RISK MANAGEMENT FOR MICROFINANCE INSTITUTIONS IN SOUTH AFRICA

by

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EXECUTIVE SUMMARY

Microfinance is part of the financial services industry in South Africa. Microfinance Institutions (MFIs) in South Africa provide financial services to a wide spectrum of clients between LSM 1 and 6. The perception exists that the micro lending industry in South Africa is a high risk industry. Since 2007 the industry has been regulated by the National Credit Act. Due to the entrepreneurial nature of the micro lending industry in South Africa, risk management should be an integral part of every MFI in South Africa in order to maintain control and ensure sustainability.

The study focuses on the following factors related to the micro lending industry in South Africa:

- the comparison between perceptions of anticipated risk from management with the risks identified in the analysis of client data;
- the optimal risk balance;
- the pro-active management of risk in the microfinance environment;
- the prediction of the outcome of microfinance credit transactions and
- the average profile of a microfinance client in South Africa.

The study compares the perception of management in terms of risk related issues with the outcome of a client analysis in terms of risk aspects. The study also determines the profile of an average ideal micro finance client and the profile of an average non-paying micro finance client.

If management in the micro finance industry understands the risks in the industry and has the tools to manage these risks, together with the understanding of the profile of the ideal client, it will enable them to ensure sustainability of their businesses as well as address the financial needs of the lower income end of the market in South Africa in the best possible way.
# TABLE OF CONTENTS

1. INTRODUCTION ....................................................................................................... 12
   1.1 BACKGROUND ................................................................................................... 12
   1.2 PROBLEM STATEMENT .................................................................................... 13
   1.3 PURPOSE STATEMENT ..................................................................................... 14
   1.4 SPECIFIC RESEARCH QUESTIONS ................................................................ 14
   1.5 IMPORTANCE AND BENEFITS OF THE STUDY ............................................. 15

2. DELIMITATIONS AND ASSUMPTIONS .................................................................... 16
   2.1 DELIMITATIONS ............................................................................................... 16
   2.2 ASSUMPTIONS .................................................................................................. 16

3. DEFINITION OF KEY TERMS .................................................................................. 17

4. LITERATURE REVIEW ............................................................................................. 19
   4.1 INTRODUCTION ............................................................................................... 19
   4.2 THE MICROFINANCE INDUSTRY .................................................................... 19
   4.3 MICROFINANCE RISKS .................................................................................... 26
      4.3.1 Business and credit risk ............................................................................. 29
      4.3.2 Financial risk ............................................................................................. 31
   4.4 THE ASSESSMENT OF RISKS .......................................................................... 33
   4.5 RISK TOOLS IN SOUTH AFRICA FOR MICRO FINANCE ................................. 33
      4.5.1 Risk identification ...................................................................................... 34
      4.5.2 Risk evaluation ........................................................................................... 34
      4.5.3 Risk mitigation ............................................................................................ 34
      4.5.4 Frameworks for risk assessment ................................................................. 34
   4.6 OUTCOME PREDICTION AND PRO-ACTIVE RISK MANAGEMENT .......... 35

5. RESEARCH DESIGN AND METHODS .................................................................... 38
   5.1 INTRODUCTION ............................................................................................... 38
5.2 DESCRIPTION OF INQUIRY STRATEGY AND THE BROAD RESEARCH DESIGN

5.2.1 Empirical research

5.2.2 Basic research

5.2.3 Descriptive research combined with a combination of exploratory and explanatory research

5.2.4 Cross-sectional study

5.2.5 Collecting primary data using questionnaires

5.2.6 Primary data

5.2.7 Qualitative data

5.3 SAMPLING

5.3.1 Target population

5.3.2 Sampling size

5.4 DATA COLLECTION

5.4.1 Time frame for data collection

5.4.2 The data collection plan

5.5 DATA ANALYSIS

5.5.1 Assessing and demonstrating the quality and rigour of the proposed research design

5.5.2 Data quality issues

5.6 RESEARCH ETHICS

6 RESEARCH FINDINGS

6.1 PROFILE OF THE RESPONDENTS AND RESPONDENT ENTITIES

6.2 RISK FINDINGS IN THE MICROFINANCE INDUSTRY IN SOUTH AFRICA

6.3 FINDINGS BASED ON CLIENT INFORMATION OF 3000 MICROFINANCE CLIENTS IN SOUTH AFRICA AS OBTAINED FROM A CREDIT BUREAU

7 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 SUMMARY AND PRIMARY OBJECTIVES OF THE RESEARCH

7.2 RECOMMENDATIONS
7.3 FURTHER RESEARCH ..........................................................................................69
7.4 CONCLUSION.....................................................................................................69
8 LIST OF REFERENCES ...........................................................................................71
APPENDICES

APPENDIX A: Data collection instrument(s) ................................................................. 74
APPENDIX B: Format of Credit bureau information ....................................................... 80
APPENDIX C: Informed consent form for data collection instrument(s) ...................... 82
LIST OF FIGURES

Figure 1: Uses of micro loans .......................................................................................... 21
Figure 2: Total Micro Lending Loan books as at May 2007.............................................. 23
Figure 3: Relation of interest charged to risk..................................................................... 36
Figure 4: Age of individual respondents ........................................................................... 47
Figure 5: Period of employment at respondent entities .................................................... 47
Figure 6: Part of the microfinance industry in years ........................................................ 48
Figure 7: Level of credit decision making ........................................................................ 49
Figure 8: Microfinance category classification................................................................. 50
Figure 9: Evaluation of risk tools in a microfinance entity................................................ 51
Figure 10: Most threatening risks for non-bank microfinance institutions in South Africa .. 52
Figure 11: Risk tools that banks use to be applied in the microfinance industry ............. 52
Figure 12: Most cost effective way to lower overall microfinance risk in South Africa ...... 53
Figure 13: The biggest predictors of non-payment of new clients in a microfinance institution in South Africa ................................................................. 54
Figure 14: The biggest contributor to minimize credit risk in a microfinance institution in South Africa ......................................................................................... 55
Figure 15: The most efficient way to optimise client service in a microfinance institution in South Africa .......................................................................................... 56
Figure 16: The most efficient way to reduce risk in a microfinance institution in South Africa ......................................................................................... 56
Figure 17: Items on which a MFI would spend the most money on in the following financial year ........................................................................................................ 57
Figure 18: The biggest misperception in South Africa regarding microfinance institutions 58
Figure 19: Two strategies that will excel your business the best........................................ 59
Figure 20: The most efficient options to pro-actively manage risk in a microfinance institution in South Africa ......................................................................................... 60
Figure 21: The best predictors of on-time payments by clients ........................................ 61
Figure 22: Client repayment analysis per age category .....................................................63
LIST OF TABLES

Table 1: Abbreviations used in this document ................................................................. 18
Table 2: Living standards measure in South Africa .......................................................... 22
Table 3: Classification of micro-lenders by size ............................................................... 24
Table 4: Capitec: Debt-to-equity ratio ........................................................................... 32
Table 5: Summary of client analysis ............................................................................... 62
1. INTRODUCTION

1.1 BACKGROUND

Risk is the probability that a decision will lead to a different outcome as thought due to the fact that decisions are made under uncertainty with imperfect information (Cendrowski and Mair, 2009:1). Microfinance Institutions (MFIs) are usually known as higher risk businesses when compared to the commercial banks (Wright and Haynes, 2005:94). Managing risks in this higher risk environment would therefore probably be different than managing risks in commercial banks in South Africa. Microfinance businesses need to consider which risks are manageable in the microfinance environment and which are exposing the business to too much risk. The fine line between manageable risks and negative exposure can determine the sustainability or failure of a microfinance institution.

The microfinance industry in South Africa evolved from a small informal industry to a massive regulated industry today. The biggest change was the implementation of the National Credit Act of 2006 (NCA) in June 2007. The primary reason why micro lenders usually charge higher interest rates than other credit providers is because they take a greater risk than what banks do (Wright and Haynes, 2005:94). Due to the new regulated environment the impact on the industry was significant as it resulted in an average fall in net profit of between 15 and 25%. The role players in the microfinance industry became formalised and had to initiate product development and emphasise current product expansion in order to stay competitive and ensure returns on the capital of shareholders. For these reasons, micro lenders started managing their risks in a more formal way (Van Heerden, 2008:17).
Microfinance is used as an instrument for alleviating poverty and approving the poor’s access to financial services, especially in developing countries like South Africa (Hietalathi and Linden, 2006:201). However, in order for MFIs to sell their products and services (loans, insurance, funeral benefits, cell phones, airtime, prepaid electricity and other related products) successfully to the volatile lower end of the consumer chain, they need to be practically sure that they sell the correct product to the correct client. This will ensure higher collectability, which is one of the biggest determinants of success in the microfinance industry. As the microfinance sector forms part of the South African financial industry, it is important to provide academic literature and fill some knowledge gaps regarding risk management in this industry. It is important to understand that risk in microfinance terms and risk in banking terms are probably the same risks, with the difference being the appetite for it.

Previous research by Mutezo (2005:1) addressed aspects of funding small, medium and micro enterprises (SMME’s) in South Africa and Van Heerden (2008:1) addressed the microfinance industry regarding the potential effect of the national credit act of 2006 on the future of selected, specialised micro-lending institutions in South Africa. As discussed by the two authors above, there are many negative perceptions (like the ‘loan shark’ connotation) regarding the microfinance industry in South Africa, mainly due to inadequate knowledge of this entrepreneurial industry.

This research report will combine industry aspects that were addressed by Mutezo (2005) and Van Heerden (2008), international microfinance features, risk traits relating to microfinance and the management thereof and determine the common factors of an average microfinance client in South Africa.

1.2 PROBLEM STATEMENT

Small, medium and even large MFIs in South Africa find it difficult to minimize business risk, manage risk and to predict the outcome of credit transactions. This may probably be due to the volatility of its client base, the unknown factors in terms of client profile and the lack of corporate risk tools. Especially the smaller and medium size role players find it difficult to manage business and credit risk cost effectively in a pro-active manner. This
may lead to the departure of these role players from the industry, the over indebtedness of the microfinance client base and non-sustainable business operations.

Business risk in this study will consist of the following main industry risks:
- the risk of micro loans being written off due to the lack of repayments;
- the risks regarding rapid growth of an MFI;
- risks relating to debtor management systems in the MFI environment and
- cash flow risks for MFIs.

1.3 PURPOSE STATEMENT

The main purposes of this study are:
- to compare the perceptions of anticipated risk from management with the risks identified in the analysis of quantitative customer data;
- to find the balance between too little risk and too much risk;
- to determine how to pro-actively manage risk in the microfinance environment;
- to determine how to increase the success of predicting the outcome of microfinance credit transactions and
- to determine the average profile of a microfinance client in South Africa.

1.4 SPECIFIC RESEARCH QUESTIONS

This study will aim to answer the following questions regarding MFIs in South Africa:
- What are the most threatening risks for microfinance businesses in South Africa today?
- What are appropriate risk tools to manage the highly risk microfinance industry?
- Which risk tools that are used by the commercial banks in South Africa can also be successfully applied to the microfinance industry?
- What are cost effective ways to manage risk?
- What are the ways to successfully predict the outcome of credit transactions?
- How does one minimize risk and optimise business efficiency in the microfinance environment?
• What are the differences in microfinance client profiles in terms of non-paying clients and on time paying clients?

1.5 IMPORTANCE AND BENEFITS OF THE STUDY

From a theoretical perspective, the study gives access to a theoretical framework to assist in managing and minimizing business risk for microfinance business in a cost efficient way. The study will determine the probability of predicting if a microfinance client will perform well or if the client will default. It will also serve as a basis for further research on the microfinance industry and related risks.

From a practical perspective, the study is useful to owners, directors and managers of MFIs to manage the whole process of risk in a cost efficient and economically effective way. The study will also supply potential investors with the knowledge to better understand the potentially high risk environment and clear some misperceptions regarding the industry.

This study covers explanations regarding the assumptions made and discusses the delimitations to the proposed study. It also includes a list of definitions and key terms and provides a literature review that is relevant to risks for microfinance enterprises. The research design and methods are also explained.
2 DELIMITATIONS AND ASSUMPTIONS

The following section will discuss the delimitations and assumptions of the study.

2.1 DELIMITATIONS

The following delimitations apply to the study:

- The study is limited solely to microfinance companies and will not focus on other financial institutions like pawn brokers and furniture shops who also supply credit to the same market.
- It focuses on South Africa as a whole and does not differentiate between different provinces within South Africa.

2.2 ASSUMPTIONS

The research study is based on the following assumptions:

- Circumstances in the industry have not changed substantially during the period of the research.
- International solutions are as effective in South Africa as elsewhere in the world.
3 DEFINITION OF KEY TERMS

Microfinance

Microfinance is the provision of a range of financial services to the lower income section of the population who do not meet the requirements to gain traditional finance (Shastri, 2009:136). Traditional finance refers to financial products from banks.

Microfinance is the supply of loans and saving services to the poor (Schreiner, 2002:591). Saving services are subject to the fact that the entity possesses a banking license.

It can also be defined as money lending on a small scale to consumers for starting a small business, paying for student fees, burial payments, buying building supplies, buying furniture, clothing and other necessities (Kasbergen, 2009:2).

Risk

Risk relates to the probability that a problem will occur or that there is uncertainty on objectives (Cendrowski and Mair, 2009:9). A problem refers to a different outcome in relation to the wanted outcome. There is a direct correlation between uncertainty and the level of risk.

Business risk

Business risk is the risk that relates to the daily running of the operating activities of a company and is mainly of operational nature (Vigario, 2002:166).
Credit risk

This is the possibility of a loss occurring due to the failure to meet contractual debt obligations (Answers, 2007). Credit risk increases as the level of debt finance increases.

Short term credit transaction

This is typically a credit transaction of less than R8000 with a repayable period not exceeding 6 months (National Credit Act and Regulations, 2007:242). This can range from a one day loan to a six month loan.

Credit scoring

This is the process of forming a prediction in terms of a client’s repayment ability when taking credit decision (Crook, Edelman and Thomas, 2007:1463). Predictions are mainly based on a client's credit record.

The following abbreviations will be used throughout the study:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>MFI</td>
<td>Microfinance Institution</td>
</tr>
<tr>
<td>NCA</td>
<td>National Credit Act</td>
</tr>
<tr>
<td>NCR</td>
<td>National Credit Regulator</td>
</tr>
<tr>
<td>MFSA</td>
<td>Micro Finance South Africa</td>
</tr>
<tr>
<td>JSE</td>
<td>Johannesburg Stock Exchange</td>
</tr>
<tr>
<td>WACC</td>
<td>Weighted average cost of capital</td>
</tr>
<tr>
<td>IDFC</td>
<td>Independent finance corporation</td>
</tr>
</tbody>
</table>
CHAPTER 4

4 LITERATURE REVIEW

4.1 INTRODUCTION

The purpose of this literature review is to synthesise and contextualise information. It will also provide a basis for later recommendations in this study. Although there is not ample literature available on the specific topic in South Africa yet, there is international literature available as well as literature on individual aspects of the topic in South Africa. The aim of the study is to combine and analyse different risks in the microfinance environment in order to create a framework which can assist in the effective management of these risks. In order to do this, it is important to identify the main aspects of the research. This section will also provide an overview of the context for the proposed study.

4.2 THE MICROFINANCE INDUSTRY

The dual mission of a MFI is to serve the poor and to be financially sustainable (Mersland, 2009:2). The fundamental products and services of MFIs are investing, lending and insurance. These are well established financial topics, even though they have not received enough attention in financial journals (Brau, 2004:1).

Micro lending is a combination of the terms micro and lend, each meaning the following:
- Micro – Extremely small in scale or capability;
- Lend – To give temporarily or allow having for a limited time (Van Heerden, 2008:17).

This subsequently means disbursing relatively small loans and other financial products that will be repaid over an agreed period of time (Van Heerden, 2008:17).

MFIs focus on giving lower income people access to financial products. The different role players in South Africa vary in size from small single branch institutions to massive entities
with banking licences. According to Brau (2004:11) all these MFIs in South Africa have the following aspects in common:

- they service the same lower income end of the market;
- their main stock item is money;
- they want to be profitable and sustainable in the future;
- they have the urge to grow and expand;
- they are all regulated by the same act; and
- they all have an appetite for relatively high risk.

The most common products that these entities sell include:

- personal loans;
- enterprise development loans;
- housing loans;
- cell phone products and airtime;
- insurance products (including life, household, motor and personal insurance);
- funeral cover;
- study loans and
- investments and savings (Capitec, 2010).

According to Van Zyl, Botha and Skerritt (2003: 116), the microfinance industry is seen as a positive expansion of the financial system as it reaches out into less-served segments of the economy. The biggest component of micro lending in South Africa consists of consumer lending (also known as microcredit or consumption) as indicated in figure 1, however this is changing as additional products are offered to the market (Brau, 2004:12).

Before the National Credit Act of 2006 (NCA) was implemented in June of 2007, standard practice in the industry was to charge 30% interest per month for short term credit transactions. With the implementation of the NCA, the maximum prescribed interest rates are 5% per month and the only other fees allowed are monthly fees (R50 per month as the prescribed maximum) and initiation fees (15% on the first R1 000 and 10% thereafter as the prescribed maximum) (National Credit Act and Regulations, 2007:246-248).

Figure 1 indicates that almost 50% of all micro loans are used for consumption. Consumption consists of travel fare, funerals, medical expenses and basic food needs. A
significant component of consumer lending is emergency loans. According to Collins, Morduch, Rutherford and Ruthven (2009:67), the funeral of a family member dominates the reasons for emergency loans in South Africa. Other reasons include serious injury or illness, theft and violent crime and fire or loss of home or property. These emergencies create additional financial needs for the lower income earners in South Africa due to the lack of savings in these households. Therefore emergency loans introduced by micro lenders proved to be popular and sometimes life saving to the poor (Collins et al, 2009:94).

Figure 1: Uses of micro loans

The parameters for a personal micro loan in this study will be loans less than R15 000 as well as a loan term of 36 months and less. This will therefore include short term credit transactions and unsecured credit transactions.

The lower income earners of the market can be classified with the living standards measure (LSM) as groups one to six. According to Van Heerden (2008:17), the need for credit in these sectors is due to the fact that commercial banks, through their traditional banking branch network, do not engage with this sector of the market. The credit risks involved in their systems do not cater for high volumes on small scale. Maintaining their images and corporate approaches instead of entrepreneurial approaches could also be seen as possible reasons for this. This is however also changing as the four commercial banks, through loan centres as sub-divisions of the banks, are entering the microfinance space.
Table 2 illustrates the different LSM levels. It clearly shows that LSM one to six forms 67.6% of the total population. There are more or less 22 million adults in South Africa, but a large percentage of the 22 million is not formally employed (South African Research Foundation, 2010). 14 million adults fall into the LSM 1 to 6 category, of which 6.5 million are permanent or part-time employed. In 2003 it was reported that 17 million South Africans were unbanked (Ojah and Mokoaleli-Mokoteli, 2010:6).

Table 2: Living standards measure in South Africa

<table>
<thead>
<tr>
<th>LSM</th>
<th>Average monthly household income</th>
<th>Proportion of South African population</th>
<th>Educational level</th>
<th>Unemployed</th>
<th>Total South African household cash expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R1 269</td>
<td>33.0%</td>
<td></td>
<td>41%</td>
<td>11.5%</td>
</tr>
<tr>
<td>2</td>
<td>R1 475</td>
<td>34.6%</td>
<td>15% no schooling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>R2 267</td>
<td>34.6%</td>
<td></td>
<td>33%</td>
<td>23.2%</td>
</tr>
<tr>
<td>4</td>
<td>R2 424</td>
<td>32.4%</td>
<td>30% post matric qualification</td>
<td>13%</td>
<td>65.3%</td>
</tr>
<tr>
<td>5</td>
<td>R3 462</td>
<td>30.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>R5 755</td>
<td>29.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>R9 638</td>
<td>28.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>R13 002</td>
<td>27.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>R17 648</td>
<td>26.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>R25 179</td>
<td>25.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


There are two extreme approaches to microfinance, namely the poverty approach and the self-sustainability approach (Shreiner, 2002:1). The poverty approach relates to the welfare of the poor, while the self-sustainability approach relates to the welfare of the micro lender. To find a balance between the two approaches would probably be the ideal situation.

Poor people tend to use micro loans to meet basic needs such as food and shelter rather than to invest it in income generating activities (Hartungi, 2007:397). Credit to the poor serves a dual purpose as it is used for investing in small enterprises, but also results in a significant short term increase in household expenditure and welfare (Kevane & Wycick, 2001:1225). This indicates the important role than MFIs plays in the economy of a country.
The implementation of the NCA had a great influence on formalising the microfinance industry in South Africa. There are fewer entities than in the 1990s, but these entities are much bigger. Most of the entities can be placed in the following tiers:

**Tier 1** – These companies have banking licences.
- Africanbank, Capitec, Loan centres of ABSA, FNB, Standard Bank and Nedbank.

**Tier 2** – These companies are listed but do not have banking licences.
- Aid Africa, Blue, Finbond, Real People.

**Tier 3** – Unlisted bigger entities.
- AMSA, Atlas, Bayport, Mafori Finance, Thuthukani Financial Services

**Tier 4** – There is long list of entities with less than 10 branches in South Africa.

The total value of the combined loan book of all the above entities is illustrated in Figure 2. In 2007 the total value of the micro lending loan book in South Africa was 29 Billion rand.

**Figure 2: Total Micro Lending Loan books as at May 2007**

![Graph showing total micro lending loan books from May 2004 to May 2007.]

Source: Adapted from Ojah and Mokoaleli-Mokoteli (2010:9) - National Credit Regulator (NCR), 2007

Different categories of microfinance enterprises can further be classified according to size. Table 3 shows the three categories.
Table 3: Classification of micro-lenders by size

<table>
<thead>
<tr>
<th>Size</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>&lt; R5 million in turnover - Between one and 10 branches</td>
</tr>
<tr>
<td>Medium</td>
<td>&lt; R250 million in turnover - Between 10 and 100 branches</td>
</tr>
<tr>
<td>Large</td>
<td>&gt; R250 million in turnover - Listed entities</td>
</tr>
</tbody>
</table>

**Source:** Adapted from Van Heerden (2008:18).

Small entities are often one branch entities, but can have up to ten branches. They usually specialise in small loans with a repayment period of between one and four months and do not often have a range of other financial products except personal loans. They are usually owner funded with relative low capital requirements due to the loan terms and are managed in a relative informal way. Medium enterprises often supply a wide variety of financial products with loan repayments that range from 1 to 18 months. They range from owner owned to listed entities. Most ‘common house brand’ entities fall in this category. The majority of these entities are striving towards a more scientific way of managing risks and have the desire to expand and to grow bigger in size. Large entities are probably the entities that started medium or even small, but made the right moves at the right time. They are also called the ‘term lenders’ and mostly specialise in products with repayment terms of between 3 and 48 months, but with a larger ratio on longer term loans. These entities sell the whole range of financial products that relate to the microfinance industry. Due to the scale of business risk, the success of the entities depends on the ways they manage their risks (Van Heerden, 2008:19). As illustrated here, there are different sizes of MFIs in South Africa, with most likely different risk appetites. The important part is that micro lenders will have to manage risks better in this regulated environment to stay competitive.

MFIs in the rest of the world generally rely on donors (Mersland, 2009:2). According to Van Heerden (2008:19), the private sector supplies 95% of all monies disbursed in the microfinance sector in South Africa. This means that this sector is primarily privately funded, which differentiates South Africa from the rest of the world. However, due to perceptions and risks associated, most enterprises heavily relied on equity funding. With the enormous growth of the industry over the last couple of years, the need for debt increased considerably. This made enterprises realise the importance of obtaining funding.
to grow and expand on their current businesses. The capital requirements to sustain microfinance businesses have increased due to the fact that loans are tied up for longer periods. Growth took place in the assessment of more people, but more importantly in the expansion of products, therefore giving the lower income earners access to more financial products that can enhance their lives.

Microfinance businesses have overall low fixed cost and this is carefully budgeted for together with variable cost. The microfinance business can be quite profitable from a low fixed cost basis and therefore fund its own growth once the breakeven point has been reached. Consolidations in the market make the stronger role players more dominant but pose a threat to smaller entities. To merge two entities is never easy, but if two ideal partners in terms of product mix, knowledge, access to funding, black economic empowerment (BEE), footprint, brand and management combine forces they can have a significant influence on the market. If an entity has a significant funding line, but not enough footprint and clients to sell to, it will probably make business sense to combine resources with an entity that has the footprint and systems in place, but serious funding restraints (Seymour, 2000:16).

The advantages of these corporate alliances can be:
- an immediate funding line through the business partner for entities with limited funding sources;
- a much bigger market presence and corporate brand;
- an extensive national footprint;
- new products and improved systems;
- the consolidation of current debt and
- lower business risk due to bigger scale.

The disadvantages of these corporate alliances can be:
- conflict as a result of the merger (more often the mis-management of conflict);
- loss of control due to large business scale;
- difficulty to operate in a more formal business environment and
- the credit act, poor operations and other illegal practices that can harm the brand name.
Lastly, another very important component of a successful MFI is well trained staff that is ethical, customer driven and driven by good incentives (Hartungi, 2007:397). This includes everybody from management to branch staff. Micro lending customers value the fact that the same person serves them every time they visit the branch. Knowing this, management will know that a constant staff rotation will have a negative impact on customer satisfaction even though this is good practice for internal controls and for reducing the risk of fraud.

4.3 MICROFINANCE RISKS

Microfinance entities face a spectrum of risks of which the biggest is probably the risk of clients not repaying their loans. MFIs who can successfully manage these risks, will be successful (Oberdorf, 1999:65). Successful MFIs have tight internal supervision, good internal audit practices, good financial procedures and sound financial risk management (Hartungi, 2007:398). The challenge therefore possibly lies in managing microfinance risk with effective internal controls.

According to Parker (1999:92), there are two kinds of risks, namely market risk and specific risk (or non-market risk). Market risk can be quantified as the beta of a company’s ordinary shares. Beta is a term used to measure the sensitivity of a company’s share price to movements in the market. For instance, Capitec has had a beta of 0.74 over the past 5 years which means that for every percentage that the market moves, they will only move 0.74% (McGregorBFA, 2010). The fact that they are less sensitive than the market means that their share price is less risky than their competitors.

According to Capitec’s 2009 annual report specific risks (business risks) relate to factors specific to a company. This can include the following:

- **Bad debts** - due to the industry they trade in, bad debt is part of the business;
- **Interest rate risk** - Capitec has an uncomplicated interest profile;
- **Credit risk** - loans and advances are unsecured and therefore the entire debtor’s book is exposed to credit risk;
- **Operational risk** - Capitec needs to comply with the National Credit Act (NCA). (Other operational risks can include reputation risk, legal risks and systems risks);
- Liquidity risk - The short term nature of the loan book in relation to the size of the deposit book reduces the liquidity risk of the company;

- Management - According to Vigario (2002:196) the quality of management needs to be considered as well as the portion of the shares that management holds. According to the researcher, Capitec has a well-balanced, highly skilled management team that combines corporate values with entrepreneurial thinking. Management holds a material amount of shares in the company which ensures that they will act in the best interest of Capitec.

Specific risks can be reduced through diversification by holding shares in different industries or companies, but market risk cannot be reduced in this way. The most common risk in the financial sector is non-performance of loan products (Chicken and Posner, 1998:35).

The accounting measurement for financial risk is gearing. Companies with higher betas, tend to be highly geared. Gearing (or leverage) is the relationship between ordinary shareholders’ funds and forms of debt (Parker, 1999:92). Debt can consist of loans, debentures, deposits and preference shares for instance. Deposits held as a funding line is a relatively cheap form of finance, due to the low interest rate on savings. What substantially reduces gearing risk with regard to the deposits is the fact that the deposits consist of many small deposit amounts from different clients. For this reason, the danger of a few clients drawing their deposits and leaving the company with a cash flow problem is very low.

To review, the following aspects need to be taken into account when evaluating the risks related to a MFI:

- the debt equity ratio (gearing risks);
- interest cover;
- liquidity;
- market risk (Beta);
- company specific risks;
- growth;
- management team;
• industry comparative performance;
• theft and fraud and
• the non-performance of loans.

The amount of debt is determined by the company’s targeted financial risk policy (Ross, Westerfield, Jordan & Firer, 2001:451). A company's cost of equity rises when financial risks (debt) increases, because the risks of shares increase.

A company's financial risk increases the more debt reliant the company is (Lee & Finnerty, 1990:161). This means that the company needs to find the balance between debt and equity finance in order to minimise risk and maximise value. The gain from leverage is the tax deductibility of the interest expense. The negative side of debt is that the financial risk of the business increases (Ward & Price, 2006:76). The optimal level of debt equity is where the marginal gain from debt meets the financial risk associated with it. For that reason it is agreed with the Bruner case (Bruner, 1993:836) that the optimal debt/equity ratio creates value, because the maximum benefits meet the minimum risk.

The gearing ratio determines the proportion of fixed interest and fixed dividends (for preference shares) in relation to income and assets (Hill, 1998:218). High gearing (more debt and less equity) increases financial risk and therefore increases the required return on equity as shareholders have to be compensated for the higher risk in the company. Lower gearing has the opposite effect. Once again the researcher agrees with the Bruner case (Bruner, 1993:836) that if a company minimizes weighted average cost of capital, the overall Net Present Value (NPV) of the company will increase, which will maximise the share price and therefore satisfy the shareholder’s needs.

Business risk, in brief, relates to the risk that the company will not be able to produce a required return for shareholders. Financial risk on the other hand relates to risks that arise from the capital structure.
4.3.1 **Business and credit risk**

The concept of risk has three basic elements:
- the perception that something could happen;
- the likelihood of something to happen and
- the consequences if it does happen (Transfield Services, 2010).

In order to lower the risk of loans not performing the emphasis should be on quality loans and a risk portfolio not exceeding 5% (Dixon, Ritchie and Siwale, 2006:416). The quality of a loan is determined by the correctness of the credit decision when the loan is granted. As per Ojah and Mokoaleli-Mokoteli (2010:4), adverse selection arises when lenders cannot distinguish between safe and risky borrowers. Adverse selection as a component of information asymmetry is a problem of hidden information where the borrower has more information about the state of their affairs than the lender. Therefore, from the credit providers' point it is of utmost importance to obtain as much accurate information regarding the borrower to assist in the credit decision. Financial intermediaries, including banks, deal with the problem of information asymmetry in the following ways:
- rationing credit;
- requiring collateral;
- screening applicants and
- monitoring borrowers.

This study discusses the latter two interventions, namely the screening and monitoring of applicants. Rationing credit is not viable in terms of pricing as the interest rates are capped by the National Credit Act of 2006 and most micro lenders operate in the unsecured lending space and cannot require collateral. Screening involves gathering as much information about the applicant as possible to assist in the credit decision (Ojah and Mokoaleli-Mokoteli, 2010:4). Due to the absence of sound formal contract enforcement, lending institutions place greater emphasis on loan application screening practices. Screening in the informal sector relies heavily on personal knowledge about loan applicants. It is possible to reach the small borrowers cost effectively by taking into account their risk profiles when making the credit decision. Screening includes the use of credit bureau information, work confirmations, affordability tests and scoring models. There
are principles to reduce lender risk in integrated financial systems that involve restructuring 
of internal management, improving appraisal of risk, developing tools for containing risk 
and some risk sharing procedures (Areyeetey, 2005:17).

The financial sector takes risks that it considers to be acceptable and at a price that will 
deliver an adequate return (Chicken and Posner, 1998:35). Commercial banks and MFIs 
fall under the financial sector in South Africa. The difference might be in which risks are 
acceptable and what an adequate return is. Better corporate governance of MFIs is a key 
to enhancing the viability of the industry (Mersland, 2009:17).

According to Levy and Sarnat (1988:66), funding risks is the loss of control due to equity 
sacrificing. Control is extremely important for decision making that must be taken into 
account before engaging with a funding partner, especially in the fast changing 
microfinance environment. Engaging with the wrong funding partner can have a negative 
impact on the microfinance company in the following ways:

- the funder interfering in the operational activities can lead to bad relationships;
- unhealthy pressure can be placed on the entity;
- loss of control by the holding company can lead to poor decision making;
- too expensive capital (either debt or equity) can drain the company;
- the micro lender can lose precious assets if it cannot comply with the agreement terms;
- a corporate funder can be a drawback on the entrepreneurial activities of the 
  microfinance company;
- microfinance companies who are listed on the JSE can fail to comply with all the strict 
  regulations and
- reputation risks can occur if the entity engages with the wrong funding partner.

The risks regarding funding decisions should be minimised by precaution and 
diversification of different funding sources according to Reekie et al (1989:162). In order 
for a MFI to be sustainable, it will have to reach a certain level of scale. This is however 
challenging as commercial loans could often be difficult to obtain (Latifee, 2003:3).

Acquiring debt funding should be a process, not a goal and with optimal funding sources 
the microfinance industry in South Africa can grow and be sustainable well into the future.
Reputation risk must be taken into account, as a bad reputation can ruin an entire micro lending company.

4.3.2 Financial risk

Debt finance always has the risks of the MFIs inability to pay back the loan and this can lead to foreclosure and even liquidation of the MFI (Harper, 2005:277). Even though the cost of debt is lower than the cost of equity due to tax advantages, it brings forth financial risks with it that increases the cost of equity (Vigario, 2002:47).

The aim is to maintain target proportions of debt and equity (Drury, 2000:508). The two important components of funding are debt capital and equity capital. The overall cost of capital is the weighted average cost of capital (WACC).

Here is an example of the calculation of WACC:

After tax cost of debt = 10%
Rate of return on equity capital = 18%
The target capital structure = 50% debt and 50% equity

WACC = (0.5 x 10%) + (0.5 x 18%)
= 14%

Different methods can be used to determine the sources of funding, for example:
- discounted cash flow method;
- internal rate of return (IRR);
- payback methods and

Product creation for a micro lending company should be a formal process in order to ensure that top management know the risk of investing resources and capital in the new product and that operational management have a stage by stage framework (Allen, 1993:86). In a typically high risk environment like micro lending, it is important to carefully plan how to manage growth and provide for a steady cash flow. It is also important to have
adequate strategies in place, like marketing, pricing and financing strategies. A business plan really gives direction and support to these key elements (Berry, 1998:129).

The cash flow statement is an important source to study risk as firms usually enter bankruptcy because it is unable to internally generate cash or obtain external cash sources (Stickney, Brown and Wahlen, 2004:263). Short term liquidity risk and long term solvency risk are tools to assess risks. There are two types of firm specific risk namely credit risk and bankruptcy risk. Ratios are therefore used to determine these two types of risks and to predict the possibility of companies not being able to repay debt and/or for the likelihood that a firm will go bankrupt or be liquidated.

Ratios to calculate business risk include the net profit percentage ratio and return on assets (ROA) and ratios to calculate financial risk include the following:

- debt to equity ratio;
- current ratio;
- acid test ratio;
- total debt to cash flow and
- the fixed asset turnover ratio (Vigario, 2002:166-175).

The greater the debt, the greater the risk for a company as all debt gives third parties a legal claim on the company. If this ratio goes wrong, the company has a long term problem that can be terminal (Walsh, 2003:132). This ratio is therefore an indication of risk and the amount of debt a company can afford. The following table illustrates Capitec’s gearing ratio.

<table>
<thead>
<tr>
<th>Table 4: Capitec: Debt-to-equity ratio</th>
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<tbody>
<tr>
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<tr>
<td><strong>2009</strong></td>
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<td>R'000</td>
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<tr>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Total debt</td>
</tr>
<tr>
<td>Total funds</td>
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<tr>
<td>Total debt over total funds</td>
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</tbody>
</table>
The negative side of debt is that the financial risk of the business increases (Ward & Price, 2006:76). On the other hand, deposits held are not that risky as they strengthen the company’s client base, generate transaction fees and have low return expectations.

Financial statements are analysed to determine the profitability and future prospects of the company and the financial structure thereof (Vigario, 2002:168). Ratios are used to determine business and financial risks.

4.4 THE ASSESSMENT OF RISKS

The recent financial crisis in 2008/2009 has proven that risk management practices are essential for small to large institutions and with Basel II the banking sector is advocating change in risk management policies. Effective risk management must be implemented in order to reduce fraud, stock losses and reduce overall company risk (De Andrade and Thomas, 2007:1577).

According to Cendrowski and Mair (2009:4), there are five steps in the risk assessment process, namely the enumeration of risks, qualitative analysis, and quantitative analysis, implementation of a risk management strategy and the assessment of the risk management strategy.

In order to complete a risk assessment one needs sound information to base one’s assessment on. This information should take on a strong future perspective and not only consist of historic information.

4.5 RISK TOOLS IN SOUTH AFRICA FOR MICRO FINANCE

According to Cendrowski and Mair (2009:11), risk management strategy consists of the following:
4.5.1 Risk identification

This is the process of gathering information in order to identify possible risks. The end result of this process will be a list of potential risks of various problems.

4.5.2 Risk evaluation

In this phase, the consequences of each risk on the list should be determined especially for the different stakeholders, namely customers, suppliers, employees, directors, shareholders and so forth. Once this has been done, the current control measures in place to mitigate these risks should be evaluated. Risk evaluation can be seen from the two perspectives of probability and magnitude. Probability refers to the risk that something will go wrong and magnitude to the extent of damage if something goes wrong.

4.5.3 Risk mitigation

After risks with their consequences have been identified and controls have been evaluated, a risk mitigation strategy should be implemented. This strategy will focus on risks that seem intolerable to the microfinance institution. This process might involve revising current controls, the implementation of new controls or the removal of factors that cause these risks. This section will therefore focus on decreasing the probability that an event occurs and the magnitude thereof if it occurs. If risk tools manage to combine the aspects of probability and magnitude, risks will be minimised effectively.

4.5.4 Frameworks for risk assessment

The following are two comprehensive frameworks for risk assessment:

- COSO’s Internal Control – Integrated framework (COSO-IC)

The COSO-IC framework emphasizes the following key elements of an effective internal control system:

- a strong control environment;
• a code of conduct;
• a competent audit committee and
• a strong management function.

The three objectives of the COSO-IC framework are effective and efficient operations, reliable published financial statements, compliance with laws and regulations and safeguarding of assets.

The COSO-ERM framework consists of the following elements:
• internal environment;
• objective setting;
• event identification;
• risk assessment;
• risk response;
• control activities;
• control functions;
• design;
• implementation;
• information and communication and
• monitoring.

4.6 OUTCOME PREDICTION AND PRO-ACTIVE RISK MANAGEMENT

In the technology satiated world that we live in, there is so much information regarding customer trends. This information should be used to illuminate restraints and alter the way work is organized. Micro lenders should use this information to determine lending trends, high risk customers and also to expand on the need of the customer. In order to reach those dream targets one has to listen hard and respond fast (Johnson, 1992:68). One of the most important standards in the industry is the affordability test. This process varies from different lenders as some have stricter criteria than others. It is of utmost importance as the affordability test determines the amount and quality of loans that are processed by taking into account the risks of recoverability. A really bad credit decision for any financial
institution is one that ultimately results in the write-off of the loan (Chicken and Posner, 1998:37).

Using information from a credit bureau will reduce transaction cost by eliminating clients with poor repayment histories and this will result in increased institutional efficiency (Drake and Rhyne, 2002:269). Banks and MFIs assess the acceptability of credit risks in several ways and most of these ways are computerised in the form of Credit Metrics and Scoring models (Chicken and Posner, 1998:37). These are called credit risk assessments. The purpose of credit risk assessment is the identification of the type of client.

**Figure 3: Relation of interest charged to risk**

Credit scoring helps a lender to differentiate between applicants whom the lender is confident that will successfully repay their loan and those applicants about whom the lender is not confident. Credit scoring and risk assessments of potential loan applicants have been one of the most successful applications of statistical and operational research concepts over the past decade. This also increases competition in the microfinance market as competitors strive to minimise risk with very accurate predictions based on the credit scores of clients. Effective credit scoring reduces cost in terms of more cost effective decision making process and eventually less bad debts (Crook *et al*, 2007:1463).
Credit scoring models have the following disadvantages:

- it is mainly based on book value of accounting data which may fail to predict correctly in a fast moving environment;
- the world is not linear and scoring models may fail to predict accurately due to this and
- the credit scoring bankruptcy prediction models are often link to theoretical models. (Altman and Saunders, 1998:1725).
CHAPTER 5

5 RESEARCH DESIGN AND METHODS

5.1 INTRODUCTION

This section deals with the research philosophy, the inquiry strategy, research design, the sampling method used, the collection of data, the analysis of data, the quality of research design and the research ethics.

An empirical research was conducted based on primary data and secondary data. Information for the study was gathered through questionnaires, which was combined with qualitative data analysis procedures. This was supplemented with a sample of client credit information that was obtained from a national credit bureau. The rest of this section gives a detailed overview of the whole process.

5.2 DESCRIPTION OF INQUIRY STRATEGY AND THE BROAD RESEARCH DESIGN

The study is exploratory as literature is limited on this topic. The appropriate descriptors of the study are discussed in this section.

5.2.1 Empirical research

Empirical studies refer to all research in which the researcher collects new data (regardless of the data collection method used) or in which the researcher re-analyses existing data (Bobbie & Mouton, 2001:75). New data for this study was collected through questionnaires and existing credit bureau data was re-analysed. Due to the lack of existing concepts and theories, a non-empirical study was not considered.
5.2.2 Basic research

Basic research is undertaken to purely understand processes and their outcomes, predominantly in universities as a result of an academic agenda, for which the key consumer is the academic community (Saunders et al., 2007:592). This study will contribute to a better understanding of real life organizational problems and informing management on decision making. It will however also aim at increasing scientific knowledge regarding risks for microfinance companies.

5.2.3 Descriptive research combined with a combination of exploratory and explanatory research

Descriptive research is research for which the purpose is to produce an accurate representation of persons, events or situations (Saunders et al., 2007:596). Role players in the microfinance industry were classified as small, medium and large and data was collected from all three categories to represent the whole spectrum accurately. The study provides in-depth descriptions of the different categories.

Exploratory research is research that aims to seek new insights into phenomena, to ask questions and to assess the phenomena in a new light (Saunders et al., 2007:598). The microfinance field in South Africa is academically still a very unexplored field and therefore this study can be a foundation for further studies in this field. New questions will be asked and new data will be collected.

Explanatory research is research that focuses on the study of a situation or a problem in order to explain the relationships between variables. This study will try to explain what the relationship is between the perception of risk from a management point of view and what the possible microfinance risks are as per customer credit information.

5.2.4 Cross-sectional study

The cross-sectional study is the study of a particular phenomenon at a particular time (Saunders et al., 2007:595). The proposed study will be a cross-sectional study due to
questionnaires that will be used over a short period of time. Due to a time constraint, a longitudinal study will practically not be possible.

5.2.5 Collecting primary data using questionnaires

The study will be non-experimental as questionnaires will be used to gather a large portion of the data. The purpose of a questionnaire is to gather valid and reliable data that is relevant to the research problems and objectives of the proposed study (Saunders et al., 2007:356). With questionnaires the researcher prepares a list of themes and a set of questions to be covered. Refer to Appendix A (p 62) for the format of the questionnaire that was used. The SurveyMonkey technique was the format used to complete the electronic questionnaires. This is called internet-mediated questionnaires (Saunders et al., 2007:356). SurveyMonkey is an online survey tool that is time efficient and enables the researcher to create his or her own professional survey online (crunchbase, 2009). This tool has advanced features to create a questionnaire and the functionality to analyse results (Surveymonkey, 2010). Therefore, instead of sending manual questionnaires to respondents, the researcher sent a link via electronic mail to the respondents. The link leads respondents to the questionnaire in an online format where they were able to complete it in their own time and comfort. This tool speeded up the response time rapidly.

5.2.6 Primary data

*Primary data* is data collected specifically for the research project being undertaken (Saunders et al., 2007:607). New data from questionnaires will be collected due to the lack of similar studies undertaken in the past in South Africa.

5.2.7 Qualitative data

Qualitative data is non-numerical data or data that have not been quantified (Saunders et al., 2007:608). As quantitative data is available in the form of credit bureau data, it will be combined with qualitative data through questionnaire answers to obtain a wide perspective.
5.3  SAMPLING

The study was based on small, medium and large companies in the micro-lending industry in South Africa post of the implementation of the National Credit Act in June 2007. The companies were classified in three groups, namely small, medium and large. The classification of microfinance companies was based on table 3 in section 4.1.

5.3.1  Target population

The units of the proposed study were microfinance entities in South Africa. All microfinance companies almost certainly have the same risks which differ in importance. Due to the qualitative side of the study, a link to the SurveyMonkey questionnaire was sent to financially responsible persons of the different entities via e-mail.

The study has been limited to South African entities due to practicality, budget constraints and area of interest. Due to the fact that microfinance entities are entities that provide unsecured loans and other financial products to the lower income end of the market, most microfinance entities do not have banking licenses, however in the large category there are role players with banking licenses. The target population has been divided into 4 different categories.

The first category is unlisted entities with less than 10 branches. The second category is unlisted entities with more than 10 branches. The third category is listed entities without a banking license. The fourth category is entities with banking licences. The last category includes the microfinance divisions of some of the traditional banks. After the entities have been categorised in the four different categories, questionnaires were sent to the relevant financial, operational and risk related employees of these entities.

In terms of the data collected from a credit bureau, client information relates to South African consumers with at least one micro loan registered.
5.3.2 Sampling size

There are hundreds of entities which can be classified in one of the four categories according to size. The smaller entities are the most but also the most difficult to reach due to the fact that they are not well known. Questionnaires were sent to relevant persons in order to receive fifty responses from financial, operational or risk responsible persons in the different sizes of entities.

The request to the credit bureau was to provide credit information on three thousand South African consumers with at least one micro loan registered. The three thousand will be randomly picked electronically by the credit bureau itself.

5.4 DATA COLLECTION

Valid and reliable data was collected through questionnaires and secondary data. The questionnaires consisted of a list of themes and questions to be covered (Saunders et al., 2007:354). The questionnaires were prepared in an experienced, well organized manner and were used to collect primary data which was collected by the researcher.

It is of extreme importance to prepare well and approach the respondents professionally. As the different companies will not want to share any confidential information or trade secrets, the themes and questions must be formulated carefully to not offend the respondents. Possible obstacles in the collection of data for this proposed study may be:

- companies who do not wish to participate due to lack of interest, lack of time and/ or who are scared to answer questions about microfinance risks with an outside person;
- respondents that are not the correct designated persons to answer the questions;
- to ask the correct questions in order to retrieve specific answers to the research questions.

In terms of the credit information required from the credit bureau, a specific format in which the information is needed and specifically what information is needed was discussed with the credit bureau. Refer to Appendix B (p 68) for the format in which the information was collected.
5.4.1 Time frame for data collection

All questionnaires were sent out on the same day with a two week answering period. After one week, a reminder was sent via electronic mail to the respondents who have not yet responded or completed the questionnaires.

5.4.2 The data collection plan

A questionnaire list of themes and questions was prepared. The format of the list of the questionnaire is included in Appendix A (p 62). The preferred respondents to whom the questionnaire was sent was financial managers, credit controllers, operational Managers of MFIs identified according to size, market share and reputation. Contacts in the industry were used to find the correct, financial or risk responsible persons in the specific companies. They were contacted via electronic mail and the purpose of the study as well as the trend of themes and questions was briefly explained to them. The list of themes and questions was tested first with a knowledgeable person in the industry in the form of a test questionnaire with this specific person.

5.5 DATA ANALYSIS

The answers to the questionnaires were stored electronically on a laptop and backed up on an external hard drive. Data needs to be analysed to develop theory from it (Saunders et al., 2007:470). The data was carefully evaluated and organised to ensure the completeness and accuracy of the responses.

The data was categorised in units of data. The categories were grouped according to similarities and differences of the different sized micro lender. Content analysis was used as a method to analyse the data. The key responses in the interviews were identified to form the themes of the study. The similarities and differences in the various responses was analysed and used to develop themes. The quantitative client credit information was analysed by using statistical functions from the Microsoft Excel computer program.
5.5.1 Assessing and demonstrating the quality and rigour of the proposed research design

Certain sources of bias or error can influence the quality and rigour of the proposed research study. Rigour refers to reliability and validity of responses. Bias can also refer to the way responses are translated. There was no personal influence when collecting data.

5.5.2 Data quality issues

The data quality issues as per Saunders et al., 2007:150 relating to questionnaires will be discussed below.

Validity is concerned with whether findings are really about what they appear to be about. Questions need to be formed in such a way that the information collected is actually the information needed. Each question on the questionnaire needs to support the problem statement of the proposed study.

Reliability: The fact that a standard questionnaire is used will lead to consistency and make the data more reliable. The question needs to be asked whether alternative researchers would reveal the same information

Form of bias: The following types of bias need to be considered:
- the attitude of the respondent can influence the responses;
- bias in the way that responses are interpreted;
- where credibility is lacking and
- the value of the information given may be limited.

These forms of bias will also influence the validity and reliability of the information.

The following suggestions will improve the standard of the questionnaire and thus the quality of the data:
- questionnaires that are identical in order to improve reliability;
• the key to a successful questionnaire is proper preparation in order to ask the correct questions;
• a detailed explanation was supplied to make clear the fact that the questionnaire is not intended to collect trade secrets and the purpose of the research was explained;
• all respondents were given the opportunity to complete the questionnaire at their own convenient time.

5.6 RESEARCH ETHICS

Research ethics relates to the way one formulates and clarifies one’s research topic, design one’s research and gains access, collects data, processes and stores the data, analyses data and discloses the research findings in a moral and responsible way (Saunders et al., 2007:178). Different codes and considerations apply to different stages of the research, for example:

- **Negotiating access**: Participants’ rights to privacy should be respected and credibility should be established. Organisations will be informed of the option to stay anonymous, to ensure that the information will be confidential and for the purpose of this study alone.

- **Ethical considerations during data collection, storing, analysis and reporting**: The researcher will be prepared to sign a confidentiality agreement with the entities that prefer to be anonymous. Privacy of the participants will be respected and they will be under no obligation to provide sensitive data or trade secrets. Personal data will be kept securely and will only be used for the intended purposes.
CHAPTER 6

6 RESEARCH FINDINGS

This chapter presents the research findings of the study relating to the risk management of microfinance institutions in South Africa. The findings are based on the responses of 50 respondents in four (4) different micro enterprise categories and on the analysis of 3000 randomly picked microfinance customers.

The first part will give an overview of the profile in terms of the respondents. The second part will present the findings from the 50 employees of microfinance entities and microfinance related entities in terms of risk related questions. The 50 employees are financially, operationally and risk related senior employees of entities that fall in either one of the following categories:

- microfinance entities with banking licences;
- microfinance entities that are listed but without banking licences;
- microfinance entities that are unlisted but have more than 10 branches and
- microfinance entities with less than 10 branches.

The third part will present the findings from the analysis on 3000 microfinance customers, which were randomly picked by an accredited South African credit bureau. The information was obtained for 3000 customers for the period of September 2009 to September 2010. Half of them were in arrears with their payments at the end of the period and the other half were still paying on time at the end of the period. This information enabled the researcher to compare all of the information at the beginning of the twelve (12) months with all of the information after the same twelve (12) months for the same customers. It also enabled the researcher to compile a profile of the average microfinance customer in South Africa.

6.1 PROFILE OF THE RESPONDENTS AND RESPONDENT ENTITIES

The profiles of the respondents are described in terms of age and period of employment at the specific entity. The following figure indicates the ages of the respondents.
Figure 4: Age of individual respondents

None of the respondents were younger than twenty six (26) years of age and most of the respondents are between the ages of thirty six (36) and forty five (45) years of age. The ages of the respondents are evenly spread between 19.1% and 31.9% per age group.

The respondents’ period of employment at the microfinance companies are illustrated in figure 5.

Figure 5: Period of employment at respondent entities
A total of 72.3% of the respondents had been employed for 5 years or longer at their respective microfinance or microfinance related entities, and 40.4% had been employed for longer than 10 years. Only 4.3% of the respondents had been employed for less than one (1) year at their entity.

The profile of the respondent entities are described in terms of how long the entity has been operating in the microfinance industry, at what level credit decisions are taken and the category in which the entity lies. The following figure shows for how many years the respondent entities have been part of the microfinance industry in South Africa.

Figure 6: Part of the microfinance industry in years

A total of 70.2% of the respondent companies have been operating in the microfinance industry for more than 10 years. None of the companies have been operating in the microfinance industry for less than 2 years.

Figure 7 shows at which level the respondent companies take their credit decisions.
Of all the entities, 42.2% take their credit decisions at branch level, 26.7% at head office level and 31.1% take combined approach when taking credit decisions.

Over and above the fixed options in the questionnaire, the following other responses were collected in terms of the figure above:

- credit decisions are made by the production system, based on specific business rules;
- credit decisions are supported by a central automated process;
- credit decisions are evaluated on a monthly basis through senior staff and specific criteria.

An important factor that was considered when the sample respondents were chosen was to discern the the microfinance category in which they fall. This is important in order to get a representative view of the industry. The following figure indicates the different categories.
A total of 42.6% of the respondents were employed at entities that are unlisted and have more than 10 branches and 27% of the respondents were employed with entities that have less than 10 branches and are unlisted. The rest are evenly spread between listed entities without banking licences and those with banking licences. The 6.4% component that refers to ‘other’ consists of entities that are involved in the industry from a supply side, for example the micro finance association and companies that supply collection systems.

This section gives a good overview of the respondents and serves as an introduction to the actual findings in terms of risk, risk management and perception of the microfinance industry in South Africa.

6.2 RISK FINDINGS IN THE MICROFINANCE INDUSTRY IN SOUTH AFRICA

The second part of the questionnaire dealt with the actual risks, management of risks and perceptions of the microfinance industry. This section will reflect the findings resulted from the questionnaire. In the first question, respondents had to evaluate five (5) risk tools in terms of importance where one (1) is very important and five (5) not important. Points have been allocated as follows for every answer:

- 5 points for a 1;
- 4 points for a 2;
- 3 points for a 3;
- 2 points for a 4 and
- 1 point for a 5.

The total points were added up and the results reflect in figure 9.

**Figure 9: Evaluation of risk tools in a microfinance entity**

The three risk tools that stood out and are almost evenly important according to the respondents, are:

- credit granting policy and customer affordability calculations;
- internal controls and
- debt collecting.

Staff training, loyalty, integrity and credit scoring models are seen as less important risk management tools in the microfinance industry in relation to the first three tools.

Respondents ranked risks for non-bank microfinance institutions in South Africa from one (1) to five (5) in terms of most threatening (1) to less threatening (5). Points have been allocated as follows for every answer:

- 5 points for a 1;
- 4 points for a 2;
- 3 points for a 3;
- 2 points for a 4 and
- 1 point for a 5.
The total points were added up and the results reflect in the following figure.

**Figure 10: Most threatening risks for non-bank microfinance institutions in South Africa**

According to the respondents, the most threatening risks for the microfinance industry relates to fraud (internal and external), followed closely by bad debts. The other risks are evenly ranked and are also seen as important though less than fraud and bad debts.

Less than 50% of the respondents think that bank specific risk tools, other than those in figure 9, can be used in the microfinance industry in South Africa. The following figure illustrates exactly that.

**Figure 11: Risk tools that banks use to be applied in the microfinance industry**
A total of 56.4% of all respondents think risk tools that are applied successfully in commercial banks, are not suitable for microfinance entities or they are unsure about it.

Over and above the fixed options in the questionnaire, other responses were collected in the questionnaire (in terms of the figure above) which relates to risk tools used by the major banks. They can also be applied in the microfinance industry and include:

- behavioural scoring methodologies;
- consumer education;
- real time information availability;
- account validation and electronic payout solutions;
- finger print authentication for all transactions;
- account management strategies;
- better product and delivery design and
- more effective and cost saving collection systems.

According to the respondents and as illustrated below, the two most cost effective ways to lower microfinance risk overall is a conservative credit granting policy and improved internal controls.

Figure 12: Most cost effective way to lower overall microfinance risk in South Africa

Over and above the fixed options in the questionnaire, the following other responses were collected in terms of the figure above:

- the lending process need to be streamlined to lower overall risk;
• educated staff is the most important asset to reduce overall risk;
• internal control manages all the above and
• a balanced credit granting process.

Figure 13 specifies the biggest predictors of non-payments as per the fifty respondents.

Figure 13: The biggest predictors of non-payment of new clients in a microfinance institution in South Africa

Of all fifty respondents, 28.8% indicated that the level of disposable income after living expenses is the biggest indicator of non-payment by new microfinance clients in South Africa. The other material indicators include the number of current loans that the client possesses (20%), the number of historic judgements against the client (18.8%), the industry in which the client is employed in (17.5%) and the number of previous credit enquiries (12.5%). According to the respondents, gender, age and race do not really have an influence on on-time or non-payment of clients.

Over and above the fixed options in the questionnaire, another response given by a respondent is that historic information gives one a clear indication of past performance and over indebtedness is a definite indicator of non-payment.

Some tools contribute more to minimize credit risk than others in the microfinance industry, as illustrated in figure 14.
The single biggest contributor that minimizes credit risk in a MFI in South Africa is accurate affordability calculations with 71.8% of respondents choosing it. Shorter term loans and credit scoring are also material contributors with a combined 23.1%. The use of smaller loans and the better analysis of credit bureau information are not material contributors in the process of minimizing credit risk in a MFI in South Africa.

Over and above the fixed options in the questionnaire, the following other responses were collected that relate to the biggest contributors to minimize credit risk:

- active management of employer data and
- the analysis of credit bureau information is also critical.

The following two figures relate to the same five components in terms of risk and customer service, namely:

- a real time loan management (debtor management system);
- a centralised head office function where all the credit decisions are made;
- a decentralised branch network where credit decisions are made;
- a call centre function and
- the effect that cash disbursements to clients have on customer service as well as efficiently reducing risk in the microfinance industry in South Africa.
Figure 15: The most efficient way to optimise client service in a microfinance institution in South Africa

Over and above the fixed options in the questionnaire, the following other responses were collected in terms of the figure above:

- clients stay loyal to a brand when the pay-out method is cash disbursements;
- customers prefer a quick turnaround time when applying for a loan and
- personal customer service ensures loyalty.

Figure 16: The most efficient way to reduce risk in a microfinance institution in South Africa

A real time loan management system (debtor system) optimises customer efficiency (38.5%) and efficiently reduces risk (51.3%) in the microfinance industry in South Africa. In an almost equal relationship a decentralised function together with disbursing cash to clients optimises client service and reduces risk efficiently at the same time. A call centre
function and a process of centralised credit decisions are in respect of the other factors not material in terms of customer efficiency and reducing risk efficiently.

Over and above the fixed options in the questionnaire, the following other response was collected in terms of figure 17:

- loan management is very important at all times

Especially in a recession period microfinance entities will strive to optimize expenditure. Figure 17 illustrates what entities are willing to spend more on in relation to the other aspects in the following financial year.

**Figure 17: Items on which a MFI would spend the most money on in the following financial year**

![Bar Chart]

According to 61.5% of the respondents companies are prepared to spend more money on staff training, followed by internal audit and independent reviews on loan management systems (17.9%). Rewards for fraud tip offs are not material and only 2.6% of the respondents would spend more money on this in the following year.

Over and above the fixed options in the questionnaire, the following other responses were collected in terms of the figure above:

- staff training can reduce risk, satisfy clients and improve business efficiency and
- if staff is skilled they will reduce risk and quality loans will be given out with good affordabilities.
The microfinance industry is a competitive industry in South Africa and influenced by so many external factors. The influence of external factors in terms of perception is illustrated in the figure below.

**Figure 18: The biggest misperception in South Africa regarding microfinance institutions**

![Bar chart showing the biggest misperceptions in South Africa regarding microfinance institutions.](image)

According to 38.5% of the respondents, the biggest misperception in South Africa regarding microfinance institutions is the fact that the microfinance industry was not negatively affected by the National Credit Act (NCA), which was implemented in 2007. Also according to the respondents, the NCA had a negative influence on the microfinance industry in South Africa. Of all respondents, 25.6% believe that MFI’s relieve poverty in South Africa is a misperception, followed by 20.5% of which believe MFI’s are in huge competition with the four major banks in South Africa. Only 15.4% of the respondents think the biggest misperception is that microfinance is an extremely high risk industry.

Over and above the fixed options in the questionnaire, the following other responses were collected in terms of the misperceptions:

- if clients are not over indebted, poverty is relieved and
- good regulation of the industry lower risks considerably.

As illustrated in the following figure, three quarters of the respondents believe that the best way to accelerate a microfinance business is to extend the term and thus the amount of
the loans given to attract a bigger market instead of softer credit criteria where more clients are approved to get a bigger market.

**Figure 19: Two strategies that will excel your business the best**

- To extend the term and thus amount of loans to attract a bigger market (66.7%)
- To soften credit criteria in order to approve more clients and have bigger scale (33.3%)

Over and above the fixed two options in the questionnaire, the following other responses were collected in terms of the figure above:

- a combination of both is considered to be most effective;
- longer term loans create competitiveness and
- accessibility to products are more important than the product offering itself.

**Figure 20** illustrates the most efficient options to pro-actively manage risk in a microfinance institution in South Africa.
Although credit scoring was not the best tool to manage credit risk (accurate affordabilities were), it is the most efficient option to pro-actively manage risk in a MFI in South Africa (35.9%) today. Jointly second are the building of customer relationships with shorter products and the extensive training of new staff (30.8%). To only disburse thirty (30) day loans was not a material option for the relative respondents.

Over and above the fixed options in the questionnaire, the respondents commented that the portfolio size was also an efficient option to pro-actively manage risk in a microfinance institution in South Africa.

Figure 21 shows the respondents’ choices of the best predictors of on-time payments by clients. The level of disposable income was the biggest predictor of on-time payments for new clients.
Correct affordability calculations are the best predictor of on-time payments for all clients according to respondents (43.6%). The other three material aspects include the following:

- a shorter term loan (21.8%);
- work reference (17.9%) and
- a credit scoring model (15.4%).

The credit agreement itself is not a material predictor with only 1.3%.

6.3 FINDINGS BASED ON CLIENT INFORMATION OF 3000 MICROFINANCE CLIENTS IN SOUTH AFRICA AS OBTAINED FROM A CREDIT BUREAU

This part reflects the findings in terms of the analysis of 3000 microfinance clients in South Africa, as randomly picked by a reputable credit bureau in South Africa. A good or bad flag has been created for each of the 3000 clients. A good flag means a client is not in arrears with more than two (2) instalments. If a client is in arrears with more than two (2) instalments, it is a bad flag. The information related to the clients have been analysed in Microsoft Excel and can be re-evaluated in the following table.
Table 5: Summary of client analysis

<table>
<thead>
<tr>
<th></th>
<th>Good clients 2009</th>
<th>Good clients 2010</th>
<th>Bad clients 2009</th>
<th>Bad clients 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of clients</td>
<td>1524</td>
<td>1524</td>
<td>1502</td>
<td>1502</td>
</tr>
<tr>
<td>Average age per client</td>
<td>41</td>
<td>42</td>
<td>35</td>
<td>36</td>
</tr>
<tr>
<td>% male clients</td>
<td>48</td>
<td>48</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>% female clients</td>
<td>52</td>
<td>52</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>% clients with registered addresses</td>
<td>90</td>
<td>90</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>Average loan amount per client</td>
<td>3450</td>
<td>3450</td>
<td>6262</td>
<td>6262</td>
</tr>
<tr>
<td>Outstanding balance per client</td>
<td>1800</td>
<td>1800</td>
<td>7229</td>
<td>7229</td>
</tr>
<tr>
<td>Average term per client in months</td>
<td>5.5</td>
<td>5.5</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Average instalment amount per client</td>
<td>456</td>
<td>456</td>
<td>591</td>
<td>591</td>
</tr>
<tr>
<td>Average number of judgements per client</td>
<td>0.16</td>
<td>0.22</td>
<td>0.15</td>
<td>0.32</td>
</tr>
<tr>
<td>% clients with 0 judgements</td>
<td>89</td>
<td>85</td>
<td>90</td>
<td>81</td>
</tr>
<tr>
<td>% clients with 1 judgements</td>
<td>9</td>
<td>11</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>% clients with 2 or more judgements</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Average number of enquiries per client</td>
<td>4.91</td>
<td>12.04</td>
<td>2.97</td>
<td>5.99</td>
</tr>
<tr>
<td>Average number of loans per client over the period</td>
<td>23</td>
<td>28</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Average number of open loans per client</td>
<td>2.34</td>
<td>-</td>
<td>1.81</td>
<td>-</td>
</tr>
<tr>
<td>Average amount of loan exposure per client</td>
<td>R37 700</td>
<td>R51 500</td>
<td>R21 000</td>
<td>R16 700</td>
</tr>
</tbody>
</table>

The following facts are extracted from the analysis and the summary above:

- the average age of a good client is 42 years and the average age of a bad client 36 years;
- the male and female component of the analysis are more or less equal;
- 90% of good microfinance clients have registered addresses in relation to the 86% of the bad clients;
- the average loan amount for good clients is R3 450 in relation to R6 262 for bad clients;
- the average loan term for a good client is 5.5 months and 14 months for a bad client;
- the average judgements are more or less the same for good and bad clients in the first year;
• the percentages of clients with judgements are more or less the same for good and bad clients;
• the average number of loans over the period for a good client (28) is considerably more than those for bad clients (10), mainly due to the difference in loan terms;
• the average exposure to microfinance credit over the credit period is R51 500 for a good client and R16 700 for a bad client.

The following figure has been compiled after an analysis has been done on the different age categories for good and bad microfinance clients.

Figure 22: Client repayment analysis per age category

The good and bad client lines cross each other at 38 years of age. This means the probability of non-payment are higher for clients younger than 38 years and the probability for non-payment are lower for clients older than 38 years.
CHAPTER 7

7 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This section will give an overview of the research done and evaluate whether the findings have satisfied the research objections and research questions. The shortcomings will be discussed as well as any further research opportunities. The study will be concluded with recommendations in the final part of this section.

7.1 SUMMARY AND PRIMARY OBJECTIVES OF THE RESEARCH

The conclusions in this chapter are based on the findings from questionnaires and the analysis of 3000 microfinance clients in South Africa.

The first primary objective was to compare the perceptions of anticipated risk from management with the risks identified in the analysis of quantitative customer data.

- According to management the biggest risks for microfinance institutions are internal and external fraud, over indebtedness and bad debts.

- As per the available information from the client analysis, the biggest risks are bigger loan amounts, longer term loans and loans to younger clients.

- Over indebtedness is therefore possibly the result of bigger, longer term loans to MFI clients that cannot meet the necessary obligations, which leads to bad debts. The average good microfinance client in South Africa is therefore a client who best meets the obligations of a 6 month loan and a loan amount as per an accurate affordability calculation, but limited to the amount of R3 450. According to the respondents, internal and external fraud can best be prevented with trained staff and a real time, effective debtor loan management system.
The next research objective was to find the balance between too little and too much risk.

- According to the management respondents, the best way to accelerate a microfinance business in South Africa is to extend the term and thus amount of loans to attract a bigger market. The client analysis however indicates that longer loan terms and bigger amount loans drastically increase the possibility of non-payment. Management respondents however believe that a credit scoring model is the most efficient option to pro-actively manage risk in a microfinance institution in South Africa. The conclusion on this research objective therefore is to use a scoring model to best fit the correct financial loan product to each client and to do an extremely accurate affordability calculation to determine the appropriate loan amount. This will balance the risk factor at optimal risk levels.

The following research objective was to determine how to pro-actively manage risk in the microfinance environment.

- As mentioned in the previous paragraph, according to respondents a credit scoring model is the best possible way to pro-actively manage risk in the microfinance environment. This is followed closely by building a customer relationship with shorter products and extensive staff training, especially for new staff.

- According to management respondents the most efficient way to optimise client service in a microfinance branch is a real time loan management (debtor management) system. If the scoring model can therefore be integrated in the loan management system, it will ensure business efficiency, build customer relationships and pro-actively manage risk. If this is further combined with well trained staff that have the capability to successfully sell shorter term products to clients, risk will be efficiently managed on a pro-active basis.
The next research objective was to determine how to increase the success of predicting the outcome of microfinance credit transactions.

- As per the findings from management, the biggest predictor of non-payment of new clients in a MFI in South Africa is the level of a client’s disposable income after living expenses and loan instalments. This means the amount that is left after all obligations (loan instalments, debit orders and living expenses) have been deducted from the client’s net pay. Thus, the amount that is available to cover the new loan instalment. The biggest contributor to minimize credit risk by far is an accurate affordability calculation. The conclusion is that if clients are not over indebted, the probability of predicting a positive outcome increases considerably. As per the management findings, the number of loans and number of judgements are also predictors of the outcome of microfinance credit transactions. This contradicts with the findings in the client analysis as the number of loans and judgements do not have a material influence in predicting the outcome of the credit transactions. The client analysis even shows that smaller amount loans on shorter terms hold much less risk than one or two consolidate loans with much bigger amounts over a longer period. It again comes down to the premise that the correct product needs to be matched to the correct client.

The last research objective was to determine the average profile of a good and a bad microfinance client in South Africa.

The average good microfinance client in South Africa has the following characteristics:

- average age of 42 years;
- male or female;
- has a registered address;
- has an average loan amount of R3 450;
- has an average loan term of 6 months;
- has an average number of 25 loans over a period of 5 years;
- has 2.34 open loans on average at any stage and
- has an average credit exposure of ± R50 000 over a period of 5 years.
The average bad microfinance client in South Africa has the following characteristics:

- average age of 36 years;
- male or female;
- has a registered address;
- has an average loan amount of R6 300;
- has an average loan term of 14 months;
- has an average number of 12 loans over a period of 5 years;
- has 1.81 open loans on average at any stage and
- has an average credit exposure of ± R20 000 over a period of 5 years.

The most material differences between the average good and bad client is in terms of age, loan amount and loan term.

The following lists secondary and other findings that have not yet been discussed as part of the primary objectives:

- Credit decisions are equally taken at branch level, head office level and a combination of the two with no preferable one.
- In terms of risk tools, credit granting policies and customer affordability calculations together with internal controls and debt collecting receive a higher rating than credit scoring models. As there is no clear best, the conclusions point to a balance approach in terms of the use of risk tools.
- Respondents are not totally convinced that banking risk tools can be applied to the microfinance industry.
- A real time, effective loan management system is seen as the most efficient way to optimise client service and reduce risk, compared to decentralised credit decisions, cash disbursements to clients, a call centre function and centralised credit decisions.
- MFI’s in South Africa are prepared to spend considerably more on staff training than internal auditing even though fraud (internal and external) is seen as a big threat. The conclusion therefore is that external fraud is possibly a much bigger risk than internal fraud.
- The biggest misperception in South Africa regarding MFI’s is that the microfinance industry was not affected negatively by the implementation of the National Credit
Act in 2007. This indicates that the industry was affected negatively according to management.

- At the age of 38 the probability that a client will be a good or bad client is equal.
- Only four out of the 1500 population of clients went bad due to death during the 12 month period from September 2009 to September 2010.
- Only 8% of all clients that became bad payers went for debt counselling.

7.2 RECOMMENDATIONS

The recommendations in this section are based on the findings extracted from the research. The findings from the questionnaires and the client information are combined to get the best results.

Microfinance institutions in South Africa need to eliminate fraud (internal and external) in order to reduce risk. This can be done by investing in staff training and ensuring that entities invest in an effective, real time loan management system. An effective loan management system simultaneously has a positive influence on customer service.

Microfinance institutions in South Africa need to assess the level of disposable income in order to not over indebt customers. This can be done by means of accurate and complete affordability calculations when assessing the loan and instalment amount.

A credit scoring model is a crucial tool to match the correct microfinance product with a specific client, based on the client’s risk profile. The term of the loan is the main outcome of a credit scoring model and a good predictor of non-payment.

Lastly, smaller loan amounts over shorter periods reduce microfinance risk in South Africa drastically. These products should be actively marketed as it easier to manage the risks associated to a short loan than a longer loan as shorter loans are more predictable than longer loans.
7.3 FURTHER RESEARCH

Possible further subjects that will be valuable to the industry and the academic field can include the following:

- The reasons why age influences the predictability of non-payment can be researched.
- The aspects of a perfect loan management system for the microfinance industry in South Africa can be determined.
- The effect of debt counselling on the microfinance industry in South Africa can be determined.
- The correlation between microfinance and traditional bank strategies in terms of microfinance in South Africa can be researched.
- Aspects to ensure sustainability of the microfinance industry in South Africa can be determined.

With limited academic literature regarding the microfinance industry in South Africa, further research options are abundant and also very important for the sustainability and growth of the industry.

7.4 CONCLUSION

The microfinance industry has come a long way to be the regulated industry that it is today. By effectively managing risks in this industry in South Africa, good business models can be built and sustained, while the lower income end of the market is serviced with much needed financial products. By doing this the microfinance industry is relieving poverty, creating opportunities and help to build the economy.

A combination of risk tools need to be applied effectively in order to reduce material risks, predict good customer payments and to optimise client behaviour. A real time loan management system with integrated credit scoring models, accurate affordability calculations combined with well trained staff forms the basis of risk management in a microfinance institution in South Africa. Microfinance risks in South Africa are therefore
manageable with a combination of the risk tools and the best combination will ensure the best results.
8 LIST OF REFERENCES


APPENDIX A

- Data collection instrument(-s) -
A STUDY OF RISK MANAGEMENT FOR MICROFINANCE INSTITUTIONS

1. General Information

1. How old are you?
   - 18 - 25 years
   - 26 - 35 years
   - 36 - 45 years
   - 46 - 55 years
   - 56 and older

2. For how long are you an employee of your current company?
   - 0 - 1 year
   - 2 - 4 years
   - 5 - 7 years
   - 8 - 10 years
   - 10+ years

3. For how long does your entity operate in the microfinance industry?
   - 0 - 1 year
   - 2 - 4 years
   - 5 - 7 years
   - 8 - 10 years
   - 10+ years

4. In which of the following categories does your entity fall?
   - Entity with a banking license
   - Listed entity without a banking license
   - Unlisted entity with more than 10 branches
   - Unlisted entity with 10 or less branches
   - Other (please specify)

5. At what level are the credit decisions of your microfinance business being taken?
   - At branch level
   - Only at head office
   - At branch level with a head office overview function
   - Other (please specify)
## A STUDY OF RISK MANAGEMENT FOR MICROFINANCE INSTITUTIONS

### 2. Risk related questions

**1. Please evaluate the following risk tools to reduce risks for microfinance institutions in South Africa in terms of importance. 1 = very important and 5 = not important.**

<table>
<thead>
<tr>
<th>Risk Tool</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit granting policy and customer affordability calculations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal controls</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Staff training creating loyalty and integrity</td>
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<td></td>
<td></td>
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<tr>
<td>Credit scoring models</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Debt collecting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**2. Please rank the following risks for non-bank microfinance institutions in South Africa and rank them from most threatening (1) to less threatening (5).**

<table>
<thead>
<tr>
<th>Risk</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer migration to competitors or the commercial banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad debts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulation of the industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of affordable funding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal and external fraud</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**3. Can other risk tools (except those listed in *1 above) that the 4 major banks in South Africa use be applied to reduce risk in a microfinance institution?**

- Yes
- No
- Unsure

Please elaborate
4. According to you, what is the most cost effective way to lower overall risk in a microfinance institution in South Africa?

- Conservative credit grading policy
- Better loan management system
- Better debt collecting on arrears clients
- Better educated staff
- Improved internal controls

Comments

5. Which of the following two (2) factors are the biggest predictors of non-payment of new clients in a microfinance institution in South Africa?

- Gender
- Age
- Race
- Industry employed in
- Number of current loans
- Historic judgments against the client
- Number of previous enquiries on his/her credit information
- The level of disposable income after living expenses and loan installments

Comments

6. Which of the following is the single biggest contributor to minimize credit risk in a microfinance institution in South Africa?

- The use of a credit scoring model
- Shorter term loans instead of longer term loans
- Smaller loan amounts
- The analysis of credit bureau information
- Accurate affordability calculations

Comments
7. Which of the following is the most efficient way to optimise client service in a microfinance institution in South Africa?

- A real time loan management (debtor management) system
- A centralised head office function where all the credit decisions are made
- A decentralised branch network where credit decisions are made
- A call centre function
- Cash disbursements to clients

Comments

8. Which of the following is the most efficient way to reduce risk in a microfinance institution in South Africa?

- A real time loan management (debtor management) system
- A centralised head office function where all the credit decisions are made
- A decentralised branch network where credit decisions are made
- A call centre function
- Cash disbursements to clients

Comments

9. Choose one of the following items on which your company would spend the most money on in the following financial year?

- Staff training
- An internal audit function
- Rewards for fraud tip offs
- An independent review on the loan management system

Comments
A STUDY OF RISK MANAGEMENT FOR MICROFINANCE INSTITUTIONS

10. What is the biggest misperception in South Africa regarding microfinance institutions?
   - Microfinance institutions were not really affected negatively by the implementation of the National Credit Act in 2007.
   - Microfinance institutions do not relieve poverty in South Africa.
   - Microfinance institutions in South Africa do not really compete with the 4 major banks.
   - Microfinance in South is an extreme high risk industry.

Comments

11. Which of the following two strategies will excel your business the best?
   - To soften credit criteria in order to approve more clients and have bigger scale.
   - To extend the term and thus amount of loans to attract a bigger market.

Comments

12. Which of the following are the most efficient options to pro-actively manage risk in a microfinance institution in South Africa?
   - A credit scoring model.
   - First build a relationship with a customer in terms of a shorter loan before a term loan is granted.
   - To only disburse 30 day loans.
   - To put all new staff through extensive training first.

Comments

13. Which are the two (2) best predictors of on-time payments by clients?
   - A shorter term loan.
   - A credit scoring model.
   - Correct affordability calculation.
   - Work reference.
   - A proper and signed credit agreement.

Comments
APPENDIX B

- Format of credit bureau information -
The following information was obtained from a credit bureau relating to clients in the MFI environment in South Africa:

- date of birth;
- gender;
- country;
- postal and physical addresses;
- date on which above address is registered;
- employer;
- employment date;
- salary frequency;
- loan history;
- information regarding admin orders;
- information regarding judgements;
- previous enquiries and
- Credit Provider Association (CPA) information.

The information was obtained for 3000 clients in the MFI environment in South Africa. The information related to the 3000 clients was obtained at September 2010 and September 2009 for comparison purposes. 1500 Of these clients was still up to date with their payments and 1500 clients have skipped 2 or more payments between September 2009 and September 2010. This information enabled the researcher to compare the information at the beginning of the 12 months with the information after 12 months for the same clients.
APPENDIX C

- Informed consent form -
Informed consent for participation in an academic research study

Dept. of Financial Management

RISK MANAGEMENT FOR MICROFINANCE INSTITUTIONS IN SOUTH AFRICA

Research conducted by:
Ms. S.J. Jansen van Vuuren (29567158)
Cell: 083 384 5868

Dear Respondent

You are invited to participate in an academic research study conducted by Stephanus Johannes Jansen van Vuuren, a Masters student from the Department of Financial Management at the University of Pretoria.

The purpose of the study is to evaluate risk relation to microfinance institutions in South Africa in terms of management perception and client analysis.

Please note the following:

- This study involves the use of questionnaires. Your name will not appear in the study and the answers you give will be treated as strictly confidential. You cannot be identified in person based on the answers you give.
- Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.
- Please contact my supervisor if you have any questions or comments regarding the study.

Please sign the form to indicate that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis.

___________________________      ___________________
Respondent's signature       Date