A Double Bottom Line Business Case for Serving Very Poor Households

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Executive Summary

Grameen Foundation is committed to ensuring that microfinance works for the poor and poorest – particularly through encouraging the use of replicable, scalable, and sustainable business models that support the longevity of the service. Currently, microfinance providers have a gap in reaching very poor households. For the most part, economic development programs that aim to reach the poorest households have not been designed using a sustainable business approach. Instead, these programs have been developed as grants and charity-driven projects. While there is a role for grant-driven programs, organizations can also make sustainable business decisions to extend outreach to poorer populations in the medium to long term. This paper investigates the "double" (financial and social) bottom line implications for two microfinance institutions that have added product lines to serve very poor households. The analysis seeks to understand how these decisions helped these MFIs meet both their social and financial goals and also articulate a methodology for creating a double bottom line business case for reaching very poor households.

This double bottom line business case takes into account that most MFIs weigh operational business decisions against their ability to meet both social goals (reaching and positively impacting poor and very poor households) and financial goals (ensuring the long-term sustainability of these programs). Because social benefits are difficult to quantify in the same manner as financial benefits, this does not lend itself to a simple cost-benefit analysis. On the financial side, the analysis takes a long-term view where possible, to assess whether differentiated retention rates, cross-selling of products, or different client acquisition costs also show a possible benefit to the institution by offering differentiated products to very poor households. The results provide a new view of the double bottom line business case for designing and implementing separate product lines for very poor households.

Grameen Foundation worked directly with two microfinance institutions – Fonkoze in Haiti and The Small Enterprise Foundation (SEF) in South Africa. The social missions of both institutions direct them to reach ultra poor households. Both developed product lines and approaches to reaching poor households after realizing that their mainstream solidarity group lending products were not enabling them to meet their social mission. Each institution's data was subjected to the same set of analyses and while some data gaps persist, the resulting analysis provides a new way of examining a double bottom line business case for serving very poor households.

Fonkoze's Ti Kredi Case

Fonkoze's Ti Kredi product line reaches a poorer client segment than those in its Solidarity program –as measured by Grameen Foundation's Progress out of Poverty Index® (PPI®) and other metrics. In the analysis, the poorer the client, the more likely they were to have a positive movement out of poverty in a one year period. Their movement out of poverty was also greater. This difference in impact holds true when specific social indicators such as housing stock, latrine ownership, livestock ownership, and literacy are also considered. Clients who started in Ti Kredi and graduated to the mainstream solidarity loan program ("Solidarity") experienced greater change against these indicators than clients who started in Solidarity. Ti Kredi clients who graduated into Solidarity demonstrated a greater improvement in food security: 92% of Ti Kredi clients who graduated had a positive or neutral change in food security versus 71% of clients who started in Solidarity.[1]

On loan performance, graduating clients had repayment and delinquency rates on par with women who started in the Solidarity group, so there was neither an advantage nor a disadvantage to servicing these clients from a portfolio performance perspective. The net cost to serve a Ti Kredi client was US $38, and according to Fonkoze, this is roughly equal to the cost to acquire and train a mainstream Solidarity client. However, an analysis revealed higher retention rates for clients who graduated from Ti Kredi into Solidarity. This does help show that although there is a financial cost to servicing a Ti Kredi client, assuming Fonkoze can maintain a strong graduation rate from Ti Kredi into Solidarity and the higher retention rates, there is in fact both a social and financial business case for scaling the Ti Kredi program – and servicing even more of Haiti's very poor households. However, our data did not span a long time horizon, and had a relatively small sample size, making it difficult to draw definitive conclusions.

Small Enterprise Foundation's TCP Case

The Small Enterprise Foundation (SEF) has traditionally used two methods to reach its clients. Its original program, the Microcredit Program (MCP), focuses on borrowers from households with incomes greater than 50% of South Africa's poverty line and established microenterprises. In 1996, SEF realized that MCP was not effectively reaching the very poor, those whose income is less than half the South African poverty line. To fill this gap, the organization established the Tshomisano Credit Program (TCP) to exclusively target the poorest households – those living in the bottom 30% of the population in Limpopo province.

In terms of the social bottom line, TCP reaches a poorer client segment than MCP. Similar to Fonkoze, those starting at lower poverty levels and with less food security saw more dramatic and faster improvement over time than those starting with more assets. SEF also measures the growth in business values, and there again the analysis revealed a more significant improvement in the initial loan cycles for the poorer TCP clients than for clients who were less poor.

[1] Both analyses looked at different rates of change over time in the social indicators. We did not seek to infer causality or a measure of "impact" from the analysis.

In terms of the financial business case, separate data was obtained from SEF branches that solely operate TCP and MCP, respectively. Those data show that TCP branches are performing financially on-par with MCP branches, with mature TCP branches having the same levels of profitability as mature MCP branches. In addition, the TCP branches consistently achieve lower drop-out rates (higher retention) than MCP branches. On measures of profitability, mature TCP branches underperform against MCP branches, but only marginally – mature TCP branches achieve within 10% of MCP branch profitability, income per client, and net operating income. In portfolio quality, TCP branches outperform MCP branches by a small margin – but in general, the TCP loan portfolio has a stronger performance than the MCP portfolio. In terms of productivity, mature TCP branches are on par or slightly more productive/efficient than MCP branches – meaning that from an efficiency perspective, it is just as easy to serve the poorest clients in the TCP branches. This also bears out when comparing operating efficiency ratios between the two types of branches, which also show little differentiation. In all, it seems that the social bottom line for serving poorer clients through the TCP methodology helps SEF achieve its social mission, while making little difference in terms of its financial performance when compared to its mainstream MCP program.

In summary, the GF double bottom line business case study examined two programs that have successfully targeted poorer clients where they have not traditionally been reached by mainstream microfinance programs. They have tailored their services and have seen improvements in various social indicators at a faster pace than among less poor clients. Moreover, it has not come at a significant cost to the institution. The clients achieve strong portfolio qualities, and over time, do not represent a higher cost to serve. In fact, in Fonkoze's case, it produced clients who have a longer-term profitability potential than their mainstream clients. There is in fact a double bottom line business case for serving very poor households, as evidenced by these two institutions.

Based on this, the authors would challenge the microfinance industry to think more deeply about current poverty outreach and how it can more effectively serve very poor households. If the influential players in the microfinance industry would focus on some of the following areas, depth of outreach to previously underserved households can be significantly increased through the offering of customized services.

- Identify the barriers to bringing very poor households into mainstream programs – and build products to serve very poor households that address these barriers. Both Fonkoze and SEF built successful products that did this effectively, which contributed to their ability to achieve the financial bottom line. They did not assume that their mainstream products and existing delivery channels would be appropriate for this population.

- Invest in experimentation that puts the customer at the center. Neither institution got these products right the first time they tried. They continually refined until they had an approach that

worked for the clients, first and foremost. The customer experience, not the business case, was the driving factor in that experimentation.

- Take the long-term view. This analysis provides evidence of higher rates of customer loyalty and on par or better repayment performance amongst poorest households. While the initial cost to target and service these clients is nominally higher, the long-term outcome offers potentially significant financial results for the institution serving them.

Introduction

From the launch of controversial IPOs in Mexico and India to the attention paid to "ultra poor" asset transfer programs replicated on a BRAC model[2], events over the past five years in microfinance have sparked increasing conversation about whom the microfinance industry is reaching – and benefitting - with its financial products. Moreover, transparent social performance metrics are bringing to light the real poverty outreach of many microfinance institutions. While some believe our current ability to reach poor households at scale is sufficient, many others are clamoring for product innovation, embracing new technologies to tap into alternative delivery channels, and even integrating subsidized grant driven approaches as ways to deepen the poverty outreach of microfinance institutions.

Grameen Foundation is committed to ensuring microfinance works for the poor and poorest – particularly through encouraging the use of replicable, scalable, and sustainable business models that ensures the longevity of the service. As we look at the current microfinance landscape – and see the service gap in reaching very poor households – we see that for the most part, programs designed to reach the poorest households were not viewed as part of a sustainable business approach, but rather as part of a side business driven by grants and charity. While we recognize the potential role for grant-driven programs in this landscape, we also saw organizations that were taking business decisions to extend outreach to poorer populations. We decided to investigate what the double bottom line implications were for these institutions – to understand how these decisions helped these MFIs to meet both their social and financial goals, and to outline a methodology for creating a double bottom line business case for reaching very poor households.

This double bottom line business case recognizes that most MFIs weigh operational business decision against their ability to meet both social goals (reaching and positively impacting poor and very poor households) and financial goals (ensuring the long-term sustainability of these programs). Because social benefits are difficult to quantify in the same manner as financial benefits, this does not lend itself to a simple cost-benefit analysis. Therefore, we have taken a long-term view, where possible, to also ask whether differentiated retention rates, cross-selling of products, or different client acquisition costs also show a possible benefit to the institution of offering differentiated products to very poor households. The results provide a nuanced view of the double bottom line business case for designing and implementing separate product lines for very poor households.

GF worked directly with two microfinance institutions – Fonkoze in Haiti and The Small Enterprise Foundation (SEF) in South Africa. The social missions of both institutions direct them to reach ultra poor households. After realizing that their mainstream solidarity group lending products were not doing a

[2] Referenced here is BRAC's "Targeting the Ultra Poor (TUP)" Program and replications implemented by Fonkoze and other organizations, supported by CGAP and the Ford Foundation. There programs usually target populations living below 50 cents a day (PPP). More information on these programs can be found at http://graduation.cgap.org/.

good enough job of this, both institutions designed different product lines and developed different approaches to reaching poorer households. Each institution's data was subjected to the same set of analyses and while some data gaps persist, the resulting analysis provides a new way of analyzing a double bottom line business case for serving very poor households.

Analyzing the Double Bottom Line Business Case

In constructing the analysis, a series of six hypotheses formed the basis of a double bottom line business case. These hypotheses illustrate how operational methodologies targeted at the very poor could potentially enhance an MFI's ability to meet its double bottom line goals. Providing tailored products to very poor households could enable the MFIs to:

1. Increase the depth of poverty outreach of the MFI
2. Show a greater developmental impact on clients reached in the targeted product versus the mainstream product
3. Open up new markets to the MFI by expanding the pool of possible clientele
4. Create greater customer loyalty by targeting an under-served customer
5. Identify more profitable customers
6. Provide a quantifiable financial contribution to the MFI

The study aimed to ascertain whether by actively targeting a poorer group of clients and customizing products and services catered to their needs, an institution was creating a sound business model for reaching very poor households that are often excluded from traditional microfinance programs that would have a positive effect on their lives. The first three hypotheses address the MFI's social bottom line, from depth of poverty outreach to expanding the number of clients. The last three hypotheses address the financial bottom line, from customer retention to the financial sustainability of reaching the poorest customers. This breadth of methodologies will provide a broad scope of evidence to support whether Fonkoze and SEF have a double bottom line business case.

Below is a background and analysis for each institution, providing first an introduction to their methodologies for servicing very poor households. This is followed by data that was analyzed against each of these six hypotheses. The conclusion considers data from both institutions in ascertaining whether a double bottom line business case does, in fact, exist.

Case Study I: Fonkoze's Ti Kredi Program

The Ti Kredi program is just one of Fonkoze's four products designed to reach people at varying levels of poverty. The six hypotheses in the business case analysis were tested in two steps. First, the impact of the Ti Kredi program is compared to the Solidarity loan on achieving its social bottom line. The analysis is supported by evidence that Fonkoze is successfully reaching very poor households and succeeding in helping their poorest clients outperform their less poor clients on some basic poverty indicators, such as reading and writing – thus showcasing the power of the Ti Kredi program in helping Fonkoze reach its social bottom line. Second, the impact on the financial bottom line is assessed. Because the institution

incurs a net cost to implement, possible methods of understanding whether this cost can be recouped through longer-term client retention or a cross subsidization model is outlined here. Data limitations – a small sample size and short time horizon – limit the ability to draw a clear conclusion in this case.

Background

Fonkoze, a microfinance industry leader working in one of the most challenging environments, Haiti, has created an innovative solution to reaching more of the poorest women. Realizing that its traditional, single-product approach, was not reaching these "forgotten bottom", Fonkoze developed a "ladder" or stair step approach to poverty reduction in Haiti. Fonkoze and its counterpart, Fonkoze Financial Services (SFF), offer four types of financial products designed to lift the poorest women out of poverty. Each product targets clients at different poverty levels and with different needs.

1. For the poorest women, Fonkoze offers a unique asset-transfer service called Chemen Lavi Miyò (CLM), or "Pathway to a Better Life." CLM is for women who need training, mentoring and experience working with a viable asset before being able to take on a Fonkoze loan product. CLM clients stay in the program for 18 months before graduating into Ti Kredi.
2. For those too poor and without a viable business to take on the regular solidarity loan, Ti Kredi ("little loan" in Creole), provides loans starting at US $25. Ti Kredi loans have one to three month terms and are coupled with business and literacy development services on a weekly basis. Upon completing a six month course, clients can then be eligible to enter the Solidarity Group loan program.
3. The traditional Solidarity Group loan starts at US $75, with a group guarantee, and does not require additional business or literacy education, although these services are still offered on a voluntary basis to clients.
4. For clients who have been able to move up the ladder and have expanded their microenterprise, SFF provides a business development loan beginning at US $1,300, with a term of 1 year or longer to help them expand their business even further.

Using this approach, Fonkoze effectively offers a full suite of financial services to women at all points on the poverty spectrum. Women can also "climb" the ladder by moving from one product group to another over time, an important aspect both for the social impact of Fonkoze's programs as well as the financial impact on their bottom line.

The Ti Kredi Program

Fonkoze's Ti Kredi program provides very poor entrepreneurs with small loans with short terms, life skills training, business skills training, and a consistent relationship with a credit officer. As of December 31, 2010, there were 2,021 active Ti Kredi clients, with 1.7 million HTG (US $41,810) of outstanding loans, and an average loan size of 1,916 HTG (US $48.06). The Ti Kredi program was offered at 8 of Fonkoze's 46 branches in 2010; by the end of 2011 it was in 18 branches. The Ti Kredi program is a three stage loan product:

1. The first stage loan (1,000 HTG, US $25) is repaid during the first month in two installments.
2. The second stage loan (1,500 HTG, US $37.50) is repaid in four, installments over the course of two months.
3. Finally, the third stage loan (2,500 HTG, US $62.50) is repaid in six installments over the course of three months.
4. The Ti Kredi loan is charged an interest of 5% per month on a declining balance.

Clients are selected after undergoing a rigorous targeting methodology that determines their eligibility for either CLM or Ti Kredi.

For reference, information on Fonkoze's Solidarity Group product, which Ti Kredi is compared to in much of the subsequent analysis, is provided below.

The Solidarity Product

Fonkoze's Solidarity Group loans are based on the solidarity group lending methodology developed by the Grameen Bank and involve groups of 5 women organized into centers of 6 to 10 groups each. As of December 31, 2010, there were 47,524 Solidarity clients, with 331,664,660 HTG (US $8,534,860) of outstanding loans and an average loan size of 8,782 HTG (US $226). The Solidarity product is offered through all 41 Fonkoze branches. New solidarity groups are given first-cycle loans (3000 HTG or US $75), which are repaid in three monthly installments. Once a solidarity group has successfully repaid its first-cycle loan on schedule, it is eligible for a non-first cycle loan of3,000 to 50,000 HTG (US $75 to US $1,250) per person – maximum increases are set for each loan cycle to ensure clients are not overextended. Non-first cycle loans are repaid in five equal installments over a six-month period, following a one-month grace period. All Solidarity loans are charged an interest of 5% per month on a declining balance.

Prior to the first-cycle loan, Solidarity Groups undergo a two-month training program administered by a Fonkoze credit agent. During the training period, clients pay an individual US $6 membership fee, set up individual deposits accounts, and make an initial deposit of 13% of the first-cycle loan into that account. Also during this two-month period, credit agents conduct client visits to verify their business and administer a poverty evaluation scorecard, which measures the poverty level of the client.

Social Bottom Line

Since 2006, Fonkoze has utilized a number of tools to monitor the social impact of its microfinance offerings. They have provided the organization with useful analysis of its overall performance regarding key social performance targets. One tool is the Kat Evalyasyon ("Evaluation Card" in Creole, hereafter referred to as Kat Eval), which captures more than twenty indicators relating to Fonkoze's social goals and allows it to segment its clients by poverty level and monitor their progress over time. Our data sample is comprised of Ti Kredi and Solidarity clients who were administered the Kat Eval. Between

September 2009 and September 2010, 2,975 responded, representing 1,984 unique clients. Clients indicate the loan cycle they are in and are often surveyed more than once.

Table 1

Loan Cycle responses	Survey Responses	Unique Clients
Ti Kredi (single response)	235	235
Ti Kredi to Solidarity (multiple responses)	168	82
Solidarity (single response)	934	934
Solidarity (2 responses)	1156	578
Solidarity (3 or more responses)	482	155
Total	2975	1984

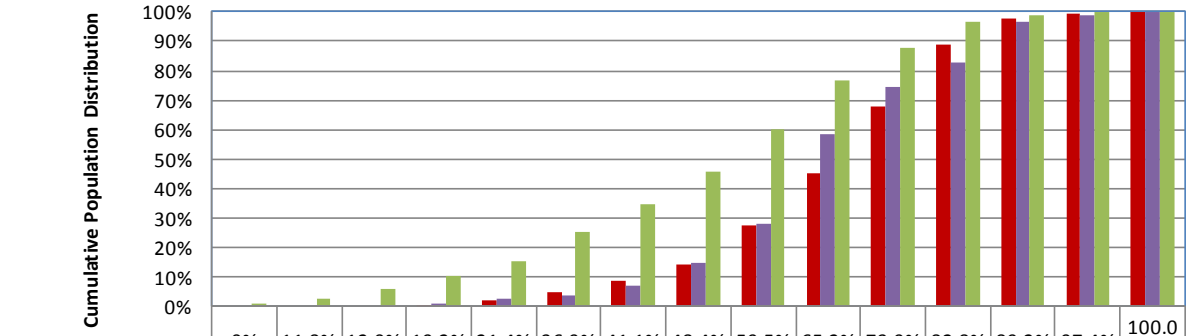
The "Ti Kredi to Solidarity" population had two (and in a few cases three) survey responses, the first at entry into Ti Kredi and then a second at entry into Solidarity. The longitudinal data on this population enables us to measure the changes in social indicators over time and examine the differential at each loan cycle.

Hypotheses 1 and 2: Depth of poverty outreach and developmental effects

To measure the depth of poverty outreach, Fonkoze has incorporated the Progress Out of Poverty Index® (PPI®) tool, developed by the Grameen Foundation, into the Kat Eval. Scores are calculated based on the responses to ten questions from the national survey that have a strong correlation to the likelihood of household poverty and are matched to a poverty likelihood score (i.e. the probability that a household falls above or below a certain poverty line). Portfolio averages are determined by averaging the individual likelihoods. In addition, Fonkoze uses a Participatory Wealth Ranking (PWR), an intensive three-day community driven process that involves the village members in defining poverty in their own context and ranking the households of their entire community according to these self-defined categories.

The PPI scores, at entry, for the 235 Ti Kredi, 82 Ti Kredi to Solidarity, and 934 Solidarity clients were analyzed on a cumulative basis. Ti Kredi clients (both those with single responses and those who graduated into Solidarity) are substantially more likely to be poorer than Solidarity clients. All of the Ti Kredi clients who did not graduate into the Solidarity program, and nearly all of those who did, had a 97.4% likelihood of living below US $1 a day. This demonstrates that the PWR has allowed Fonkoze to reach a poor population typically not served by mainstream MFIs.

Figure 1



	0%	11.8%	12.0%	19.2%	21.4%	36.9%	41.1%	48.4%	59.5%	65.2%	73.9%	82.8%	89.2%	97.4%	100.0 %
Ti Kredi	0%	0%	0%	0%	2%	5%	9%	14%	28%	45%	68%	89%	97%	100%	100%
Ti Kredi to Solidarity	0%	0%	0%	1%	2%	4%	7%	15%	28%	59%	74%	83%	96%	99%	100%
Solidarity Single	1%	3%	6%	10%	15%	25%	35%	46%	60%	77%	88%	96%	99%	100%	100%

In its 2010 social performance report, Fonkoze found that 85% of new Ti Kredi clients were likely to live on less than US $2 per day, compared to 71% of new Solidarity clients. In 2010, 4,845 clients participated in Ti Kredi, 91% of whom graduated into Solidarity loans[3].

While an improvement in PPI score typically does not occur within a one year period, given the complex nature of tackling poverty, the study sought to understand the change, if any, across the two program offerings. In comparing the three groups (positive change, no change, and negative change), the PPI probability of falling under US $1 per day for each group was analyzed:

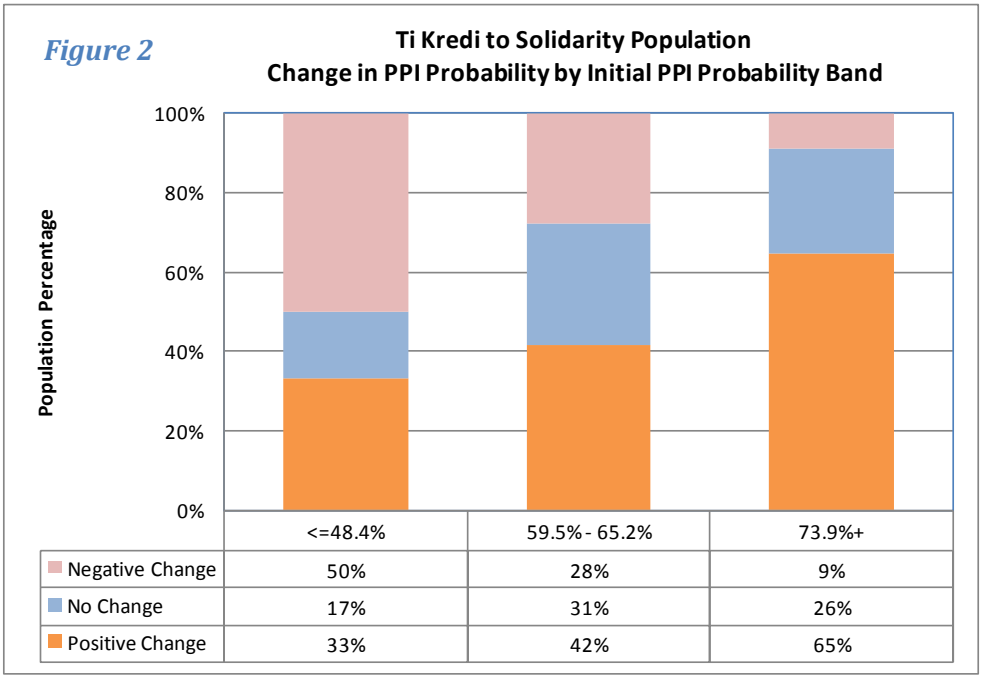
Table 2

Ti Kredi to Solidarity population	Number of clients	1st Response - Average Probability of <$1/day	2nd Response – Average Probability of <$1/day
Positive change	41 (50%)	71%	57%
No change	22 (27%)	70%	70%
Negative change	19 (23%)	60%	75%

Of the 82 Ti Kredi clients that progressed into Solidarity, 41 (or 50%) experienced a positive change in their PPI score, while 22 showed no change, and the remaining 19 clients had a negative change. On average, clients experiencing a positive change were poorer to begin with. To further test this theory, a deeper analysis was done on the change in PPI probability, segmented by the initial PPI probability band. Clients falling in the 73.9% or higher probability band were more likely to experience a positive change in PPI probability. Clients who are relatively more affluent (initial probability of poverty less than or equal to 48.4%) are more likely to experience negative change.

[3] "Fonkoze 2010 Social Performance Report: Keeping Our Clients on the Staircase Out of Poverty" available online at: http://www.fonkoze.org/docs/Fonkoze_Social_Performance_Report_2010.pdf

Figure 2



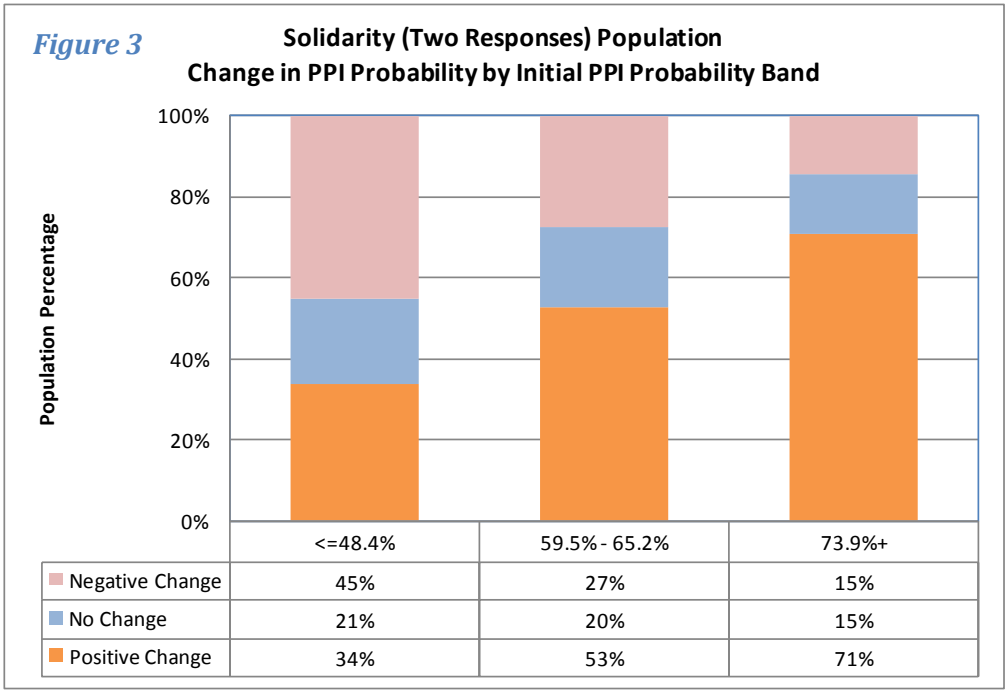
To benchmark these results, the same analysis was performed on the Solidarity client population with two Kat Eval responses:

Table 3

Solidarity (2 responses) population	Number of clients	1st Response - Average Probability of <$1 per day	2nd Response – Average Probability of <$1 per day
Positive change	272 (47%)	58%	42%
No change	112 (19%)	48%	48%
Negative change	194 (34%)	44%	58%

The percentage of the client population that experienced an improvement in PPI score (47%) is almost equivalent to the Ti Kredi population that graduated into Solidarity (50%). Both groups experienced a markedly strong improvement (drop from 58% to 42% probability for Solidarity and 71% to 57% for Ti Kredi graduates). The Solidarity population, while generally better off at the beginning, demonstrates a lower likelihood of experiencing any negative change. The same pattern again emerges, with clients experiencing positive change more likely to be poorer to begin with.

Figure 3



	<=48.4%	59.5% - 65.2%	73.9%+
Negative Change	45%	27%	15%
No Change	21%	20%	15%
Positive Change	34%	53%	71%

Developmental Effects

To enhance the analysis of the potential effects of the product offerings on client poverty levels, the study further analyzed other social indicators that reflect improvement in the living conditions of Fonkoze's clients. Fonkoze prioritizes five social indicators when monitoring its impact:

- Sending all children to school
- Having a home with a tin roof, cement floor, and latrine
- Providing food on the table every day
- Being able to read and write
- Accumulating assets (land, animals, and savings)

As discussed previously, 50% of the population of 82 Ti Kredi clients with longitudinal data ("Ti Kredi to Solidarity") experienced a positive improvement in PPI score. This improvement, coupled with an analysis of the 'social' data, indicates that completing the Ti Kredi loan cycle and progressing to Solidarity does have a positive effect on these clients and enables them to upgrade their living conditions substantially. Again, causality was not established, so this is directionally interesting to note and requires further analysis to determine causality.

Table 4

Percentage of "Ti Kredi to Solidarity" clients	Ti Kredi (first response)	Solidarity (second response)	Percent Increase
Home with cement floor	24%	30%	25%
Latrine made from cement	12%	18%	50%
Own livestock	55%	72%	31%
Unable to read or write	45%	35%	-22%
All children attend school	63%	76%	21%
Eat meat 2 or more times/week	20%	34%	70%

Benchmarking the Ti Kredi longitudinal population against the Solidarity longitudinal population reveals that the rate of improvement in the Ti Kredi social indicators is markedly more dramatic than for Solidarity.

Table 5

Percentage of Solidarity (2 response) clients	Solidarity (first response)	Solidarity (second response)	Percent Increase
Home with cement floor	55%	56%	2%
Latrine made from cement	34%	37%	9%
Own livestock	84%	83%	-1%
Unable to read or write	31%	26%	-16%
All children attend school	59%	70%	19%
Eat meat 2 or more times /week	43%	42%	-2%

Food Security

Fonkoze also collects social data through a Food Security survey. The 18 Food Security questions are used in calculating a Food Security score, ranging from 0 to 9, with 9 representing those individuals with the most insecure/irregular access to food.

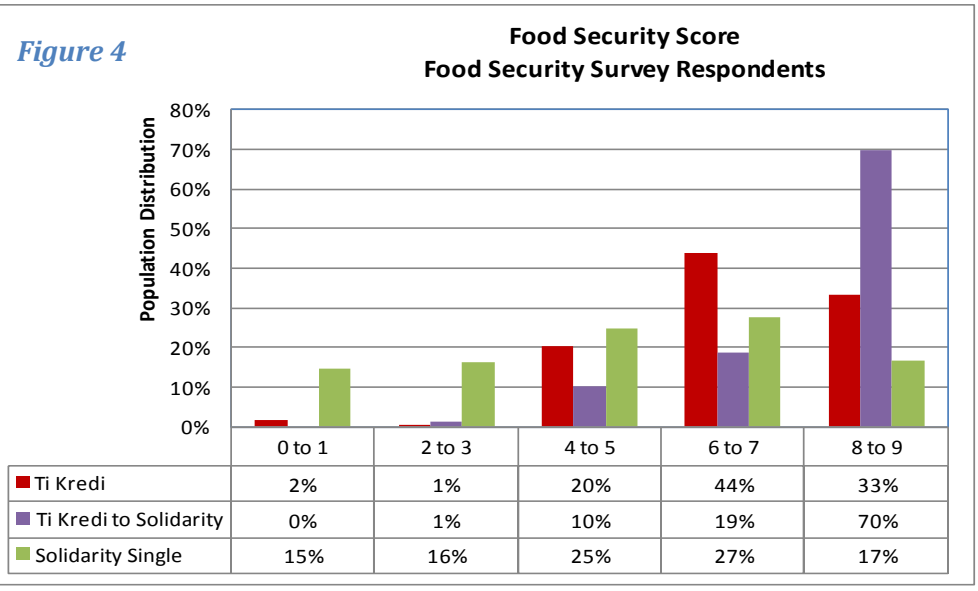
We analyzed 2,202 survey responses from 1,541 unique clients that were collected between September 2009 and September 2010. Clients indicate the loan cycle they are in and are often surveyed more than once. Thus, respondents were classified as follows:

Table 6

Loan Cycle responses	Survey Responses	Unique Clients
Ti Kredi (single response)	166	166
Ti Kredi to Solidarity (multiple responses)	142	70
Solidarity (single response)	783	783
Solidarity (2 responses)	912	456
Solidarity (3 or more responses)	199	66
Total	2202	1541

The "Ti Kredi to Solidarity" population had two (and in a few cases three) survey responses – the first at the time when they were in the Ti Kredi loan cycle and the second when they were in the Solidarity loan cycle. This allows for measuring the change in food security over time for the Ti Kredi population.

Figure 4



This data indicates that the Ti Kredi populations are substantially less secure in the area of food than the Solidarity population, with the Ti Kredi group that moves on to Solidarity being the least secure. When the two longitudinal populations are compared, the Ti Kredi to Solidarity population appears to be more likely to improve than the Solidarity population (2 responses).

Table 7

Change in Food Security Score from 1st Response to 2nd Response	Ti Kredi to Solidarity Number of Clients	Solidarity (2 responses) Number of Clients
Positive change	55 (79%)	215 (47%)
No change	9 (13%)	111 (24%)
Negative change	6 (9%)	130 (29%)

The Ti Kredi to Solidarity population went from an average Food Security Score of 7.7 to 4.9, while the Solidarity 2 Response population went from an average Score of 4.9 to 3.8.

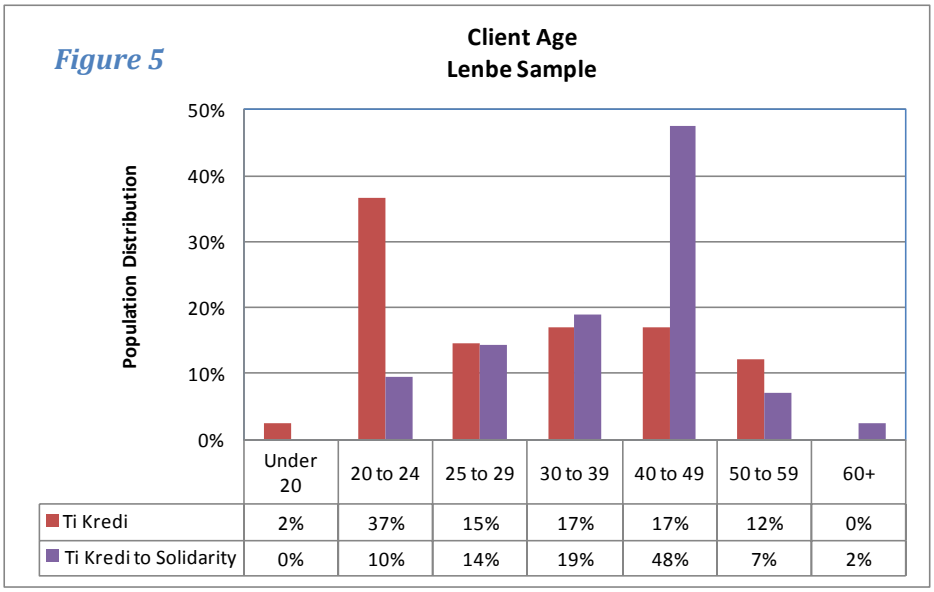
The analysis drawn from the Kat Eval data indicates that while both product offerings have, on average, lowered the probability of households living on below US $1 per day for the majority of clients, the developmental impact or improvement in living conditions of clients who received support earlier through a stair step approach beginning with Ti Kredi has been stronger. Utilizing the PWR method of targeting has additionally made Fonkoze more effective in reaching down market to poorer clients, increasing the depth of its poverty outreach.

Hypothesis 3: Understanding the new pool of clientele by profiling successful Ti Kredi graduates in the Lenbe Branch population

To understand how clients' social performance coincides with loan servicing performance, Kat Eval responses were matched with loan disbursement and reimbursement data for 83 Ti Kredi clients from the Lenbe branch. The Lenbe loan cycles spanned the years 2008 to 2010. Of the 83 clients, 41 had stopped their loan cycle at Ti Kredi, while 42 had progressed through the Ti Kredi cycle onto Premye Kredi – the first cycle of the Solidarity loan - and future Solidarity loans. For this population, the available data allowed for a holistic analysis of the client: loan profile, repayment behavior, and social survey data.

One notable difference between the two groups was their age. Women who progressed on to the Solidarity loans skewed older than those who remained in the Ti Kredi program. Almost half of the population moving successfully out of Ti Kredi ("Ti Kredi to Solidarity") was aged 40 to 49, compared to the population ending their loan history with Ti Kredi where the population distribution was skewed towards the 20 to 24 age band.

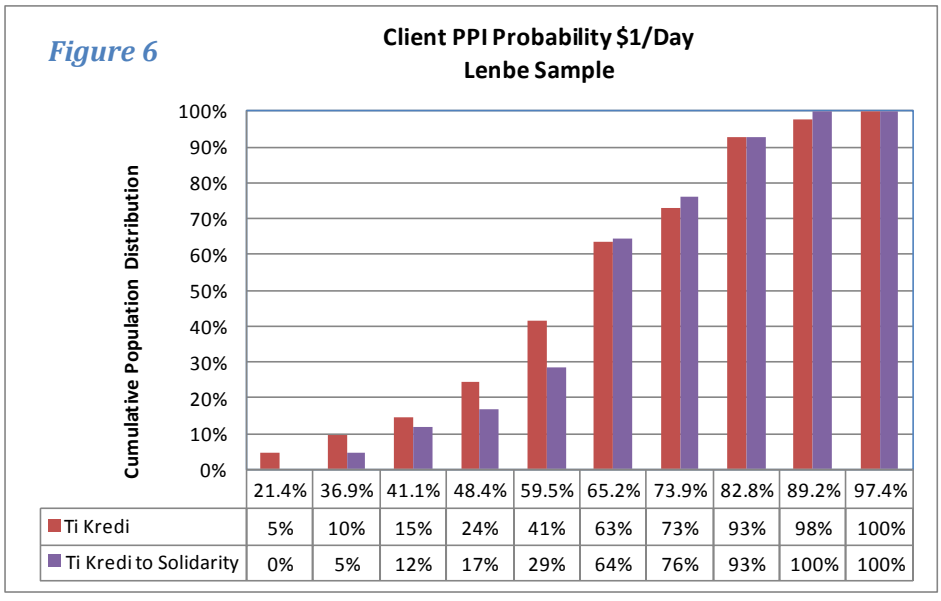
Figure 5



	Under 20	20 to 24	25 to 29	30 to 39	40 to 49	50 to 59	60+
Ti Kredi	2%	37%	15%	17%	17%	12%	0%
Ti Kredi to Solidarity	0%	10%	14%	19%	48%	7%	2%

Turning to the distribution of PPI scores, there appeared to be a difference in the poverty level likelihoods of the two populations. On a cumulative basis, 41% of the women who ended their loan cycle in Ti Kredi had a less than 59.5% probability of earning US $1 per day, compared to 29% of the women who progressed successfully out of the Ti Kredi into Solidarity. This data suggests that less affluent women are more likely to graduate out of the Ti Kredi program into the standard loan programs.

Figure 6

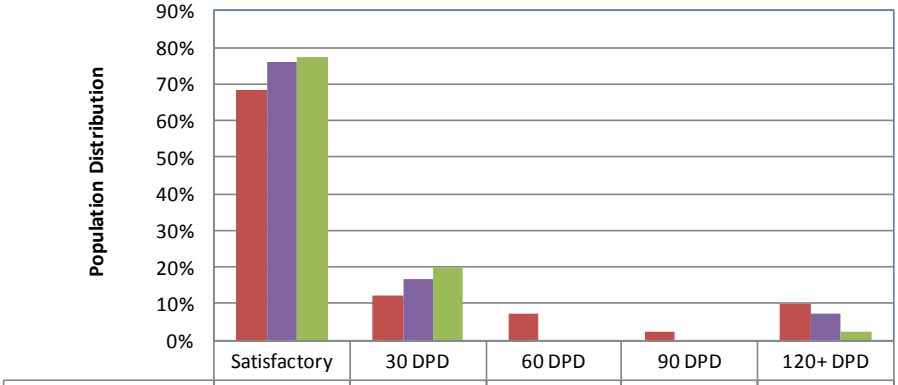


	21.4%	36.9%	41.1%	48.4%	59.5%	65.2%	73.9%	82.8%	89.2%	97.4%
Ti Kredi	5%	10%	15%	24%	41%	63%	73%	93%	98%	100%
Ti Kredi to Solidarity	0%	5%	12%	17%	29%	64%	76%	93%	100%	100%

A difference in payment performance was also observed between the two populations. Women who progressed out of Ti Kredi were more likely to have a record of timely repayment, with 76% of the population always paying satisfactorily, versus 68% of the women who did not progress out of Ti Kredi. The 7% of the "Ti Kredi to Solidarity" population with the worst record (120 days past due) all

experienced this level with their Premye Kredi loan (meaning that their Ti Kredi track record was satisfactory). In order to benchmark the performance of the two Ti Kredi populations, a random sample of 40 clients with Premye Kredi and Solidarity loans was selected. The loan performance for this population ("Solidarity Sample") was not substantially different from the population of clients who graduated from Ti Kredi to Solidarity ("Ti Kredi to Solidarity").

Figure 7



	Satisfactory	30 DPD	60 DPD	90 DPD	120+ DPD
Ti Kredi	68%	12%	7%	2%	10%
Ti Kredi to Solidarity	76%	17%	0%	0%	7%
Solidarity Sample	78%	20%	0%	0%	3%

There was additionally a difference noted in group dynamics: the population of women who successfully graduated out of Ti Kredi into Premye Kredi and Solidarity all belonged to groups where other women also successfully graduated. On average, 84% of the original group population graduated to the standard loan programs. This figure was dramatically lower for the population that did not progress out of Ti Kredi. Of the 41 women, only 3 belonged to groups where another individual was able to graduate out of Ti Kredi; only 6% of the original group population graduated to the standard loan programs. This suggests that the group dynamic plays a critical role in determining whether a client can successfully progress out of Ti Kredi.

Hypotheses 4-6: Understanding the Contributions to Fonkoze's Financial Bottom Line

The following analysis examines data from Fonkoze that will help to determine if there is a strong financial business case for Ti Kredi, which addresses the last three hypotheses. The analysis, though limited by the availability of data, concludes that, there appears to be strong customer loyalty in Ti Kredi clients, which Fonkoze can build on to make a business case for reaching the poorest people.

To address the financial bottom line contribution that Fonkoze's Ti Kredi credit program provides, Grameen Foundation considered three main elements:

1. The cost of acquisition of Ti Kredi clients compared to Solidarity clients. Comparing the cost to service a Ti Kredi client against a Solidarity client reveals whether the program has a net cost to the institution or whether it can be considered another cost of client acquisition.
2. Portfolio quality of Ti Kredi clients versus Solidarity clients. The performance of clients in the Ti Kredi program, clients who had graduated from Ti Kredi to Solidarity, and Solidarity only clients was analyzed to understand whether the cost of acquiring a client through the Ti Kredi program provided any additional benefit to the organization through a greater portfolio quality
3. Retention rates of Ti Kredi clients versus Solidarity clients. The study assessed whether Ti Kredi clients who graduated to Solidarity showed any difference in how long they continued taking solidarity loans, to see whether they contributed greater revenue than Solidarity-only clients.

Quantifying the Financial Contribution of Ti Kredi clients

To investigate the cost per client in each program, GF worked with Fonkoze to analyze the cost of serving a sample of 5,000 Ti Kredi clients over the course of 12 months. The cost per client was calculated assuming that each Ti Kredi loan officer served approximately 200 clients. The summarized results follow:

Table 8

Ti Kredi Cost to Serve

5000 Ti Kredi Clients per 12 Months

200 Clients per Credit Agent

USD$ 1 = 40 HTG

Budget Heading	Total for Ti Kredi	Cost/TI Kredi
ADMINISTRATION AND PERSONNEL	111,750.13	22.35
CLIENT SERVICES	50,000.00	10.00
INFRASTRUCTURE & EQUIPMENT	21,220.00	4.24
OTHER OPERATING EXPENSES	50,324.50	10.06
TOTAL COST TO SERVE:	**$ 233,294.63**	**$ 46.66**

Gross cost per client who completes the full program includes administration and personnel costs, which covers:

- Staffing
- Client services, such as educational materials for clients and a wealth ranking profile that is used to assess the poverty level of each client
- Infrastructure and equipment
- Other operating expenses, such as transportation and other travel costs, staff training, equipment repairs and office supplies

The gross cost per client is US $46.66. This cost does not include the cost of loan capital because most of the capital comes from grants. Fonkoze estimates that the small portion of capital that comes from loans generates an additional net cost of funds of US $0.16 per client on interest payments, bringing the gross cost per client to US $46.82.

Grameen Foundation also calculated the gross revenue per Ti Kredi client while in the Ti Kredi program:

Table 9

Ti Kredi Income Per Client USD$ 1 = 40 HTG

	Loan Amount	# of Payment Cycles	Semi-Monthly Payment	Semi-Monthly Interest Rate	Total Income
Cycle A	25.00	2.00	12.50	2.5%	0.94
Cycle B	37.50	4.00	9.38	2.5%	2.34
Cycle C	62.50	6.00	10.42	2.5%	5.47
				TOTAL:	**8.75**

Fonkoze earns 2.5% interest (on a declining balance) per payment. The total revenue per client is US $8.75. Therefore, the Ti Kredi clients cost Fonkoze US $38.07 per client. According to Fonkoze, it costs the same to recruit individual clients for the Solidarity loan program and put them through the two-month intensive training program. However, data on Solidarity loan recruitment costs was not accessible to verify this. If true, it would mean that the cost of acquisition of a Solidarity loan client is the same as the cost to serve a Ti Kredi client who graduates into Solidarity – hence, there is essentially no loss to the institution of gaining clients through the Ti Kredi program as opposed to the traditional Solidarity loan program.

Customer Loyalty

To address the next step in establishing a business case for Ti Kredi the following were considered:

- Comparative cost of servicing a Ti Kredi client vs. a Solidarity-only client in the Solidarity program
- Portfolio quality of Solidarity vs. Ti Kredi clients once they enter the Solidarity loan program
- Client retention rates of Solidarity vs. Ti Kredi clients

Fonkoze treats former Ti Kredi clients and Solidarity-only clients the same when they enter the Solidarity program and thus, Fonkoze assumes that the cost to serve them is identical. Unfortunately, Fonkoze does not have the data on relative time and other resources invested to confirm this assumption, nor does it have the data to confirm whether repayment rates impact the comparative cost to serve the two categories of clients in the Solidarity program.

While Fonkoze also lacks available data to generate a thorough comparison of client retention rates, Grameen Foundation conducted a proxy analysis of client retention rates using a sample set of loan

disbursement and reimbursement data from three branches that service both Ti Kredi and Solidarity clients. These three branches were selected because they are the only ones with a statistically relevant sample set of both Ti Kredi and Solidarity clients throughout the sample period.

Between July 2007 and September 2010, Fonkoze serviced 7,345 clients in these three branches. Among those, 5,586 took out at least one Ti Kredi loan or one Solidarity loan without taking out any other special loan that Fonkoze may have offered during the period being analyzed. Grameen Foundation sampled a subset of 5,398 clients – 73.5% of all clients at those branches and 96.6% of all Ti Kredi or Solidarity clients who did not take out other loans – that had no reporting anomalies that would complicate the analysis. Using this sample, the percent of entering clients that remain active in each program was calculated.

This sample was divided into four categories:

- First, clients were split between those who had fully paid their last loan cycle and those who had not.
- Clients who had not fully paid were split again into one subset whose payments were up to date and whose cycles ended after the sample period and a second subset whose cycles had been scheduled to end and were therefore in default. The first subset was designated *active clients* because they were in the midst of a loan cycle. The second was designated *inactive* and no longer in the program because their last cycle was past due and remained unpaid.
- Clients who had fully paid were also split into two subsets. One group comprised those whose last payment had been made less than 30 days prior to the end of the sample period. These clients were designated *active clients* because it was assumed that because their last cycle had ended recently, they would renew. The other subset was of those with a completed cycle more than 30 days older than the end of the sample period. They were designated *inactive,* since it was presumed that they had elected not to take out a new loan once their previous cycle had ended.

Using this set of assumptions, the results of the three branches were aggregated, dividing clients into three categories: Solidarity-only, All Ti Kredi (any client who had started in the Ti Kredi program), and Ti Kredi + Solidarity clients (clients who had started in the Ti Kredi program and graduated into the Solidarity program). Table 10 provides a summary of the results:

Table 10

Client Retention at Three Branches: July 2007-September 2010

Solidarity Only Clients		Entering Total	# Still Active	% Still Active
	Branch A	637	226	35.48%
	Branch B	743	308	41.45%
	Branch C	1958	898	45.86%
TOTALS:		**3338**	**1432**	**42.90%**

All Ti Kredi Clients		Entering Total	# Still Active	% Still Active
	Branch A	454	138	30.40%
	Branch B	1003	496	49.45%
	Branch C	612	321	52.45%
TOTALS:		**2069**	**955**	**46.16%**

Ti Kredi + Solidarity Clients		Entering Total	# Still Active	% Still Active
	Branch A	274	98	35.77%
	Branch B	558	412	73.84%
	Branch C	166	105	63.25%
TOTALS:		**998**	**615**	**61.62%**

Among the branches sampled, a higher proportion of Ti Kredi clients remained active from the time they entered the program to the end of the sample period (46.16% compared to 42.90% for Solidarity-only). While the difference of 7.60% is small, it demonstrates that based on the sample taken, the staying power of Ti Kredi clients appears to be at least as strong as or slightly stronger than Solidarity-only clients. Given that they do not add additional costs to Fonkoze's bottom line, this is an encouraging result for the Ti Kredi program.

An even more encouraging take away is the difference between Solidarity-only clients and Ti Kredi clients who graduated into the Solidarity program. For Ti Kredi clients, 61.62% remain active, which is over 43% more than the Solidarity-only clients. Among those sampled, the Ti Kredi clients who graduate into the Solidarity program demonstrate more loyalty than their Solidarity-only cohorts.

Because it may be unsafe to assume that all clients in default have indeed dropped out of the program (a portion of these clients may indeed intend to complete their payments and advance to a new loan if eligible), we also separated all default clients with last payments that were due within 30 days of the end of the sample payment period, who had already paid at least 75% of the principal on their loans to see how this would affect the results. The outcome of that analysis is presented in Table 11:

Table 11

Client Retention at Three Branches w/Defaults <30 Days, >75% Paid: July 2007-September 201

Solidarity Only Clients		Entering Total	# Still Active	% Still Active
	Branch A	637	226	35.48%
	Branch B	743	316	42.53%
	Branch C	1958	898	45.86%
TOTALS:		3338	1440	43.14%

All Ti Kredi Clients		Entering Total	# Still Active	% Still Active
	Branch A	454	138	30.40%
	Branch B	1003	543	54.14%
	Branch C	612	321	52.45%
TOTALS:		2069	1002	48.43%

Ti Kredi + Solidarity Clients		Entering Total	# Still Active	% Still Active
	Branch A	274	98	35.77%
	Branch B	558	412	73.84%
	Branch C	166	105	63.25%
TOTALS:		998	615	61.62%

The highlighted yellow cells represent changes to the results from the original analysis. The results indicate that only one branch contained default clients that fit into this category, and none of those clients were Ti Kredi clients who had graduated into the Solidarity program. Incorporating these recently defaulted clients who were close to paying off their loans actually enhanced the difference between Ti Kredi and Solidarity-only clients, producing a 12.26% difference in remaining active clients, as opposed to the 7.60% difference in the original analysis.

These results suggest that Ti Kredi clients are more loyal than the Solidarity clients and that those who graduate from Ti Kredi into Solidarity remain clients longer than Solidarity-only clients. The net cost of the program by itself makes no greater impact on the bottom line than the recruitment cost for the Solidarity program. Ti Kredi clients seem to remain in the program longer, generating more revenue by completing more loan cycles and increasing the profitability of the Solidarity program, since recruitment costs per client will decline as retention rates increase. Having more data as the program grows will help to verify whether this is true.

The challenge for Fonkoze, then, is to truly maximize the financial impact of the Ti Kredi program by increasing graduation rates into the Solidarity program. To do so, it must demonstrate the program's economic and social value to clients and maintain clients' awareness of that value as they pass through the program. The more effectively Fonkoze is able to quantify the program's value to its clients, the easier it will be to make that case.

To quantify Ti Kredi's financial bottom line impact and track it over time, Fonkoze should collect data that will allow it to track the cost to serve Solidarity clients and separate portfolio quality and client

retention data for all Ti Kredi graduates that participate in the Solidarity program from Solidarity-only clients.

To increase the robustness of this business case analysis, the following additional data analysis should be considered when data is available:

1. Compare the profitability of the Ti Kredi program to Fonkoze's traditional Solidarity loan product, focusing on a cost per client, to determine how many average Solidarity loan cycles Ti Kredi clients would have to complete to offset the cost per client of the Ti Kredi program.
2. Calculate how many average Solidarity loan cycles a Ti Kredi client would need to complete to reach net profitability for the entire program.
3. Finally, compare retention rates of Ti Kredi clients in the Solidarity program to clients who begin at the Solidarity level. If Ti Kredi clients offset the costs of the program and then became Solidarity loan clients for more net cycles once those costs had been covered, then the case could be made that Ti Kredi clients are actually greater profit generators than clients who begin at the Solidarity level.

Case Study II: Small Enterprise Foundation's (SEF) Tshomisano Credit Program (TCP)

As with the previous section, the below sections analyzing the Small Enterprise Foundation (SEF) address the same six hypotheses in two steps. First, evidence to address the first three hypotheses is discussed using descriptive statistics from the social data sample before presenting the findings for the financial hypotheses.

Background

The Small Enterprise Foundation (SEF) is a Section 21 Company (not-for-profit) microfinance institution operating in Limpopo Province in South Africa since 1992. Its mission is to eradicate poverty and unemployment in a sustainable manner. It provides credit services directly to its clients and links them to banks to assist in establishing savings habits. The credit products are modeled on a Grameen Bank methodology using solidarity group lending.

SEF aims to engage the poorest households in areas characterized by extremely high poverty prevalence and vulnerability. With women clients comprising the bulk of its portfolio, SEF reaches South Africa's poorest households through two programs[4]. The Microcredit Program (MCP) focuses on borrowers from households with income that is above half the poverty line and established microenterprises. In 1996, SEF realized that MCP was not effectively reaching the very poor, those with incomes less than

[4] Limpopo Province is dominated by women-headed households, pensioners, and youth. 64% of its population lives below South Africa's unofficial 'poverty line'. 40% live below half this level (Baumann (2004), p.3)

half the South African poverty line (in South Africa this is a "household subsistence level"). To fill this gap, the organization established the Tshomisano Credit Program (TCP) to exclusively target the poorest households – those living in the bottom 30% of the population in the province. After several iterations in policy and practice, the program became fully operational in 2000. As of June 30, 2009, TCP made up 72% and MCP 28% of SEF's 57,425 active clients.[5]

Overview of the TCP program

The TCP starts with an intense targeting process and an evaluation of the client's motivation to start a business. Like Fonkoze, SEF identifies the poorest households in a community through Participatory Wealth Ranking (PWR), and subsequently pairs field staff with these households to mentor and motivate the women to engage in a new or resume a previously established microenterprise. The combination of the motivation and access to small loans helps these women to successfully engage in an income generating activity. The available loan product under both MCP and TCP programs is the same – a basic group loan product with five variations based on loan term, frequency of repayment, and the cost to the client. The main difference is in the targeting used to identify the clients – and thus, the method of analysis changes somewhat from the case of Fonkoze, where the product looks quite different.

New TCP clients' repayment schedule entails fortnightly payments over a period of 4 or 6 months. After successful repayment of the first loan, clients can opt for monthly repayments over 4, 6, or 10 months. First-time loans have a maximum of R1,200 (US $156). The maximum loan ceiling is R12,000 (US $1,560)[6]. TCP loans tend to be smaller, given the lower capital needs of TCP clients in the initial loan cycles. SEF's current average loan for MCP is R1,211 (US $157), while for TCP it is R754 (US $98). The average size of a first loan is R570 (US $74) for MCP and R433 (US $56) for TCP[7].

SEF's future growth strategy is to focus on growing the TCP portfolio without adding more MCP clients in the near future. As such, there are currently seven branches operating the MCP methodology; the remaining 31 branches operate the TCP methodology. TCP clients, however, are eligible to 'graduate' into MCP and access larger size loans once they demonstrate increased levels of confidence, skills, and business operations. This holistic model ensures active targeting, continued provision of customized financial and non-financial services, and placement of the poorest on a track for sustained growth and support from a financing institution.

Between June 2005 and December 2009, SEF experienced substantial loan volumes with the average number of loans issued per month for TCP at 4,710 and 2,476 for MCP. Given the high volume of activity, clients active during this period were the focus of the study. Unless otherwise specified, the following analysis took into account the available data for 83,168 unique TCP clients and 37,410 unique

[5] Small Enterprise Foundation Management Review, 30 June 2009

[6] http://www.sef.co.za/files/2009-02-13%20-%20SEF%20Social%20Rating.pdf

[7] Baumann, T., *Community Microfinance Network Monograph No. 1,* The Urban Resource Center, p.18

MCP clients serviced during this period. Because SEF's systematic impact management work is solely concerned with TCP, certain developmental impact analyses has been limited to this client group.

Social Bottom Line

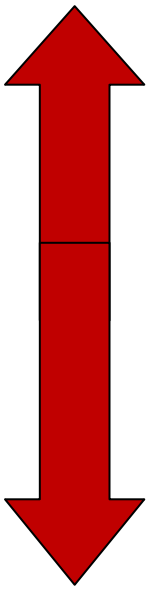
Hypotheses 1 and 2: Depth of poverty outreach and developmental effects

SEF's mandate to solely target poor and very poor households in rural and peri-urban areas is inherent in its operational policies. The establishment and expansion of TCP demonstrates SEF's aim to serve this target market. As discussed in the previous section, TCP now mirrors MCP with the additional steps of actively identifying the poorest women in its target areas through a rigorous selection process and providing intensive mentoring and motivational support.

SEF employs the Participatory Wealth Ranking (PWR) method for identifying its target market. The female members of the bottom 40% of households identified through this process are eligible for participation in TCP from the onset, while the remaining households are excluded for three years, after which the poverty criterion is removed and no restrictions are applied.

The PWR score ranges from 0 to 100, with higher scores indicating a deeper level of poverty. SEF has further broken down scoring under five categories to measure impact by poverty bracket, segmenting households with a score of 90 to 100 as worst off and 'have nothing,' while households scoring 35 or less are the best off and considered 'well off.' Households in the former typically have no or extremely erratic employment; a high number of dependents; food insecurity with a reliance on begging to secure only one meal a day; inadequate housing (often constructed with mud); and school-aged children who beg or work instead of attending school. Households in the latter range are typically professionals and/or business owners with smaller family sizes. They have high food security and can afford three complete meals a day (including luxury food items such as bread with margarine), live in large, brick homes, and send their children to private or tertiary schools.

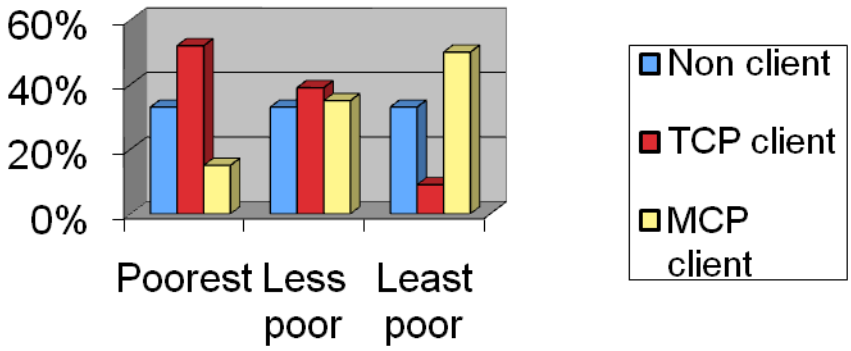
PWR	SEF's PWR
0 (less poor) **100 (more poor)**	**0-35 (better off)** ▪ Professionals or wage earners ▪ Small family sizes ▪ Food secure (three meals a day) ▪ Large, brick homes ▪ Children attend private schools **90-100 (have nothing)** ▪ Households have no or extremely erratic employment ▪ Large family sizes ▪ Food insecure (one meal a day) ▪ Inadequate homes (typically mud) ▪ Children begging or working, not enrolled in school



A 2001 CGAP study that compared the poverty levels of TCP and MCP clients also found that TCP was reaching a poorer client segment than MCP. A composite poverty index was constructed from the Poverty Assessment Tool (PAT) instrument[8] to calculate comparable poverty scores for MCP and TCP clients. Sample households of TCP, MCP, and non-clients were assigned a PAT score and then categorized under poorest, less poor, and least poor. Figure 8 (below) illustrates the poverty profiles for each of the three household groups.

[8] The Poverty Assessment Tool (PAT) is a rapid quantitative research method that uses key indicators as proxy measures of poverty. It was designed by the International Food Policy Research institute (IFPRI) to measure the levels of wellbeing of clients entering micro-credit program and was adapted by the Consultative Group to Assist the Poorest (CGAP) to be used in the context of microfinance (van de Ruit, C., May, J. (2003), p. 5).

Figure 8



Source: van de Ruit, C., May, J., and Roberts, B. (2001)

The findings reveal a significant increase in the depth of poverty outreach through TCP that is directly attributed to the PWR method of targeting:

> There is a striking contrast between poverty profiles of these two programmes. The clients in the poverty targeted programme are overwhelmingly situated in the poorest category, while the majority of clients in the non poverty targeted scheme are found in the least poor category. The majority of TCP clients (52%) are located in the poorest category, as opposed to 9% in the least poor category. The remaining 39% are in the less poor category. In comparison, 15% of MCP clients fell in the poorest category, and 35% are in the less poor group with 50% in the least poor group. The TCP poverty profiles indicate that SEF is reaching the poorest people and point to the success of the targeting mechanism (PWR) in encouraging poorer people to join the programme. MCP in contrast appears to be reaching people who are better off (van de Ruit, May and B. Roberts (2001), p.5).

M-CRIL also conducted a similar analysis in 2008 using the PPI® tool developed by the Grameen Foundation. In 2007, SEF administered the PPI tool on a sample group of 312 TCP clients during their first loan cycle. The PPI showed that more than half of SEF's clients were living below US $1/day PPP and 81% were living below US $2/day. Subsequently in 2008, a similar study with a sample MCP group revealed that although MCP is not a poverty-targeted program, it still serviced relatively poor clients, with half of the clients estimated to be living below US $2/day at entry. The conclusion drawn indicates the deeper poverty outreach SEF achieved as it expanded TCP:

> Weighing the results between the two programmes, the overall depth of outreach implied at entry is very significant, well above the national poverty rate. Depth of outreach will be higher since over 90% of new clients are now TCP (M-CRIL (2008), p.11).

SEF has adopted an impact management system that focuses on the loan application, center performance monitoring, and loan utilization monitoring. The information allows SEF to assess and measure its impact beyond a purely financial sense, while also serving as an opportunity for

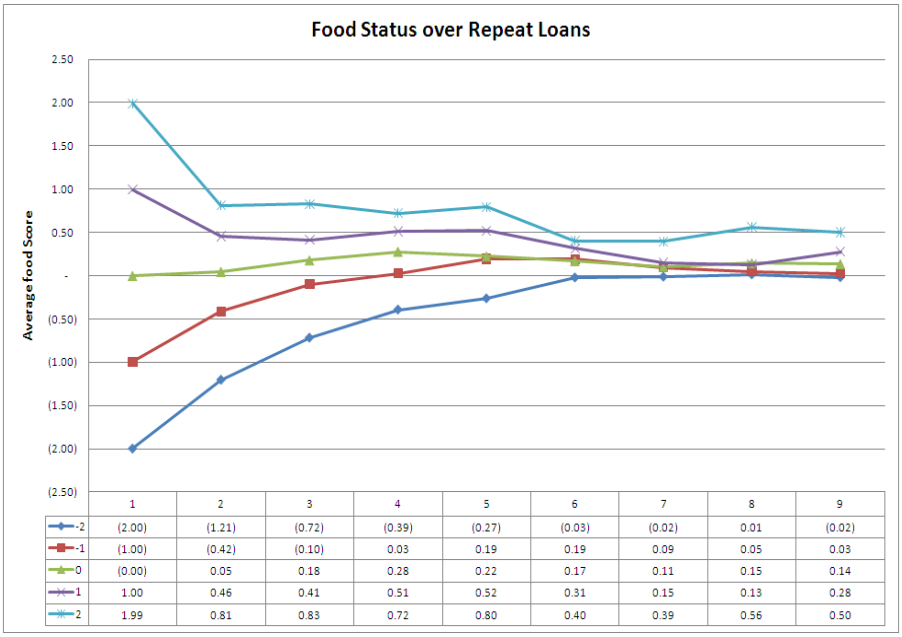
fieldworkers, clients, and management to identify and discuss impact trends before dropouts occur. This data requires one caveat: as it is longitudinal, it only captures data on clients taking subsequent loans who may have a different entrepreneurial ability. This self-selection may result in some biases in the analysis, which does not take into consideration the performance of dropouts (which averaged 27% for MCP clients in FY 2009).

For a more meaningful analysis on the developmental effects of TCP, the poorest clients reached by SEF with PWR scores of 96-100 at entry were segmented, and their performance was compared to the rest of the TCP client sample over nine loan cycles. In addition to its impact on household savings and borrower business growth, SEF monitors, from entry, the improvement in housing quality and food security for its TCP clientele. Scoring for the latter two indicators is the same, ranging from -2 being very poor to 2 being excellent. Scores are collected at entry as a baseline and then during each subsequent loan cycle until at least the fifth loan.

Food Security and Housing Quality

Analysis (Figure 9) of the longitudinal food security data shows that between baseline and the ninth loan cycle, the TCP clients with the lowest food scores (0 or lower) improved their food security drastically. At the baseline, 90% of clients scored within the '0 to -2' range. By the ninth loan cycle, only 10% of the same clients remained within this range.

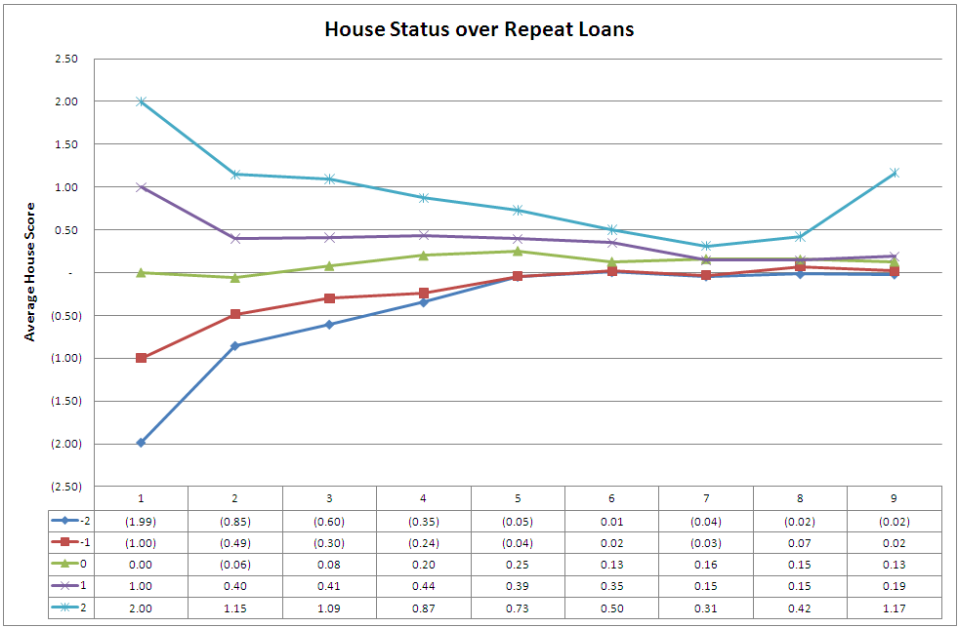
Figure 9



	1	2	3	4	5	6	7	8	9
-2	(2.00)	(1.21)	(0.72)	(0.39)	(0.27)	(0.03)	(0.02)	0.01	(0.02)
-1	(1.00)	(0.42)	(0.10)	0.03	0.19	0.19	0.09	0.05	0.03
0	(0.00)	0.05	0.18	0.28	0.22	0.17	0.11	0.15	0.14
1	1.00	0.46	0.41	0.51	0.52	0.31	0.15	0.13	0.28
2	1.99	0.81	0.83	0.72	0.80	0.40	0.39	0.56	0.50

Similarly, an analysis of the longitudinal data on housing quality reveals an incremental improvement in scores from the time of entry through subsequent loan cycles. Interestingly, the housing quality momentum mirrors that of the food security analysis. At the baseline, 90% of TCP clients scored within the '0 to -2' range, but by the ninth loan cycle, this had dropped to less than 10% of the client sample.

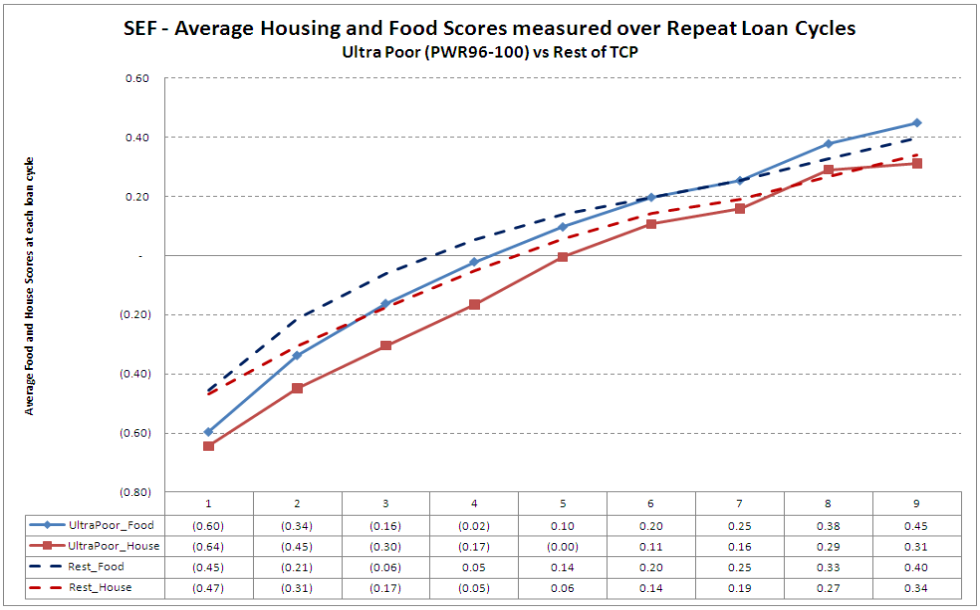
Figure 10



	1	2	3	4	5	6	7	8	9
-2	(1.99)	(0.85)	(0.60)	(0.35)	(0.05)	0.01	(0.04)	(0.02)	(0.02)
-1	(1.00)	(0.49)	(0.30)	(0.24)	(0.04)	0.02	(0.03)	0.07	0.02
0	0.00	(0.06)	0.08	0.20	0.25	0.13	0.16	0.15	0.13
1	1.00	0.40	0.41	0.44	0.39	0.35	0.15	0.15	0.19
2	2.00	1.15	1.09	0.87	0.73	0.50	0.31	0.42	1.17

At entry, ultra poor TCP clients (those with a PWR score of 96-100), on average, scored lower on both food and housing quality scores. Interestingly, as indicated in Figure 11, these scores appear to improve at a slightly faster rate over each subsequent loan cycle when compared to the rest of the repeat TCP client population. The average improvement in food and housing scores per loan cycle for ultra poor TCP clients is 0.13 and 0.12, respectively, while for the rest of the TCP client sample, the average score improvement per loan cycle is 0.11 and 0.10, respectively. One conclusion that may be drawn from this data is that in working with extremely poor groups earlier than is typical for an MFI, there may be greater scope for more immediate and rapid improvement in clients' living conditions.

Figure 11



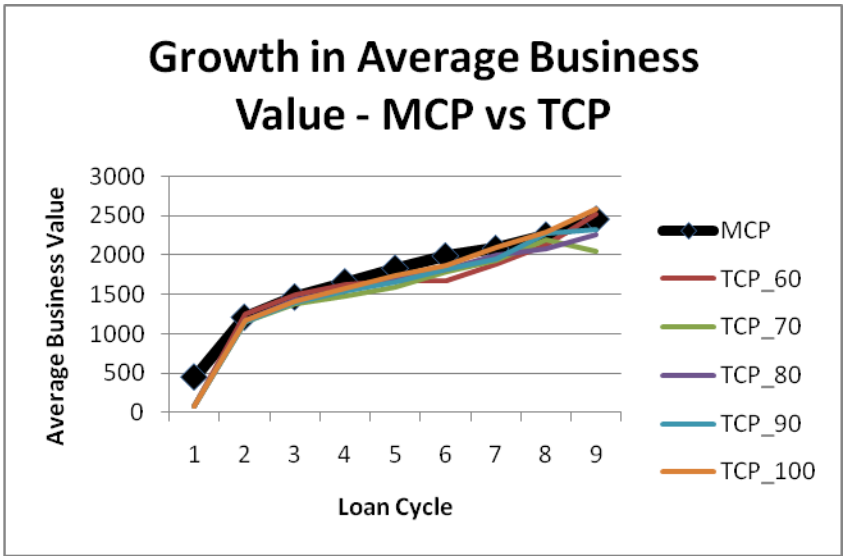
	1	2	3	4	5	6	7	8	9
UltraPoor_Food	(0.60)	(0.34)	(0.16)	(0.02)	0.10	0.20	0.25	0.38	0.45
UltraPoor_House	(0.64)	(0.45)	(0.30)	(0.17)	(0.00)	0.11	0.16	0.29	0.31
Rest_Food	(0.45)	(0.21)	(0.06)	0.05	0.14	0.20	0.25	0.33	0.40
Rest_House	(0.47)	(0.31)	(0.17)	(0.05)	0.06	0.14	0.19	0.27	0.34

Business and Loan Portfolio Growth

Because of the availability of the data, measured changes in business growth of clients across TCP and MCP were also measured. Business value here is defined as the aggregate value of stock, cash, equipment, and savings of a client's small business or income generating activity. Prior to each subsequent loan cycle, data on business value and savings is collected to monitor impact and for consideration as part of a subsequent loan application. The subsequent loan size is contingent on these values that are captured for individual clients.

Our analysis reflects that for poor and ultra poor TCP clients, their average business value at intake increased 30 times from loan cycle 1 through 9. The most interesting progressions occur from loan cycle 1 to 2, where TCP clients experience a sharp increase in average business value from R80 (US $10) to R1,183 (US $154) –a roughly 15-fold increase. As detailed in Figure 12, clients who had a PWR score in the range of 70 experienced regression between loan cycles 8 and 9, however, the R155 (US $20) dip is nominal.

Figure 12

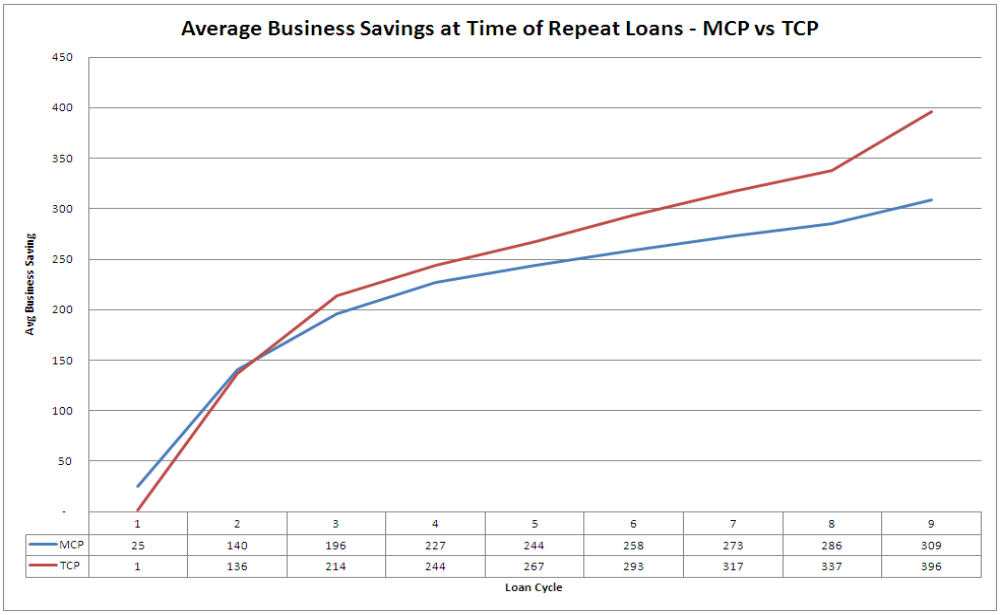


When comparing the change in average business values over loan cycles between MCP and TCP clients at loan cycle 1, TCP clients start with a much lower business value, with the poorest clients starting with an average business value of R80 (US $10). A greater proportion of TCP clients had no existing business at the time of their first loan disbursement (essentially a 0 business value). By loan cycle 2, the TCP clients' business values align with those of MCP clients and continue to grow at roughly the same rate through loan cycle 9, as seen in Figure 12. Both TCP and MCP clients increased their business values by around R1,200 (US $156) by loan cycle 9. The average growth beyond loan cycle 2 was calculated at R166 (US $22) for TCP and R178 (US $23) for MCP.

SEF's impact monitoring system has revealed that while most TCP clients, at entry, demonstrate low self-confidence and are not operating an enterprise, many begin to mirror similar levels of confidence, skill, and business operation as MCP clients after two or three loan cycles.

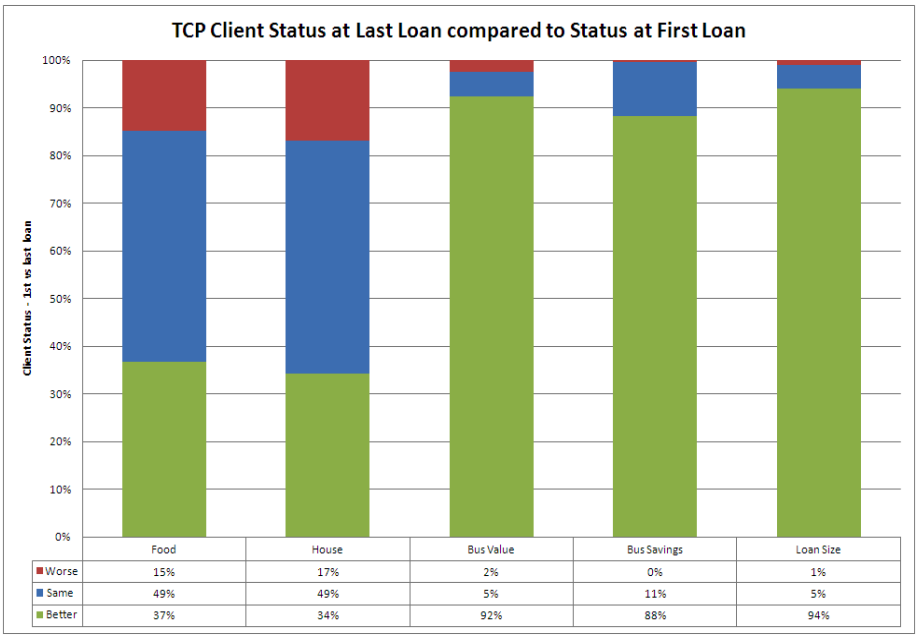
When business savings are compared between TCP and MCP clients, as indicated in Figure 13 below, this amount appears to grow at a faster rate for TCP clients than their MCP counterparts. At the end of the nine loan cycles, the TCP clients saved R396 (US $51), which is 28% more than what MCP clients saved (R309 or US $40).

Figure 13



When first and last loan food security scores were reviewed, 37% of clients demonstrated an improvement, 49% no change, and 15% a deterioration. Figure 14 reveals that more than a third of repeat TCP clients improved their food security and housing quality between their first and last loan, and over 90% increased the value of their own business and business savings along with increased loan sizes.

Figure 14



Hypothesis 3: Increasing the pool of available clientele

This hypothesis aims to assess whether offering customized products to either an untapped or unbanked market expands the pool of clientele for an MFI and leads to greater market saturation. The study aimed to ascertain if SEF was able to concurrently achieve depth and scale of outreach through its TCP offering. Because SEF's mission and operational policy, particularly since 2002, are based solely on reaching the poorest populations rather than on market demand and/or increased financial returns, the analysis instead sought to understand the market penetration SEF achieved in MCP versus TCP branches.

To assess the organization's household penetration, we looked at data with similar demographic characteristics that geographically fell in line with seven MCP and six TCP branches that were in operation for eight or more years. Household penetration is defined by the number of households in the branch area where at least one member is a client. The MCP branches contained a population size of 1,255,522 or approximately 272,338 households and served 15,369 clients, achieving a household penetration of 5.6%. The potential market population of the TCP branches was 1,163,729 or 258,606 households, and 14,972 clients or households were served, achieving a 5.8% household penetration. Though TCP branches appear to have deeper household penetration, the difference of .2% is nominal, demonstrating that SEF's choice to initially restrict client entry to include poorest households before opening up TCP to the remaining 'upper' 60% of potential clients does not affect the organization's outreach.

Since 2004, SEF has merged MCP and TCP into common branches in order to comprehensively reach both very poor and poorest markets. The resulting mixed portfolios allow SEF to manage portfolios that are large enough to attain self-sufficiency without overburdening its staff and clients. TCP clients are also able to 'graduate' to MCP loan terms to ensure their sustainable and long-term growth.

Hypotheses 4-6: Understanding the Contributions to SEF's Financial Bottom Line

The following analysis examines data from SEF that will help determine if there is a strong financial business case for the TCP loan. This addresses the last three hypotheses. The analysis shows that the TCP branches, once mature, are just as profitable as the MCP branches. To test the fourth hypothesis, SEF tracked client dropout rates per six month period at both TCP and MCP branches until the end of FY 2009. Rates were calculated as the percentage of active clients who left the program in the previous six-month period. As Table 12 indicates, TCP clients maintained consistently lower dropout rates than MCP clients:

6-MONTH DROP-OUT RATE: TCP vs. MCP CLIENTS

Table 12

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
All TCP Branches	16%	17%	18%	18%	23%
All MCP Branches	18%	21%	22%	21%	27%

These results demonstrate that TCP clients maintained greater customer loyalty over a sustained period.

The fifth and sixth hypotheses were tested by examining other financial and operational data for MCP and TCP loans. It was easier to do this with SEF than with Fonkoze because SEF offers the two loan products in discrete branches. Between 1992 and 2001, SEF opened seven branches that offer MCP loans and has not opened new MCP branches since then. As a result, every MCP branch has been in operation for at least ten years. SEF also has 32 branches that exclusively offer TCP loans. Of those branches, ten have been in operation for at least five years as of June 2010, the end of SEF's 2010 fiscal year. As a result, TCP branch financial and operational results were able to be compared to MCP branch financial and operational results, but the analysis was concentrated on the ten branches that had opened as of June 2005, the close of SEF's 2005 fiscal year.

We analyzed the following data from TCP and MCP branches for the fiscal years 2009 and 2010 to test the last two hypotheses:

- Profit margin, or net income [revenue – (expenses + interest paid)] as a percentage of revenue
- Net income per client, measured by dividing income [revenue – (expenses + interest paid)] by the average number of clients for the year
- Portfolio quality, which combines Portfolio at Risk (PAR) > 1 day + rescheduled loans (GF did not receive data on write-offs, so write-offs are excluded from the analysis)
- Staff and loan officer productivity, expressed as clients per staff member and clients per loans officer, and measured by dividing the average number of staff members and the average number of loan officers per year by the average number of active clients per year
- Operating Expense Ratio (OER), or total operating expenses as a percentage of average gross loan portfolio for the year

The first two data points provide insight into the relative profitability of each loan, while the others look at underlying factors impacting profitability. In the case of portfolio quality and staff productivity, they specifically address the role clients play in impacting profitability. Portfolio quality in particular provides insight into which clients are more profitable by looking at the percentage of loans that create a drain on profitability because they are in a stage of default.

Following is a comparison of the two profitability indicators between TCP branches, TCP branches opened before 2006, and MCP branches:

Table 13

PROFITABILITY: TCP vs. MCP BRANCHES

	FY	Profit Margin	Income per Client (IPC)*
All TCP Branches	**2010**	23.33%	204
	2009	23.40%	197
TCP Branches Opened Before FY 2006	**2010**	43.21%	410
	2009	41.03%	370
All MCP Branches	**2010**	44.15%	451
	2009	42.18%	427

* In South African Rand

Not surprisingly, profitability as measured by the two data points is higher for all MCP branches than for all TCP branches given that most TCP branches were opened within the past five years and are far less mature than the MCP branches. In fact, 13 of the 32 TCP branches currently in operation opened within the last two fiscal years analyzed, significantly impacting those results. Income per client of MCP branches was more than double that of all TCP branches for 2009 and 2010, while profit margin of MCP branches was almost double.

However, comparing MCP branches to TCP branches that had been open for at least five years by the end of FY 2010 tells a different story. The profit margin of this subset of TCP branches is 97.27% of the profit margin of MCP branches in 2009 and 97.86% in 2010. Income per client of these TCP branches is 86.73% of MCP branches in 2009 and 91.04% in 2010. While MCP branches still demonstrated better results, TCP branches opened before FY 2006 are comparable within 10% for all indicators except income per client in 2009. TCP loans are therefore not just profitable, but are actually within range of a product that has never been targeted to ultra-poor clients.

Looking at some of the underlying factors that contribute to profitability enhances the business case for TCP loans further. There are three key indicators that specifically document the role that an MFI's clients play in driving organizational profitability:

1. Staff productivity: the number of clients served per loan officer and per staff member
2. Portfolio quality: assessing the portfolio-at-risk plus rescheduled loans due to non-payment (again, write-offs are excluded here because SEF has not taken any)
3. Client retention: the percentage of clients that remain in the program once they have entered

As discussed above, SEF's data on client drop-out rates, which may serve as a proxy for client retention rates, showed that TCP clients are less likely to leave the program than MCP clients. This means TCP staff members have to devote less time to recruiting new clients to replace those drop outs.

Grameen Foundation also compared TCP and MCP branch portfolio quality and staff productivity. As Table 14 indicates, all TCP branches and TCP branches opened before FY 2006 outperform MCP branches on portfolio quality:

Table 14

PORTFOLIO QUALITY: TCP vs. MCP BRANCHES

	FY	<30 Days	> 30 Days	Rescheduled Loans	Total
All TCP Branches	**2010**	0.22%	0.19%	0.24%	0.66%
	2009	0.65%	0.26%	0.32%	1.23%
TCP Branches Opened Before FY 2006	**2010**	0.08%	0.11%	0.29%	0.48%
	2009	0.53%	0.22%	0.35%	1.10%
All MCP Branches	**2010**	0.70%	0.27%	0.41%	1.39%
	2009	0.57%	0.45%	0.70%	1.72%

Table 14 illustrates that for FY 2009, the portfolio quality for TCP branches was stronger than for MCP branches. All TCP branches had an aggregated PAR + rescheduled loans of 1.23% in 2009, compared to 1.39% for all MCP branches. In FY 2010, the difference increased, where all TCP branches had only 0.66% PAR + rescheduled loans vs. 1.39% for MCP branches, less than half the amount TCP branches had. Comparative results are even stronger for the subset of TCP branches opened before FY 2006. In FY 2009, mature TCP branches had only 0.48% PAR + rescheduled loans compared to 1.39% in MCP branches and 1.10% compared to 1.72% in FY 2010. As a result, at least one indicator of client quality as a contributor to SEF's profitability demonstrates that the TCP loan is attracting more reliable clients than the MCP loan.

The distinction between the amount of time required to serve TCP and MCP clients, as measured by the number of clients per loan officer and the number of clients per staff member, is less one-sided. As Table 15 indicates, MCP branches clearly outperform all TCP branches in staff productivity when the less mature branches are included. However, when MCP branches are compared to TCP branches opened before FY 2006, the results are almost identical in 2009, and TCP actually outperforms MCP in 2010:

Table 15

STAFF PRODUCTIVITY: TCP vs. MCP BRANCHES

	FY	Clients per Loan Officer	Clients per Staff Member
All TCP Branches	**2010**	224	196
	2009	236	210
TCP Branches Opened Before FY 2006	**2010**	330	292
	2009	329	296
All MCP Branches	**2010**	318	275
	2009	328	287

MCP branches were able to serve an average of 92 more clients per loan officer and 77 more clients per staff member than all TCP branches in 2009 and 94 more clients per loan officer and 79 more clients per staff member in 2010. This is not surprising given that approximately one third of all TCP branches were just ramping up in those two years. However, TCP branches that opened before FY 2006 slightly outperformed MCP branches. In 2009, those branches served an average of one more client per loan officer and nine more clients per staff member. In 2010, they served 12 more clients per loan officer and 17 more clients per staff member. Overall, the staff productivity results indicate that TCP clients require no additional time commitment by staff to serve them.

A fourth underlying contributor to profitability, operating expense ratio (OER), has perhaps the most direct impact on profitability (aside from product pricing and sales), as it is a measure of the cost to serve clients taken as a percentage of total loan portfolio. This may be influenced by additional costs an organization takes on to serve its clients. A typical example might be additional training to support the entry of ultra-poor clients into a loan program, much like what Fonkoze provides to Ti Kredi clients. In SEF's case, the TCP loan program is a targeting effort; no significant additional training or other interventions is provided to these clients once they are selected into the program. Not surprisingly, then, based on a comparison of FY 2009 and 2010 OER results, TCP branches do not appear to assume other costs above and beyond what is required to support MCP branches. As Table 16 indicates, MCP branches outperform all TCP branches but, again, are closely aligned with OER results from TCP branches opened before FY 2006:

Table 16

OPERATING EXPENSE RATIO (OER): TCP vs. MCP BRANCHES

	FY	OER
All TCP Branches	**2010**	35.24%
	2009	31.52%
TCP Branches Opened Before FY 2006	**2010**	24.40%
	2009	23.32%
All MCP Branches	**2010**	25.27%
	2009	24.29%

In 2009, all TCP branches had an OER of 10.23 percentage points higher than MCP branches, and in 2010, it was 9.97 percentage points higher. However, TCP branches that opened before FY 2006 had an OER of 0.96 percentage points lower in 2009 and 0.87 percentage points lower in 2010. As a result, there appears to be no significant difference in OER between the MCP branches and the more mature TCP branches, indicating that mature TCP branches are operating just as efficiently.

The overall results of our analysis of financial indicators and operational indicators related to clients' impact on profitability indicate that, once mature, TCP branches achieve comparable, if not equivalent, profitability to MCP branches. It also shows that TCP clients themselves are as strong contributors to SEF's bottom line as MCP clients. While the business case for TCP loans is not as strong as for MCP loans, the TCP branches are consistently profitable, achieve financial results that are close to MCP branches, and boast underlying contributors to profitability that are on par with or exceed MCP branches.

Concluding Thoughts: Is there a double bottom line case for serving very poor households?

The above case studies highlight two different approaches taken by microfinance institutions operating in different geographies and economies to the similar problem of increasing their depth of poverty outreach. Both organizations have clearly demonstrated an ability to create products that enhance the social bottom line by deepening outreach and offering these products rather than only serving them through a mainstream microfinance approach (in some cases, this even had a greater developmental effect on their clients).

Some data from this analysis further demonstrated the impact on the financial bottom line – in the case of Fonkoze, the Ti Kredi product is a net cost to the institution of roughly US $38 a person. The organization, however, has embraced this as a cost of acquisition that is similar to the cost of the two-month training program for each Solidarity loan client. This mindset of the management – seeing it as a cost of acquisition for a particular client, rather than simply a cost to serve – is an important logical twist

in how practitioners think about building a double bottom line business case for serving the very poor. For SEF, however, this cost to serve is not an issue, as they have streamlined their approach such that both of their products are profitable, thus ensuring overall organizational profitability.

Going beyond the cost to serve, it is interesting to see whether these clients perform differently in terms of delinquency and longer-term retention – two important factors in determining the profitability of the customer segment. There is encouraging data from both Fonkoze and SEF. At Fonkoze, Ti Kredi clients who graduated had a higher retention rate than Solidarity-only clients – an important fact when facing an initial cost to serve of US $38. For SEF, TCP and MCP clients had the same retention rates. In addition, rates of delinquency were the same or better for TCP clients, which shows that when targeted well and served with a product that meets their needs, very poor clients can participate productively in a microfinance program.

There are data limitations that still affect the ability to truly close the books on the financial bottom line side of the business case. Further time panel data will strengthen this assessment, particularly for Fonkoze. But, it is encouraging to see the beginnings of a double bottom line business case for servicing very poor households.

Based on this, we would challenge the microfinance industry to think more deeply about its current poverty outreach and how it can serve very poor households more effectively. It may be possible to achieve significant growth in financial services to households that were previously unserved if the influential players in the microfinance industry were to focus on some of the following areas:

- Identifying the barriers to bringing very poor households into mainstream programs – and building products to serve very poor households around this. Both Fonkoze and SEF built successful products that did this effectively, which contributed to their ability to achieve the financial bottom line. Neither assumed their mainstream product was appropriate for this population at the outset.

- Investing in experimentation that puts the customer at the center. Neither institution got these products right the first time. They continually refined their approach until they had one that worked for the clients, first and foremost. The customer experience, not the business case, was the driving factor in that experimentation.

- Taking the long-term view. This analysis provides evidence of higher rates of customer loyalty and on par or better repayment performance amongst poorest households. Though the initial cost to target and service these clients is nominally higher, the long-term outcome poses potentially significant financial results for the institution serving them.