Tembisa Small Business Financial Diaries:
Key findings and recommendations

This report was commissioned by Standard Bank Community Banking

Bankable Frontier Associates LLC
www.bankablefrontier.com
2 July 2010
Previous draft date: 15 June 2010

EXECUTIVE SUMMARY

1. *Background of this report:* Standard Bank Community Bank is committed to providing a full suite of financial products in low income areas. The commercial lending pilot in Tembisa is key in developing one of those core products, a loan to small business owners. This report outlines the findings of Financial Diaries done with fifteen of the Tembisa loan recipients.

2. *Objectives of this report:* This report reviews the findings of the Tembisa Small Business Financial Diaries, a study designed to better understand the cash flow profiles and behaviour arises from the a Standard Bank loan. The Financial Diaries were used a year long study of households in South Africa in 2003/2004[1] (hereafter referred to as the "2003/2004 household Financial Diaries"). The objectives of this report are two-fold:

    a. To describe a small set of loan recipients in Tembisa with details about their cash flow behaviour, use and servicing of the Standard Bank loan and other qualitative and quantitative details about their business; and

    b. To use the findings to comment on the design of the Standard Bank loan offering to small enterprises.

3. *Methodology:* This study included fifteen small business owners in Tembisa, across a range of industries. Businesses were tracked over the course of a month, being interviewed every 10 days to capture all household and business level cash flows: income, expenditure, financial instrument usage and asset changes. Business owners were also asked a series of qualitative, open-ended questions about the business history, difficulties, skills and interactions with customers, suppliers and competitors as well as how they used and serviced the Standard Bank loan.

4. *Key lessons learned:* One of the purposes of this study was to better understand whether the loans being made in Tembisa could be considered successful from the client's point of view. This study is not an impact evaluation and therefore cannot provide details comparing the respondents business prior to the loan to after. However, there are a number of key lessons that come out of this exercise that can inform us both about small business owners and how they use the Standard Bank Community Banking loan:

    a. **Overall, the loan from Standard Bank Community Banking does appear to be an effective product being used productively by small business owners, most of whom are taking on the lion's share of income production in the household and who are not**

[1] For more information, see www.financialdiaries.com.

able to get appropriate financing from elsewhere. Most business owners in this sample are using the loan to make creative, informed investments in their business and most of the businesses in the sample contributed at least 50% of the monthly household income.

b. **Most of the small businesses in the sample could be categorized as being in what has been called the "zone of transition,"[2]** i.e the size at which the greatest impact can be made most rapidly.

c. **This sample of businesses was run by owners whose household income was relatively low and whose business profits made up the bulk of household income.** Across the sample, average monthly household income per capita was R2 791, average business profits after finance repayments were R6 004 and the average share of business income to household income was 86%.

d. **Money is always fungible between business- and household-level spending.** There were no business owners in this sample that kept their business-level transactions distinct from their household-level transactions.

e. **Standard Bank Community Banking loans were generally used for business purposes, not for personal consumption.** Two thirds of the respondents in the sample used the loan for purely business purposes, buying stock or making some sort of upgrade to improve their overall business. Most of the remainder spent the loan on a combination of personal savings (not consumption) and business needs, and only one respondent used the loan for purely personal reasons.

f. **Respondents generally tapped into the Standard Bank Community Banking loan multiple times rather than withdrawing the entire amount at once.** Respondents withdrew the loan money an average of 3.5 times over the life of the loan, rather than all at once. This, however, may not have been by design, as a number of respondents expressed their surprise and frustration at withdrawal limits at ATMs.

g. **The ratio of monthly loan repayment to profits before financing varied broadly across this sample of businesses, from 5.7% to 42.2%.** Four of the fifteen businesses had a loan repayment to profits before financing of over 25%, a level which we would call a heavy loan burden.

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[2] See FinScope Small Business Pilot. The zone of transition describes small business within Business Sophistication Measures 3 and 6.

h. **However, the heavy loan burden did not appear to cause stress among the respondents.** They did not borrow elsewhere to meet loan repayments. In fact, many continued to save. Only one (oddly, with a low debt service ratio) expressed strain in making loan repayments.

i. **But we did find that those with heavy loan burdens also tended to use the loan for "liquidity" purposes such as buying stock to keep the business going.** Seven of fourteen business with whom we were able to trace the "life" of their loan used the loan for this purpose, including three out of the four heavily debt burdened households. We suggest that this signals a mismatch between the structure of the loan and the needs of the business.

j. **Small businesses in low income communities handle small amounts of money on a daily basis.** Nearly all respondents also said that they build up the money for repayment in small amounts, mostly by keeping some of the business revenues in their house every day.

5. Suggestions: As this was a study on only a small number of businesses, which only ran for six weeks, suggestions should be not be taken without further exploration. However, the findings above generate several ideas about how Standard Bank Community Banking can best serve these clients with appropriate product designs, not only for credit products but also savings and insurance. These suggestions are discussed in the final chapter of this report.

ACKNOWLEDGEMENTS

Our thanks are due to several people at Standard Bank Community Banking who enabled us to complete this research: Carline Southey, Smita Sircar, Marcelle Desfontaines and Ndleleni Macdonald Kumalo. Thanks also go to the respondents who patiently endured our persistent questions. All errors are our own.

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2 July 2010

TABLE OF CONTENTS

1. INTRODUCTION

As part of a range of core businesses, Standard Bank Community Banking has embarked on a for- profit, small business lending exercise involving 700 small businesses in Tembisa, a township in Johannesburg. In this exercise, they are piloting a sustainable business model that aims to reach out to a new market segment with minimum impact on the traditional banking infrastructure. Should this pilot be success, the model will be rolled out into more areas.

Many of the indications of success in this pilot will come from the financial results of the lending business itself – was it profitable, does it has external benefits for other parts of Community Banking business, does it fit appropriately within the range of business models that Community Banking is implementing? However, a key attribute of success also comes from the viewpoint of the borrowers – what difference did the loan make to their income earning potential, how did they service the loan, and what did they use the loan for?

Understanding the financial and business management of low income households is one of the most challenging areas of client level research. In South Africa, the FinScope Small Business pilot in Gauteng (African Response, 2006) has been an important break-through in providing rigorous information about the dealings of small businesses and how they interact with each other and the broader financial sector. Importantly, FinScope Small Business allowed policymakers and financial service providers to begin to speak about meaningful segmentations of small businesses, by defining and using a new Business Sophistication Measure (BSM). The rich FinScope Small Business Survey data allowed financial providers in the small business sector to estimate market size and conduct needs analyses by segment.

However, FinScope Small Business does not touch many of the more detailed questions we still wish to know about Standard Bank Community Banking clients in Tembisa. We know very little about how they operate on a day-to-day basis and this creates gaps in our understanding of what they need to run their businesses better. We assume that businesses need loans to expand, or even to start up, but do their financial services needs stop at capital loans? How do they bridge cash flows? How do they save? Are there financial services products particular to small businesses, as opposed to households, that need to be designed?

The Financial Diaries[3] is an effective new tool for data collection which can be used to deepen knowledge about the financial flows in the lives of poor households, their businesses and their communities. Most data collection methods interview households only once or, at the most, two or three times. However, it takes time to gain the trust and understanding of households, particularly around such a sensitive area as finances. Using a finely tuned research instrument, over time, results in more meaningful data.

A Small Business Financial Diaries pilot was implemented in early 2009 by purposively selecting a group of 20 businesses around Langa and Nyanga, Cape Town (herewith referred to as the 2009 Small Business Financial Diaries pilot). These businesses were interviewed intensively by a team of field workers over the course of two months. We have used the same methodology to gather data on Standard Bank Community Banking's clients in Tembisa.

1.1 Main objectives

The over-arching goal of the Tembisa Financial Diaries is to provide an in-depth understanding of the clients of the Tembisa small business lending pilot. More specifically, the objectives are:

1. To provide evidence of how the clients are **using their loans**. We assume that borrowers will use the entire loan for a big capital purchase to expand the business. However, previous Financial Diaries exercises suggest that many clients will use the loan little by little to provide ongoing working capital support. Or they may use the loan in part to help with household level needs. Therefore, we had the business owners trace in detail what they did with their loan, step by step.

2. To show how the business owner actually manages to **service their loan**. We assume that households are servicing loans from the proceeds of the business, but previous Financial Diaries exercises suggest that money is fungible within the household, so the loan may be repaid out of another

[3] The first Financial Diaries study was conducted by Stuart Rutherford in Bangladesh in 1999 with a sample size of 42 households. The second was led by Orlanda Ruthven in India in 2000, with a sample of 48 households. Both used largely qualitative methods. Daryl Collins developed the Financial Diaries into a highly quantitative method, and was able to increase the accuracy of the data and the sample size by constructing the Financial Diaries database. She led the most recent study in South Africa, with 180 households, in 2004. The results from all three studies form the basis of a newly released book: Collins, Daryl, Jonathan Morduch, Stuart Rutherford and Orlanda Ruthven. 2009. *Portfolios of the Poor*. New Jersey and Oxford: Princeton University Press.

household level income, such as another family member's salary. How much and to what extent this is happens across different types and sizes of businesses is a key learning.

3. To establish the **cash flow profiles** of small businesses. Small businesses tend to deal with small amounts of irregular and high frequency cash. This may present a mismatch for a traditional loan which has an inflexible duration and monthly repayments. The 2009 Small Business Financial Diaries pilot suggested that a line of credit would be more helpful to households than providing a lump sum loan to be paid back in instalments. Households often would need bridging finance if their customers didn't pay them back on time or if they had bad sales but still needed to buy fresh stock. Do we find the same pattern with Tembisa's small businesses?

4. To assess the **sizes of loans** offered. The incidence of default at the business level will provide some indication of whether loans are too big, but another indication is whether businesses can easily find money to service the loan or put it to use all at once. On the other hand, if the loan size is too small, it might be easily misallocated to personal purchase. The Tembisa Financial Diaries hopes to learn more about how clients use and repay their loans to understand the reasons behind a potential default.

1.2 Methodology and sample selection

Given the above objectives, the businesses selected for the financial diaries in Tembisa had the following features:

- In order to see how businesses have used the loan and with what patterns, we targeted businesses who received their loans about 4-5 months prior to the start of field work (which was April 1, 2010).
- We also chose businesses across a breadth of business types – including retail, services and manufacturing - and sizes of loans.
- Lastly, we chose purposively among business owners that the Standard Bank Community Banking team thought would be welcoming, willing to be interviewed and forthcoming. After all, we wanted to get as much detail as possible about the business in a short period of time, so we needed to approach businesses with whom we could work with a minimum of hassle.

The recruitment process generated a sample of 15 households. This sample is described in Chapter 2.

Although the focus in the Tembisa Financial Diaries was on small businesses, we made a conscious decision to consider the household as our unit of analysis. The basis for this decision was that earlier 2003/2004 household-level Financial Diaries showed that most businesses owned by respondent households did not separate the cash flow activities in the businesses from those of the household. So, for example, even a fairly high level business person, like an undertaker, would use his personal bank account to transact for his business, and he might use a personal loan for a number of reasons, including buying some stock for the business. If we asked purely about business level financial transactions, we would miss out on a great deal of the action.

Following an initial questionnaire, the Tembisa Financial Diaries continuously tracked the cash flows of the sample respondent households over the course of a month. The initial questionnaire asked about the household members, income sources (including other forms of informal income like casual work and rental income and remittances), assets and financial instruments. This information was then used to craft a "diary" questionnaire specific to each household. It is important to note that the word "diaries" is something of a misnomer—respondent households did not actually keep a diary themselves. They were interviewed by an experienced field researcher every week.

The diaries interviews were dynamic in nature – they did *not* simply ask respondents the same set of questions every week, but were rather produced using a specially-built relational database to generate questionnaires specific to each household. Each weekly diary questionnaire for each business owner was based on data from the previous interview. These uniquely relevant questionnaires yielded a higher precision of recall, even for the smallest financial transactions. It also meant that diaries interviews took only about 20 minutes, an important benefit for busy business owners.

Having a short quantitative questionnaire to capture cash flow data also allowed the field researcher to spend time with the respondents talking about some of the qualitative aspects of their business experience. In addition to the daily quantitative data collected for each household and business, we also asked a different set of qualitative questions each week:

- Week 1: History and skills– how did you get into this business and how did you acquire the skills you need?
- Week 2: Interactions with other people – credit given, credit taken, collaborations?

- Week 3: Retroactive "life of the Standard Bank loan" – tell me bit by bit how you spent the loan, was it all at once, do you still have some left, what are your plans for what is left?
- Week 4: Servicing the loan – how did you find the money to repay?

The end result is a rich mix of qualitative and quantitative data gathered for a set of 15 businesses for the months of April/May 2010.

2. SAMPLE DESCRIPTION

2.1 Describing the sample across industries

We selected businesses from as broad a range of industries as possible, from *spaza* shops to food businesses, from an internet café to a hair salon.

Table 1 below shows the number and types of business recruited for the sample, as well as the average household income, the average monthly business profits and the business profit share of household income. Most of these businesses were entangled in households that earned an average monthly household income that ranged between R2 500 to R23 000. Monthly business profits over the months of April/May 2010 ranged from R1 500 to R18 000. For most households, the business is a crucial part of the overall income stream. Only one business contributed less than 50% to the household income.

Table 1: Sample by industry

Type of business	No. of businesses in sample	Examples	Avg. monthly household income*	Avg. monthly business profits**	Business profit % of household income
Services	5	Catering, Day Care Centers, Hair Salon, Internet Café Supply and install car sounds	R 8,115	R5,645	70%
Retailing	6	Selling of audio equipment, Spaza Shop, Tavern, Tuck-shops	R10,129	R7,692	77%
Manufacturing	4	Cooking food[4]	R7,546	R3,660	49%

**Left out where other household members did not participate in the study.*

***Based on the months of April/May 2010.*

2.2 Describing the sample across BSMs

To get a sense of how small or unsophisticated these businesses are, we asked households a set of questions during the recruitment interview to construct a "quasi-BSM."[5] Our questions included where

[4] We used a rather generous definition of manufacturing which is anything to which the respondent added value.

the business took place, the number of paid employees, whether the business owner had a cell phone, whether there was electricity and hot running water at the business site, whether the business was tax registered and whether the business owner combined household and business cash flows. Once we had our month-long cash flow details, we were able to add average annual turnover to this set of indicators.

Table 2 shows the number of businesses in each BSM category, along with each indicator used to estimate the BSM. As shown, most businesses in the sample were between BSM 3 and 6, right in the middle of what the FinScope Small Business pilot calls the "zone of transition" at which size of business the greatest impact can be made most rapidly. We can also see that the most important indicator is certainly not whether the business owner has a cell phone or electricity, as all the businesses in the sample had these. The annual turnover is much more important. It is also worth pointing out that all business owners combine their household and business cash flows, even those who are more sophisticated.

Table 2: Sample by BSM

Estimated BSM	No. of businesses in sample	Average annual turnover	Premises mostly…	No. of paid employees	% cell phone	% electricity	% combine cash flows
3	1	R83,520	Owned corrugated iron structure	3	100%	100%	100%
4	6	R111,789	Home 43% Rented room 14% Container 43%	2	100%	100%	100%
5	7	R257,885	Home 50% Rented room 50%	2	100%	100%	100%
6	1	R474,546	Rented room	0	100%	100%	100%

[5] The FinScope Small Business Survey uses many more indicators than we did to create BSMs, so these estimated should only be considered indicative. They also included a wide array of 26 questions including details on assets, loans, legal structure, financial records and tax practices. We did not have the opportunity to ask the entire array of questions and therefore focused on the ones that were the most easy to answer in an initial interview and that seemed to be the most relevant.

3. ROBUSTNESS OF THE DATA

3.1 Measuring data robustness in the 2003/2004 household Financial Diaries

One of the built in functions of the Financial Diaries database is the ability to determine the robustness of the data and pinpoint areas of weakness while the data is being collected. The way this is done is to match the sources of funds to the uses of funds in every interview. In other words, we aggregate all the cash flows flowing *into* the household (from income or from financial instruments like bank withdrawals, or the receipt of a loan) and match them against the cash flows going *out* of the household (for expenditures or to financial instruments, like depositing cash into a bank account, paying premiums on insurance, or making payments on a loan). The net result, plus and minus cash on hand for the previous interview and the current interview, respectively, should be zero if all the cash flows have been captured. Any net result other than zero is the **margin of error**. In the year-long 2003/2004 household financial diaries, the margin of error averaged about 6% of sources of funds (see Annex 2 for more details).

3.2 Margin of error in the 2009 Small Business Financial Diaries pilot

An example from the Tembisa Financial Dairies shows how this margin of error is calculated. Ruth is the owner of a crèche in Tembisa. She originally was a *spaza* shop owner in Kaalfontien. This was a good business and she was able to save money, but ultimately she imagined that a crèche would be a better business. In 2002, she closed her spaza shop and started her crèche with eighteen children. Now she has thirty-five children in her crèche ranging from infants (for whom she charges R200 per month) to toddlers (R170 per month) and pre-schoolers (R180 per month). She buys stationary and food for use in the crèche and ultimately she'd like to buy a van that will fetch and return the children from home. Her loan from Standard Bank Community Banking was R10 000 and she used it to buy building materials to renovate the crèche.

In Table 3 below are the cash flows for Ruth over the course of two weeks at the beginning of April. The business revenues drive the cash flows in the household, as they are the most regular income in the household. These revenues tend to come in a cluster around the very end and beginning of every month, as parents pay their fees, although as some pay late, more revenues will trickle in later in the month. So, for example, in Table 3, all the revenues that she received over the time period, she received in a single day, the 31st of March. She deposited the R1 000 of those fees in her bank right away in time for the Standard Bank loan repayment to go off on the second of the month. In the next few days Ruth used the remaining revenues as well as some savings in her ABSA account to pay business expenses, her funeral plan premium, buy food for her house and pay for other household expenses. When she finished making those purchases, she deposited R3 100 in her ABSA account to save. All of her cash flows tend to be clumped around the turn of the month, when most of her revenues flow in.

Table 3: Ruth's Sources and Uses of Funds, March 30, 2010 – April 14, 2010

Sources of funds		Uses of funds	
Operational		*Operational*	
Business revenues	R4140	Food	R172
		Business inventory	R500
		Business expenses	R200
		Newspapers/ stationary	R299
Financial		Transport to shopping	R60
Withdrawal from bank account	R2539	Cell phone airtime	R59
		Financial	
		Bank account deposit	R4100
		Funeral insurance premium	R240
		Standard Bank loan repayment	R1299
Total	**R6 769**	**Total**	**R6 685**

Survey margin of error (R6769 – R6685) = -R6

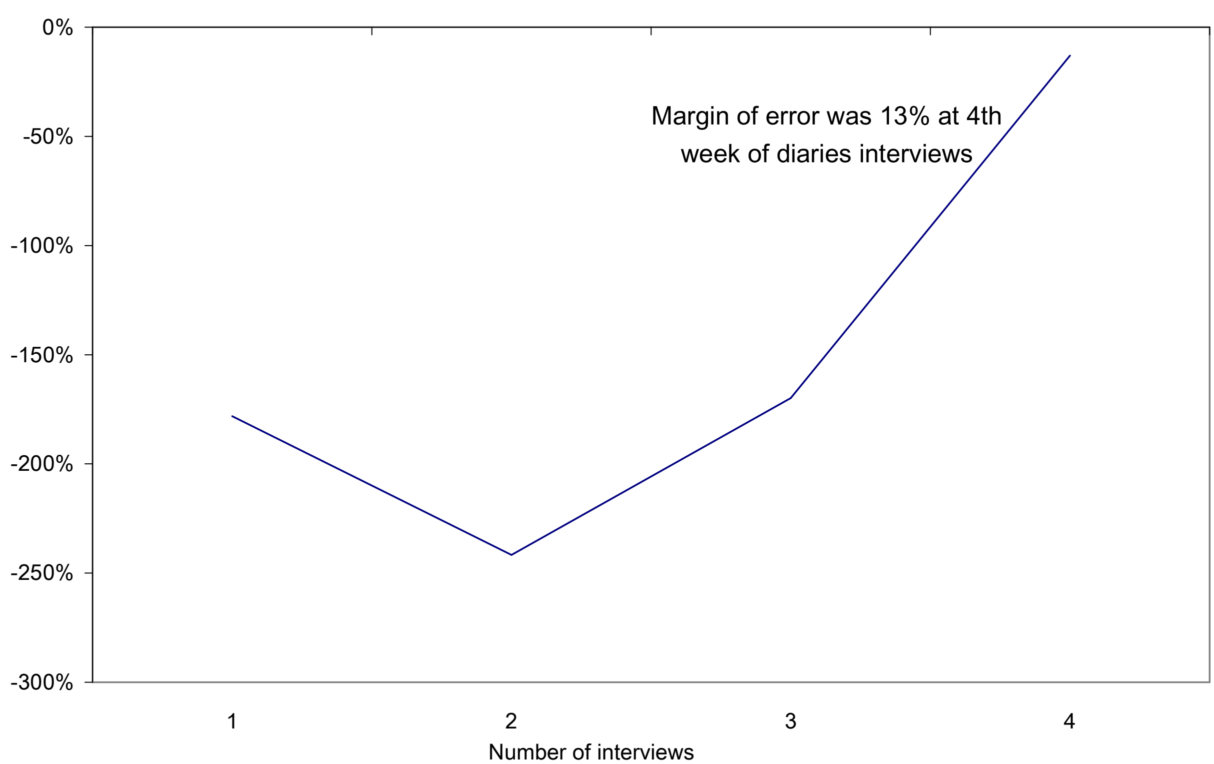
As Table 3 shows, the sources of funds for Ruth nearly matches the uses of funds, which means the margin of error is practically 0. This suggests that we obtained a full set of cash flows for Ruth, which is consistent with the field researcher's experience, who found Ruth was very helpful and forthcoming during the survey.

However, we did not expect that every respondent would be as easy to work with as Ruth. In the 2009 Small Business Financial Diaries pilot, the margin of error was larger than in the 2003/2004household Financial Diaries for several reasons. First, the respondents only went through only one initial interview – usually this is a much more gradual process that takes place over a total of four interviews, with every interview affording the respondent and interviewer to get to know each other better. Second, we interviewed households with diary questionnaires only four times, which is less than the six times that we saw we needed to get robust data in the household Financial Diaries. Third, capturing cash flows for small businesses is harder than it is for households, because cash flows are much more frequent and business owners are particularly suspicious of the intent of the research.

In the 2009 Small Business Financial Diaries pilot, our initial margins of error were enormous, even bigger than seen in the first 2003/2004 household Financial Diaries interviews. Similar to the household Financial Diaries, the data got worse before it got better. Then it began to improve and in the fourth and last week of interviews, the margin of error was at 13% of sources of funds. This means that by the fourth and last week of interviews, we were starting to get a more complete set of cash flows from the business owners.

Chart 1: 2009 Small Business Financial Diaries Pilot Margin of Error

(% of sources of funds)

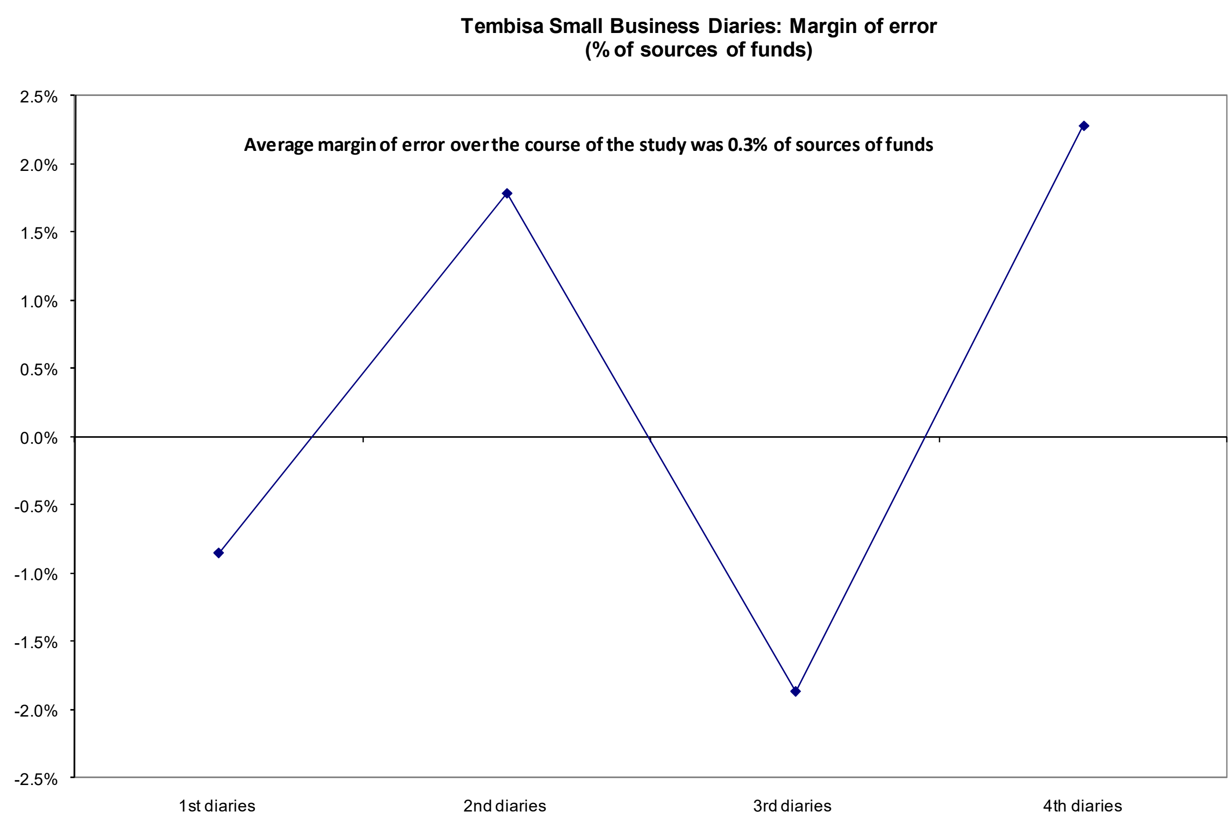


As the example with Ruth shows, the methodology performed much better in the Tembisa Financial Diaries, likely because of the experience of the researcher in tracking business, thanks to the 2009 pilot. We immediately were able to capture enough cash flows to provide us with a very small margin of error, which remained small throughout the interviews. Over the four diary interviews undertaken with respondents, the margin of errors averaged only 0.3% of sources of funds.

This was quite an accomplishment, given the obstacles we had working against us in the field. Our largest challenge was to distance ourselves from Standard Bank, as respondents were very wary of talking honestly to us. In fact, respondents were so suspicious, that we needed to spend a great deal of unexpected time trying to track them down to talk to us! Rather than doing six interviews over the six weeks, as we had planned, we were only able to do four interviews, because the business owners initially then gave us such a hard time. From then on, they had a hard time talking to us because their businesses were so busy. We took this as a good sign.

Chart 2: Tembisa Small Business Financial Diaries Margin of Error

(% of sources of funds)



Despite the good data that we were able to capture on these businesses, the dataset still has weakness. First, such a short, two-month-long set of data misses the seasonal ebbs and flows of both the business revenues and costs. The 2003/2004 household Financial Diaries showed us that most businesses have a strong seasonality to them. For example, Mambongo, the sheep intestine seller described in Annex 2, would find her business much decreased during the winter when it was raining and people were not coming outside to buy from her. She would take a casual job during the winter and let her daughter look after the business to make ends meet.

Another aspect we would not see in a month long survey, or even in a longer survey, is how the business reacts to events in the household. In the household Financial Diaries, there were roughly 200 financially relevant events that happened to 152 households over the course of 1 year. That is just over 1 event per household over a year. One might reasonably then conclude that to capture at least one event per household, we would want to spend at least a year in the field.

There are also aspects of the Tembisa dataset that we suspect are missing. For example, several respondents report that they give credit to customers but only one reported actual outstanding credits being given and repaid during the six weeks of interviews. We know from the experience of the 2003/2004 household Financial Diaries that small business usually give credit on a much more regular basis. We also suspect that there are other short term financial exchanges, such as giving and taking small loans, which we missed simply because we were not engaged with the respondents long enough to capture these.

Lastly, there are certain things that we cannot expect to capture, like the cash flows of household members who refuse to participate in the study. In the Tembisa Financial Diaries, many of the household members that worked refused to participate. Perhaps if we had been able to interview the business owners for longer, perhaps we would have gained the trust of the entire household.

4. USING THE TEMBISA SMALL BUSINESS DIARIES DATA: KEY OBSERVATIONS

Among the fifteen respondents in the Tembisa Financial Diaries, we found many different types of business, not only in terms of the commodities they sold and the services they provided, but also in terms of how large the business was, whether it was managed conservatively or not, whether cash flow was tight, or whether the business was at the centre of income generation in the household. We found that simply asking questions about their businesses and what they needed was not enough to really understand the relative health or weakness of their enterprises. We needed to ask about the entire premise of how the business started, what other incomes and expenditures were happening in the household, and generally look at their financial positions with the eye of a financial advisor. In this way, we were able to make judgments about how their businesses ran and what they might need in terms of financial services, whether they had thought of this or not. We used the combination of qualitative responses and quantitative cash flow statements, income statements and balance sheets to provide some initial insights on four questions below.

4.1 How are the business owners using their Standard Bank loan?

A question long asked in the microfinance industry is whether loans made for business purposes are actually used for the household and not put back into the business. In order to answer this, we asked households to help us trace the "life of their loan." We were able to do this for fourteen of the fifteen respondents.[6]

What we found was reassuring because most of them (eight to be exact) spent the loan strictly on business purchases. Only one of them spent the loan funds entirely on private purposes, which was helping her sister pay off a hire purchase credit and to pay for school fees and Christmas gifts. The remainder (five) spent on a combination of both personal and business, most of which were not consumption-related:

- A tuckshop owner used R1 000 of a R6 000 loan to save in a *stokvel*, although the ultimate purpose of the *stokvel* was business related.
- A car sound business owner appeared to have invested the money into a different business than what he claimed to be doing, a chip frying business, but there was no appearance of that business during the time we were speaking to this respondent.

[6] One respondent, a tuckshop owner, proved so difficult to get ahold of after the first 2 interviews that we gave up.

- An internet café owner transferred money into a different bank account for an unspecified use.

Four out of the fourteen still had funds left over by the time we were speaking with them. For most, they were keeping aside to fund repayment.

We were also curious about the cash flow pattern of loan use – did respondents use the loan in one big lump or did they use it in small increments? We felt that knowing how business owners used the loan might provide us some indication of whether the structure of the loan was appropriately matched to their needs. We found that most (eleven out of the fourteen) withdrew the money in multiple withdrawals rather than one large withdrawal, on average withdrawing 3.5 times over the life of the loan. However, this was not necessarily by design. Several complained that they bumped into a limit of R1 000 each time, presumably because they were withdrawing from an ATM. Most reported that they had wanted to withdraw all at once, were frustrated by this limit and only one knew how to change it.

4.2 How did respondents manage to service their loans?

Another key question is whether these loans are overwhelming clients. The microfinance industry is currently deliberating whether their clients are becoming increasingly indebted and borrowing from multiple sources. On the face of it, this certainly did not seem to be the case. Only one of the respondents we spoke with short-paid on her loan, and it seems that this was largely due to a misunderstanding rather than cash flow difficulties. And when asked, only one out of fourteen respondents admitted that he found repaying the loan stressful because it was a slow period for his business. Otherwise, all respondents said that they paid the loan easily and did so purely from the proceeds of their business.

However, we felt we needed to read between the lines to understand how true this was, or whether business owners were nervous about telling us the trouble they were having for fear it might jeopardize their ability to get another loan. Nonetheless, the more we knew about the businesses, the more we determined that perhaps it wasn't that the loans were too *big* for some of the clients, but they were not of the right *structure* for all clients.

First, having gathered robust data on the business cash flows, we knew that on average the share of the monthly loan repayment to profits before financing costs was 20%. However, this varied broadly across these businesses, from 5.7% for the very profitable audio sound business which grosses R39 545 per month, to 42.2% for the tavern which grosses R8 933 per month. If we take a (generous) benchmark ratio of loan repayment to profits before financing costs of 25%, then four out of the fourteen businesses were overstretched by loan repayments. Some businesses also reported leaving some money in their Standard Bank account to cover the loan repayment, including two of these "highly indebted" businesses. Overall, this suggested to us that indeed the loan for these particularly businesses was surely too large.

But perhaps maybe business owners were tapping into other household income to help service the loans? We found however, that for most of these households in the sample, the business income makes up a substantial part of household income. For seven of them, the business constituted the only household income available. For seven of the others, the business contributed at least 50% of the household income. There was only one for whom the business was less than half the household income. The four "highly indebted" businesses were indeed forced to pay for the loan out of their business cash flows.

A very bad outcome would be if business owners dealt with their Standard Bank debt by taking on other debt. To answer this, we looked to the financial portfolios of these four heavily indebted businesses and their household members. On the whole, we found that they were not indebted to other credit instruments. To the contrary, most were engaged in saving in either *stokvels* or in bank accounts. One had a store credit card with a balance of R1900, but, like almost all the small businesses in this sample, we saw no *mashonisa* loans or loans from micro lenders.

So, in sum, it does indeed appear that despite sometimes large loan repayments to profits, businesses were able to service their loans without using other household income and without taking on additional debt. In short, businesses can and did service their loans faithfully from their business profits. However, with incidents of such high levels of debt service, surely the question of whether the loan size is appropriate for the business has to be looked at in greater detail.

4.3 Are these loans the right size for the business?

Although the section above suggested that the small businesses in this sample can and did handle the servicing of the loan with their profits, there remains a concern of whether the size of the loan is appropriate for the business. Is the Standard Bank loan causing these households to take on more debt than their businesses can afford?

We found one way of addressing this question by looking more carefully at the use of the loan: was it used to buy stock, or to manage personal liquidity? We would loosely consider this use of the loan as a "liquidity" purchase, i.e. using the loan to bridge either personal or business cash flow. There were seven out of the fourteen businesses that used the loan in this way, and included three out of the four "highly indebted" businesses. So when we correlate these loan uses to loan repayment as a percent of profits, indeed those who had repayments higher than 25% of business profits did seem to use the loan more for cash flow bridging than capital investments.

What struck us then is that perhaps we are looking at two different types of clients, each with particular needs. One was ideal for the current Standard Bank loan: they had a strong and consistent business, a specific and targeted investment intention for the use of their loan and could easily service it with 25% or less of the business cash flow.

We met one of these businesses earlier – Ruth, who runs the crèche, discussed in Section 3.2. Her business is thriving. She makes a profit of R7190 in an average month before she pays R1300 for her Standard Bank loan. The loan only takes up 18% of her gross profits, giving her a net of R5890 for her family of three to live on. Her profit margin[7] is extremely high at 67% with only one employee and very low expenses. She had a very clear vision of using the Standard Bank loan to renovate her crèche so she could expand it and take on more children. In Ruth's situation, the R10 000 loan from Standard Bank was ideal.

But another case is Bessie, who sells chips and Kotas. In 2003, Bessie was a housewife with no income, yet her children were growing, needing more things and she felt that she needed to make some extra

[7] We refer to profit margin several times in this report. We calculate this as profits after financing (revenues less expenses, cost of goods sold, employee wages and financing costs) over revenues.

money to provide for them. With some small cash given to her by her husband, she bought a box of cigarettes and sold each one for 30 cents. Then she bought mixture to make cool "ice pops" which she sold for 20 cents each. And from those revenues she bought crisps and starting selling those as well. Finally, with the savings that she built up, she bought machines to allow her to make and sell chips and Kotas. This business income has grown to become quite important in her household, making up 77% of the household income, to support eight household members. They supplement this with R1 000 per month income renting out rooms in their yard.

When customers are flowing, Bessie's business is really quite good. She clears about a profit of R2 256 per month after servicing her R10 000 Standard Bank Community Banking loan, with a profit margin is 25%. However, the loan repayment is heavy for this business, eating up a third, or R1 139, of before financing profits every month.

The way Bessie has used her loan indicates that she would have been much better off using smaller bits of cash flow to make sure she could build her stocks back up when cash flow is poor. She made a total of five withdrawals of between R850 and R2000 over the course of the loan and all of them were to buy stock to keep the business going. The amount she didn't use was held in her bank account, earning far less interest than she was paying. Clearly, the structure of this loan is not optimal for Bessie's needs.

4.4 How could a credit product better match the cash flows of these businesses?

Two perspectives: Cash flow going to the client and cash flow coming from the client

We look at two cash flow elements of a credit product. The first is how the money used by the client, i.e. for what purpose and in what cash flow patterns. The second is how the client repays the loan, i.e. how and where the repayment money is accumulated, where the money comes from, and how hard it is for the client to keep it aside for repayment.

Cash flow going to the client: Capital versus cash flow loans

The data suggests that not every business needs or should have a large capital loan. This does not mean that the businesses are any less profitable, or that the owners are less creditworthy. But rather than having a specific investment in mind, they need a cash flow loan that will help them keep their businesses going during lean times. The credit they need to take on at any given time is not as much as the R10 000 loan they've taken, but smaller amounts that they can pay off more quickly.

As discussed above, nearly half of the businesses surveyed were those who fall into the category of using their loan for "liquidity purposes" either bridging their business cash flows, by buying stock, or their personal cash flows. A more flexible type of loan in which credit can be taken in small amounts as businesses slows and be repaid as it picks up can keep these businesses going and keep cash coming into the household. This does not have to take the form of a traditional overdraft or revolving credit product, but could be a hybrid savings lending, where one can simultaneously build up savings as well as borrow.[8]

Cash flow coming from the client: Repayment options

The Tembisa Financial Diaries reminds us that small business handle small amounts of money on a day to day basis. In this regard, it is particularly difficult for small business owners to keep money safe from being used for other purposes, let alone from theft. Most business owners reported saving small bits of revenue in their houses until the debit order fell due, when they would deposit the amount into their account. This is clearly not optimal cash management. One solution is to change the loan product so that borrowers can easily repay on a more flexible and frequent basis. Another more pragmatic approach is to ensure that the deposit mechanism into a Standard Bank account can easily and consistently happen via the retail agent system with the township.

[8] SafeSave's P9 product is currently enjoying success not only in Bangladesh, but also being piloted on "mobile money rails" in Kenya. See more on http://www.thepoorandtheirmoney.com/Products.htm.

5. SUGGESTIONS FOR FUTURE PRODUCT DESIGN AND BUSINESS DEVELOPMENT

This exercise has by no means given us a complete understanding of small businesses but it has illuminated certain insights which could be applied to future product and business development:

1. **Overall, loans from Standard Bank Community Banking is an effective product being used productively for small businesses, most of whom are not able to get appropriate financing from elsewhere:** Most business owners in this sample are using the loan to make creative, informed investments in their business: cold storage in which to store beer, a trampoline to attract small children, renovations for a crèche. Most of these small business owners have not taken on any other credit. This does not mean that other credit is not on offer to them: the tavern owners can buy stock on credit and anyone can borrow from a *stokvel*, moneylender or relative. However, loans at these sizes and these terms are unlikely to be available, and therefore they are giving these business owners an opportunity to invest in their businesses in ways that will hopefully make them bigger. All are already profitable, and many have high profit margins of 30% or more. For these businesses, the trick is moving to scale and capturing more customers. Lastly, for many of these business owners, their income is the only in the household.
2. **Consider also offering a more flexible, cash flow bridging product:** Nonetheless, not all of these business owners, in fact just under 50% of them, are using the loan for large capital expenditures but are rather using it to buy stock or meet some other liquidity needs. This suggests that there is an additional need for a flexible, cash flow bridging product. Although this product may not increase the size of the business, it will keep the owner in business over slower times, which means a consistent flow of income into their households.
3. **Consider also trying to make repayments timing and opportunities more flexible.** Most respondents said they build up their loan repayment slowly by saving in their house. But if they could easily stop by the retail agent to make a deposit every day, with into the loan account or into their transaction account, those incremental sums would be much less prone to capture to be used for purposes other than loan repayment, as well as less likely to be stolen in dangerous Tembisa.
4. **Execution matters a great deal for the efficient use of funds.** Several respondents said they wanted to draw loan funds all at once but were limited to drawing R1000 per day. This

complaint can likely be remedied easily and it should be to make sure the customers are happy with the service. However, there is another reason why it should be fixed. Clients who have clear intentions about how to use a loan get stymied when they are not able to take it in one big lump sum. Lump sums are precious and usually spent wisely, where small increments are more likely to get frittered away. By ensuring that clients can access their loan in one lump sum, there is a greater likelihood that the loan will end up financing what it is meant to.   Both of these last two points are largely points about mechanisms, which matter as much, if not more, as product design.

5. **Other products, particularly savings, still matter to small businesses:** Many of the business owners in this study have other bank accounts and several have accumulated sizable savings, but they also have sizable savings in their house.   We would argue that for small business owners, who trade so visibly in cash, convenient and safe access to a transaction account is key.

ANNEX 1: BUSINESS PROFILES

Estimated BSM: 3

CRECHE OWNER

(BFA code: THDCMA)
Loan size: R12 000
Monthly loan repayment: R1350
Number of withdrawals on loan capital: 4
Loan use: Used to help family pay off debts

Martha is a 50 year old women living with seven other family members including her grandmother, two nieces and her children. Only one other family member, her niece, is employed at the local clinic (we were not able to find out her income). Her grandmother and her children receive social grants. Her business contributes 74% to the household income, in addition to a child grant and occasional remittances.

Martha has operated her crèche in a corrugated iron structure since 2000. She had been a teacher for eight years at Umthambeka, but she resigned when her qualifications were questioned by the education department. It was at that point that she decided to open the crèche. She has between ten and eleven children every day and charges R180 per month for under 2 years and R150 for anyone older.

Martha's business is really quite good – she has a high profit margin, as her main expenses are simply buying food for the crèche. She pays her workers irregularly and with a fairly minimal salary. Her most pressing problem with the crèche is that the parents find it difficult to pay for fees on time. She finds that she cannot send the children away if the fees are in arrears but she waits until the parents can come up with the money and she does not charge interest. [9] She currently operates the crèche out of a big zinc shack and she hopes to build a brick structure once she has the title deed for the property in hand.

Martha is unusual in the sample in that she used the entirety of the R12 000 loan from Standard Bank Community Banking to help her family rather than on the business:

- R7500 was given to her sister to settle her outstanding debt with a furniture retailer

[9] As discussed above in the methodology section, given that she has this problem with payments in arrears, it is surprising that she did not tell us about current fees that are outstanding. We would imagine this is a crucial part of her business flows that she manages.

- R2000 was used to pay for the school fees of her daughter and nephews
- The remaining amount was used for Christmas presents.

During the time we spoke with her, her loan repayment was paid by her sister via debt order to her Standard bank account, in time for the loan repayment to be made.

Martha has a rather strong financial portfolio, with no other debt (in fact this was her first experience with a formal loan), but with savings in the house, in another bank account and in a 32 day notice account.

Household Income and Net Worth

Monthly Household Income	R8 160	Percent of household income
Child Grant	R750	9%
Remittance	R1 350	17%
Business Profits	R6 060	74%
Household Net Worth (Mainly comprised of value of crèche building, and her own furniture)	**R12 100**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Implied annual turnover)	R6 960 (R83,520)
Expenses	R0
Cost of goods sold	R300
Wages	R600
SBCB loan repayment	R1 350
Other financing	R0
Profit	R4 710
Profit margin	67.7%
Loan repayment as % of monthly profits	22.3%
Loan size compared to annual turnover	14.4%

Financial Portfolio

- Bank account
  - Martha Nedbank savings account Current balance =R1400

▪ Martha	Standard Bank saving, Current balance = 0, uses only for debit order of loan repayment
❖ Investment account	
▪ Martha	Nedbank, 32 days notice deposit, automatically debits R100 from her Nedbank saving account every month. Current balance = not known, considers it a type of insurance
❖ Formal Loan	
▪ Martha	Standard bank community banking, R12 000 as principle with a monthly repayment of R1350 per month.
❖ Saving in the house	
▪ Martha	Balance= R1800

Estimated BSM: 4

SECOND CRECHE OWNER

(BFA code: THDCRE)
Loan size: R10 000
Monthly loan repayment: R1300
Number of withdrawals on loan capital: 10
Loan use: Help building and renovating of creche

Ruth is a 45 year old woman who has run her crèche from her home in the Kaalfontein area since 2002. She stays with her unemployed husband and a 17 year old child. Her business income accounts for about 74% of the monthly income, with irregular remittances coming in from time to time.

Before her crèche was in operation she was running a spaza shop from her home, using her savings to purchase stock to get it started. In 2002, she decided to close her shop and open a crèche instead, because she had always thought that having a crèche was a good business.

Ruth's crèche is larger than Martha's, with over twice as many children. She also charges slightly more than Martha. However, like Martha, she has cash flow problems from parents not paying on time. She claims that at least a third of them owe several months worth of fees (we unfortunately had a hard time capturing these details). But she does not send the children away if the parents are in arrears and when they ultimately pay, she does not charge interest.

She used all her Standard Bank Community Banking loan to renovate her crèche. She was one of several respondents who said they had a problem withdrawing only R1000 per day, which forced her to by the building materials little by little. She was greatly concerned about this as she knew she was being charged by many withdrawals but she did not know how to change this.

For the future, she would love to buy a van so she can also offer drop off and pick up of the children in the crèche.

Like Martha, she saves in another bank account and in the house, and she additionally has a funeral plan that she pays for every month. She has no other credit in her portfolio at the moment.

Household Income and Net Worth

Monthly Household Income	R9 690	Percent of household income
Remittance	R2 500	26%
Business Profits	R7 190	74%
Household Net Worth (Mainly comprised of value of her furniture)	**R10 300**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Implied annual turnover)	R9 190 (R110,280)
Expenses	R200
Inventories	R1 100
Wages	R700
SBCB loan repayment	R1 300
Other financing	R0
Profit	R7 190
Profit margin	64.1%
Loan repayment as % of monthly profits	18.1%
Loan size compared to annual turnover	9.1%

Financial Portfolio

- Bank account
  - Ruth — ABSA savings account Current balance = R2000
  - Ruth — Standard Bank saving account used to deposit money for the debit order to take place
- Funeral plan
  - Ruth — IFA, paid via debit order from the ABSA account, R230 per month
- Saving in the house
  - Ruth — Current balance= R2906
- Formal loan
  - Ruth — Standard Bank Community Banking, R10000 as principle, R1300 repayment per month via debt order

HAIR SALON

(BFA code: THHSNO)
Also has a dagga-selling business

Loan size: R10 000
Monthly loan repayment: R1129
Number of withdrawals on loan capital: 3
Loan use: Renovation of salon

Nell is a 39 woman who stays with her husband and one child. She operates three hair salons: one in Tsheph, another in Thafeni and a third in Attridgeville. During the course of the study, we found out that she has another business – selling dagga. However, we do not have any details on the revenues and inventory expenses of this business. Her husband is working at Fair Deal Furniture but he was not willing to participate in the study so we do not have information about his income or private expenditures.

Nell loved to work on people's hair when she was young and she charged very little money to style people's hair. She failed her matric and decided to go hair dressing college in Johannesburg in 1997, paying R2500 as a course fee.

Nell's (hair salon) business appears to be quite profitable, earning her a profit margin of nearly 70%, the highest in the sample. One of the biggest challenges she has, like the two crèche owners discussed above, is that she offers credit to her clients and does not charge interest.

Nell used all of her Standard Bank Community Banking loan on the renovation of her salon at Attridgeville, buying equipment, stocks and paints. One of her complaints about the loan is that she was told by the agent that, if business was bad, then she only needed to pay half the amount. However, when she did so, she was called by the Bank because there wasn't enough money for the debit order in the account. Strictly speaking, the loan repayments should not be overwhelming for her, being only 15% of profits.

It took us a quite a bit of time to really gain Nell's trust, but once we did, she told us a great deal about her business dealings – even that she also sold dagga on the side!

Household Income and Net Worth

Monthly Household Income	R9 457	Percent of household income
Remittance	R1 600	17%
Business Profits	R7 857	83%
Household Net Worth (Mainly comprised of value of business inventory, equipments and household contents)	**R43 400**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Implied annual turnover)	R9 643 (R115,714)
Expenses	R0
Cost of goods sold	R1 786
Wages paid	R0
SBCB loan repayment	R1 129
Other financing	R0
Profit	R7 857
Profit margin	69.8%
Loan repayment as % of monthly profits	14.4%
Loan size compared to annual turnover	8.6%

Financial Portfolio

- Bank accounts
  - Nell — Nedbank saving account Current Balance = R0
  - Nell — Standard bank SME account, Current balance = R0, she uses this for the loan repayment debit order.
- Stokvels
  - Nell — Rotating stokvel with 7 others, pays R500 per month
  - Nell — Goods stokvel with 7 others, pays R300 per month
- Formal loan
  - Nell — Standard Bank Community Banking, Principle= R10 000 with repayment term of R1129 per months for 12 months

INTERNET CAFE

(BFA code: THICBR)

Loan size: R10 000
Monthly loan repayment: R1300
Number of withdrawals on loan capital: 3
Loan use: Use the money partly for personal uses and some for business use and left some money behind for 1st instalment.

George is a 21 year old man who operates an internet café from a container in the main street of Tembisa. He is the quintessential bachelor, staying alone and enjoying the fruits of his labours.

George loved to fiddle with computers at a young age and was doing repairs and selling fixed computers while he was at school with help of his teachers. After his matric, he enrolled himself in a college and studied information technology.

His internet café business is small but makes a good profit margin of 50%. The repayment of the Standard Bank loan is quite sizable for him, at just under 23.3% of profits before finance costs, but he suggests that the loan repayments do not put him under stress.

That said, George is one of the businesses that appeared to use the loan He was offered R10000 loan from Standard Bank Community Banking and he used the money to purchase goods that could be sold in his internet café. He transferred R1400 into his Nedbank account for his personal use and left R1300 in the Standard Bank for his first debt order.

George is also one of the businesses who saves up his loan repayment in the house, despite having several bank accounts. He keeps some of his daily revenues day by day in the house and when it is time for the loan repayment, he deposits them into his Standard Bank account before the debit order to takes place.

Household Income and Net Worth

Monthly Household Income	R5 584	Percent of household income
Business Profits	R5 584	100%
Household Net Worth (This is mostly the furniture and computers in the shop)	**R38 900**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Implied annual turnover)	R8 438 (R101,250)
Expenses	R550
Cost of goods sold	R1 603
Wages paid	R700
SBCB loan repayment	R1 300
Other financing	R0
Profit	R5 584
Profit margin	50.8%
Loan repayment as % of monthly profits	23.3%
Loan size compared to annual turnover	9.9%

Financial Portfolio

- Bank accounts
  - George — Standard bank cheque account, Balance = R0, uses only for debit order of loan repayment
  - George — Absa cheque account, Current Balance = R1000
  - George — Nedbank small business saving account, Current Balance =R1400
- Formal loan
  - George — Standard Bank Community Banking, principal =R10 000, repayment via debt order R1300 per month.

CATERING (Kota Shop)

(BFA code: THCAMA)

Estimated BSM: 4
Loan size: R5 000
Monthly loan repayment: R602
Number of withdrawals on loan capital: 1
Loan use: Used R3000 to buy stock and left R2000 for 1st debt order

Maxton is a 33 year old single man who operates a Kota (a famous township food - bread filled with chips, Russian dog, atchar) shop from a container situated in Tembisa township. Originally he rented a place next to his house and he managed to save R12000 and then bought his container which he put alongside the road. He also bought new equipment with these savings.

Generally speaking, he runs quite a good business, earning himself just under R5 000 per month. However, we interviewed Maxton during one of the school holidays, when most of his clients, school children, were not around to buy from him, so his profits are usually a bit higher. In fact, he noted that the Standard Bank loan allowed him to buy stock worth R3 000 during this slow time, so he could continue to have product even when revenues were too weak to buy inventory for the next day.

He said that repayment of loan is not stressful, and this is born out in his financial accounts – the repayment is only 12% of profits. Nonetheless, he was nervous enough about managing his payments to leave the remaining R5000 in the bank account for the repayment, just in case.

Like many of the other business, Maxton had another bank account and also saved in his house.

Household Income and net worth

Monthly Household Income	R4 929	Percent of household income
Business Profits	R4 929	100%
Household Net Worth (Mainly comprised of value of equipments, stocks and household contains.)	**R44 044**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Implied annual turnover)	R8 704 (R104,451)
Credit paid from customers	R0
Expenses	R0
Cost of goods sold	R2 776
Wages	R1 000
SBCB loan repayment	R602
Other financing	R0
Profit	R4 929
Profit margin	49.7%
Loan repayment as % of monthly profits	12.2%
Loan size compared to annual turnover	4.8%

Financial Portfolio

- Bank account
  - Maxton — Standard Bank savings account, Current balance = R3591
  - Maxton — ABSA, Current balance=R2300
- Formal loan
  - Maxton — Standard Bank Community Banking, R5000 as principle with R602.25 as repayment per month for 12 months, paid via debit order via Standard bank account
- One on one lending
  - Maxton — R500 loan to neighbour, no interest charged
- Saving in the house
  - Maxton — Current balance = R700

TUCKSHOP/MAKING KOTA

(BFA code: THTSSY)

Loan size: R10 000
Monthly loan repayment: R1139
Number of withdrawals on loan capital: 5
Loan use: Majority of her loan used for buying stocks and left R1000 behind for 1st instalment

Bessie is a 48 year old woman with eight people living in her household. Her main sales product is Kota, the same product that is sold by the caterer above. Although her husband is working, we were not able to interview him. The household also earns income from renting out their backyard shacks.

When she found that there were increasing needs from her children, she decided to start her business by selling cigarettes with money her husband gave to her. Then she brought a mixer to make cold drinks that she made an ice cube and sell it for 20 cents each. Then she brought crisps and sell in front of her house. She then bought a cutter and fryer to make chips for the filling of the Kota.

Bessie is one of the businesses who seems to struggle with the size of the repayments (they are a third of her monthly profits), as well as one of those who used the Standard Bank loan for "liquidity" purposes. From her R10 000 loan, she withdrew five time, between R850 and R2000, using each to buy stock to keep the business going. She also left R1150 in her Standard bank account for the debt order.

Like most others, Bessie tends to save little by little from the business, depositing frequently into her Standard Bank account. She also pays R300 per month in funeral insurance. Unusually, she is one of the few business owners in this sample to have other credit – an Edgar's card.

Household income and Net Worth

Monthly Household income	R4 396	Percent of household income
Business Profits	R3 396	77%
Rental income	R1 000	23%
Household Net Worth (This is mainly comprised of the value of equipment, appliances and stock.)	**R33 900**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Implied annual turnover)	R9 000 (R108000)
Credit paid from customers	R0
Expenses	R300
Cost of goods sold	R4 304
Wages	R1 000
SBCB loan repayment	R1 139
Other financing	R0
Profit	R3 396
Profit margin	25.1%
Loan repayment as % of monthly profits	33.5%
Loan size compared to annual turnover	9.3%

Financial Portfolio

- Bank account
  - Bessie — Standard Bank Small Business account Current balance = R200, used for saving and for debit order on loan
- Burial plan
  - Bessie — Burial plan, pays cash R200 per month
- Funeral plan
  - Bessie — Funeral plan, pays cash R100 per month
- Formal Loan
  - Bessie — Standard bank Community Banking, Principal= R10000, pays R1139 every month
- Store card
  - Bessie — Edgars, Current Balance = R1900. Tries to make a regular payment of R300 per month

Inventory stocks and turnover

Average Inventory Turnover Ratio[10]	1.30
Average Value of Inventories at each diary interview	R 4 915
Maximum Value of Inventories over the period of diary interviews	R 6 400
Minimum Value of inventories over the period of diary interviews	R 3 025

[10] Inventory turnover ratio = cost of goods sold/average inventory over the period.

TAVERN

(BFA code: THTANH)

Loan size: R10 000
Monthly loan repayment: R1130
Number of withdrawals on loan capital: 1
Loan use: Combined with his own revenues to purchase and install cold storage for the tavern inside his house

Norman is a 42 year old man who runs a tavern from his home. He is a bachelor and has no dependents.

Norman has had a number of false career starts. After his matric in 1988, he enrolled in a journalism course. Between 1990 and 1991, he started a newspaper with partners but it failed and closed down in 1992. Between 1993 and 1995, he became a street vendor selling chips and cold drinks. He did quite well, and in 1995 he used the profits from street vending to purchase a motor car and transport school children from and to their schools. He also used some of his savings to build more rooms in his house. From 2000, he has been selling various thing both in the street and from his home, and in 2003 he decided that he will focus on selling beer and cider only from his home.

Norman does reasonably well with his business, although not as well as the service providers in this sample. His gross profit margin is 17% and he clears a profit of R2 667 after servicing his Standard Bank loan. Like many others who run taverns, Norman can get credit from his supplier, ABI. ABI offers him supplier credit him to purchase beer and cider but only for 7 days without charge. After that, ABI charges more for the drinks. He used to employ two people to work for him but during the course of the interviews he did not have them come to work.

For Norman, the Standard Bank loan puts a heavy burden on his cash flow – he pays 42% of his profits to servicing it. Nonetheless, unlike others who have a high repayment to profit ratio, Norman used the entire R10 000 Standard Bank Community Banking loan plus R2 000 of his own savings for a capital investment – installing a cold storage unit in his house. He is now equipped with a cold room that has 500 cases of beer as its maximum capacity, which will certainly increase the size of his business. Despite the heavy debt service, Norman says he does not feel any difficulty in paying back his loan.

Norman has several savings instruments: two bank accounts other than his Standard Bank account; shares in SAB; and a stovkel to which he contributes R500 per month. Other than the supplier credit, which he takes only infrequently, he has no other credit.

We found Norman's turnover fluctuated quite a bit over the month, but never dipped below R2700. His inventory turnover ratio averaged 1.13 over the period.

Household Income and Net Worth

Monthly Household Income	R2 667	Percent of household income
Business Profits	R2 667	100%
Household Net Worth (Mainly comprised of value of house, furniture, appliances and stock.)	**R312 360**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Implied annual turnover)	R8 933(R107,200)
Expenses	R0
Cost of goods sold	R6 266
Wages	R0
SBCB loan repayment	R1 300
Other financing	R0
Profit	R2 667
Profit margin	17.2%
Loan repayment as % of monthly profits	42.4%
Loan size compared to annual turnover	9.3%

Financial Portfolio

- Bank account
  - Norman — Standard Bank SME account, Current balance = R0, as it is used primarily as the account for debt order for repayment.
  - Norman — FNB saving account, Current Balance= R500
  - Norman — Capitec saving account, Current Balance=R0
- Stokvel

- Norman — Accumulating stokvel that pays out at the end of the year, contributes R500 every time

❖ Investment
- Norman — SAB share offer to black retailers investment capital = R2500

❖ Formal loan
- Norman — Standard Bank Community Banking, principal= R10000, repayment R1300 per month for 12 months

❖ Savings-in-house
- Norman — Current balance= R1300

Inventory stocks and turnover

Average Inventory Turnover Ratio	1.13
Average Value of Inventories at each diary interview	R 4 425
Maximum Value of Inventories over the period of diary interviews	R 5 000
Minimum Value of inventories over the period of diary interviews	R 2 700

SECOND TUCKSHOP/TAVERN

(BFA code: THTSLY)

Loan size: R6 000
Monthly loan repayment: R701
Number of withdrawals on loan capital: 6
Loan use: Used R5000 to purchase stock and last R1000 used for pay for her stokvel.

Linda is a 30 year old woman who runs a tuck shop; she sells beers and other snacks in Tembisa. She lives with her husband, Julius, and two children, one of whom gets a child grant. His husband is running his own business in thatched roofing, but he was not available for interviews, so we're not certain how much this business contributes to the household.

For a retailer, Linda's profit margin is quite high at 57%, earning her a profit of about R6387 every month. Like Norman, Linda can get supplier credit from SAB, but prefers to pay for her stock in cash. She also gives credit (interest free) to her regular customers on beer only, but she says her clients always pay her on time. She says that this is a slow time, as it is winter and her place is open. Ultimately, she feels that in order to retain her customers, she needs to build on a closed structure. Right now, she and her husband are in the process of saving up R5000 through two stokvels in order to get the materials to build this closed structure.

Linda is unusual in how small a share of her profits she needs to use to pay the Standard Bank loan – only about 10%. Yet she classifies as one of the businesses that used the loan for "liquidity" purposes. She took the R6 000 loan from Standard Bank and used R5 000 to purchase stock for her business. The last R1000 she used to pay her monthly dues to her stokvel (she owed a bit more than the usual R700 per month fees). Would she have been better off simply using the Standard Bank loan to build her outside structure? Perhaps, but arguably this way she saves up the cash for the outside structure for free, while also keeping her business going through the lean winter months. One can see how lean her stocks can become – they swing from R26 000 to just over R1 000 during the month.

Like others, she also saves a little bit every day in the house and deposits the money into Standard Bank account in time for debit order.

Household Income and Net worth

Monthly Household Income	R7338	Percent of household income
Child grant	R250	3%
Business Profits	R7088	97%
Household Net Worth (Mainly comprised of capital equipment and furniture)	**R39 920**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Implied annual turnover)	R11 302 (R135,628)
Expenses	R0
Cost of goods sold	R4214
Wages	R0
SBCB loan repayment	R701
Other financing	R0
Profit	R7 338
Profit margin	56.5%
Loan repayment as % of monthly profits	9.9%
Loan size compared to annual turnover	4.4%

Financial Portfolio

- Bank account
  - Linda — Standard Bank saving account, Current Balance = R1000,
  - Linda — ABSA savings account, Current balance = R900
- Store Credit Card
  - Linda — Truworths, Current Balance=R731
- Funeral Insurance
  - Linda — ABSA Funeral Plan, pays R28 per month debit order via her ABSA account
- Formal Loan
  - Linda — Standard Bank Community Banking, Principal= R6000, pays R701 per month via debt order from her Standard Bank account
- Saving in the house
  - Linda — Balance= R300
- Informal lending
  - Linda — Gives loans to neighbour with no interest charged Current balance = R20.
- Stokvel
  - Linda — Rotating cash stokvel with other 7 people, pays R350 per month and expects to be paid out R2450

- Julius — Rotating cash stokvel with other 7 people, pays R350 per month and expects to be paid out R2450

Inventory stocks and turnover

Average Inventory Turnover Ratio	1.4
Average Value of Inventories at each diary interview	R 11 056
Maximum Value of Inventories over the period of diary interviews	R 26 710
Minimum Value of inventories over the period of diary interviews	R 1 100

__Estimated BSM: 5__

TUCKSHOP/TAVERN

(BFA code: THTSLA)

Loan size: R10 000
Monthly loan repayment: R1200
Number of withdrawals on loan capital: Unknown, did not finish interviews
Loan use: Unknown, did not finish interviews

William is a 36 year old man who runs a tuck shop and tavern from his home. He lives with his mother, one sister, two other relatives and their one child. One of the relatives is working for Discovery Health but we were not able to get the details of his wages. The other relative works for William but he only pays him when he has extra cash.

William worked as a petrol attendant in a garage. But he felt that the work was not challenging and found the pay low. He used the money he saved from his work to buy stock to start his business. He now sells daily groceries and some household products, and also runs a tavern.

From what we could understand, William runs a fairly profitable business, with a high profit margin, earning him some R12 060 every month. He can comfortably manage the repayment on his R10 000 loan, which is only about 9% of his profits. He used the loan to build the thatch roof entertainment place for his tavern.

Unfortunately, we were not able to see William for the entire length of the interview period, as he started to avoid us after a week or two.

Household Income and Net worth

Monthly Household Income	R14 510	Percent of household income
Social grants	R 1250	9%
Business Profits	R13 260	91%
Household Net Worth (Mainly comprised of value of newly constructed thatch roof structure and furniture and stock.)	**R57 659**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of April 2010)

Revenues (Implied annual turnover)	R22 800 (R273,600)
Credit paid from customers	R0
Expenses	R0
Cost of goods sold	R9 540
Wages	R0
SBCB loan repayment	R1 200
Other financing	R0
Profit	R13 260
Profit margin	52.9%
Loan repayment as % of monthly profits	9%
Loan size compared to annual turnover	3.7%

Financial Portfolio

- Bank account
  - William — FNB savings account, Current Balance R14 000
  - William — ABSA cheque account , Current Balance = R0
  - William — Standard Bank mobile account, Current Balance = R0, uses only for repayment of loan
- Credit card
  - William — Woolworths, Current Balance R490
- Formal loan
  - William — Standard Bank Community Banking, Current balance R7000, pays R1200 per month via debit order

Inventory stocks and turnover

Average Inventory Turnover Ratio	0.95
Average Value of Inventories at each diary interview	R 5895
Maximum Value of Inventories over the period of diary interviews	R 6170
Minimum Value of inventories over the period of diary interviews	R 5621

CAR AUDIO INSTALLATION

But did he use the Standard Bank loan to start another business?

(BFA code: THCSSA)

Loan size: R15 000
Monthly loan repayment: R1627
Number of withdrawals on loan capital: 5
Loan use: Bought deep fryer for chips, deep freezer, stocks and drinks for self consumption

Andile is a 31 old man who lives on his own. He runs a car entertainment installation business where he sells, installs and repairs car audio system.

At a young age he lived in Swaziland and his parent could not offer to keep him in school until grade 12. He moved to Johannesburg and started working for a company called Extreme Sound in 2004. This was where he obtained his skills in car audio. He started out on his own with only a screw driver. His business grew by word of mouth.

He took out a loan of R15 000 from Standard Bank Community Banking and only used R2500 for his car audio business. The rest of the loan was used to start another business of food and drinks - he brought a deep fryer, deep freezer and beer and cold drinks for his 'shop'. But there has no sign of these items in his car sound place. He spent R2300 on drinks for himself. Is this really a business or for his own use?

He says it is easy to generate the money from his audio business to repay his Standard Bank loan. He wants to pay back on time because he would like to maintain a good relationship that will enable him to take out further loans in future.

His only complaint is that trying to deposit money via the retail agent in Tembisa does not always work and so he has to go to Standard Bank Branch to deposit money for the repayment, which is time consuming.

Household Income and Net Worth

Monthly Household Income	R7686	Percent of household income
Business Profits	R7686	100%
Household Net Worth (Mainly comprised of value of household contents, appliances, equipment, stocks and R7000 bank account balance)	**R31 574**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Annual turnover implied)	R18 422 (R221,069)
Credit paid from customers	R0
Expenses	R150
Cost of goods sold	R10 087
Wages	R500
SBCB loan repayment	R1121
Other financing	R0
Profit	R7686
Profit margin	35.6%
Loan repayment as % of monthly profits	14.6%
Loan size compared to annual turnover	6.8%

Financial portfolio

- Bank account
  - Andile — Nedbank savings account, Current balance = R6341
  - Andile — Standard bank saving, Current balance = R950, uses for repayment of his bank loan.
- Formal loan
  - Andile — Standard Bank Community Banking, principle: R15000 with repayment of R1121 per month.
- Savings-in-house
  - Andile — Balance: R2700

PHONE/SPAZA SHOP

(BFA code: THSSLI)

Loan size: R5 000
Monthly loan repayment: R1060
Number of withdrawals on loan capital: 3
Loan use: Spend as add-ons to the business

Busisiwe is a 36 year old housewife who runs a spaza and phone shop from her yard. She sells all kinds of goods from shack: cool drinks, public phone and even a trampoline that the children pay to use! Her husband, Revival, works a job with a regular salary. There are six children in the household, three of which are receiving foster care grants. They also earn a monthly rental income, by renting out shacks in their back yard.

Busisiwe started her business with R500 from her husband, purchasing a public phone system and also some sweets and vegetables. The business has a reasonable profit margin, but not as high as some of the other tuckshops in the sample.

She took a R5000 loan from Standard Bank Community Banking, using R3000 to purchase another public phone and airtime and R2000 to purchase a trampoline for children to jump on (she charges them R2 for 10 minutes jumping time).

Despite the repayments being a high 22% of monthly profits, she says that she does not have trouble paying the loan. She uses money from her business which she saves little by little in the house. It helps that her husband takes care of most of the other bills and food that are required by the household.

She otherwise has quite an active financial life, with three bank accounts of her own and one for her husband. She belongs to a stokvel to which she contributes R300 per month, as well as two funeral insurances to which she pays a total of R177. She even has enough money left over to lend out to her neighbours, charging 40% per month!

Household Income and Net Worth

Monthly Household Income	R14 807	Percent of household income
Forster care grants	R2 040	14%
Regular wages	R7 000	47%
Rental income	R1 000	7%
Business profits	R4 767	32%
Household Net Worth (Mainly comprised of furniture, equipment and stock.)	**R31 081**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Annual turnover implied)	R15 180(R182,160)
Expenses	R0
Cost of goods sold	R10 413
Wages	R0
SBCB loan repayment	R1060
Other financing	R0
Profit	R4,767
Profit margin	24.4%
Loan repayment as % of monthly profits	22.2%
Loan size compared to annual turnover	2.7%

Financial Portfolio

- Bank account
  - Busisiwe — Standard Bank saving, Current Balance= R0, uses for debit order for repaying bank loan
  - Busisiwe — FNB saving account balance=R0
  - Revival — Standard Bank saving, uses for salary deposit weekly and withdraws about R1400 every week.
  - Busisiwe — Nedbank saving account, Current Balance = R250
- Stokvel
  - Busisiwe — Rotating stokvel with 8 others, pays R300 per month
- Funeral insurance
  - Busisiwe — FNB, R77 per month pay with debit order from her FNB account.
- Burial Plan
  - Busisiwe — Thuso Funeral, pays R100 cash per month

- Formal loan
  - Busisiwe — Standard Bank Community Banking, Principal= R5 000 for 6 months loan and monthly payment of R1060
- Giving informal loans
  - Busisiwe — Busisiwe is a mashonisa! She has lent money to 12 of her neighbours. The total amount that she has lent out is R4050 and she charges 40% interest per month
- Savings-in-house — Current Balance=2000

Inventory stocks and turnover

Average Inventory Turnover Ratio	0.863
Average Value of Inventories at each diary interview	R 6 304
Maximum Value of Inventories over the period of diary interviews	R 8 591
Minimum Value of inventories over the period of diary interviews	R 3 491

SECOND CATERING

(BFA code: THCAMO)

Loan size: R15 000
Monthly loan repayment: R1700
Number of withdrawals on loan capital: 1
Loan use: Used to buy stock and things for canteen

Mary (49 years old) and Moore (51 years old) are wife and husband proprietors of a catering business opposite one of the taxi ranks in Tembisa. They have six children and two grandchildren staying with them in the household.

Mary has loved selling since she is small. She started to sell food in campus when she was studying at university. Although she qualified as a nurse in 1983, she found that her passion is business and not nursing.

Their business is modest, with a profit margin of 18%, earning them monthly profits of R4352 after paying the Standard Bank loan. The burden of this repayment is significant at 28%. Nonetheless, she made some capital purchases with the R15 000 Standard Bank loan, buying a canteen table, tools for the business and renovating their shop with tiles. Moreover, Mary says she has found it petty easy to repaying loan out of her business cash flows. She tries to deposit money into her Standard Bank account whenever she can.

Moreover, Mary and Moore are quite busy saving for their retirement, in both bank accounts and a retirement annuity, as well as keeping up premiums on funeral insurance. They pay a total of R1880 per month in funeral insurance premiums – quite a sizable chunk of their monthly income and leaving little to support the others in the household.

Household income and Net Worth

Monthly Household Income	R6 053	Percent of household income
Business Profits	R6 053	100%
Household Net Worth (This is comprised mainly of the value of their home, purchased 22 years ago, furniture, equipment and stock.)	**R675 110**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Implied annual turnover)	R23 719 (R284,625)
Expenses	R0
Cost of goods sold	R16 066
Wages	R1600
SBCB loan repayment	R1700
Other financing	R0
Profit	R6053
Profit margin	18.4%
Loan repayment as % of monthly profits	28.1%
Loan size compared to annual turnover	5.3%

Financial Portfolio

- Bank account
  - Moore — Standard Bank business account, Current balance = R0
  - Mary — Standard Bank savings, Current balance=R5 400, it used as primary account for debt order of loan repayment
  - Mary — ABSA Saving account, Current balance = R2 000
- Funeral plan
  - Mary — Momentum, via debt order, R1630 per month, withdraw at the end of April
  - Mary — IFA, via debt order, R250 per month
- Formal loan
  - Moore — Standard Bank Community Banking, principal=R15 000, regular payment of R1700 per month for 12 month, pay via debt order.
- Retirement annuity
  - Moore — AIMS ABSA, it will mature in 2014. One third can be taken in lump sum and the rest will be paid as an annuity.

SECOND TAVERN

(BFA code: THTABA)

Loan size: R10 000
Monthly loan repayment: R1300
Number of withdrawals on loan capital: 2
Loan use: Used half to manage his personal cash flow problems and the rest of money for more stock in the business

Thomas is a 47 year old man who stays with his wife and two children in Tembisa. He operates his tavern from home with two fridges from SAB and two others from ABI and Pepsi, respectively. The household also earns income from renting out shacks in their yard.

Thomas was employed full time when his father talked him into starting a business from home. In 1991, he started to sell a few cases of beer on the side, and he brought two fridges to keep his beer cold. In 2000, he registered his business and purchased a deep freezer. At that point, he also resigned from his job and focused all his effect on his business.

Of the three taverns in the sample, Thomas has the lowest profit margin, of about 10%, earning him just under R3 000 per month, after financing costs. The R10 000 loan from Community Banking is a substantial weight on his cash flow, one of the highest in the sample, of 31%. Like many others in the sample with high debt burdens, he used the loan for “liquidity” purposes: R5000 to buy stocks for the tavern and (worse) R5000 to help cover personal cash flow. Yet, he claims that repaying the loan is not stressful because he saves little by little every day from his business revenues and deposits them into the Standard Bank account in time for the repayment debit order.

One of the key burdens in Thomas’ life will hopefully turn into an enormous benefit. He belongs to a “high rollers” stokvel to which he contributes R2 000 per month (all of the rental income they earn). He ultimately expects to get paid out R10 000.

Household Income and Net Worth

Monthly Household Income	R6 221	Percent of household income
Rental Income	R2 000	32%
Business Profits	R4 221	68%
Household Net Worth (Mainly comprised of value of home that brought 15 years ago)	**R380 637**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Implied annual turnover)	R28 571 (R342,857)
Credit paid from customers	R80
Expenses	R65
Cost of goods sold	R22886
Wages	R1400
SBCB loan repayment	R1300
Other financing	R0
Profit	R7180
Profit margin	10.2%
Loan repayment as % of monthly profits	30.8%
Loan size compared to annual turnover	2.9%

Financial Portfolio

- Bank account
  - Thomas — Standard Bank SME savings account Current balance = R0, used primarily for debit order of the loan repayment
- Giving credit to clients
  - Thomas — Giving credit on beer to neighbors for R50
  - Thomas — Giving credit on beer to a client for R30
- Stokvel
  - Thomas — R2000 rotating stokvel with a payout expected of R10 000
- Formal loan
  - Thomas — Standard Bank Community Banking, principal= R10 000, repayment terms of R1300 per month for 12 months, pay via debit order from his Standard Bank account
- Saving in the house
  - Thomas — Current balance = R1780

Inventory stocks and turnover

Average Inventory Turnover Ratio	1.07
Average Value of Inventories at each diary interview	R 13 609
Maximum Value of Inventories over the period of diary interviews	R 15 315
Minimum Value of inventories over the period of diary interviews	R 11 712

THIRD TAVERN

(BFA code: THTAMP)

Loan size: R10 000
Monthly loan repayment: R1300
Number of withdrawals on loan capital: 1
Loan use: Bought stock for business

Sipho is a 57 year old man who lives with his wife and four children. Some of his children are working, but he has no idea how much they earn and they give no money to the household. He runs his tavern from a container away from his house.

Sipho was once employed by Reckitt & Colman as general worker for many years. In 1992, he started to run his tavern from home by selling few cases of beer and cool drinks. In 2000, he made a decision to resign from his job and concentrate on his tavern.

Of the three taverns in the sample, Sipho's in the most profitable, with a profit margin of 30%, earning him just under R6 000 per month after financing costs. His R10 000 Standard Bank loan is a manageable 18% of profits. Like the other taverns, he is able to get credit from SAB but only receives a discount if he settles the account in 7 days. He used to give credit to his customer but found it took too long for them to pay back, which impacted on his business negatively. He tries not to give credit now. He usually hires three people to help him but we didn't see any evidence of this when we were interviewing him.

Late last year, he was battling with his business because his son was arrested and he used the revenue from the business to pay for the legal fees. Earlier this year he was still climbing out of that hole and the Standard Bank loan seems to have helped him bridge his cash flow – he used all the money at once to buy beer, cold drinks and groceries for his business. Certainly, the value of his inventories fluctuated sharply over the time we knew him, from R16 000 to just over R2 000.

He is very anxious not to default because he'd like to get a second loan with which he would use to upgrade his business by tiling the floor. He is worried that if his tavern does not look nice, customers will be attracted to his competitors.

Household Income and Net Worth

Monthly Household Income	R7 267	Percent of household income
Business Profits	R7 267	100%
Household Net Worth (This is mostly the value of the house, which he inherited, plus his business stock)	**R265 068**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Implied annual turnover)	R20 250 (R243,000)
Expenses	R0
Cost of goods sold	R12 983
Wages paid	R0
SBCB loan repayment	R1300
Other financing	R0
Profit	R7 267
Profit margin	29.5%
Loan repayment as % of monthly profits	17.9%
Loan size compared to annual turnover	4.1%

Financial Portfolio

- Bank accounts
  - Sipho — Standard Bank SME saving account, Current balance=R6200, the account is used for debit order and general savings.
  - Sipho — FNB saving account, current balance=R500
- Burial Plan
  - Sipho — Church funeral plan, R20 per month paid in cash
- Formal loan
  - Sipho — Standard Bank Community Banking, principle= R10 000, repayment is R1300 monthly for 12 months, paid via debit order

Inventory stocks and turnover

Average Inventory Turnover Ratio	1.05
Average Value of Inventories at each diary interview	R 8 988
Maximum Value of Inventories over the period of diary interviews	R 16 644
Minimum Value of inventories over the period of diary interviews	R 2 280

Estimated BSM: 6

ELECTRONICS RETAILER

(BFA code: THASMO)

Loan size: R 10000
Monthly loan repayment: R1300
Number of withdrawals on loan capital: 2
Loan use: Took out R2000 for studies, and R7000 for stocks and left the rest for debt order

Peter is a 54 year old man who lives with his wife and four children. He runs an electronic retailing business in the main street of Tembisa. He built the room in 2007, but is still paying the rent to the land that he rents from the owner. Currently, he says his business faces competition from the Pakistani-owned shops that sell cheaper products than he does. He also does some repair and stocks some goods that his competitors are not able to get to make his business more competitive than others.

Peter started working on electronics in 1983. He has no formal training but he always liked to fix broken radios and other electronic items that he could get his hands on. Between 1994 and 1995, he was enrolled into a college to study electronics and was able to obtain employment with Early Bird service division in Limpopo. He worked at Early Bird for five years but thought it paid too little for too much effort. He used his UIF payout to purchase some stock and started selling electronics in Limpopo. In 2006, he relocated to Tembisa and continued with the trade in electronics with R12000 he had saved in Limpopo.

Peter took a R10 000 loan from Standard Bank Community Banking. He used R2000 to pay for his studies in a class and R7 000 to purchase stock from wholesalers. The remaining R1000 was left in the bank account for the first instalment. Peter does not find paying back his loan a very stressful thing to him because he always makes enough money to cover the repayment.

Peter is the only one of the sample to have substantial alternative sources of credit – an auto loan of R150 000.

Household Income and Net Worth

Monthly Household Income	R22 773	Percent of household income
Business Profits	R22 773	100%
Household Net Worth (Mainly comprised of value of house (RDP house given for free) , motor cars (one he is still paying off a loan for), furniture, and R150000 worth of stock.)	**R437 850**	

Monthly Business Details (calculated from interviews conducted between the end of March 2010 and the middle of May 2010)

Revenues (Implied annual turnover)	R39 545(R474,545)
Expenses	R0
Cost of goods sold	R16 772
Wages	R0
SBCB loan repayment	R1300
Other financing	R3100
Profit	R22 773
Profit margin	46.5%
Loan repayment as % of monthly profits	5.7%
Loan size compared to annual turnover	2.1%

Financial Portfolio

- Bank account
  - Peter — FNB, Current Balance = 13 000, account is used primarily for the Nedbank loan repayment, Budget insurance premiums and general savings.
  - Peter — Standard Bank saving account, Current Balance = R1200, used for Standard Bank loan repayment.
- Formal Loan
  - Peter — Standard Bank Community banking, principal= R10 000, repayment terms R1300 per month for 12 months, pay via debit order.
  - Peter — Nedbank auto loan, principal= R150 000, 60 month car loan, monthly repayment of R2769, paid via debit order through FNB account.
- Other insurance
  - Peter — Budget, motor car accident, R127 per month, pay via debit order.
  - Peter — Budget, motor car accident, R104 per month, pay via debit order.

Inventory stocks and turnover

Average Inventory Turnover Ratio	1.1
Average Value of Inventories at each diary interview	R 12,853.75
Maximum Value of Inventories over the period of diary interviews	R 16,600.00
Minimum Value of inventories over the period of diary interviews	R 7,200.00

ANNEX 2: MARGIN OF ERROR IN 2003/2004 HOUSEHOLD FINANCIAL DIARIES

An example from the 2003/2004 household Financial Diaries in South Africa shows how the Financial Diaries method of data collection yields a set of ongoing financial accounts for a 50 year old woman, whom we will call Mambongo,[11] who lives with her three children and one grandchild in Langa township in Cape Town. Table 3 on the next page shows her complete set of cash flows for April 2004, the combined results of two interviews. Mambongo supports her family with profits from cooking and selling sheep intestines on the street, with a bit of extra income from a monthly government child grant. In addition, in April, her eldest daughter worked a few days at a casual job and she also received some money from her aunt. She and her children also belonged to eight different savings clubs over the year: most were to save for Christmas and one was to help fund her cash flow requirements for business inventories. However, she found the other members of her business stokvel were not responsible about paying and she needed to take a loan from a moneylender. The payout from the business stokvel only came late in the month, and in May she used it to pay back the moneylender loan she had taken.

Table 4: Mambongo's Sources and Uses of Funds, April 2004

Sources of funds		**Uses of funds**	
Operational		*Operational*	
Casual wages	R338	Food	R553
Business revenues	R1417	Business inventory	R774
Child grant	R169	Business expenses	R13
Money from aunt	R175	Paraffin	R39
		Electricity	R143
Financial		Household products	R299
Received moneylender loan	R150	Transport to work	R78
Savings club payout	R598	Newspapers, magazines	R7
		Pay phone	R20
		Penalties and fines	R7
		Personal (haircut)	R13
		Clothing	R111
		Financial	
		Savings club payment	R787
Total	**R2847**	**Total**	**R2844**

Survey margin of error (R2847 – R2844) = R3

As Mambongo's cash flows show, the sources of funds coming into the household from income and from financial receipts in April totalled R2847, and the uses of those funds, for expenditures and

[11] All the names in this report have been changed to protect the identity of the respondent.

financial outflows, totalled R2844. The difference between the two is the survey margin of error, which was R3 in this example. The survey margin of error is a measure of how well the Financial Diaries captured all the cash flows of the household. We have found that over time, as households trust the researchers more, they reveal more and more of their complex financial workings and this margin of error declines. Our experience with Mambongo is a case in point: in February, the survey margin of error was R286, much larger than the R3 recorded in April. The same pattern is reflected across the sample. If we aggregate all the margins of error across households and over time, as we do in the chart below, we see that these survey errors are initially large, even after 3 or 4 visits. But after 6 interviews (about three months in the household Financial Diaries where households are seen every other week rather than every week) the margin of error is trivial.

Chart 3: 2003/2004 Household Financial Diaries Margin of Error

(% of sources of funds)