance.

BancoSol did not create employment or provide economic security for an appreciable portion of the informal sector, even though a financially focused firm such as BancoSol may affect more members of the informal sector than the charitable model. Assuming that each of BancoSol’s clients employed ten additional members of the informal sector these employees could not have fared well when the shocks of 1999 hit.\(^2\) From this year to the next BancoSol lost 8,000 clients, who themselves could not longer support their hypothetical 80,000 employees. If this loss of clients had occurred in a time of favorable economic conditions then the loss could be attributed to entrepreneurs graduating to more formal sources of finance or rising competition in the microfinance sector (McIntosh, 2002). Since this loss occurred when Bolivia’s GDP growth

\(^2\) This represents the maximum possible employees by the definition of microenterprise and an extremely impossible overestimation. Anything larger would probably transition to other more established commercial banks.
rate dropped from five to zero percent the more likely consequence is that 8,000 clients and a significant number of their employees lost their livelihood.

If BancoSol’s financial outlook should drive the creation of successful small and medium sized enterprises then BancoSol did not adequately succeed in this goal. While BancoSol may allow some microentrepreneurs the opportunity to increase their enterprises’ operations, BancoSol did not provide the support structure to see these enterprises through difficult times. BancoSol had no long term positive effect on the economic ability of informal sector, a condition which extends to all financial MFIs due to their unwillingness and inability to provide insulation from macroeconomic shocks.

Wider Non-economic Effects

While the gains earned by clients of financial MFIs are more prone to loss due to macroeconomic shock than the gains earned by clients of a charitable MFI, each type of MFI may have had wider effects on the informal sector that outweigh the losses or gains made on the individual microentrepreneur’s finances. In addition to earning power, the standard of living of members of the informal sector entails achieving beneficial interactions in the social but non-economic sphere (Zohir and Matin, 2004:307). While quantitative study of such effects can rarely capture the true trends occurring in the informal sector, qualitative comparison of each model’s policies reveal the probable non-economic effects of the two models.

Financial MFIs, given their dedication to applying the traditional rules of the market to previously excluded economic actors, induce a wider awareness of market forces in their clients. Unlike the Grameen Bank, which maintains stringent repayment schedules for groups but not for individuals, in BancoSol’s program each member chooses to make payments on either a weekly or monthly cycle and loan durations can last up to two years depending on the client’s preference
(Morduch, 1999:1576). This policy may not ensure a high degree of success but increasing choice does force clients to more rapidly accumulate knowledge about market forces than the paternalistic policies of the charitable model, creating a class of entrepreneurs more knowledgeable than those created by the charitable model.

Unfortunately, although these entrepreneurs had increased knowledge of the market, this increased knowledge did not lead to greater knowledge and more beneficial transactions in the non-economic spheres. One would expect that these more knowledgeable actors would seek out and obtain government services if their enterprises failed. However, while BancoSol clients may have greater knowledge they do not necessarily have greater ability. A study of 221 BancoSol participants that found that approximately half of BancoSol’s client households did not have access to housing and services equal to the national average (Navajas et al, 2002:162). In addition, anecdotal evidence indicates that BancoSol policies may adversely affect household social structures, such as marriage, when pressure from the bank for payments intensifies (Van Tassel, 2000:934). Without an explicit focus on developing social capital or reshaping cultural norms, the effect of participation in a financially focused MFI seems completely limited to the economic sphere.

As compared to the strength of the financial MFIs in imparting market knowledge, the charitable model exhibits a greater ability to streamline economic transactions in the informal sector. Unlike financial MFIs which recruit entrepreneurs fully capable of repayment, charitable MFIs “promote social and financial discipline to the rural poor by encouraging their members to adopt certain activities and codes of conduct” (Hassam, 2002:232). At the same time the Grameen Bank encourages clients to manage their funds carefully rather than engage in riskier behavior, a policy which gradually makes the mesoeconomy surrounding clients less volatile
(Zohir and Matin, 2004:318). While the financial MFIs address uncertainty about their clients through higher interest rates, the charitable MFIs achieve institutional security by reducing this uncertainty through socialization, with positive externalities in the clients’ economic and social domains.

Even without creating greater understanding of market forces to the degree of participation in a financial MFI, the explicit focus of charitable MFIs on changing behavior has positive externalities in the social sphere. In many developing nations trust exists only within the smallest social spheres, usually the household or family, but “Membership in Grameen Bank enhanced the ‘radius of trust’ as it allowed people, who are not related to one another, to cooperate to achieve a common goal” (Dowla, 2004:118). Over time, the social effects of the charitable model can create a cyclical effect by prompting more economic interactions which build trust. The charitable model does not create a group of more economically knowledgeable actors as the financial model does. Instead, policies focused on social change have a much greater effect on the entire nature of the informal sector, allowing for more beneficial transactions in both domains, an important contribution to standard of living.

Cost Benefit Analysis

Taking into account the effects of participation on the individual level and the probable externalities regarding the economic and social spheres the charitable model provides the greatest overall benefit to the informal sector. The Grameen Bank provided previously excluded economic actors with a sufficient and almost certainly necessary means of increasing their standard of living. In contrast, BancoSol did not demonstrate significant ability in developing its clients’ capacity to raise their standard of living. Despite this wide range in effect on clients the two models may have produced the same overall benefit to the informal sector in terms of overall
cost. Having clarified the difference in benefits, a comparison of the actual costs of the respective operations will reveal whether the charitable model or financial model provides a more cost effective means of combating poverty.

The two MFIs obtained their funding from different sources at vastly different rates. Given the overall goal of microfinance three levels of benefactors exist. At the first level, excluded economic actors need a sufficient means of raising their standard of living. Next, society as a whole and the society’s government can benefit from a reduction in poverty and inequality. Finally, some members of society far removed from the plight of the informal sector may benefit out of proportion to their distance from the informal sector if involved by providing capital. Microfinance operations should be funded by those who can benefit most, otherwise a principal/agent problem may occur, causing mission drift.

The Grameen Bank encountered no such principal/agent dilemma. Due to the dependency of the government of Bangladesh on the Grameen Bank as a provider of social welfare (a relationship not shared by most charitable MFIs) the fee charged by lending agencies on the capital lent to the Grameen Bank falls far below market value: “The Grameen Bank obtained funds from the Bangladesh Bank at just 5-6 percent in the mid 1990’s while alternative sources of funds would have cost 12-15 percent” (Morduch, 2000:625). In the Grameen case the secondary benefactors supplies the funds without misaligning the goal of social change and as a result create positive return for the individual client, the wider informal sector and by extension the government.

With no similar special relationship with the government of Bolivia, BancoSol can not depend on secondary benefactors to fund operations. BancoSol receives no such subsidization and must support its operation with interest rates approximately twice that of the Grameen Bank.
(Morduch, 1999:1576) and by selling equity (Accion International, 2005). Due to the reluctance of the Bolivian government to become involved with another MFI, BancoSol’s cost of operation is borne by primary and tertiary benefactors creating a conflicting pair of goals: impart clients with the ability to raise their standard of living while providing profit to investors. Unable to commit fully to their clients’ goals, BancoSol faces a continuing inability to train or retain successful entrepreneurs capable of affecting change in their own lives.

This difference in cost of funding prompted variation in policy operations but equally important the source of the funding affected the actual efficiently of operations. Given its long history, one would expect the Grameen Bank to have more clients than BancoSol in absolute terms. More surprisingly, the Grameen Bank supported nearly twice as many clients per employee than BancoSol. In per capital terms, the operations of the Grameen Bank cost between one fourth and one tenth as much as BancoSol operations, as seen in Table 7. These differences severely degrade the claim that the financial model offers a more cost effective alternative to the charitable model. The difference in cost per capita may be due to difference in purchasing power parity but the difference in number of clients supported by each employee firmly establishes the high cost in real terms of operating a financial MFI which must constantly seek two unaligned goals.

Qualifications

While the charitable model provides a more effective and cheaper means of allowing the informal sector to develop than the financial model, under different sets of macroeconomic conditions the financial model may have succeeded. Bolivia, while considered a lesser developed nation on the global scale, has a more complex economy than Bangladesh as evidenced by the proportion of each nation’s formal economy employed in agriculture. A MFI
focused on social change has much less incentive to increase its clients’ economy of scale and use of technology than a financial MFI, a difficult policy to uphold in an economy where agricultural has an ever decreasing ability to raise standard of living.

In addition to level of development, degree of globalization may have an effect on the success of MFIs. A charitable MFI, while successful in a more autarkic economy, like Bangladesh, would find dependence on donor support more difficult in a nation prone to hyperinflation and other macroeconomic contagions. In order to completely identify which model allows for the greatest change in the informal sector’s standard of living, further research should examine, if possible (Andersen and Malchow-Møller, 2005), how the models perform in direct competition under the same level of development and globalization.

Despite the noted differences in macroeconomic indicators between the cases under study and slight discrepancies between the models and cases, the evidence indicates that in sum the charitable model makes greater progress toward improving the standard of living of members of the informal sector. Not only does the charitable model, as represented by the Grameen Bank, succeed in its particular goals of maximizing outreach, providing oversight, and insulating clients from macroeconomic shocks but also in the goals of the financial model. The charitable model provides relatively larger loans at a lower cost than the financial model represented by BancoSol. Unless financial MFIs find a path past their agent/principal problem, which prevents these institutions from providing a greater degree of insulation to its customers, any nation seeking to use microfinance to increase the standard of living in the informal sector should use the funding mechanism and policies of the charitable model to maximize the impact of microfinance on the informal sector.
Table 1:
Demographics of Bolivia and Bangladesh

<table>
<thead>
<tr>
<th>MFI</th>
<th>Year</th>
<th>Population</th>
<th>Population age 15-64 (percent of total)</th>
<th>Population age 15-64 Labor Force</th>
<th>Not in Labor Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>1997</td>
<td>7813387</td>
<td>55.5949</td>
<td>4343845</td>
<td>1066669</td>
</tr>
<tr>
<td>Bolivia</td>
<td>1998</td>
<td>7979559</td>
<td>55.74813</td>
<td>4448455</td>
<td>1075891</td>
</tr>
<tr>
<td>Bolivia</td>
<td>1999</td>
<td>8147104</td>
<td>55.92238</td>
<td>4556054</td>
<td>1095008</td>
</tr>
<tr>
<td>Bolivia</td>
<td>2000</td>
<td>8316648</td>
<td>56.11114</td>
<td>4666566</td>
<td>1114587</td>
</tr>
<tr>
<td>Bolivia</td>
<td>2001</td>
<td>8488241</td>
<td>56.31076</td>
<td>4779793</td>
<td>1108772</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1997</td>
<td>1.21E+08</td>
<td>57.80783</td>
<td>70193909</td>
<td>16937289</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1998</td>
<td>1.24E+08</td>
<td>58.24318</td>
<td>72166096</td>
<td>17556196</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1999</td>
<td>1.26E+08</td>
<td>58.67594</td>
<td>74164980</td>
<td>18265650</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2000</td>
<td>1.29E+08</td>
<td>59.08536</td>
<td>76170424</td>
<td>18905964</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2001</td>
<td>1.31E+08</td>
<td>59.46393</td>
<td>78172115</td>
<td>19468155</td>
</tr>
</tbody>
</table>

Source: World Bank, World Development Indicators: Bolivia and Bangladesh

Table 2:
Outreach and Growth of MFIs

<table>
<thead>
<tr>
<th>MFI</th>
<th>Year</th>
<th>Participants</th>
<th>Growth</th>
<th>Informal Sector</th>
<th>Participants/Size of Informal Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>BancoSol</td>
<td>1997</td>
<td>76216</td>
<td></td>
<td>1066669</td>
<td>7.145234</td>
</tr>
<tr>
<td>BancoSol</td>
<td>1998</td>
<td>81555</td>
<td>6.546502</td>
<td>1075891</td>
<td>7.580229</td>
</tr>
<tr>
<td>BancoSol</td>
<td>1999</td>
<td>73073</td>
<td>-11.6076</td>
<td>1095008</td>
<td>6.673285</td>
</tr>
<tr>
<td>BancoSol</td>
<td>2000</td>
<td>67082</td>
<td>-8.93086</td>
<td>1114587</td>
<td>6.018552</td>
</tr>
<tr>
<td>BancoSol</td>
<td>2001</td>
<td>61338</td>
<td>-9.36450</td>
<td>1108772</td>
<td>5.532066</td>
</tr>
<tr>
<td>Grameen Bank</td>
<td>1997</td>
<td>2272503</td>
<td></td>
<td>16937289</td>
<td>13.41716</td>
</tr>
<tr>
<td>Grameen Bank</td>
<td>1999</td>
<td>2357083</td>
<td>-0.47788</td>
<td>18265650</td>
<td>12.90446</td>
</tr>
<tr>
<td>Grameen Bank</td>
<td>2000</td>
<td>2378359</td>
<td>0.894566</td>
<td>18905964</td>
<td>12.57994</td>
</tr>
<tr>
<td>Grameen Bank</td>
<td>2001</td>
<td>2378601</td>
<td>0.010174</td>
<td>19468155</td>
<td>12.21791</td>
</tr>
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</table>

Source: Mix Market: BancoSol, Grameen Bank: “The Last 9 Years at a Glance”
### Table 3
Relative Size of Loans

<table>
<thead>
<tr>
<th>MFI</th>
<th>Year</th>
<th>Ave Loan per Borrower (US$)</th>
<th>GDP at Purchasing Power Parity (US$)</th>
<th>Population</th>
<th>Per Person GDP, PPP</th>
<th>Ave Loan Size as Percent of GDPPPP per person</th>
</tr>
</thead>
<tbody>
<tr>
<td>BancoSol</td>
<td>1997</td>
<td>873</td>
<td>1.76E+10</td>
<td>7813387</td>
<td>2248.665</td>
<td>38.82</td>
</tr>
<tr>
<td>BancoSol</td>
<td>1998</td>
<td>908</td>
<td>1.85E+10</td>
<td>7979559</td>
<td>2324.364</td>
<td>39.06</td>
</tr>
<tr>
<td>BancoSol</td>
<td>1999</td>
<td>1126</td>
<td>1.90E+10</td>
<td>8147104</td>
<td>2330.194</td>
<td>48.32</td>
</tr>
<tr>
<td>BancoSol</td>
<td>2000</td>
<td>1160</td>
<td>1.99E+10</td>
<td>8316648</td>
<td>2398.409</td>
<td>48.37</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1997</td>
<td>979</td>
<td>1.62E+11</td>
<td>1.21E+08</td>
<td>1338.549</td>
<td>73.11</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1998</td>
<td>1120</td>
<td>1.72E+11</td>
<td>1.24E+08</td>
<td>1389.789</td>
<td>80.60</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1999</td>
<td>1263</td>
<td>1.76E+11</td>
<td>1.26E+08</td>
<td>1400.427</td>
<td>90.21</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2000</td>
<td>1366</td>
<td>1.91E+11</td>
<td>1.29E+08</td>
<td>1477.886</td>
<td>92.40</td>
</tr>
</tbody>
</table>

Source: Mix Market: BancoSol, Grameen Bank: “The Last 9 Years at a Glance”, World Bank, World Development Indicators: Bolivia and Bangladesh

### Table 4
Change in Loan per Borrower

<table>
<thead>
<tr>
<th>MFI</th>
<th>Year</th>
<th>Ave Loan per Borrower (US$)</th>
<th>percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>BancoSol</td>
<td>1997</td>
<td>873</td>
<td>3.85</td>
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<tr>
<td>BancoSol</td>
<td>1998</td>
<td>908</td>
<td>19.36</td>
</tr>
<tr>
<td>BancoSol</td>
<td>1999</td>
<td>1126</td>
<td>2.93</td>
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<tr>
<td>BancoSol</td>
<td>2000</td>
<td>1160</td>
<td>12.32</td>
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<td>BancoSol</td>
<td>2001</td>
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<td>9.62</td>
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<td>Ave</td>
<td>1078</td>
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<td></td>
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<tr>
<td>Bangladesh</td>
<td>1997</td>
<td>979</td>
<td>12.63</td>
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<tr>
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<td>1998</td>
<td>1120</td>
<td>7.49</td>
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<tr>
<td>Bangladesh</td>
<td>1999</td>
<td>1263</td>
<td>11.34</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2000</td>
<td>1366</td>
<td>8.16</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2001</td>
<td>1487</td>
<td>9.90</td>
</tr>
<tr>
<td>Ave</td>
<td>1243</td>
<td></td>
<td></td>
</tr>
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</table>

Source: Mix Market: BancoSol, Grameen Bank: “The Last 9 Years at a Glance”
Table 5
Savings

<table>
<thead>
<tr>
<th>MFI</th>
<th>Year</th>
<th>Savings per Client (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BancoSol</td>
<td>1997</td>
<td>No Data</td>
</tr>
<tr>
<td>BancoSol</td>
<td>1998</td>
<td>1070</td>
</tr>
<tr>
<td>BancoSol</td>
<td>1999</td>
<td>1676</td>
</tr>
<tr>
<td>BancoSol</td>
<td>2000</td>
<td>1838</td>
</tr>
<tr>
<td>BancoSol</td>
<td>2001</td>
<td>1143</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1997</td>
<td>48</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1998</td>
<td>45</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1999</td>
<td>46</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2000</td>
<td>48</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2001</td>
<td>53</td>
</tr>
</tbody>
</table>

Source: Mix Market: BancoSol, Grameen Bank: “The Last 9 Years at a Glance”

Table 6
Wages

<table>
<thead>
<tr>
<th></th>
<th>Effective Minimum Wage (US$)</th>
<th>Agricultural Wage (US$)</th>
<th>Labor Cost Per Worker in Manufacturing (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>492</td>
<td>360</td>
<td>671</td>
</tr>
<tr>
<td>Bolivia</td>
<td>529</td>
<td>No Data</td>
<td>2,343</td>
</tr>
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</table>

Source: World Bank, World Development Indicators: Bolivia and Bangladesh

Table 7
Costs

<table>
<thead>
<tr>
<th></th>
<th>Members</th>
<th>Employees</th>
<th>Members per Employee</th>
<th>Cost per Borrower (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grameen Bank</td>
<td>1997</td>
<td>2272503</td>
<td>12288</td>
<td>185</td>
</tr>
<tr>
<td>Grameen Bank</td>
<td>1998</td>
<td>2368347</td>
<td>12850</td>
<td>184</td>
</tr>
<tr>
<td>Grameen Bank</td>
<td>1999</td>
<td>2357083</td>
<td>12427</td>
<td>190</td>
</tr>
<tr>
<td>Grameen Bank</td>
<td>2000</td>
<td>2378356</td>
<td>11028</td>
<td>216</td>
</tr>
<tr>
<td>Grameen Bank</td>
<td>2001</td>
<td>2378601</td>
<td>11841</td>
<td>201</td>
</tr>
<tr>
<td>BancoSol</td>
<td>1997</td>
<td>20839</td>
<td>180</td>
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<tr>
<td>BancoSol</td>
<td>1998</td>
<td>35675</td>
<td>342</td>
<td>104</td>
</tr>
<tr>
<td>BancoSol</td>
<td>1999</td>
<td>32517</td>
<td>277</td>
<td>117</td>
</tr>
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<td>BancoSol</td>
<td>2000</td>
<td>40018</td>
<td>321</td>
<td>125</td>
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<td>BancoSol</td>
<td>2001</td>
<td>57076</td>
<td>376</td>
<td>152</td>
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Source: Mix Market: BancoSol, Grameen Bank: “The Last 9 Years at a Glance”
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