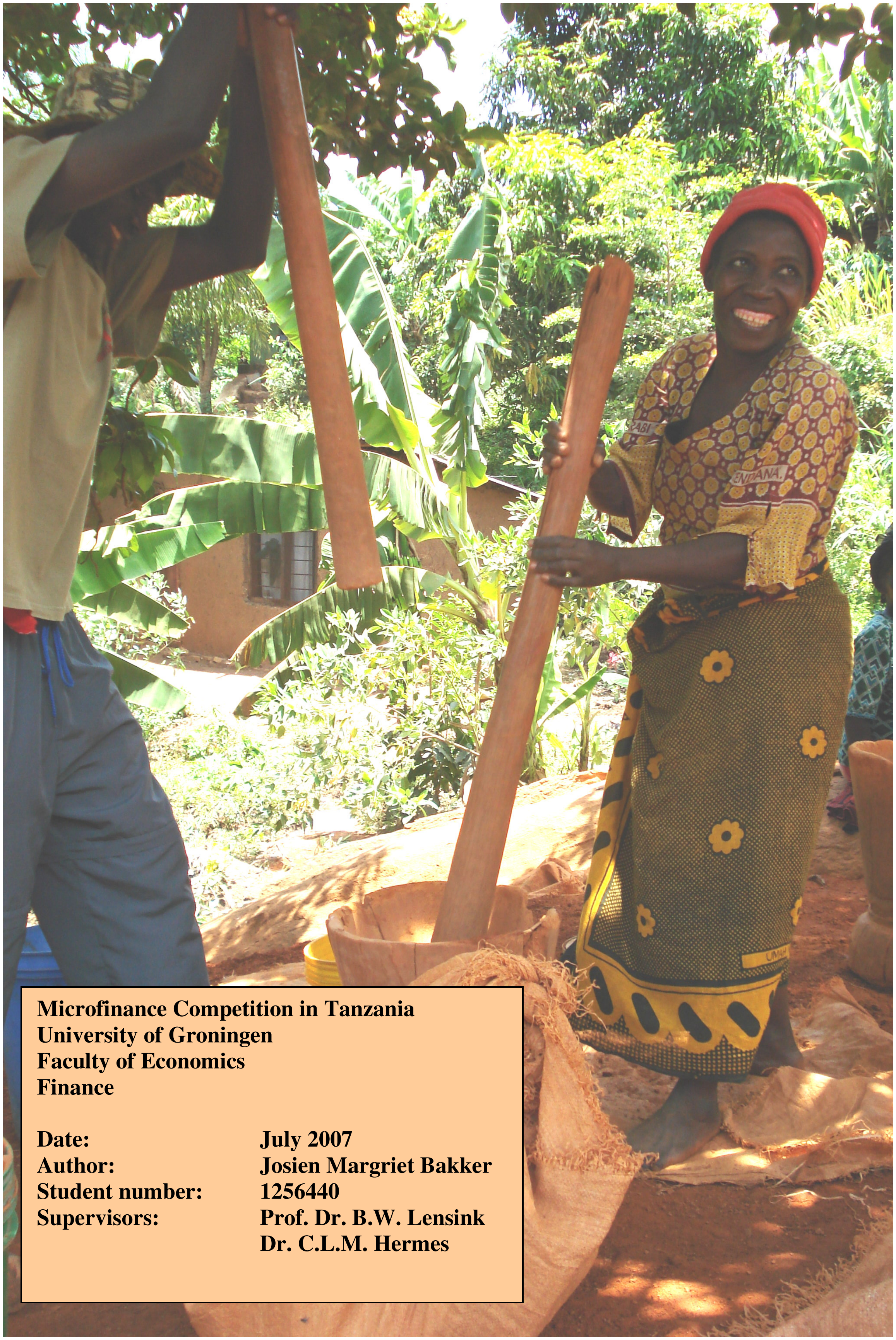

Microfinance Competition in Tanzania
University of Groningen
Faculty of Economics
Finance

Date:	**July 2007**
Author:	**Josien Margriet Bakker**
Student number:	**1256440**
Supervisors:	**Prof. Dr. B.W. Lensink**
	Dr. C.L.M. Hermes

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"Usishindane na Kari; Kari ni mja wa Mungu"
Do not compete with Kari, Kari comes from God

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Preface

This thesis is about the competition in the microfinance industry and consist of a research I carried out in Dar es Salaam, Tanzania. I had the wonderful opportunity to spend more than three months at the Institute of Finance Management in Dar es Salaam to do this research. Being able to speak to the managers and employees of the microfinance companies, to talk with the clients, to see the small business that are started with a microloan and to discuss current development in the microfinance market with very experienced people, was an unique chance for me. It allowed me to see and experience how microfinance actually works. Therefore it is not surprising that I learned a lot while writing this thesis. Not only about microfinance, but also how it is to carry out a research in a developing country. With a lack of information at the MFIs, hours of waiting, often no electricity and squeezing myself in the daladala, it is was sometimes a difficult, but most of the time a fantastic challenge.

I would like to thank several people, who have been helping me in writing this thesis. First of all Dr. B.J.W. Pennink for arranging the place at IFM. Dr. Mohammed, who organized everything for me at IFM and made me feel very welcome. Dr. Satta, who was always willing to help me with my research and invited me for several microfinance conferences in Dar es Salaam. The interviewees, for their big contribution to my thesis. Mr. Nagel, for his advice and down-to-earth view on microfinance research.
And, of course, my supervisors, Prof. Dr. Lensink and Dr. Hermes. They were, with their quick reading and their useful advice, very supporting and helpful during the whole process.
After all, this is the outcome of a very interesting research time in Tanzania. I am pleased with the result and I hope the reader will be as well.
Karibu sana.

Josien Margriet Bakker
July 2007

Abstract

Competition is increasing in the microfinance industry. Based on a literature study I formulated seven hypotheses that describe the effect of competition for MFIs. The objective of my research in Dar es Salaam, Tanzania, is to investigate if the opinion of the managers of MFIs about the consequences of competition on their company policy is the same as the seven hypotheses and if the data of the different branches of the MFIs supports the hypotheses. The information of my research comes from interviews with managers of MFIs in Dar es Salaam.

The outcome of the study is that the direction of the changes doesn't seem to be in line with my hypotheses. The hypotheses that: the target group is more risky, the very poor are excluded from the target group, the relationship of the borrower and the lender is weaker, MFI invests more in screening and monitoring, the interest rate is higher and that the MFI prevents double-dipp of clients are, based on my research on MFIs in Dar es Salaam, rejected. There is one hypothesis that isn't rejected: MFI focuses on innovation of products and increasing the level of service.

List of Abbreviations and Acronyms

ACB	Akiba Commercial Bank
BOT	Bank of Tanzania
CGAP	Consultative Group to Assist the Poorest
CRDB	Cooperative and Rural Development Bank
DCB	Dar es Salaam Community Bank
DID	Desjardins International Development
FSDT	Financial Sector Deepening Trust
IFM	Institute of Finance Management
MEDA	Mennonite Economic Development Association
MFC	Microfinance Company
MFI	Microfinance Institution
NGO	Non-Governmental Organisation
NMB	National Microfinance Bank
PAR	Portfolio at Risk
PRIDE	Promotion of Rural Initiative and Development Enterprises Limited
PTF	Presidential Trust Fund
SACCO	Savings and Credit Cooperative Society
SCULLT	Savings and Credit Cooperative Union League of Tanzania
SEDA	Small Enterprise Development Agency
SEF	Small enterprise foundation
TANGO	Tanzanian Association of NGOs
TAMFI	Tanzania Association of Micro Finance Institutions
TGT	Tanzania Gatsby Trust
TPB	Tanzania Postal Bank
Tsh	Tanzanian shilling
WAIR	Weighted Average Interest Rate
YOSEFO	Youth Self-Employment Foundation

Contents

Chapter one - Introduction

"There is enough food in the world to provide every human being with 3,500 calories a day. Scarcity is not the problem, but the absence of purchasing power of the ill-nourished to buy in the market." (Jeremy Seabrook, World Poverty, 2003)

The beginning of microfinance goes back to the first years of the seventies. While there are contradictory stories about the invention of microfinance the most well-know story is the one of Professor Muhammad Yunus from Bangladesh. He discovered, during a famine in 1974, that small loans to poor people can make a significant improvement in their lives. Poor people get the opportunity to start a small business and at the same time the repayment rate of the micro loans isn't inferior to the repayment rate of 'normal' loans. More than thirty years later, microfinance is still a "hot item". The United Nations announced 2005 as the international year of the microcredit. Microcredit is seen as a tool that is very important to realize the UN millennium goals. In 2006 professor Muhammad Yunus from Bangladesh was awarded the 2006 Nobel Peace Price for his contribution to create economic welfare of the poor (Grameen Bank).

The consequence of this attention on microfinance is that more and more microfinance institutions arise. In several areas microfinance companies are overlapping each other and, as a consequence, they are competing with each other. This is quite a new phenomenon. At the end of 1990's the providers of microfinance were still enjoying a monopoly position and didn't have to care about competition (Wright and Rippey 2003).

The initial concept of microfinance is affected by the competition. The incentives to repay a loan get weaker. Competition might be a threat for the operations of the MFIs and therefore empirical research on this topic is important. My research is an explorative research, carried out in Dar es Salaam, Tanzania and can be seen as an onset to a future study.

Based on a literature study I formulated seven hypotheses that describe the effect of competition for MFIs. The objective of my research in Dar es Salaam is to investigate if the opinion of the managers of MFIs about the consequences of competition on their company policy is the same as the seven hypotheses and if the data of the different branches of the MFIs support the hypotheses. The information of my research comes from interviews with managers of MFIs in Dar es Salaam.

It turns out that six of the seven hypotheses are rejected. The most important rejected one is the hypothesis that very poor are excluded from the target group. My research is an explorative research and can be seen as an onset to a future study.

For several reasons I chose to go Dar es Salaam. First, there hasn't been done research about competition in Dar es Salaam before, even though competition is an issue in the microfinance industry in Dar es Salaam. Secondly, there is a connection between the faculty of economics and the Institute of Finance Management (IFM) in Dar es Salaam, which allows me to do my research at IFM in Dar es Salaam.

This paper continues as follows. The next chapter, chapter two, explains microfinance and the repayment incentives. It highlights the differences between the traditional repayment incentives and microcredit repayment incentives The special focus on the repayment incentives is because competition reduces their strength. Chapter three takes into account the literature on competition in the microfinance sector. Based on this information, I formulated the seven hypotheses. To get a better understanding of my research, I describe in chapter four the complexities of the microfinance sector in Dar es Salaam and the different providers of microfinance. The research methodology is comprised in chapter five. This chapter includes also the challenges I faced while doing my research. The output and the analyses of my research are put together in chapter six, followed by the conclusions, the identification of the limitations and further issues in chapter seven.

Chapter two - Microfinance

2.1 Background of microfinance

A difficulty with competition in microfinance is that competition weakens repayment incentives (Morduch 1999) or more specific “competition will diminish the power of dynamic incentives against moral hazard ” (Morduch 1999) and the reputation effects can become weaker (Armendáriz de Aghion and Morduch (2005, p127). These changes underlie consequences of competition for MFIs. Therefore I explain in this chapter the traditional repayment incentives and the microfinance repayment incentives and clarify the problems of moral hazard and adverse selection**.**

Definition of microfinance

According to the definition of the United Nations microfinance includes the supply of loans, savings, insurance, transfer services and other financial products for low-income clients. It targets the unbanked people, who are the people that are excluded from financial services by any type of financial sector organizations. This low-income group mostly has a lack of collateral. Armendáriz de Aghion and Morduch (2005, p5) stated that this group can be very profitable, since the marginal return for a poor entrepreneur is higher than the marginal return for a rich entrepreneur. The production function is assumed to be concave, which means that when an entrepreneur invests more, his output will be higher, but his marginal return will diminish.

The providers of microfinance are microfinance institutions (MFIs). The definition of the United Nations (on the year of microcredit website) of a MFI is “an organization that provides financial services targeted to the poor.” This is quite a broad term and it includes, among other lenders, banks, NGO’s, non-bank financial institutions, government programs and financial cooperatives.

Moral hazard and adverse selection

Microfinance is exploited in developing countries. In those areas, with often a weak judicial system, it is more difficult to overcome the problems of moral hazard and adverse selection (Armendáriz de Aghion and Morduch 2005, p7).

Adverse selection is the problem that financial institutions can’t make a distinction between (relatively) safe and risky customers due to a lack of information. (Armendáriz de Aghion and Morduch 2005, p7). The safe clients are borrowers that invest in a project with a certain return. The risky borrowers invest in a risky project that yields a higher return at success, but has a probability of failure (Armendáriz de Aghion and Morduch 2005, p 37). Preferably, institutions want to make a separation between these two groups when offering a loan. They want to charge a higher interest rate for risky borrowers to compensate for the higher risk of default and charge a lower interest rate for the safe borrowers. This lower rate must assure that the safe borrowers stay willing to invest in the safe project and aren't encouraged to take up risks.

Moral hazard in lending is defined by Armendáriz de Aghion and Morduch (2005, p 43) as "situations where lenders cannot observe either the effort made or action taken by the borrower, or the realization of project returns." There is a distinction between ex-ante moral hazard and ex-post moral hazard. Ex-ante moral hazard occurs when the incentive for the borrower to undertake action to generate a profit to repay the loan is not sufficient. Ex-post moral hazard takes place when the borrower strategically defaults even though he gained the resources to repay the loan.

The difficulties of overcoming adverse selection and moral hazards with the un-bankables in developing countries were an important reason that no institutions provided financial services to this group in the past.

2.2 Traditional repayment instruments

Collateral

A traditional tool to diminish the risk of moral hazard for financial institution is to use an asset of the borrower as collateral. The present value of the asset will compensate the loan in case of default and this secures the lender. Poor borrowers don't possess enough assets and therefore this construction is not used in this way by microfinance institutions. There are microfinance institutions that use a variation. For example Caja Los Andes in Bolivia offers personalized loans where they take into account imperfect collateral (Navajas, Conning and Congzalea-Vega 2003). Caja Los Andes asks his clients to use some of their household valuables, like the refrigerator and furniture, as collateral. Even though it is difficult to use those products in case of default, it stimulates borrowers to meet their contractual obligations. Another variation on collateral as a tool to enforce repayment is the "emergency fund", which is part of the Grameen model (Morduch 1999). This fund provides security whenever an emergency, like death and disability, takes place. The bank collects a few percent of the loan to fill this fund. When the loan contract comes to an end the bank will first take his part and the amount that is left over will go to the borrowers. This construction can be seen as a form of partial collateral.

Screening

In order to overcome the problem of adverse selection banks screen their clients before providing a loan. The information allows the bank to offer a personalized loan based on the specific risk of the borrower. Screening is only a useful tool when the effort and the costs of screening are lower than the profit generated by the loan. In a country with a good developed financial system, where for example rating agencies, security analysts and auditors can provide information (Freixas and Rochet 1997 p. 29), it is profitable to screen the borrowers. In the microfinance industry it takes a lot of effort to collect information, while the size of the loans is small. This makes screening relatively expensive for MFIs.

Without enough knowledge about the borrowers, the MFI will charge the same interest rate for every borrower. The good customers compensate the bad ones. This cross-subsidize solution is not optimal. It encourages the save borrowers to switch to a more risky project (Armendáriz de Aghion and Morduch 2005, p37). Not every MFI makes use of cross-subsidizing. An example is Caja Los Andes in Bolivia that adapts the loan to the productivity level of the borrower despite the high screening costs (Navajas, Conning and Congzalea-Vega 2003).

2.3 Incentives to repay microloans

Dynamic incentives and progressive lending

Because of the lack of collateral and the high screening and monitoring cost, microfinance institutions adopted other techniques to overcome the problems of moral hazard and adverse selection. Dynamic incentives are important to stimulate the repayment of microcredit. The MFIs initially lend a small amount to the customer and increase the loan upon successful repayment. The incentive for the borrower to repay comes from the regular interactions and (mostly) from the threat to be excluded from a future loan (Morduch 1999). This incentive will be stronger with progressive lending. The MFI offers the borrower to take up a higher loan, every time the borrower repaid his loan adequate. Finally the client will be able to do substantial investments. (Morduch 1999). The advantages of progressive lending are that it allows the MFI to test the borrower before it provided a relatively large loan and the progressive lending system increases the opportunity cost of defaulting which stimulates repayment (Armendáriz de Aghion and Morduch 2005, p125). Churchill (1999) found, based on interviews with microfinance clients, that continued access to future loans is the most important incentive to repay a loan.

Regular repayment schedule

A typical characteristic of microcredit is that repayment of the loan starts nearly immediately after the borrower receives the money from the bank. It is common that the borrower repays every week a small amount. The benefits of this regular repayment schedule are that the unreliable borrowers are filtered out in an early stage, that it provides an early warning mechanism to group members and that the bank receives his money before it can be spend on something else (Morduch 1999).

Group lending

To diminish the problem of adverse selection a lot of MFIs offers group loans instead of individual loans. The groups need to be established by the borrowers themselves. This self selection creates a separation between the safe and risky borrowers. The reasoning is that the clients know each other and therefore they have enough insights to form groups with like-minded borrowers. They form either a safe group with only safe borrower, or a risky group with only risky borrower. A key word in group lending is joint liability. This means that all the members of one group will be excluded from a future loan in case one of the group members doesn't repay his loan (Besley and Coate 1995). The safe borrowers won't have the trouble of a defaulting group member, but the risky groups will. In order not to be excluded from a future loan, the members will pay the outstanding part of the defaulting group member. The MFI offers the same contract to the safe and the risky groups, but the costs for the risky clients are higher since they carry the costs of their defaulting group member. Group lending is a measure to create price discrimination even though the MFI still doesn't have the information about the safe and the risky borrowers (Armendáriz de Aghion and Morduch 2005 p 90 and 91).

Another positive effect is that group lending can create an incentive for the borrowers to choose the safe projects instead of the risky ones (Besley and Coate 2005). Group members have the insights to monitor and punish each other and this "peer monitoring" reduces moral hazard. A consequence is that the MFI operates more efficient and is able to lower the interest rate, which has a positive impact on the repayment rate (Morduch 1999).

In the beginning of the development of microfinance, group lending was a basic condition of a successful supply of a loan. This is changing. Microfinance contains not always grouplending anymore; individual microloans are getting more common.

Reputation effects

The microfinance mechanisms are based on the threat to be cut off from future loans. When this threat is not credible anymore, the incentive is useless. The lender has to assure that the fear to its clients to be cut off from future loans when they default remains believable. He can do this by keeping up his reputation. This are called the reputation effect. If someone defaults, the lender has to punish the borrower to keep his reputation. Churchill (1999) finds that the most important reason for banks not to extend loans in the case of default comes from this reputation effect. Vogelgesang (2001) stated that the reputation effects are very important to prevent the borrower to default strategically.

Chapter three – Competition for microfinance

3.1 Background of competition for microfinance

Due to the increased attention on microfinance and its success, more and more microfinance institutions arise. While the demand of microfinance is still large and less than 18 percent of the poorest households in the world are able to use financial services (Meehan 2004), there are places where the activities of microfinance institutions are overlapping each other. The areas of overlap are most prominent in the countries where microfinance has started, namely Bangladesh, Bolivia and Indonesia. Other frequently named areas that deal with competition in the microfinance sector are east-Africa and Central America (McIntosh and Wydick 2002).

The competition in the microfinance business is quite a new phenomenon. At the end of 1990's the providers of microfinance were still enjoying a monopoly position and didn't have to care about competition (Wright and Rippey 2003). According to Rhyne (2001) the rise of competition in the microfinance sector comes from three sources: the development of self-identified MFIs, the entry of new commercial institutions in the microfinance field and the emergence of related business that serve the same target group.

3.2 Overview of the literature of the effect of competition for MFIs

Competition has a big impact on the company policy of the MFI, partly because the repayment incentives get weaker. The most important incentive to repay a loan is the continued access to a future loan (Churchill 1999). The power of this dynamic incentive diminishes tremendously in a situation with competition. With more providers in the same area the client gets the opportunity to apply for a loan elsewhere. As a consequence the threat to be excluded from a future loan becomes less relevant.

Other repayment incentive becomes also less effective as the number of MFIs increase. Reputation effects stimulates repayment only when the information that supports it, is known. In an industry with more microfinance providers the exchange of information is more dispersed and this weakens reputation effects (Hoff and Stiglitz 1998).

Morduch (1999) mentions the need for a centralized credit rating agency to assure the proficient sharing of information about borrowers. Since those agencies are still rare, MFIs need to adapt their strategy to the new situation in order to enforce repayment and to remain in the market. According to Rhyne (2001) the strategy from the pre-competitive stage "to reach more people and to become financially viable" changes in the competitive stage to "retain or increase market share while remaining profitable".

There are many theories about the consequence of competition for the MFIs and some of them are contrarily. The next part shows an overview. Based on that literature I formulate seven hypotheses of how the company policy of the MFIs is affected by competition in the microfinance industry.

Target group

A part of the strategy of the MFI is the identification of the target group. With an increasing availability of microfinance a MFI broadens the definition of its target group (Christen and Drake 2002). Competition pushes MFIs to look for niche markets and attract new types of clients. Rhyne (2001) describes that in Bolivia MFI successfully included new group of customers, mainly by moving upward to small business.

Vogelgesang (2001) stated that with more providers of microfinance, at one moment the relatively 'safe' customers are saturated. The result is that the MFI needs to shift to the more hazardous clients. This is enhanced by the theory that competition lowers the screening possibilities for the MFI, which result in a higher share of low quality borrowers (Marquez 2002). Villas-Boas and Schmidt-Mohr (1999) came up with an opposite conclusion. They found that lenders screen borrowers more thorough in a competitive environment, in order to include the most profitable clients.

The very poor

A positive aspect of competition in general is that it creates a pressure to lower the prices. Assuming that this effect is the same for the MFIs, the hypothesis would be that competition will enhance the opportunities for MFIs to serve the very poor. With a lower interest rate, the repayment rate is higher and more people are able to receive a loan. Even though this sounds very reasonable the literature predicts the opposite; increasing competition has a negative effect on the poorest borrowers.

McIntosh and Wydick (2005) stated that competition lessens the ability of a socially motivated MFI to provide financial services to the very poor. In order to describe the effects of competition, the authors make a distinction between the different (micro) lenders. They divide: moneylenders, client-maximizing MFI's (among many NGO's that are involved in microfinance), profit-maximizing MFI, targeted subsidies (subsidy that has been allocated by the donor to relief the costs of loans specifically to poorer borrowers) and non-targeted subsidy and created a theoretical model to constitute and ground propositions about competition and microfinance. Important findings are that profitable borrowers are never worse of because of competition. Without subsidies, poor borrowers can only be reached when there are no other competitors than moneylenders. The competition of a profit-maximizing MFI has a negative effect, because the client-maximizing MFI will copy the profit-maximizing behavior. Cross-subsidizing gets restrained, because the loans to the poor borrowers can't be paid by profits from the wealthier clients anymore. In this new competitive situation the poor borrowers are dropped in the client-maximizing portfolio.

Navajas, Conning and Gonzalez-Vega (2003) come to a similar conclusion in their investigation about BancoSol and Caja Los Andes, two big players in the competitive microfinance market in Bolivia. To overcome the problem of adverse selection BancoSol offers standardized loans to its clients, which is profitable because of cross-subsidizing, and uses joint liability to stimulate peer screening and peer monitoring. Because the loan contracts of Caja los Andes are personalized, high-productive borrowers prefer those loans and switch to Caja los Andes. Lower-productivity borrowers stick at Banco Sol. Since the strategy of Banco Sol is based on cross-subsidizations, the competition of Caja los Andes makes it hardly impossible for Banco Sol to continue doing business in his old manner. Banco Sol can either makes the loans more expensive, or it can design new loan products to prevent high-productivity borrowers from switching. The poor borrowers are excluded, because competition diminutes cross-subsidizing.

Relationship lending

According to the article of Dinç (2000) relationship lending implies that a bank promises refinancing to a borrower. This can be costly in the short term, but the bank will keep its commitment and a good reputation. Practical this means that apart from the current performance and assets of the borrower, the bank also takes into account the future prospects. The potential for a company may be high, even though his actual cash flow is low. Relationship banking is an efficient tool in overcoming asymmetric information (Peterson and Rajan 1998). The opposite of relation lending is arm's length lending and that is the matter when the bank makes no commitments about future lending. Dinç (2000) assumes that competition can encourages the incentive to maintain a good reputation, whenever the impact of competition on relationship lending is lower than the impact on arm's length lending. The results depend on the source and the level of competition.

The negative aspect for the MFI is that he is insecure if he will share in the future returns of the client. The MFI is not the only provider, so he isn't assured to receive the future profits and therefore he leaves out the future gains and breaks even on the current performance. So competition has a negative effect on relationship lending (Peterson and Rajan 1998).

Relationship lending depends on the relationship of the borrower and lender. This relationship changes because of competition. Rhyne (2001) stated that as a result of the competition in the MFI sector clients can choose between different providers and they do exercise that choice. This weakens the relationship.

Screening and monitoring

Competition affects the cost structure of a MFI. Hoff and Stiglitz (1998) stated that due to new entrants the incentive for the borrowers to repay the loan is smaller and the reputation effects are weaker. In order to assure repayment, the MFI will be faced with higher enforcement costs. Volgelgesang (2001) investigated the repayment rate in Bolivia. As a reason for the improved repayment she assumes that "being aware of the possible negative incentive effects of high supply, institutions could have developed higher repayment incentives and/or more efficient screening to compensate for high competition at the time of disbursement". Also Villas-Boas and Schmidt-Mohr (1999) consider the screening costs to be higher in a more competitive environment. Their reasoning is that lenders screen borrowers more thorough to include the most profitable clients.

Interest rate

A common consequence of competition is that it lowers prices. In a market where private firms gain large profits, new companies will enter and offer lower prices to compete with the incumbent firms. Even without new companies entering, the price will go down, simply because of the threat of new entrants. This is in general the theory about the effect of competition on the price. Empirical research about the interest rate in competing microfinance industries shows different results. In Bolivia the interest rate declined because of the competitive pressure, but in Uganda and Bangladesh the interest rate hardly changed (Porteous 2006). Based on his findings Porteous conclude that competition has to reach an almost mature stage, before the microfinance providers will compete on price.

Several papers came to the conclusion that competition in the microfinance industry causes a higher interest rate of microloans. Petersen and Rajan (1998) conclude that because of less relationship lending in a more competitive environment the interest rate is higher. The lender will break even on the current performance and leaves out possible future returns. The results of Hoff and Stiglitz (1998) show that in an area with more competition, the costs will be higher and so the interest rate increases to compensate the higher costs. Besides higher enforcement costs, the marginal costs increase. With more competition the market of each player becomes smaller and the marginal costs of transacting loans become higher. This loss of scale economies leads to a higher interest rate. Another reason behind the higher interest rate is that in a market with more MFIs the information about clients is much more dispersed. Because of the insufficient exchange of information, more bad borrowers get the opportunity to receive a loan. This higher number of bad borrowers increases the interest rate (Marquez 2002).

Diversification of products

In a more competitive environment the MFI focus more on the demands of the clients. The need to retain or increase market share becomes more urgent and this encourages the MFI to put more effort in satisfying its clients. The consequence is that the products and the level of service of the MFIs change. The company adapts its products and operations more to the client's preferences. Porteous (2006) found that "clients place a lot of value on quality service, flexible product characteristics, and the availability of small loans." Similar findings come from the research done by Wright and Rippey (2003) in Uganda. They conclude that competition in Uganda causes:

- "greater availability of individual loans and salary-based loans for lower-income clients;
- greater diversity of loans above and beyond the standard working capital loans;
- loans with longer repayment terms;
- extended grace periods;
- reduced compulsory savings balances;
- reduces minimum balances;
- more ATMs;
- improving customer service."

Rhyne (2001) also describes the changes in the products and services of MFIs in a more competitive area. She highlights that competition forces MFIs to invent new products for their existing customers.

Double-dipp

Instead of borrowing at a single MFI, clients start to take up multiple loans at several MFIs, the so called "double-dipp" effect. Since the MFIs don't know the about the other loans of the clients and the clients usually can't assess what is an appropriate loan, the borrower becomes regularly over indebted. As Armendáriz de Aghion and Morduch (2005) mentioned: "As long as borrowers believe that they have multiple options, no single lender will have the power to clamp down and maintain full discipline." Chaudhury and Matin (2002) found, based upon their research in

Bangladesh, that an increasing number of clients had multiple loans at different institutions. This negatively affects the repayment rate.

There is a distinction between opportunity- and distress driven double dipping. When a client takes up another loan with the intention to carry out his business plan it is called opportunity driven. Mukwana and Sebageni (2003) state that: “In many cases, MFIs do not give the clients enough money. Respondents said it is common for one to ask for a loan of a specified amount and be given much less than one applied for. When this happens, such a loan will just become a burden because it is not sufficient for the intended purpose (…) The client will however still usually accept the reduced loan (…) having done this, the client will then usually get another loan to raise the shortfall and to be able to meet his target purpose.”

Distress driven borrowing is using multiple loans with the reasons to solve finance emergencies, like school fees and health related expenditures. The study of Mukwana and Sebageni (2003) shows the motivation for taking up more loans, with the most important reasons: “To make up the required capital, to finance another loan and to finance critical demands and emergencies.”

A solution to this problem would be a centralized credit rating agency. The availability of the lending information of clients would allow MFIs to avoid overlending. Though the information has to be complete and up to date and this is not so easy to achieve in a development country.

Multiple lending is seen as a major negative effect of competition and has impact on the microfinance environment as a whole and on the financial performance of the MFIs.

Deduced from the described literate I formulate seven hypotheses that are the framework of my research. The hypotheses describe the consequence of competition on the company policy of MFIs:

- ***Target group is more risky***
- ***The very poor are excluded from the target group***
- ***The relationship of the borrower and lender is weaker***
- ***MFI invests more in screening and monitoring***
- ***The interest rate is higher***
- ***MFI focuses on innovation of products and increasing the level of service***
- ***MFI prevents double-dipp of clients***

Chapter four –Microfinance in Tanzania

4.1 Background information of Tanzania

The history of Tanzania

In 1961 Tanganyika received its independency from the United Kingdom. Zanzibar achieved independency two years later in 1963. The two counties formed the United Republic of Tanzania in 1964. The president of Tanzania was the elected mr. Nyerere. He agreed in 1967 on the Arusha declaration, which focuses on social principles of economic management by a central planning and primarily on the public sector. After several years Tanzania faced severe, complex economic problems and in 1985 the Government decided to switch to a more market oriented system.

The last couple of years the government has put a lot of effort in creating a more stable macroeconomic environment by intensifying macroeconomic policy reforms. This policy had a positive effect on the macroeconomic indicators. For example, the inflation, which was still almost 30% in 1995, seems now to be stable between 3.5 % and 4.5% since 2002 (Bank of Tanzania, economic and financial indicators) and the averaged real GDP growth rate is since 2001 almost seven percent a year (World Bank).

But despite all the effort and foreign support, after more than forty years of independence Tanzania is still among the 10 poorest countries in the world. Despite the outstanding growth, GDP per capita in 2005 was only 317.8 USD (Bank of Tanzania, economic and financial indicators). The poverty highly is concentrated in the rural areas. In 1999 the percentage of the poor that were living in rural areas was 92% (Randhawa and Gallardo 2003).

Development of the financial system

During the socialistic political system, the financial institutions were under the supervision of the Bank of Tanzania (BoT). The BoT enforced a system of fixed credit and interest rates and the control of the government obstructed any form of competition (Bagachwa 1995). Since the private sector was very small, the loan portfolios of the banks existed mainly of loans to state-owned companies. A large part of the loans remained unpaid and together with the highly inefficiency of the financial markets at that time, it caused almost a collapse of the financial system.

The response of the Government was the reform of the financial sector in 1991. The government initiated a revision of the financial sector with the purpose to create an effective and efficient financial system. “The lynchpin of the reforms was the Government’s commitment to allow banking institutions to operate on a commercial basis, making their business and management decisions free from outside intervention within the norms of prudential supervision. The principal elements of the financial sector reforms included liberalization of interest rates, elimination of administrative credit allocation, strengthening the Bank of Tanzania’s role in regulating and supervising financial institutions, restructuring of state-owned financial institutions, and allowing the entry of local and private banks (both local and foreign)” (Ministry of finance of the United Republic of Tanzania 2000). These new regulations were embodied in the Banking and Financial Institutions Act of 1991. In the same year the Cooperative Societies Act, which provides the basis for the regulation of the SACCOs, was developed (Ministry of finance of the United Republic of Tanzania 2000).

The government had the opinion that to reach its goal of creating an effective and efficient financial system, the financial services to the low-income had to be expanded. The Government included microfinance as an integral part of the country’s financial system and developed a microfinance policy, which was approved in 2002 (Randhawa and Gallardo 2003). The overall objective of the policy is: “to establish a basis for the evolution of an efficient and effective micro financial system in the country that serves the low-income segment of the society, and thereby contribute to economic growth and reduction of poverty” (Ministry of finance of the United Republic of Tanzania 2000). The policy includes a vision for development of microfinance and specifies the roles of the different stakeholders. With respect to the regulation and supervision the policy adopted the same fundamental principles it applies to the other elements of the financial system. An important principle is the use of prudential financial norms in order to protect the depositors (Ministry of finance of the United Republic of Tanzania 2000).

Current state of the financial sector in Tanzania

The financial sector can be divided in the formal financial sector, the semiformal financial sector and the informal financial sector. The formal financial sector is composed of the current supervised institutions like commercial banks, community banks or insurance companies and of pension funds that are likely to be supervised soon. The semi-formal segment includes providers of financial services that are formally registered, but not supervised by a financial services regulator. These are NGOs and SACCOs. The informal financial sector consists of the informal associations and groups that offer financial products, like Rotating Savings and Credit Associations (ROSCAs) and Village Community Banks (VICOBAs) (FSDT research 2007).

4.2 Providers of microfinance in Tanzania

Formal - Commercial banks, regional and rural unit banks and non bank financial institution

Commercial banks, regional and rural unit banks and non financial institution are all supervised and regulated by the bank of Tanzania. The regional and rural unit banks are registered as specialized community banks, an example is the Dar es Salaam Community Bank. The difference between regional and rural unit banks and commercial banks is that regional and rural unit banks are allowed to establish with lower minimum capitalization requirements, but they are restricted to a limited geographical area of operations. The only non bank financial institution in Tanzania is the Tanzania Postal Bank (Satta 2004). In Tanzania there are currently 22 commercial banks (BoT), of which three are providing microfinance services, namely NMB, CRDB and Akiba.

According to Satta (appendix A), the commercial banks started providing services to small and medium enterprises after the government implemented the financial reform of 1991. Before 1991 commercial banks served mainly several multinationals and the Government. Serving the Government was very profitable, due to the low handling costs and the high interest rate. With this profitable construction there was no need for the commercial banks to innovate.

At the time the Government reduced the return on the treasury bills, the bank starts to downscale (including smaller business in their target group). After years of neglecting lower income business, the banks had a lack of knowledge of this type of business. They faced difficulties with screening them properly. The tendency of the reducing return on the treasuring bills will continue and so the banks will increase their downscaling activities. Currently the outreach of the banks is still small. They are centralized in the urban areas, since they find it unprofitable to operate in the rural parts of Tanzania (according to Nagel - appendix A). So far the commercial banks are still serving the upper class of society, with the exception of the three banks that include microfinance products.

The banks offering microfinance are severely challenged by adopting their services to the low income households. The ordinary banking methods are not (easily) applicable to those clients, due to the high level of illiteracy, a lack of any form of identification and unregistered collateral. Ordinary loans are mostly secured by registered collateral, but the costs for registration are very high. Sometimes the banks use unregistered asset as a replacement, after they have checked if it is widely known as that person’s property.

Semi-formal - Savings and Credit Cooperative Society (SACCOs)

The most widespread supply of financial services in Tanzania comes from the SACCOs. These are societies started by a group of people to create an opportunity for them to receive credit. The ownership of the SACCOs is in hands of the members, since it is obligatory to buy a share of the SACCO to become a member. This is an important difference from other financial services. Usually the membership ranges between 40 - 50 persons, but there are SACCOs reaching several hundreds of persons and sometimes even over thousand (FDST 2003). The average number of members of a SACCO in a Tanzania is 209 persons (International Co-operative Alliance 2001).

The exact current number of SACCOs is unknown. Data from January 2001 indicated a number of 646 SACCOs in Tanzania (Randhawa and Gallardo 2003). In 2005 the bank of Tanzania came up with a number of 1620 SACCOs in Tanzania, of which 259 in Dar es Salaam. Mr Mashingia, the operations manager of the credit union SCULLT claims that there are currently 2450 SACCOs in Tanzania and 300 SACCOs in Dar es Salaam. But, even though the SACCOs are registered, it remains unclear what the exact amount of SACCOs is in 2007.

SACCOs are registered under the cooperative law of 1991 and they are also covered under the Banking and Financial Institutions Act, 1991 as financial intermediaries. The Ministry of Agriculture and Cooperatives is responsible for the supervision of the SACCOs (Ministry of finance of the United Republic of Tanzania 2000). The supervision of SACCOs comes from the Registrar for Cooperatives, who operates through the Regional and District Cooperative Departments (Duursma 2004).

The SACCO is managed by a board, which is chosen by the shareholders. An extension on the regulation in 2004 obliged the SACCOs to separate the executive board and the management board and to employ the management board. Previously the board didn't get paid for their responsibility. The forecast is that at the end of this year all the SACCOs has applied this new rule (according to Duursma – appendix A).

The capital of the SACCOs comes from the compulsory savings and the compulsory shares. It is legally restricted that a member can borrow three times the amount of his savings. Most of the SACCOs don't pay an interest on the savings of their members. When the demand of credit exceeds the supply, SACCOs borrow from financial institutions or from their credit union. A credit union is a network of SACCOs, for example SCULLT in Dar es Salaam. The aim of a credit union is to create economies of scale, by cooperating on several business activities. An example is training in finance for the members.

Most of the SACCOs operate in the rural areas. The ones that are established in urban areas are commonly occupational SACCOs, which mean that they are attached to a working place. They are the so-called employees SACCOs (according to Duursma – appendix A).

For several reasons the image of SACCOs has been damaged in the past and therefore there is a lack of trust in this type of lending. One reason is that the board of the SACCO is elected by its members. It is not uncommon that the board only completed primary school and has a lack of knowledge about handling a financial society. As a consequence the SACCO is regularly weakly managed (according to Duursma – appendix A). The members of most of the SACCOs are among the poorest people of the country and they are the ones that can least afford to lose their money (FSDT). Fortunately, there is an increasing focus on this type of lending and as a consequence the performance of SACCOs starts to improve (FSDT 2006).

Semi-formal – NGOs[1]

The NGOs are registered, but it is unclear where exactly. As a consequence there is no information about the number of MFI NGOs in Tanzania. There used to be an umbrella organization, called Tanzania Association of Micro Finance Institutions (TAMFI). Due to a problem with the funding it isn't active since January 2005 (BoT). Recently a new initiative to cooperate, named Tanzania microfinance institutions network, has been established. Nevertheless this is still small and includes only a few microfinance NGOs.

There is a lack of regulation for this group of MFIs. Since NGOs are not allowed to use deposits as credit money, the national microfinance policy aims that there is little need to regulate this institutions. "Only the institutions licensed to accept deposits from the public or from other financial institutions will be subject to regulation and supervision" (the national microfinance policy 2000). NGOs are only allowed to attract savings to use it as a security. This is in contradiction with the SACCOs who are permitted to lend this money to their members. NGOs need to obtain their money elsewhere. Previously NGOs could rely on donor subsidies, but the donor subsidies have been tremendously reduced. Currently most of their money comes from the financial market. With an interest rate above 10% this is a very costly source.

A specific chapter in the law of financial institutions on the regulation of NGOs, that recently has been add, allows NGOs to transform into a microfinance company (MFC). The two restrictions to become a MFC are (MicroRate 2004):

1. The company has to be limited by shares with a maximum shareholding by any one entity of 66% [2]
2. The company must have a capital of 800 mln TSH

[1] Not all the NGOs in Tanzania offer microfinance products, but if I refer to NGOs I mean the ones that provide microfinance services.

[2] The difference with SACCOs is that if you want to become a member of a SACCO you are obliged to buy a share. This is not the case with MFCs.

The advantage is that MFCs are allowed to use the savings of their clients as credit, which will reduce their cost of borrowing. The MFC are like small banks. Uganda started a few years ago with a similar transformation opportunity. NGOs in Uganda could become micro deposit taking institutions.

In the past there were many NGOs that provided microfinance next to its other services, but currently NGOs are more and more specialized microfinance companies. In a way they try to stick to their social mission by targeting minority groups. FSDT wrote that NGOs have taken the lead in actively providing microfinance to women.

4.3 Developments of the microfinance sector in Tanzania

The microfinance sector in Tanzania is constantly developing and faces several challenges. Important developments of the industry today are:

- *One billion plan[3];* In line with the Government's strategy to reach to United Nations Millenium Goals, the prime minister of Tanzania invests one billion TSH in every of the 26 regions of Tanzania. The money is delivered through the SACCOs, who can borrow it from several commercial banks. The interest rate for both the commercial banks and the SACCOs is fixed and relatively low. Especially from abroad there is a lot of criticism about this plan. With a history of socialism, this government intervention will probably work contra productive on the development of the microfinance industry (according to Duursma – appendix A). This plan might influence the competition in Tanzania, because experts believe that many people will found a SACCO, in order to claim the money (according to Robbinson – appendix A).
- *Downscaling;* Commercial banks are downscaling. They are forced to this innovation, since the return on the treasury bills is decreasing. The expectation is that soon more commercial banks will enter the microfinance market (according to Nagel – A).
- *Transformation;* A new rule allows NGOs to transform into microfinance companies. Especially the more established NGOs, like Finca and Pride, are already far advanced in the process of becoming a small bank (MicroRate 2004). The advantage of operating as a microfinance company instead of a NGO is that as a microfinance company you are allowed to lend the savings to their clients. This is not allowed for NGOs. Possible consequences are that the competition for deposits of clients will intensify and that the microfinance companies get more commercial.

[3] The name of the plan refers to the amount of one billion Tsh the president wants to invest in every region.

- *Competition*; Competition is a challenge for the different MFIs in Tanzania, but the competition is not as stiff as it is in the neighbor countries Kenya and Uganda (according to Robbinson – appendix A). The level of competition is different through Tanzania. The cost of operating in the rural areas is higher than in the urban areas, so most of the MFIs are operating in the cities. The biggest concentration of MFIs is in Dar es Salaam.

Chapter 5 - Research Design

5.1 Methodology

As far as I know, no one else investigates the competition in the microfinance industry in Tanzania before. Therefore my research can be seen as an explorative research. My objective is to give a better insight in this topic, so that this output can be used as a basis for future research.

Framework

Chapter three describes the literature on the consequences of competition in the microfinance sector for the MFIs. Based on the existing literature I came up with seven different hypotheses. These seven hypotheses are the framework for my research. They describe the consequences of competition on the company policy of the MFIs:

- Target group is more risky
- The very poor are excluded from the target group
- The relationship of the borrower and lender is weaker
- MFI invests more in screening and monitoring
- The interest rate is higher
- MFI focuses on innovation of products and increasing the level of service
- MFI prevents double-dipp of clients

My actual research consists of three parts: a picture of competition in Dar es Salaam, an interview part and a statistical part. The first part, a picture of competition in Dar es Salaam, shows how managers of MFIs consider the competition in Dar es Salaam. It is based on information from the interviews. The underlying reason to include this in my research is that it might give a better insight in how managers perceive competition in Dar es Salaam and which type of MFIs (commercial banks, NGOs or SACCOs) deals the most with competition. Especially for further research it is good to know where the competition comes from. In the second part, I interviewed the managers about the hypotheses. The managers probably know the most about the effect of competition on their company policy. They told me their opinion on the hypotheses and how they experience the consequences of competition. Explicitly, I asked them about their underlying arguments to check if their arguing is similar to the arguing in the literature.

The statistical section, the last part, shows another way of verifying the hypotheses. By collecting data of the different branches, I try to proof the different hypotheses. The data is classified[4] and with a t-test and a Mann-Whitney test I examine if the output of the different groups significantly differs.
Not all the hypotheses can be tested by interviews and statistical data, so a few hypotheses are only taken into account either in the interview part, or in the statistical part.

Data collection

For my research I focus on the MFIs that provide micro loans. I excluded MFIs that don't offer microloans, only microfinancial services. An example is Meda, which is a MFI that provided micro loans in the past, but focuses currently on training, research and advice.
Micro credits are micro and small loans. This is a broad description, but there isn't a general accepted maximum amount of this type of loan in Tanzania**.** My criteria was if the MFI labels its business as microfinance.
I included only MFI's that are providing micro and small loans in Dar es Salaam and I enclose only the information of their operations in Dar es Salaam. So the data of the branches outside Dar es Salaam are excluded. Most of the MFIs have several branches in Dar es Salaam. For example the National Microfinance Bank has nine branches in Dar es Salaam, which means that there are nine operating offices. Most of the branches of the MFIs are not integrated and practically this means that clients are restricted to one branch for financial services. Therefore I collected the data for the statistical part of my research, like number of clients, costs, etc, branch wise.
On the other hand I belief that the general managers of the MFIs are more informed about this topic than the branch manager. Many operational and strategically decisions are made on a higher level in the organization. So, as long as it was possible, I did my interviews with the general managers of the MFIs. The consequence is that the size of my sample differs in the different parts. I had only one interview at a MFI, but sometimes the MFI had more than one branches in Dar es Salaam. As a consequence, the number of total branches (61) in the statistical part is bigger than the number of interviews (18) in the interview part. Appendix B shows an overview and background information of the MFIs and appendix C shows the MFIs and branches in the samples of the different parts.

As I explain in chapter four, there are three different types of MFIs in Tanzania: commercial banks, NGOs and SACCOs. The three different providers have their own specific regulations and

[4] The groups are formed in two ways: on area and on level of perceived competition. This will be explained in detail later in this chapter.

structure. I included all the three types in my research, because there was no information about the differences between them according to how they deal with the competition in the microfinance sector.

The collection of the information is different for every type of MFI. I will describe the process of collection the information and the difficulties I faced type-wise. Appendix B gives more background information of the MFIs.

Commercial banks

According to Satta (2004) there are five commercial banks that are providing microcredit: Akiba commercial bank, NMB, CRDB Microfinance Company Ltd, Tanzania Postal Bank and Dar es Salaam Community bank. I lived in the business centre of Dar es Salaam and all the banks have a branch in that area. That made it for me relatively easy to acquire the right contact details. I mentioned before that I tried to interview the general manager of the MFI. Nevertheless, with several commercial banks it was more useful to interview the microfinance manager or the zone manager. A couple of the commercial banks are operating in all the regions of Tanzania and therefore the general managers are not always specialised in the situation in Dar es Salaam. Appendix B shows the position of the interviewees.

The difficulty with the commercial banks is that there is big difference in the size of their microfinance activities. For example the CEO of the Dar es Salaam community bank stated that all of their activities are considered as microfinance, Akiba commercial bank stated that 80 percent of their operations are comprised by microfinance and Tanzania Postal bank came up with a percentage of 90. Tanzania Postal bank has one microfinance loan. I calculated that the percentage of that microfinance loan of their total portfolio of their branches in Dar es Salaam is only about 10%. There is a big gap between the percentage they gave me and the percentage I calculated. I don't know their methodology, but they might take into account the costs and efforts of the bank that are subjected to the microfinance activities. The micro loans are small, but probably the handling costs of those loans are relatively substantial higher than the costs of the other loans and can therefore count for an extensive share of the total costs of the bank. A logical solution would be to include only the activities, costs, etc. of the microfinance loan, but since the banks don't make that distinction themselves, it is extremely difficult and time costing to separate the information. The microfinance MIX market includes a percentage of the business of the MFIs that comprises microfinance, but I couldn't find their methodology.

I pointed already a bit at another problem of the commercial banks. The commercial banks are, relatively to the other MFIs, well organised. E.g. more of their business is computerized, compared to the operations of the NGOs and SACCOs. However, the information of the bank is still quite dispersed. For example, at the financial department of Akiba commercial bank the number of clients of the different branches wasn't known. This was only available at the different branches. To solve this problem, I suggested to call the different branches, so I ended up with the right information, but it wasn't available at the head office. Another similar problem was at Tanzania postal bank. They couldn't tell me what the amount of costs was, because there was one person responsible for the cost statement and he was never there. Even though I visited the head office very often and they promised me to collect the information, it never worked out. These examples show how difficult it was to gain the right information from the banks due to the lack of centralized information.

Another peculiar issue was that they feared that I was a spy. Therefore they asked me to bring an introduction letter from IFM, to proof them that I wasn't working for another bank.

NGOs

As I already mentioned in chapter four, it is unknown how many NGOs are providing microfinance services in Dar es Salaam. Even the Tanzanian Association of NGOs (TANGO) with 620 membership NGOs and the director of the NGO registration office (mr. Katembe) couldn't inform me on this point.

The Bank of Tanzania published a list of MFIs on their website after carrying out a survey in 2005 and the microfinance mixmarket included the information of four NGOs in Dar es Salaam. However these lists are incomplete and not all the information is up-to-date anymore. One reason is that all the mobile phone numbers changed a couple of months ago. Though I used the correct information and expanded the list of NGOs and the contact details by asking the interviewees about their contacts.

As long as it was possible, I interviewed the general manager of the NGO. Most of the NGOs are primarily active in Dar es Salaam, so the general managers were well informed about the competition in Dar es Salaam[5]. In a few cases the general manager was settled in another city and I spoke to someone else. Appendix B shows the names and positions of the interviewees.

SACCOs

In 2005 the BoT released a document with the names of 259 SACCOs that were located in Dar es Salaam. Currently it is estimated that there are even more than 300 SACCOs in Dar es Salaam. A

[5] There a few exceptions, namely Finca, Pride and SEDA, the three largest NGOs in Tanzania. They have several branches in different areas in Tanzania.

few of them are extensive, like Posta na simu, but most of the SACCOs are very small. It is difficult to find the small ones and it is often complicated to gather the right information from them. Fortunately the manager of SCULLT (a SACCO network organization) offered me the assistance from the regional manager, mr. Florian Haule. He showed me the way and, when necessary, he translated my questions into Swahili.

I asked the managers of the SACCOs about the state of competition in Dar and the level of competition they faced. For the interview part, I did an interview with the managers of the netwerk organizations SCULLT and Dunduliza and with the manager of the SACCO Posta na simu. I didn't interview the managers of the small SACCOs for several reasons. First, it was practically impossible. It would take a long time, also because it had to be translated by mr. Haule. Since his normal work needed attention too, I couldn't manage to get more of his time. Next to this, the managers of the SACCOs regularly have a lack of knowledge about the microfinance market and about their own company policy. So I decided to focus on the collection of data at the SACCOs and leave them out the interview part. The sample of SACCOs was supposed to be bigger, but a couple of times the SACCOs were closed. Since the SACCOs are scattered through Dar es Salaam and the traffic problems are huge. It wasn't an option to return to the SACCOs at another time.

The accounts of the SACCOs are commonly poorly organized. Most of the times the information of 2006 wasn't even prepared yet, so I ended up with the information of 2005. Sometimes they couldn't even show me the statements and just told me different numbers, which didn't seem very accurate to me.

Next to the interviews with the managers, I spoke to several people who are knowledgeable about the microfinance sector in Tanzania. Appendix A gives an overview of their names and positions. The microfinance field in Tanzania is quite complex, but there is not so much written information about it. Because of the interviews with the experts I got to know the current state of the microfinance industry, which is mostly described in the previous chapter.

5.2 Research

My actual research consists of three parts. The first part, picture of competition in Dar es Salaam, gives an overview of the state of competition. The second part, interviews with the managers, describes the opinion of the managers on the seven hypotheses. The last section, the statistical one, includes the statistical evidence.

Picture of competition in Dar es Salaam

I included this part in my research to get a better view of the level of competition in Dar es Salaam. Especially for further research it is useful to know how the different types of MFIs regard the competition for microcredit in Dar es Salaam and where the competition comes from according to them.

First I asked the managers how they consider the level of competition for microcredit in Dar es Salaam. I used a 1 - 5 scale, where 1 is 'no competition', 3 is 'moderate competition' and 5 is 'stiff competition'. 2 Is in between 'no competition' and 'moderate competition' and 4 is in between 'moderate' and 'stiff competition'. The reason that I used this scale is that 'no competition' and 'stiff competition' are quite resolute proposition. The scale I use allows more nuances than a scale from 1 to 3. An even larger scale might become unclear.

I show the outcome in a table to compare the perception of the competition in Dar between the managers of the commercial banks, the NGOs and the SACCOs.

To put the competition for microcredit more in perspective and to see where the managers believe most of the competition comes from, I asked the managers which type of MFIs (Commercial banks, SACCOs or NGOs) causes the strongest competition for microcredit for them in Dar es Salaam. I asked to rank the different types of MFIs from the one that is the strongest cause of competition, to the one that is the least cause of competition or doesn't cause competition at all. In order to analyze the output I gave the one that is the strongest cause of competition three points, the type that causes less competition receives two points, least cause of competition is one point and if the type doesn't cause competition at all it gets zero points.

Interview part

The interview part gives the opinion of the managers on the seven hypotheses from the literature.

<u>Target group is more risky.</u>

The theory predicts that MFIs need to shift to the more hazardous clients, since the relatively 'safe' clients are saturated. Risky clients are the clients that invest the loan in projects with a probability of default. The safe clients invest in a project with a certain return. I asked the managers if competition affects their company policy about risky borrowers in their target group (less risky borrowers, more risky borrowers, makes no difference).

<u>The very poor are excluded from the target group.</u>

The theory predicts that a consequence of competition is that the very poor are excluded from the target group. I asked the managers how they believe competition affects the inclusion of the very poor in the target group of MFIs. This can either be positive (very poor borrowers get better access to financial services and will be more included in the target group), makes no difference, or can be negative (competition makes is more difficult for very poor borrowers to get access to financial services). The very poor are the people that haven't got any job or business.

<u>The relationship of the borrower and lender is weaker</u>

According to Dinç (2000) relationship lending implies that a bank promises refinancing to a borrower. This can be costly in the short term, but the bank will keep its commitment and a good reputation. Practical this means that apart from the current performance and assets of the borrower, the bank also takes into account the future prospects. It is impossible for me to investigate if the lender promises more refinancing to a borrower. The underlying assumption is that relationship lending is based on a good relationship between the borrower and the lender. Rhyne (2001) stated that as a result of the competition in the MFI sector clients can choose between different providers and they do exercise that choice. This weakens the relationship.

I asked the managers how they believe their relationship with their customers changes because of competition. It can either change positively (it makes the relationship stronger), makes no difference, or negatively (it makes the relationship weaker).

<u>MFI invests more in screening and monitoring</u>

The theory predicts that competition requires MFIs to invest more in screening and monitoring. I ask the managers if they invest more in screening and monitoring and therefore if the screening and monitoring costs are higher or lower because of competition, or that is doesn't make a difference. Many MFIs don't separate the screening and monitoring costs and that makes it difficult for them to know about an increase or decrease and it makes it impossible for me collect their screening and monitoring costs. Instead of that type of costs, I used their total costs in the statistical part. For that reason, I built out my question in the interviews and I ask the managers also if their operating costs are higher or lower as a consequence of competition.

<u>The interest rate increases</u>

The assumption is that the interest rate that MFIs charge on their loan products increases because of competition. The higher costs (Hoff and Stiglitz 1998) and the increase of the share of bad borrowers (Marquez 2002) are responsible for this price increase. I asked the managers what the influence of competition is on the interest rate in Dar es Salaam. Does the interest rate increase, is there no influence at all, or is the interest rate getting lower. Besides that I asked if they compete on the interest rate themselves (yes/no).

<u>MFI focuses on innovation of products and increasing the level of service</u>

Competition increases the level of service and the number of different products of the MFIs (Rhyne 2001). I asked how many different loan products the MFIs offer, what kind of products they have besides their loan product, and if they are developing new products. There is nothing to compare the outcome with, so this will only give an indication of the current number of different loans and other financial products. Next to this I ask if competition causes a change in the products they are offering (either yes, or no).

Since the assumptions behind this hypothesis is that the MFI put more effort in satisfying their clients I asked the managers what they believe is the most important for borrowers, so where do the clients select an MFI on (speed, customer care, products, interest rate, location, information, loan conditions, convenience).

Speed; the time that it takes to receive a loan

Customer care; the attitude of the staff towards the customers (polite, with respect etc)

Products; products (for example, insurance, special loans)

Price; the interest rate and other compulsory fees

Location; the distance to the office/field officer

Information; the information that the client have about the MFI, this includes the reputation of the MFI.

Loan conditions; for example compulsory savings, repayments (weekly, montly)

Convenience; the level of convenience, for example is it easy to get a loan, how strict is the defaulting punishment.

<u>MFI prevents double-dipp of clients</u>

The literature considers double-dipping of clients as a consequence of competition (Armendáriz de Aghion and Morduch 2005). I assume therefore that if clients take up multiple loans, and if the managers think about this as a threat for their business, they might adapt their company policy in order to overcome this. Therefore I asked the managers if double-dipp is considered to be a problem (yes/no) and how they try to prevent their clients from taking up multiple loans. The purpose is to find out if and how the MFIs change in order to overcome double dipping.

I put the outcomes in a table and included the different underlying arguments of the managers.

I present the output in two different ways, bases on MFI type (commercial banks, NGOs or SACCOs) and based on their perception of the competition in Dar es Salaam. The reason that I use those separations is that I want to see if there is a clear difference between the groups. In order words, is the general opinion of the commercial banks different than the opinion of the managers of NGOs and SACCOs and is there a different opinion of the managers with a different perception of the competition in Dar es Salaam.

5.2.3 Statistical part

The objective of this part is to test several hypotheses empirically. Therefore I use the information of 61 branches. The different branches are named in appendix C. Not all the seven hypotheses are part of the statistical part, simply because there isn't always a good proxy to test it. This is for example the case with the hypothesis that MFIs focus on innovation of products and increasing the level of service because of competition in the microfinance sector. There isn't a good proxy to test this empirically. The hypotheses and the different proxies I include in this part are the following:

hypothesis	**proxy**
Target group is more risky	Portfolio at risk
The very poor are excluded from the target group	Amount of the outstanding loan per client
MFI invests more in screening an monitoring	Costs per client
The interest rate increases	Interest rate

My hypotheses are that with more competition, the portfolio at risk is higher, the amount of the outstanding loan per clients is higher, the costs per client are higher and the interest rate is higher.

Initial plan

In Dar es Salaam it turned out to be impossible to stick to the plan that I had made on forehand, so I had to adapt it along the way. Though I believe it has an added value to describe in this section the intended plan and the reasons for failure, especially if this explorative research is going to be used for future research.

Initially the purpose was to collect the current data and the data of 2001 (which is before the microfinance policy was introduced), to test if there is a significant difference. Nevertheless it is impossible to collect the data from 2001. Either because it is stored somewhere too far away to collect it for me, or they changed their systems and there is no access to the data anymore, or they were doing another kind of business in 2001, or they didn't even exists in 2001. Even if they could provide me with the data, I wonder if it would be useful, since many MFIs changed their business or their accounting system in the meantime.

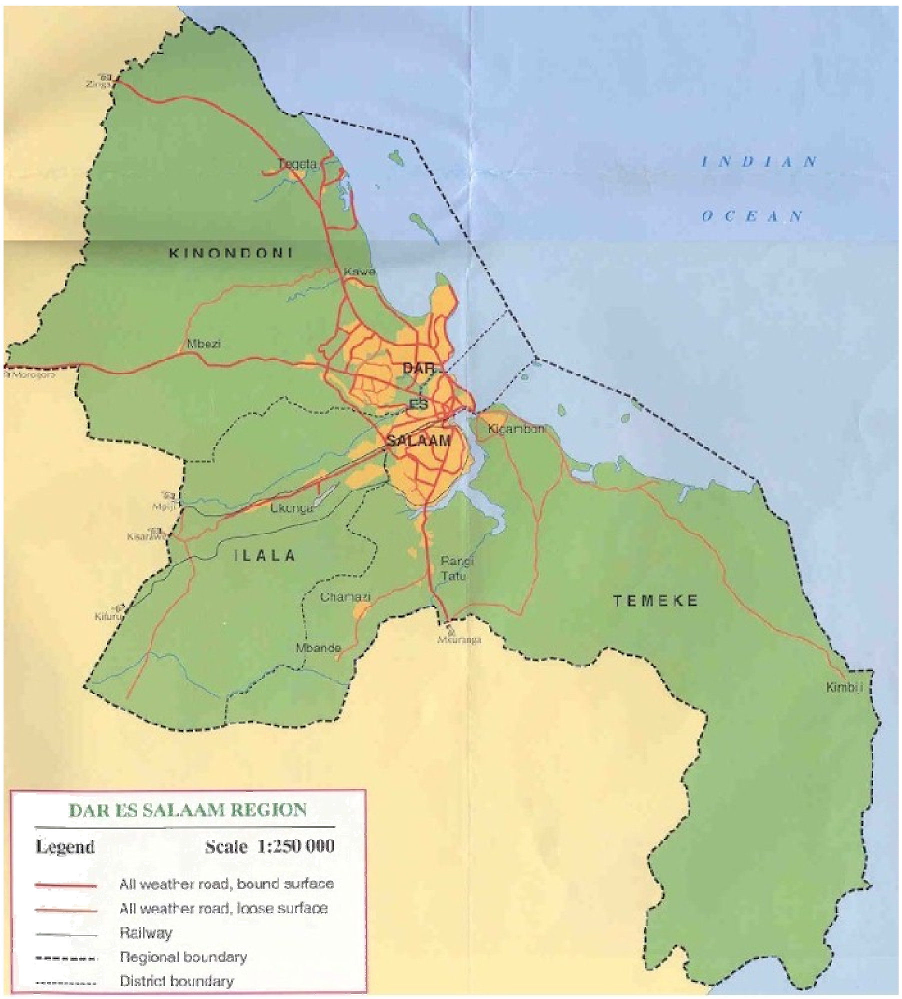
As a proxy for the perceived competition, I wanted to use the number of MFIs that operate within a certain distance from the MFI in my sample. However, since no one knows the locations of the

MFIs, the MFIs doesn't have an address and even more important, you can't get hold of a map of Dar es Salaam (maps are sold out for more than a year), I had to leave this idea.

Adapted plan

In Tanzania I adapted my plan. Dar es Salaam consists of three different areas: Kinondoni, Illala and Temeke, what can be seen in the following figure.

Figure 1 Areas Dar es Salaam



Source: African LSS

The level of competition in the different areas differs. There is no hard evidence to proof this, but it is more a general fact where quite a lot of managers and experts informed me about. Least competition is in Temeke. The microfinance industry in Temeke is less developed than in Kinondoni and Illala. It is said that the market for microfinance is most competitive in Kinondoni, for the reason that most of the small businesses are operating here. However the discrepancy in the level of competition between Kinondoni en Illala is less obvious than between Kinondoni, Illala and Temeke. So I compare the data of the three areas with each other and I take the data of Kinondoni and Illala together and compare it with the data from Temeke. In total I make four comparisons.

I asked the managers of the MFIs how they consider the level of competition in Dar es Salaam on a scale from 1 (no competition) to 5 (stiff competition). Based on their opinion I grouped the data into three groups: MFIs with a perceived competition level of 1 or 2, of 3 and of 4 or 5. I compared the output of the different groups with each other, which result in three comparisons.

Explanation of the data

Portfolio at risk (PAR): The PAR is the percentage of the delayed amount of outstanding loans of the total amount of outstanding loans. The interest receivable is excluded. I collected the data for 1 day, 30 days and 90 days, since every MFI conduct its statements in another way. After my research I excluded the PAR for 1 day and 90 days, because of insufficient information, and use the PAR for 30 days in the statistical test[6].

Amount of outstanding loans [7] per client; This is the outstanding amount of the loans of the MFI divided by the number of clients. I divided the total sum by the number of clients of the MFI to make the outcome comparable. To come up with the number of clients I copied the methodology of the microfinance mixmarket, who defines the number of active borrowers as follows: "The number of individual who currently have an outstanding loan balance with the MFI or are responsible for repaying any portion of the Gross Loan Portfolio." The number of clients of the NGOs and the SACCOs in my sample can be assumed to be the same as the number of active borrowers. On the other hand, at the commercial banks there is a gap between the number of clients and the active borrowers[8]. Many clients of the commercial banks only deposit money in the bank and don't take up a loan. Therefore I divided the outstanding amount of loans of the commercial banks by the number of loan clients.

Costs [9] per client; There is hardly a MFI that collected the screening and monitoring costs. So as an alternative I used the total operating costs[10]. The costs are divided by the number of clients to make the information comparable. The number of clients is number the active borrowers[11].

[6] There is a lack of information of the PAR of the different SACCOs.

[7] All the costs are in Tanzanian shilling (tsh). The currency rate at the time of my research was between 1644 tsh and 1716 tsh for one euro.

[8] Except for the DCB.

[9] All the costs are in Tanzanian shilling (tsh). The currency rate at the time of my research was between 1644 tsh and 1716 tsh for one euro.

Weighted average interest rate (WAIR); Most of the MFIs offer more than one type of loans, with different loan terms and interest rates. For that reason I calculated the weighted average interest rate, which is based on the weight of the loan in the total loan portfolio of the MFI. A couple of times I couldn't use this method. For example one SACCO used a certain interest rate for each loan. No matter what the duration of the loan was. In those specific circumstances I calculated the interest rate by dividing the loan income of 2006 by the amount of loans issued in 2006.

Not all the MFIs were willing and able to provide me with the information I asked for. The manager of CRDB microfinance company Ltd refused to give me the information. Tanzania Gatsby Trust wasn't able to give me all the data I asked for. Tanzania Postal bank couldn't give me the information of the costs and several SACCOs didn't prepare the portfolio at risk.

Statistics

I test if there is a significant difference in the PAR for 30 days, the amount of outstanding loans per client, the WAIR and the costs per client between the different groups within the area part and within the perceived competition part.

To check if the data is normally distributed I carry out the Jarque-Bera test. I test on a confidence interval (CI) of 95%, which means that if the output is normal distributed the probability of Jarque-Bera is above 0.05 (Brooks 2002).

When the output is normally distributed I continue with the t-test. The t-test identifies whether two groups significantly differ from each other under the assumption that the differences are independent and normally distributed (Moore and McCabe 2001). The null hypothesis is that there is no significant difference, so

$H_0 : \mu = m$

$H_a : \mu \neq m$

On a 95% CI the null hypothesis is rejected if the probability is below 0.05 and on a 90% CI if the probability is below 0.1.

Next to the t-test I do a Mann-Whitney test. This test is based on the idea "that the sum of the ranks for the samples above and below the median should be similar" (eviews). "The null hypothesis is that the two groups are independent samples from the same general distribution" (eviews). With this test I use the same confidence intervals as I use with the t-test.

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[10] I tried to come up with the total operating costs without the interest costs, but this wasn't possible. So the total costs include the interest part.

[11] At the commercial banks I included all the active borrowers, because all the clients count for the total costs, not only the loan clients.

Chapter 6 – Results and analysis

6.1 Picture of the competition in Dar es Salaam

To get a better view of the level of competition in Dar es Salaam, I asked the different managers how they consider the level of competition for microcredit in Dar es Salaam. The scale is 1-5, where 1 is 'no competition', 3 is 'moderate competition' and 5 is 'stiff competition'. The outcome is as follows:

TYPE	SAMPLE	AVERAGE LEVEL OF COMPETITION
Commercial banks	5	2.5
NGOs	10	**3.5**[12]
SACCOs	18	2.1

Table 1 Average level of competition

The level of competition in Dar es Salaam is valued most competitive by the NGOs, second by the commercial banks and lowest by the SACCOs.

To put the competition for microcredit more in perspective and to see where the managers believe most of the competition comes from, I asked the managers which type of MFIs causes the strongest competition for microcredit for them in Dar es Salaam. The questionnaire ranks the different types from the type that is the strongest cause of competition (3 points), causes less competition (2 points), least cause of competition (1 point), causes no competition (0). The next table shows the results. The outcome is mentioned at an average.

TYPE	SAMPLE	COMMERCIAL BANKS	NGOs	SACCOS
Commercial Banks	5	**3.0**	1.4	0.6
NGOs	10	1.8	**2.4**	1.1
SACCOs	18	**0.9**	0.5	0.7

Table 2 Competitors

Table 2 shows that commercial banks and SACCOs believe that most of the competition comes from commercial banks and NGOs think that most of the competition is caused by other NGOs.

6.2 Interview part

[12] The numbers in the tables that are bold are the highest outcome.

The results of the interviews are classified in two ways: by type of MFI (commercial banks, NGOs and SACCOs) and by the level of perceived competition. I created three perceived competition groups. The group that values the competition in Dar es Salaam a 1 or 2, a group that gives it a 3 and the group that considers the competition a 4 or 5. The reason that I divided it into three groups is that I think that this will deliver the best output. In this way there are more groups to compare with each other, while the samples of every group are still large enough.

The outcomes of the interviews are shown in the tables in absolute numbers and in percentages. The percentage is the part of the interviewees in that particular group with that opinion. The numbers that are bold are the highest numbers in the specific group and represent therefore the opinion of the majority of the group.

Target group is more risky

The theory is that that the target group of MFIs is affected by competition. Vogelgesang (2001) and Marquez (2002) stated respectively that the relatively "safe" customers are saturated at one moment and that competition lowers the screening possibilities for the MFIs. Both consequences result in a riskier target group. It wasn't useful to include this in the interview part, because after a couple of interviews it turned out that this is not a deliberate change. The managers hardly separate "safe" and "risky" clients, so I excluded this hypothesis from the interview part.

The very poor are excluded from the target group

I asked the managers how they believe how competition affects the inclusion of the very poor in the target group of MFIs. Either positive (very poor borrowers get better access to financial services and are more included in the target group), makes no difference, or negative (competition makes is more difficult for very poor borrowers to get access to financial services). The results are as follows:

CLASSIFICATION	SAMPLE		POSITIVE		NO DIFFERENCE		NEGATIVE	
TYPE MFI	#	%	#	%	#	%	#	%
Commercial banks	5	100	2	40	**3**	**60**	0	0
NGOs	10	100	**5**	**50**	2	20	3	30
SACCOs	3	100	0	0	**2**	**66.7**	1	33.3
PERCEIVED COMPETITION	#	%	#	%	#	%	#	%
1 - 2	7	100	1	14.3	**5**	**71.4**	1	14.3
3	6	100	**4**	**66.7**	1	16.7	1	16.7
4 - 5	5	100	**2**	**40**	1	20	**2**	**40**
TOTAL	#	%	#	%	#	%	#	%
Total MFIs	18	100	**7**	**38.9**	**7**	**38.9**	4	22.2

Table 3 *Replies to "how affects competition the inclusion of the very poor in the target group?"*

The managers mentioned different reasons to ground their opinion. This is shown in the next table:

POSITIVE	7
Competition lowers the prices of the loans, which makes it affordable for the very poor.	3
MFI extend their operations to the rural areas, where the poorer people are living	2
More MFIs lead to more opportunities for the very poor to receive a loan	2
NO DIFFERENCE	7
MFIs are not serving the very poor at all, so it doesn't influence them	3
No reason, or unclear answer	4
NEGATIVE	4
The MFIs goes after the most profitable borrowers in a more competitive environment	3
Competition creates bad MFIs (MFIs without a honest objective), which damage mostly the poor	1

Table 4 Explanations of the change in the inclusion of the very poor

McIntosh and Wydick (2005) stated that the poor borrowers are dropped in a client-maximizing portfolio, because the loans to the poor borrowers can't be paid by profits from the wealthier clients anymore. Navajas, Conning and Gonzalez-Vega (2003) came to a similar conclusion in their investigations in Bolivia. In the interviews however seven managers said the opposite; the very poor are more included because of competition, seven managers thought that there is no effect for the very poor and four managers agreed with the hypothesis. Out of those four managers, three managers came up with the same reasoning as the theory of McIntosh and Wydick (2005) and Navajas, Conning and Gonzales-Vega (2003). The managers that stated the opposite argued that the poor borrowers are more included, because competition lowers the price. So the loans will be affordable for poorer borrowers. Another reason is that competition stimulates the MFIs to move to the rural areas of Tanzania, where most of the very poor borrowers are living. So this shift increases the possibilities for the very poor. Two managers argued that in an area with more providers of microfinance, there are more opportunities for the very poor to receive a loan. The output of the interviews are presented in two ways (type of MFI and perceived competition), but there is not an obvious difference between their opinions. Based on the interviews it seems that the opposite is true; that the very poor are more included instead of excluded. The hypothesis is rejected.

<u>The relationship of the borrower and lender is weaker</u>

I asked the managers how they believe the relationship with their clients changes because of competition. Either positively (it makes the relationship stronger), makes no difference, or negatively (it makes the relationship weaker).The outcome is shown in the next table.

CLASSIFICATION	SAMPLE		POSITIVE		NO DIFFERENCE		NEGATIVE	
TYPE MFI	#	%	#	%	#	%	#	%
Commercial banks	5	100	**4**	**80**	0	0	1	20
NGOs	10	100	**6**	**60**	1	10	3	30
SACCOs	3	100	**2**	**66.7**	1	33.3	0	0
PERCEIVED COMPETITION	#	%	#	%	#	%	#	%
1 - 2	7	100	**5**	**71.4**	0	0	2	28.6
3	6	100	**5**	**83.3**	1	16.7	0	0
4 - 5	5	100	**2**	**40**	1	20	**2**	**40**
TOTAL	#	%	#	%	#	%	#	%
Total MFIs	18	100	**12**	**66.6**	2	11.1	4	22.1

Table 5 Replies to "how does the relationship with clients change because of competition?"

The reasoning behind the positive opinion is more or less the same. The arguing of the managers who believe that the relationship of the borrower and the lender changes positively comes down to the fact that because of competition the power is in the hand of the clients. Clients have the possibility now to move to another MFI. As a consequence the MFIs put more effort in keeping the relationship with their clients good and try to satisfy the borrowers. The other arguments are shown in the following figure:

POSITIVE	12
MFI focus more on a good relationship	12
NO DIFFERENCE	2
Don't know	1
Competition has a negative as well as a positive impact on the relationship of the borrower and the lender	1
NEGATIVE	4
The clients take up more loans	2
Clients migrate between MFIs	1
More delayed repayments	1

Table 6 Explanations of the change of the relation between borrowers and lenders

According to Peterson and Rajan (1998) and Rhyne (2001) competition has a negative effect on the relationship of the borrowers and the lenders. Clients can choose between different providers and as a result the MFI is insecure if he will share future returns of the client. On the other hand Dinç (2000) assumes that competition can encourages the incentive to maintain a good reputation. The interviews show that overall the managers are quite like-minded. Twelve of the eighteen managers are convinced that competition has a positive impact on the relationship of the MFIs and their clients. However, it is remarkable that the managers of the NGOs (who consider the level of competition higher than the other managers) and the managers that perceive more competition in Dar es Salaam are less positive than the other managers. It could be that the managers that perceive more competition are more confronted with the negative aspects of competition on the relationship with the clients

The reasoning of the ones that believe the relationship changes positively comes down to the fact that because of competition the power shifts from the MFIs to the clients. In order to keep the clients the MFIs put more effort in the relationship and try to satisfy the clients. This is in line with the theory of Dinç (2000). The other managers believe that the relationship is negatively affected because clients take up more loans, clients migrate between MFIs and there are more delayed repayments. Overall I can say that the managers are not convinced that the relationship with their clients gets weaker because of competition. It is more likely that the opposite is true and so the hypothesis is rejected.

MFI invests more in screening and monitoring

I asked the managers how they believe their screening and monitoring costs are affected by competition. Is that type of costs higher, lower, or is there no difference. The next figures give an overview of the results.

CLASSIFICATION	SAMPLE		POSITIVE		NO DIFFERENCE		NEGATIVE	
TYPE MFI	#	%	#	%	#	%	#	%
Commercial banks[13]	4	100	**2**	**40**	1	20	1	20
NGOs	10	100	3	30	**6**	**60**	1	10
SACCOs	3	100	0	0	**2**	**66.7**	1	33.3
PERCEIVED COMPETITION	#	%	#	%	#	%	#	%
1 - 2[14]	6	100	2	33.3	**4**	**66.7**	0	0
3	6	100	**3**	**50**	2	33.3	1	16.7
4 - 5	5	100	0	0	**3**	**60**	2	40
TOTAL	#	%	#	%	#	%	#	%
Total MFIs	17	100	5	29.4	**9**	**52.9**	3	17.6

Table 7 Replies to "how are screening and monitoring costs affected by competition?"

The following table gives an overview of the different arguments.

HIGHER	5
They screen more thoroughly to assure the client hasn't got a loan at another financial institute	4
Screening costs remain the same, only the monitoring costs are higher	1

[13] CRDB didn't give a clear answer and is therefore excluded from the sample.
[14] CRDB didn't give a clear answer and is therefore excluded from the sample.

NO DIFFERENCE	9
No influence	7
Screening costs are higher and monitoring costs are lower, that equalizes each other, so the screening and monitoring costs together are not affected	1
The screening and monitoring policy is the same everywhere in Tanzania, so the costs don't depend on the level of competition.	1

LOWER	3
More efficiency because of competition	3

Table 8 Explanations of the change in screening and monitoring costs

As an extension I asked the managers how the total operating costs are affected by competition. Are they higher, lower, or doesn't it make a difference. The results are as follows:

CLASSIFICATION	SAMPLE		POSITIVE		NO DIFFERENCE		NEGATIVE	
TYPE MFI	#	%	#	%	#	%	#	%
Commercial banks[15]	3	100	**2**	**66.7**	0	0	1	33.3
NGOs	10	100	**4**	**40**	**4**	**40**	2	20
SACCOs	3	100	0	0	**3**	**100**	0	0
PERCEIVED COMPETITION	#	%	#	%	#	%	#	%
1 - 2[16]	5	100	2	40	**3**	**60**	0	0
3	6	100	**3**	**50**	2	33.3	1	16.7
4 - 5	5	100	1	20	**2**	**40**	**2**	**40**
TOTAL	#	%	#	%	#	%	#	%
Total MFIs	16	100	6	33.3	**7**	**38.9**	3	16.7

Table 9 Replies to "how are the total operating costs affected by competition?"

HIGHER	6
With more competition, there is also more competition for deposits, so they have to borrow at the financial market, which increases the interest costs. The interest on deposits is lower than the interest rate on the financial market [17]	1
MFI needs to adapt its business to the expectations of the clients and that is expensive	1
They have to invest more in service and that increases the cost	1
There are more defaulters	1
Monitoring and screening costs are higher	1
The MFI needs to invest more to improve its image	1

NO DIFFERENCE	7
The costs are not affected by competition	7

LOWER	3

[15] CRDB and TPB didn't give a clear answer, so I excluded those two commercial banks.
[16] CRDB and TPB didn't give a clear answer, so I excluded those two commercial banks
[17] This is the answer of a commercial bank

More efficiency because of competition	3

Table 10 Explanations of the change in total operating costs

Hoff and Stiglitz (1998), Vogelgesang (2001) and Villas-Boas and Schmidt-Mohr (1999) stated that MFIs are faced with higher enforcement costs in a more competitive area. Due to new entrants the incentive for the borrowers to repay the loan is smaller and the reputation effects are weaker, so the MFIs need to increase their monitoring and screening activities. Nine of the seventeen managers had the opinion that the screening and monitoring costs are not affected by competition. Only in the group of commercial banks and in the group with a perceived competition of 3 most of the managers thought these costs are higher because of competition. Their main reasoning is that they screen more thoroughly to assure the client hasn't got a loan elsewhere. The managers who stated that this type of costs is lower believe that competition increases the efficiency.

When I ask the managers how the total costs are affected by competition, six managers believe the total costs are higher. Seven respondents think is has no influence and three managers are convinced that the costs are lowered. The reasons of the assumed higher costs are very different. Only one of the six managers believes the costs are higher because the screening and monitoring costs are increasing. Interesting is that three of the stated arguments come down to the fact that it in a more competitive area the MFI need to invest more in attracting the clients, either by investing in its image, or by investing more in service, or by investing to meet the expectations of the clients. The arguments why the costs might be lower is that, according to the managers, competition increases the efficiency.

Based on the interviews it seems that the hypothesis that MFIs invest more in screening and monitoring isn't true for the MFIs in Dar es Salaam and can be rejected.

<u>The interest rate increases</u>

I asked the managers what the influence of competition is on the interest rate in Dar es Salaam. Does competition increase or decrease the interest rate or is there no influence at all. Besides that I asked if they compete on the interest rate themselves (yes/no).

The next two tables show the results.

CLASSIFICATION	SAMPLE		INCREASE		NO DIFFERENCE		DECREASE	
TYPE MFI	#	%	#	%	#	%	#	%
Commercial banks	5	100	0	0	0	0	**5**	**100**
NGOs	10	100	0	0	**6**	**60**	4	40
SACCOs	3	100	0	0	1	33.3	**2**	**66.7**
PERCEIVED COMPETITION	#	%	#	%	#	%	#	%
1 – 2	7	100	0	0	3	42.9	**4**	**57.1**
3	6	100	0	0	1	16.7	**5**	**83.3**
4 - 5	5	100	0	0	**3**	**60**	2	40
TOTAL	#	%	#	%	#	%	#	%
Total MFIs	18	100	0	0	7	38.9	**11**	**61.1**

Table 11 Replies to "what is the influence of competition on the interest rate?"

CLASSIFICATION	SAMPLE		YES		NO	
TYPE MFI	#	%	#	%	#	%
Commercial banks	5	100	5	100	0	0
NGOs	10	100	3	30	**7**	**70**
SACCOs	3	100	2	66.7	1	33.3
PERCEIVED COMPETITION	#	%	#	%	#	%
1 – 2	7	100	4	57.1	3	42.9
3	6	100	3	50	3	50
4 - 5	5	100	3	60	**2**	**40**
TOTAL	#	%	#	%	#	%
Total MFIs	18	100	**10**	**55.6**	8	44.4

Table 12 Replies to "do you compete on the interest rate?"

Even though in general prices go down with more competition, several authors came up with the opposite theory for the microfinance industry. The assumptions are that the interest rate becomes higher, because of less relationship lending (Petersen and Rajan 1998), higher costs (Hoff and Stiglitz 1998) and the higher number of bad borrowers (Marquez 2002). The outcome of the interviews was very clear on this point. No-one thought the interest increases, seven managers were of the opinion that the rate doesn't change and eleven managers believed that the interest decreases. Next to this I asked if they compete on the interest rate. These answers match, to a certain extend, with the previous answers. The managers, who believe the interest rate isn't influenced by competition, mostly don't compete on the interest themselves. Remarkable is that the NGOs hardly compete on the interest rate. This can be explained by the urge for the NGOs to become financial sustainable, since the donor funding is reducing. All the commercial banks, however, believe the interest rate decreases and all of them compete on the interest rate themselves. The hypothesis is rejected.

MFI focuses on innovation of products and increasing the level of service

I asked if competition causes a change in the products they are offering (either yes, or no). The outcome is shown in the next tables.

CLASSIFICATION	SAMPLE		YES		NO	
TYPE MFI	#	%	#	%	#	%
Commercial banks	5	100	2	40	**3**	**60**
NGOs	10	100	**10**	**100**	0	0
SACCOs	3	100	1	33.3	**2**	**66.7**
PERCEIVED COMPETITION	#	%	#	%	#	%
1 – 2	7	100	**4**	**57.1**	3	42.9
3	6	100	**5**	**83.3**	1	16.7
4 - 5	5	100	**4**	**80**	1	20
TOTAL	#	%	#	%	#	%
Total MFIs	18	100	**13**	**72.2**	5	27.8

Table 13 Replies to "causes competition a change in the product you're offering?"

The results of the question where managers believe clients select an MFI on, is shown in the next figure. Every manager mentioned the **two** most important qualities. This explains that the sample is twice as large as in the other tables.

CLASS	SAMPLE		SPEED		CC		LC		INFO		CONV		PROD		PRICE		LOC[18]	
TYPE MFI	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Comm banks	10	100	**3**	**30**	2	20	1	10	1	10	2	20	1	10	0	0	0	0
NGOs[19]	18	100	**6**	**33.3**	3	16.7	3	16.7	2	11.1	2	11.1	0	0	1	5.6	1	5.6
SACCOs	6	100	1	16.7	0	0	1	16.7	1	16.7	0	0	**2**	**33.3**	1	16.7	0	0
PERC COMP	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1 – 2[20]	14	100	**3**	**21.4**	1	7.1	2	14.3	2	14.3	1	7.1	2	14.3	1	7.1	0	0
3	12	100	**3**	**25**	2	16.7	1	8.3	2	16.7	2	16.7	0	0	1	10	3	8.8
4 - 5	10	100	**4**	**40**	2	20	2	20	0	0	1	10	1	10	0	0	0	0
TOTAL	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Total MFIs	34	100	**10**	**29.4**	5	14.7	5	14.7	4	11.8	4	11.8	3	8.8	2	5.9	1	2.9

Table 14 Replies to "where do clients select an MFI on?"

[18] CC = Customer Care, LC = Loan Conditions, INFO = Information, CONV = Convenience, PROD = Products, LOC = Location.

[19] Tanzania Gatsby Trust (TGT) didn't give a relevant answer, so TGT is excluded from the sample.

[20] Tanzania Gatsby Trust (TGT) didn't give a relevant answer, so TGT is excluded from the sample.

It is assumed that in a more competitive environment the MFI focus more on the demands of the clients. The need to retain or increase market share becomes more urgent and this encourages the MFI to put more effort in satisfying its clients. The consequence is that the products and the level of service of the MFIs change. Rhyne (2001) stated that competition forces MFIs to invent new products for their existing customers. The interviews show that most of the managers (thirteen out of eighteen) take the view that competition causes a change in the products they are offering. The reasoning behind the positive and the negative answers is roughly the same. The managers who are positive argue that competition stimulates innovation in order to attract clients. The negative reasoning comes down to the conviction that innovation of products is created by the willingness of MFIs to match the demand of customers. It is notably that when the groups are classified by type of MFI, most of the managers of the commercial banks and most of the managers of the SACCOs are not of the opinion that competition causes a change in the products they are offering. According to the managers, the type of products is not very decisive for the clients. Customers base their opinion mainly on the speed of the MFIs (so the time that it takes to receive a loan), on the customer care (so the attitude of the staff towards the customers) and on the loan conditions, like compulsory savings and repayment schedules. This is not totally in line with the findings of Porteous (2006), who found that "clients place a lot of value on quality service, flexible product characteristics, and the availability of small loans." However, to conclude, this hypothesis can't be rejected.

<u>MFI prevents double-dipp of clients</u>

The next table shows if double dip is considered to be a problem (yes or no). I asked the manager if they consider double-dipping (taking up multiple loans) as a problem (yes or no) and if their answer is positive I ask the managers how they try to prevent their clients from taking up multiple loans. The answers are as follows:

CLASSIFICATION	SAMPLE		YES		NO	
TYPE MFI	#	%	#	%	#	%
Commercial banks[21]	4	100	**3**	**75**	1	25
NGOs	10	100	**9**	**90**	1	10
SACCOs	3	100	1	33.3	**1**	**66.7**
PERCEIVED COMPETITION	#	%	#	%	#	%
1 – 2[22]	6	100	4	66.7	2	33.3
3	6	100	5	83.3	1	16.7
4 - 5	5	100	4	80	1	20
TOTAL	#	%	#	%	#	%
Total MFIs	17	100	**13**	**76.5**	4	23.5

[21] CRDB offers only loans to SACCOs and is therefore excluded from the sample.
[22] CRDB offers only loans to SACCOs and is therefore excluded from the sample.

Table 15 Replies to "do you consider double-dipping as a problem?"

PREVENTING METHODS	13
The only effective solution is a credit bureau	5
Information sharing system with other banks	2
Educating clients about double-dipping	3
Ask about other loans in questionnaires / agreement	2
MFI assures that it offers enough different products, so that there won't be the need to borrow somewhere else	1

Table 16 Double-dipp preventing methods

Armendáriz de Aghion and Morduch (2005) mentioned: "As long as borrowers believe that they have multiple options, no single lender will have the power to clamp down and maintain full discipline." This double dipping affects the MFI negatively. Thirteen of the seventeen managers consider it as problem. The difficulty, which has also been highlighted in the literature, is that MFIs need to cooperate to solve the problem. A credit agency is mostly mentioned as a solution for this problem, but it is difficult to create an effective and up-to-date institute. Five commercial banks in Dar es Salaam started their own information exchange network. They have a system where they can send the names of defaulted borrowers around to the other banks within the network. But since clients can use another name it is not very useful[23].The TAMFI previously worked on a credit agency before, but the organization isn't active anymore. The current network of NGO has it set as a goal to develop a credit agency, but this will probably take a time.
In sum, also this hypothesis can be rejected.

The conclusion of the interview part is that five of the seven hypotheses can be rejected, one hypothesis is excluded from the interview part and one hypothesis can't be rejected. The one that is excluded is 'that the target groep is more risky' and the one that can't be rejected is that 'MFI focuses on innovation of products and increasing the level of service'.

6.3 Statistical part

The data of this section is classified in the same way as the interview section, so by type of MFI and by the level of perceived competition.
The statistical part consists of a test on normality (Jarque-Bera), the t-test and the Mann-Whitney test. Appendix E shows the Jarque-Bera test for the different variables. Seven of the sixteen variables of the area part aren't normally distributed. In the perceived competition part is one variable not normally distributed.

[23] This is stated by mr Msaki of Akiba Commercial bank.

The t-test and the Mann-Whitney test are carried out on a 95% confidence interval and on a 90% confidence interval.

Table 17 gives an overview of the mean and the median of the variables and table 18 shows the outcome the t-test and the Mann-Whitney test.

CLASSIFICATION		PAR 30 days	Loan/member	Costs/member	WAIR
Illala	Mean	0.134961	844089.9	8489.042	0.250790
	Median	0.057829	909090.9	8229.587	0.217324
Kinondoni	Mean	0.103986	487783.3	7830.147	0.242308
	Median	0.046400	312883.4	5371.975	0.211821
Temeke	Mean	0.143466	192110.4	6395.232	0.256663
	Median	0.102199	115368.3	5316.293	0.245000
Kinondoni + Illala	Mean	0.123118	658513.6	8110.177	0.246463
	Median	0.053915	525956.8	5533.882	0.217236
Perc. 1-2	Mean	0.174066	690709.9	7274.609	0.205832
	Median	0.154699	641243.5	6033.039	0.189466
Perc 3	Mean	0.135806	732182.8	8141.265	0.279564
	Median	0.058761	748259.6	5250.000	0.232535
Perc 4 - 5	Mean	0.050470	209173.8	7794.019	0.253180
	Median	0.027500	179119.3	6505.220	0.250000

Table 17 Mean and median of the variables

CLASSIFICATION		PAR 30 days	Loan/member	Costs/member	WAIR
Illala – Kinondoni	Prob. T-test	0.5105	**0.0216***	0.7629	0.7626
	Prob. M-W[24]	0.4150	**0.0335***	0.1800	0.4654
Illala – Temeke	Prob. T-test	0.8976	**0.0007***	0.2238	0.8385
	Prob. M-W	0.8841	**0.0009***	0.4925	0.5913
Kinondoni – Temeke	Prob. T-test	0.5917	**0.0389***	0.5515	0.6929
	Prob. M-W	0.7589	**0.0222***	0.8213	0.3899
Kinondoni + Illala - Temeke	Prob. T-test	0.7399	**0.0052***	0.4003	0.7372
	Prob. M-W	0.9849	**0.0021***	0.8535	0.4353
Perc. 1-2 - Perc. 3	Prob. T-test	0.4995	0.8098	0.7113	**0.0164***
	Prob. M-W	0.2812	0.6524	0.8692	**0.0237***
Perc 1-2 – Perc 4- 5	Prob. T-test	**0.0194***	**0.0047***	0.7859	**0.0361***
	Prob. M-W	**0.0101***	**0.0473***	0.7471	**0.0193***
Perc 3 – Perc 4 - 5	Prob. T-test	0.1155	**0.0005***	0.8756	0.3983
	Prob. M-W	**0.0855****	**0.0026***	0.9049	0.6787

Table 18 Probability of the t-test and the Mann-Whitney test

* 95% confidence interval
** 90 % confidence interval

[24] M-W is the Mann-Whitney test.

The portfolio at risk of 30 days (Par 30 days) is a proxy for the risk of the target group. The PAR of the groups with a perception of competition shows significant differences. The theory assumes that the PAR of the group with the perceived competition level of 4 or 5 is the highest and lowest in the group with the perceived competition level of 1 or 2. Table 17 shows that the outcome is the opposite: the risk is lower as the perceived competition is higher.
Based on this test the hypothesis can be rejected. It doesn't turn out that the target group is riskier when the perceived competition is higher.

The table 18 shows that there is a significant difference in the amount of outstanding loans per member in the different areas and in the different perceived competition groups. The theory predicts that if there is more competition, the amount of loans per member will be higher.
Table 17 shows that the amount of outstanding loans per member in Temeke is the smallest. It is assumed that the amount of loans per member is an indicator for the wealth of the borrower. Temeke is the area with the lowest level of competition, so this outcome is in line with the theory: The poorer borrowers are clients of the MFIs in the area with least competition. The amount of outstanding loans per member is the highest in Illala. The competition is a bit stiffer in Kinondoni than in Illala, so this is not in accordance with the theory. The perceived competition groups show the opposite. The group with a perceived competition level of 4 or 5, has the lowest amount of loan per member. The middle group, the 3-group, shows the highest amount of loan per member. So even though the results show a significant difference, it is not possible to draw a clear conclusion from the results.

In the statistical part I used the total costs per member. None of the tests (table 18) shows a significant different. So it seemed reasonable that the costs per member don't depend on the level of competition.

The statistical tests (table18) show only significant differences in the weighted average interest rate (WAIR) between the groups with the different perception of the competition. The theory predicts that with a higher perception of competition the WAIR will be higher. The managers are convinced of the opposite. Table 17 shows the average and the mean of the WAIR of the different groups. The means aren't increasing or decreasing systematically. However, if I take into account the groups that show a significant difference with each other (based on the t-test), the groups with a perception of the competition of 3 or 4 - 5 have a higher mean WAIR than the group with a perception of the competition of 2. The median of the WAIR increases when the groups perceive a higher level of competition. This is in line with the theory that predicts that the interest rate increases with more competition.

Based on the statistical test three of the four hypotheses can be rejected, namely: the target group is more risky, the very poor are excluded from the target group and the MFI invests more in screening and monitoring. The hypothesis that the interest rate is higher can't be rejected.

Chapter 7 – Conclusions, limitations and further research

7.1 Conclusions and discussion

Picture of competition in Dar es Salaam

In the first table in chapter six it can be seen that NGOs consider the microfinance industry in Dar es Salaam as most competitive. This can be explained by the current developments of the NGOs in Tanzania. The amount of donor funding is reducing and this enhance the urge for the NGOs to focus on their financial sustainability. It is therefore reasonable that they are more alert on the competition than the SACCOs and the commercial banks.

The fact that SACCOs value the microfinance industry least competitive can be explained by the current state of the SACCOs in Dar es Salaam. The organization of the SACCOs is often more based on goodwill and the organization is less operating with commercial objectives. Table two shows the strongest competitors. SACCOs aren't really seen as a threat to the NGOs and the commercial banks. The NGOs that are mostly mentioned as tough competitors are Pride and Finca, the two biggest NGOs in Tanzania. For the commercial banks this is mainly NMB bank.

The expectation is that the competition in the microfinance sector will intensify, because of the current developments. New SACCOs are founded to claim the Government money, NGOs are transforming into Microfinance companies and commercial banks continue downscaling.

Hypotheses

<u>Target group is more risky</u>

Based on the statistical test this hypothesis is rejected. It doesn't turn out that the target group is riskier when the perceived competition is higher or in a more competitive area. There is a significant difference between the PAR of several perceived competition groups, but the groups with a perception of more competition in Dar es Salaam show a lower PAR. An explanation might be that the theories that predict the opposite are true in Dar es Salaam. For example, Villas-Boas and Schmidt-Mohr 1999) stated that lenders screen borrowers more thorough in a competitive environment to include the most profitable clients. Another reason might be that the MFIs, that perceive more competition, are more worried about the risks involved with more competition and focus therefore more on controlling the risk than the MFIs that consider the competition less stiff.

<u>The very poor are excluded from the target group</u>

Based on the interviews it seemed that the very poor aren't excluded from the target group of MFIs. It is even more likely that the opposite is true, that the very poor are more included in the target group because of competition. The statistical tests show a significant difference, but it is not possible to draw a clear conclusion from the results. A reason can be that the loans of the commercial banks are not adjusted. As I mentioned before, the business of a couple of the commercial banks is not 100 percent microfinance. A part of their loan portfolio consists of standard loans. This explanation might be true, since most of the banks are well presented in Illala.[25]

Next to this, it might be that the theory is based on another type of NGOs. McIntosh and Wydick (2005) made a distinction between client-maximizing and profit-maximizing NGOs. Many NGOs in my sample are transforming into a microfinance company and very commercial and fall probably in the profit-maximizing category. Caritas DSM is an exception to this and is probably a client-maximizing NGO. Caritas DSM is forced by its suppliers of donor funding to fulfill its social objective and help the very poor by offering microfinance. The microfinance manager of Caritas DSM totally agrees with the hypothesis and came up with the same reasoning as where the hypothesis is based on. They face more problems of serving the very poor, because that is getting too costly in a competitive area. Mr. Simon, the microfinance manager of Caritas DSM, stated that although the poor are bankable, it is tough and expensive. The borrowers need a training of one to three weeks (some of them can't even read or count) before loans can be provide. At the time they completed the training, they are seen as reliable clients and enticed away by Finca or Pride. The hypothesis might be true for NGOs like Caritas DSM, but not for the majority of MFIs in Dar es Salaam.

<u>The relationship of the borrower and lender is weaker</u>

Most of managers believe that the relationship of the borrower and the lender improves in a more competitive environment. So this hypothesis isn't true for the MFIs in Dar es Salaam. It is interesting how the managers try to improve or keep a good relationship, e.g. by innovation (CRDB), by leaving space for the borrowers to negotiate (TPB), by giving away t-shirts (Pride), by listening to the preferences of the clients (SEDA), by increasing the service (SCULLT) and by giving awards for the best clients (SEF).

<u>MFI invests more in screening and monitoring</u>

Four of the managers argue that they screen more thoroughly to assure the client hasn't got a loan at another financial institute. In total five of the seventeen managers agreed with the hypotheses, which is less than thirty percent of the interviewees. The hypothesis doesn't seem to be true. Six

[25] Outstanding amount of loans per member are the highest in Illala.

managers believe the total costs are higher because of competition, but only one manager attributes this to the increase in screening and monitoring costs. The statistical tests don't show any significant differences, which affirms that the hypothesis doesn't hold for MFIs in Dar es Salaam. An explanation might be that there are too many other factors influencing the total costs. In the interview part, all the managers came up with another reason for the increase in the total operating costs, which point at this diversity of factors.

<u>The interest rate is higher</u>

The outcome on this hypothesis is contradictory. No single manager has the opinion that the interest rate increases as a result of competition. However the statistical test shows that the weighted average interest rate in the groups with more actual or perceived competition is significant higher. Based on the two different outcomes there is no unambiguous conclusion.

The cause can be that the interest rate in Dar es Salaam depends (more) on other factors than on competition. An important factor is the huge variance in the cost of borrowing between the different types of MFIs. The borrowing rate for MFIs varies between zero percent for several SACCOs[26] up to more than twenty percent for a NGO.

Another explanation might be that I used the weighted average interest rate instead of the effective interest rate. The effective interest rate of MFIs might differ tremendously. The effective interest rate is "the rate that a client is really paying based on the amount of loan proceeds actually in the client's hand during each period of the life of the loan" (Rosenberg 2002).

<u>MFI focuses on innovation of products and increases the level of service</u>

Based on the interviews it turns out that managers innovate because of competition and that managers believe that speed (the time that it takes to receive a loan) is most important to clients. The first outcome is in line with the hypothesis. The second outcome doesn't really affirm the last part of the hypothesis**.** Speed can be seen as an element of service, but since service is quite a broad term it is difficult to make a statement about the second part of the hypothesis.

<u>MFI prevents double-dipp of clients</u>

Almost eighty percent of the managers deem double-dipp as a problem. The most mentioned solution is a credit bureau/agency. However this has to be cooperated to be effective. Two solutions that can be carried out by a MFI on its own are: educating clients about double-dipping (two respondents) and asking new clients about other loans in questionnaires/agreements (two respondents). The last solution doesn't really help to the problem. It is easy to lie about other loans, when no-one can't find out about it. To link outcomes to the hypothesis; it doesn't appear

[26] Most of the SACCOs don't give an interest on the savings of their members and don't borrow in the financial market.

that MFIs prevents double-dipp of clients. The conviction is that a credit bureau is the only solution and that it has to be coordinated by the authorities.

7.2 Limitations

Carrying out a research in Dar es Salaam led to more limitations than I had in mind on forehand. In my studies I was used to collect the information from a reliable source and take it for granted. There was no need to dig into their methodology or sources. In Dar es Salaam I couldn't take everything for granted, but it was sometimes impossible to get exactly the information I wanted[27]. One reason is that the microfinance institutions aren't properly organized. Many of the MFIs (except the commercial banks and a few NGOs) aren't working with computers. The data needs to be found in high piles of written reports. Besides that, the data that I received wasn't always correct. Even in a sheet of Akiba Commercial bank I discovered several mistakes.

Another limitation was the lack of time in Tanzania. The results would be more reliable with bigger samples. Though in three months it was impossible to find, reach and include more MFIs in Dar es Salaam.

7.3 Recommendations for further research

I hope that this study will lead to further research. The things I learned and experienced and that might be used in a future study are the following:

In my research I didn't add control variables, though it might be useful to do so. For example, a difference in the amount of outstanding loans per client can be influenced if there is a difference in the level of income between the different areas. A control variable can proof this.

Another recommendation is to use the effective interest rate instead of the weighted interest rate. This could lead to more reliable results.

In my research I assumed that the microfinance business of the commercial banks, NGOs and SACCOs are similar and can be compared with each other. Afterwards I think that the results might have been better if they aren't grouped together. For this topic on microfinance the best group to use is the NGOs. They are better organized than the SACCOs and their business in 100 percent microfinance, instead of the business of some of the commercial banks.

[27] The details about the problems with the different variables are described in chapter 5

Another improvement would be to make a separation between salary loans and non-salary loans. Salary loans are based on an agreement between the borrower, the lender and the employer. A part of the salary of the borrower (an amount that equals the repayment and interest on the loan) goes to the lender. The benefits are that there is no chance for the borrower to spend it on something else, and the lender is assured of his money. This type of lending is (almost) without risk and the handling costs are very low (no screening or monitoring costs). The result is that this type of lending is extremely populair at MFIs. There is much competition for this type of lending. However, I didn't make a separation between the different loans, but it would be useful to do so in further research.

It is better to specialize more on the different aspects of diversification. I asked the MFIs about the number of loans the currently have, about the loans they are developing, about the products they offer next to the loans and about new products. I found out that there are so many different types of loans and services, with different conditions and different benefits, that it is almost study on its own to make the findings comparable. To mention a few different loans I heard about in Dar es Salaam: salaried loan, micro individual loan, solidarity group lending, cooperative loan (loans to sacco's), fahari loan, asasi loan, social loan, domestic loan, commercial loan, advanced group loan, workers product, educational loan, development loan, special occasion loan, housing loan and plant loan. Dunduliza has even more than twenty different loans. Because of that, I kept my hypothesis more general, but it would be interesting to deep this out.

It would also be interesting to investigate it the other way around; to do this research from a borrower perspective instead from a lender point of view. Do borrowers actually know that they have more options to receive a loan, is the information about the MFIs well known to them (e.g. interest rates) and is speed really the most important quality for the clients?

Another matter I left out my research is the cultural aspect. Tanzanians haven't got a savings culture[28]. Mr. Jaub Kyalo Kulu, managing director of Faulu Tanzania, worked previously in the microfinance industry in Kenya. He told me that: "the problem in Tanzania is that they don't have a savings culture. Tanzania is the 7th poorest country in the world (Kenya is 89th). It is not in their culture to invest, so that is why they default. They eat it, instead of investing it. There is no knowledge about finance. Though you have to bring a culture of savings, before microfinance makes the country more prosperous." It might be interesting for further research in Tanzania, to include the cultural aspects.

The effect of competition is that the repayment incentives get weaker. I experienced in Dar es Salaam that MFIs strengthen their enforcement mechanism to assure repayment. Several NGO's

[28] This is general known in Tanzania.

were well known for their harshness. They didn't hesitate to take possession of the (imperfect) collateral even if this means that the family hasn't got a bed to sleep in anymore. I didn't include this in my research, but I think it can be useful to investigate it.

Next to my hypotheses there are more interesting developments of the MFIs in Dar es Salaam, due to the increasing competition. An example is that there seems to be a shift of the MFIs to the rural areas of Tanzania[29]. This shift is triggered by competition. It might be interesting to investigate this in more detail in a further research.

7.4 Final remark

Based on the conclusions it can be stated that MFIs in Dar es Salaam change because of competition. However, the direction of the changes doesn't seem to be in line with my hypotheses. The hypotheses that: the target group is more risky, the very poor are excluded from the target group, the relationship of the borrower and the lender is weaker, MFI invests more in screening and monitoring, the interest rate is higher and that the MFI prevents double-dipp of clients are, based on my research on MFIs in Dar es Salaam, rejected.

Next to the hypotheses, this research gives a clear view of the current state of microfinance and the competition for microfinance in Dar es Salaam, Tanzania. My research will hopefully, due to its explorative design, lead to more detailed research on this topic in the future.

[29] This is based on the interviews with the managers. Many of them are considering to expand to the rural areas of Tanzania.

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Appendix A - Experts

Mrs. Marjan Duursma

Representative East Africa

Consultant FACET

Financial Assistance, Consultancy, Entrepreneurship and Training, FACET, is a consultancy company specialised in the promotion and development of Small and Medium Enterprises. It is part of a large network of companies. It was co-founded by Triodos Bank, a specialised commercial bank incorporated in The Netherlands. They share a common view on enterprise development and share the notion of the importance of financial services for small and micro enterprises. This co-operation enables FACET to mobilise specialised know-how and expertise in the area of banking and financing. The head office of the FACET group is located in Zeist, the Netherlands. Other offices are based in The Hague, Guatemala City, La Paz (Bolivia), Jakarta (Indonesia), Dar es Salaam (Tanzania), Warsaw (Poland) and Rome (Italy).

Mr. Frank Nagel

Senior Project Manager of Rabo International Advisory Services (RIAS) BV

Rabo International Advisory Services (RIAS) offers consulting services and technical support to banks in the fields of rural banking, cooperative development and agricultural chain development. RIAS also disseminates knowledge through studies and seminars, helping improve in both the expertise and the administrative quality of financial organisations in emerging markets and developing countries. The priority lies in improving financing options for the bottom and middle layers of society, including farmers and SMEs in rural areas.

Since the end of 2005 Rabobank owned, together with three consortium partners, a 49 percent share of NMB. At the time of my research, Rabobank provided the bank with technical staff.

Mr. Ian Robbinson

Technical Director of FSDT

The Financial Sector Deepening Trust (FSDT) is a consortium of five development partners named CIDA, DANIDA, DFID, SIDA, and Royal Netherlands Embassy. It was registered on 1st July 2004 and officially launched on 11 October 2005.

FSDT has been established as a vehicle to channel development partner resources to support development of pro-poor financial markets in response to the Government's National Microfinance Policy.

The main objects of the Trust are:

- To provide finance services to low income groups in the country for poverty alleviation;
- To receive donations and other contributions for funding and supporting initiatives and projects aimed at improving the capacity of financial sector in the country to meet the needs of micro and small enterprises as well as low income rural and urban households.

Dr. Tadeo Andrew Satta
Institute of Financial Management (IFM)
Specialized in microfinance

Appendix B - MFIs

Commercial banks

Akiba Commercial Bank limited (ACB)

Mr. Isidori John Msaki - Microfinance manager

Akiba Commercial Bank started operations in August 1997 as an initiative of a group of over 300 Tanzanian entrepreneurs, who wanted to move into microfinance. Since the start the ownership of Akiba has mostly been in the hands of Tanzanians and it is the meaning that this will be maintained in the future. The mission and the vision of Akiba are respectively: "To strive to offer financial services to the micro and SME's in the most efficient and sustainable manner always embracing environmental and social interests of all our stakeholders" and "to become a leader in the provision of financial services to the underserved of Tanzania and thereby to contribute to the country's economic development".

Currently the bank has three branches in Dar es Salaam and seven branches in the whole of Tanzania.

Dar es Salaam community bank Limited (DCB)

Mr. Mkawa - CEO

Dar es Salaam Community Bank Limited is a private microfinance bank dedicated to financing poverty alleviation programmes, aimed at uplifting the standard of living of the majority of low income people in Dar es Salaam. The bank opened its door to the public since April 2002. The vision of DCB is "to be the leading micro-finance bank in Dar es Salaam through delivering of commercial micro-finance banking services to the majority of the low income and poor people, and Micro and Small Enterprises". The mission is: "to contribute to the ongoing economic and social development in Dar es Salaam Region for micro small and medium enterprises by developing specialized microfinance products and services and market these through an efficient and sustainable branch network where the customer is treated with promptness and responsiveness. It aims at building cultures, structures and operating systems that can support sustainable service delivery to a significant and growing number of economically active micro, small and medium enterprises in Dar es Salaam Region."

National Microfinance Bank (NMB) Tanzania

Mr. Gabriel W. Ole-Loibangut - zone manager

NMB was created in 1997, when the national bank split up in three units and two banks, NMB and NBC (National Bank of Commerce). NMB is present in all the areas in Tanzania with a totality of 116 branches. In Dar es Salaam NMB is operating through nine branches. The Government wanted to privatize the bank in a couple of years ago to stimulate the financial sector in Tanzania. Since the end of 2005 Rabobank owned, together with three consortium partners, a 49 percent share of NMB. Part of the deal was that Rabobank provides the bank with technical staff. At the time I visited NMB, the bank was in a transition.

CRDB microfinance company Ltd (CRDB MFC Ltd)

Mr. Masaki - General manager CRDB MFC Ltd

CRDB MFC Ltd is a subsidiary van CRDB bank. The idea for this company was raised in 2000 when the CRDB bank started to look for a suitable mechanism to deliver financial services to the ordinary Tanzanians. The bank started operations at the end of 2004 after a successful microfinance pilot project of three years. The bank is a subsidiary instead of a part of CRDB bank. The explanation of mr. Masaki is that you can't combine ordinary banking with microfinance. Especially the staff needs to use a totally other approach and attitude where they have to be trained for. Another reason is that when you integrate the activities, it loses focus.

98 % Of the activities op de bank involves the cooperation with SACCOs. In practice this means that CRDB MFC Ltd offers services to SACCOs, who in turn provides the services to their members.

Tanzanian Postal Bank (TPB)

Mr. mwakyandile - zone manager

In 1992 the bank became operational from the then Tanzania Posts and Telecommunications Corporation. The vision of the bank is "to be the Bank of choice for individuals, micro, small and medium Enterprises." The mission is "to provide the customers with modern, affordable, tailor-made banking and other financial services."

Currently the bank is operating in sixteen areas in Tanzania and has 22 branches throughout the country. In Dar es Salaam the bank is operating with seven branches.

NGOs

Pride Tanzania

Mr. Peter Songoma – zone manager

Promotion of Rural Initiative and Development Enterprises Limited (PRIDE Tanzania) is a micro finance institution involved in the provision of credit to small and micro entrepreneurs in

Tanzania. It started its operations in January 1994 with its first branch and head office in Arusha. In 1996 PRIDE Tanzania started a branch in Dar es Salaam. Currently they have four branches in Tanzania and 32 branches in total in Tanzania.

Their mission and vision are: "To create a sustainable financial and information services network for small and micro-entrepreneurs in order to promote their business growth, enhance their income and create employment in Tanzania" and "To continue to be the leading microfinance institution in Tanzania".

Pride is in the process of transforming into a microfinance company.

Tujijenge Tanzania

Mrs. Felistas Coutinho - executive director

Tujijenge Tanzania is founded in July 2006 by the former managing director of Finca, mrs. Felistas Countinho. The company is owned by shareholders. The objective is twofold: to improve the quality of lives by providing loans and to ensure a good return for the shareholders and. For now they have one office in Dar es Salaam.

Small enterprise foundation (SEF)

Mr. Joel Mwakitalu - executive director

SEF is founded in 2000. It has two branches, one in Kyela and one in Dar es Salaam. They are considering expanding their branch in Kyela. Their objective is to contribute to the national policy of reducing poverty.

Youth self employment foundation (Yosefo)

Mr. Millinga - executive director

The company is founded in 1997. When the programme of ILO, a programme to create work possibilities for the youth in Tanzania, was finished, several members started to continue this and formed Yosefo. Yosefo creates opportunities for youth through delivering financial services and by providing useful information and connections. It has one branch in Dar es Salaam.

Faulu Tanzania LTD

Mr. Jaub Kyalo Kulu - managing director

Faulu Tanzania is an extension of Faulu Kenya. It is founded in 2003 and currently only located in Dar es Salaam. They have plans to expend in 2007 to other areas. The ideology of faulu is that microloans can be compared with medications. It can heal or it can kill. It needs to be accompanied by a good description. That is the same with microfinance, and therefore much attention is placed on training. Their vision is “a nation where all people are able to work toward fulfilling their dreams and potential for the future and have the dignity of being able to provide for their own needs and the needs of others”. The company is now in the process to become a microfinance company. The company is owned by shareholders and only the legal part has to be adapted.

Finca Tanzania
Mr. Robert Ongodia - chief operations officer

Finca started in 1992 and in 1998 in Tanzania. Finca is operating in 22 countries. In Tanzania Finca covers about 40 % of the country. In Dar es Salaam there are three branches of Finca. The mission of Finca is to “provide financial services to the world's lowest-income entrepreneurs so they can create jobs, build assets and improve their standard of living” and their vision is to “be a global network collectively serving more poor entrepreneurs than any other microfinance institution, while operating on commercial principles of performance and sustainability”. Finca is in the process of transforming into a microfinance company.

Caritas DSM

Mr. Simon - microfinance manager

Caritas DSM was founded in January 1979 and provided social and economic support to community based activities. Currently it has 5 major projects: Savings and Credit Scheme (SCS); Women in Development (WID); Organization Development for Food Security Production for Market (OFM); Mafia Island Integrated Development Program (MIDP); and the Center for Young Dhow Seamen and Fishermen (CYDSF); as well as, a Social Welfare Program. The Caritas-DSM Savings and Credit Scheme (SCS) is aimed at poverty alleviation to the poor and low-income families through women in remote areas under the Archdiocese of Dar Es Salaam from other sources. This project started in 1999.

Small Enterprise Development Agency (SEDA)

Mrs. Lolesia –Branch manager

SEDA was established in 1996 as a parallel institution to World Vision Tanzania, a Christian relief and development NGO, to provide micro-finance services in the regions that WVT is working in. SEDA started as a NGO, but is now in the transformation process of becoming a microfinance company. Their goal is to be a MFC in 2007. Currently they have six branches in Tanzania in different areas. The branch in Dar es Salaam started in 2003.

Tanzania Gatsby trust (TGT)

Mrs. Olive D. Luena – General manager

The Tanzania Gatsby Trust (TGT) was founded 1992, for the relief of poverty and the advancement of education. The establishment of the Trust is based on the premise that there is an underlying productive potential in the informal enterprise sector which is yet to be mobilized, as reflected in the high levels of unemployment, under-employment and low income. Small and medium entrepreneurs are struggling to start or expand their business but they face major constraints in the form of limited access to credit, underdeveloped markets and limited access to technical, business and management development training and technology. To achieve the target of poverty alleviation they provide credit, training, marketing and technology.

Presidential trust fund (PTF)

Mr. Martin - operational coordinator

PTF started as a Government initiative in 1984 and became a NGO in 1988. Currently PTF has seven branches in Tanzania, spread over four regions. In Dar es Salaam PTF has two branches.

SACCOs

Dunduliza

Mr. Taslio Joseph - managing director

Dunduliza, a network organization that supports SACCOs, was founded in 2004. It is limited by shares and 40 percent of the shares are owned by Desjardins International Development (DID), a Canadian corporation.

Dunduliza facilitates the development and capacity building of SACCOs and provides them with monitoring services. The organization is present in four regions in Tanzania: Dar es salaam, Ruruma, Mara and Mwanza

SCULLT

Mr. Peter T. Mashingia - operations manager

The company is founded by SACCOs in 1992 after the cooperative societies act came into existence in 1991. SCULLT is an umbrella organization that delivers services to SACCOs. In Tanzania 900 SACCOs are members of SCULLT, of which 112 in Dar es Salaam. SCULLT operates in every region of Tanzania, except for Zanzibar (the act is not applied in Zanzibar).

Wafanyakazi wa posta na simu

Mr. Wilfred Martin Lugendo - chairman

The company started in 1976. It is an employee SACCO, linked to four companies: the post office, the postal bank, Telecommunication Company and TCRA. The companies are located in all the 26 regions of Tanzania, though there are only nine where they provide microloans. Their objective is to put money in a cooperative movement. Employer gets a loan and an affordable interest, affordable repayment period. Currently they are the largest SACCO in the country.

Appendix C – Samples

Picture of competition in Dar es Salaam

Commercial banks (5)

Akiba commercial bank	Tanzania Postal Bank
NMB	Dar es Salaam Community bank
CRDB microfinance company Ltd	

NGOs (10)

Pride Tanzania	Faulu Tanzania LTD
Finca Tanzania	Caritas DSM
Tujijenge Tanzania	SEDA
Small enterprise foundation SEF	Tanzania Gatsby trust (TGT)
Youth self employment foundation	PTF

SACCOs (17)

Dunduliza Dar es Salaam	Makuburi Cath. Church SACCO
shirikisho SACCO	Mabibo com. SACCO
Jiji	Methobox
Urafiki	Alaf SACCO
Teachers SACCO	Gospel Compaign
Viwango SACCO	Harbour SACCO
Milimani SACCO	Bandari SACCO
Costek SACCO	Wafanyakazi wa posta na simu
Makongo teachers SACCO	

Interview part

Commercial banks (5)

Akiba commercial bank	Tanzania Postal Bank
NMB	Dar es Salaam Community bank
CRDB microfinance company Ltd	

NGOs (10)

Pride Tanzania	Faulu Tanzania LTD
Finca Tanzania	Caritas DSM
Tujijenge Tanzania	SEDA
Small enterprise foundation SEF	Tanzania Gatsby trust (TGT)
Youth self employment foundation	PTF

SACCOs (17)

Dunduliza Dar es Salaam	SCULLT
Wafanyakazi wa posta na simu	

Statistical part

Commercial banks (5)	Number of branches in Dar es Salaam (21)
Akiba commercial bank	5
NMB	9

Tanzania Postal Bank	5
Dar es Salaam Community bank	2

NGO's (10)	Number of branches in Dar es Salaam (20)
Pride Tanzania	4
Finca Tanzania	3
Tujijenge Tanzania	1
Small enterprise foundation SEF	1
Youth self employment foundation	1
Faulu Tanzania LTD	1
Caritas DSM	5
SEDA	1
Tanzania Gatsby trust (TGT)	1
PTF	2

SACCO's (17)	Number of branches in Dar es Salaam (20)
Dunduliza Dar es Salaam	4
shirikisho SACCO	1
Jiji	1
Urafiki	1
Teachers SACCO	1
Viwango SACCO	1
Milimani SACCO	1
Costek SACCO	1
Makongo teachers SACCO	1
Makuburi Cath. Church SACCo	1
Mabibo com. SACCO	1
Methobox	1
Alaf SACCO	1
Gospel Compaign	1
Harbour SACCO	1
Bandari SACCO	1
Wafanyakazi wa posta na simu	1

Appendix D - Data

MFI	branch name	area	perc. comp.	WAIR	# total members	# loan clients	cost/member	loan/member	PAR 30 days
ACB	Ubungo	Kinondoni	3	0.487	19250	2788	7567.62	478479.1966	0.031
ACB	Main	Illala	3	0.217	11529	2416	n.a.	1862253.321	0.032
ACB	Kijitonyama	Kinondoni	3	0.404	7651	2767	20636.52	665341.5251	0.066
ACB	Kariakoo	Illala	3	0.424	9115	1623	17131.59	1004875.908	0.021
ACB	Buguruni	Illala	3	0.375	13198	2704	10827.34	748259.5551	0.058
DCB	Arnautoglu	Illala	2	0.360	63000		13253.97	4146.71812	0.068
DCB	Magomeni	Kinondoni	2	0.360	13950		9701.31	6634.175914	0.039
NMB	Bank House	Illala	3	0.201	63130	5530	4449.87	1018076.6	0.250
NMB	Morogoro Rd	Illala	3	0.198	29364	2169	3704.53	1073620.47	0.244
NMB	Kariakoo	Illala	3	0.212	17808	869	4473.65	1618406.329	0.034
NMB	Ilala	Illala	3	0.214	17806	1658	4076.93	768735.8866	0.127
NMB	Muhimbili	Illala	3	0.201	5287	1662	8939.44	1501659.025	0.221
NMB	Magomeni	Kinondoni	3	0.209	40518	2067	3136.28	927886.4538	0.127
NMB	Mwenge	Kinondoni	3	0.233	2047	75	16272.35	1142644	0.015
NMB	University	Kinondoni	3	0.212	611	523	33788.71	1042865.392	0.059
NMB	Temeke	Temeke	3	0.213	30663	3791	3527.84	730460.1952	0.146
TPB	Illala	Illala	2	0.203	42		n.a.	1064450.905	0.200
TPB	Kariakoo	Illala	2	0.217	5675		n.a.	785575.3094	0.320
TPB	Manzese	kinondoni	2	0.191	2494		n.a.	782224.6022	0.240
TPB	Metropolitan	Illala	2	0.187	2411		n.a.	1642594.602	0.340
TPB	Mkwepu	Illala	2	0.188	806		n.a.	1365842.161	0.350
Pride	Temeke	Temeke	4	0.279	7632		13521.69	198089.9088	0.011
Pride	Magomeni	Kinondoni	4	0.278	7965		13524.01	272908.447	0.013
Pride	Kariakoo	Illala	4	0.278	8759		15070.21	228294.9583	0.033
Pride	Buguruni	Illala	4	0.277	5372		9162.26	231874.2509	0.021

MFI	branch name	area	perc. comp.	WAIR	# total members	cost/members	loan/member	PAR 30 days
Tujijenge	Tujijjenge	Kinondoni	3	0.360	1300	5250.00	70000	0.020
SEF	Dar es Salaam	Temeke	4.5	0.260	1200	2420.57	86967.08333	0.015
Yosefo	Dar es Salaam	Illala	2	0.300	4821	3611.88	142891.369	0.024
Faulu	Dar es Salaam	Illala	3	0.280	2400	4861.11	187500	0.035
Finca	magomeni	Kinondoni	3	0.443	6554	5371.97	178846.585	0.476
Finca	Ilala	Illala	3	0.401	5471	8229.59	250988.3076	0.379
Finca	Temeke	Temeke	3	0.478	4823	7716.76	143769.5803	0.484
Caritas DSM	Mlandizi	Kinondoni	5	0.250	108	2557.87	154066.7593	n.a.
Caritas DSM	Mbezi	Kinondoni	5	0.250	127	2362.20	528557.4016	n.a.
Caritas DSM	kumara	Kinondoni	5	0.250	125	2210.00	369192.96	n.a.
Caritas DSM	Mbagale	Temeke	5	0.250	53	5212.26	179119.3396	n.a.
Caritas DSM	Kijichi	Temeke	5	0.250	29	10344.83	346835.9655	n.a.
SEDA	Dar es Salaam	Kinondoni	3	0.357	2072	3378.38	125482.6255	0.027
TGT	Dar es Salaam	Illala	2	0.240	44	n.a.	909090.9091	0.050
PTF	kinondoni branch	Kinondoni	5	0.354	2800	3235.00	167849.9393	n.a.
PTF	illala branch	Illala	5	0.356	1500	3462.72	175556.8133	n.a.
Dunduliza	WAT	Kinondoni	4	0.180	4937	16851.05	92448.60563	19.31%
Dunduliza	Lumumba	Illala	4	0.180	3192	4517.38	98612.5661	2.75%
Dunduliza	Masoko madogo madogo	Temeke	4	0.180	2845	6505.22	26830.59227	9.50%
Dunduliza	Tandale	Kinondoni	4	0.180	3289	8373.58	67367.76224	4.64%
SCULLT	shirikisho	Illala	2	0.150	104	10075.34	1253218.337	n.a.
SCULLT	Jiji	Illala	3	0.240	1700	n.a.	n.a.	0.000
SCULLT	Urafiki	Kinondoni	3	0.120	1873	1542.53	228344.5601	n.a.
SCULLT	Teachers	Kinondoni	3	0.081	1657	1686.03	120468.0253	n.a.
SCULLT	Viwango	Kinondoni	2	0.130	88	6806.98	759130.6818	n.a.
SCULLT	Milimani	Kinondoni	2	0.180	780	6033.04	1923076.923	n.a.

MFI	branch name	area	perc. comp.	WAIR	# total members	cost/members	loan/member	PAR 30 days
SCULLT	Costek	Kinondoni	3	0.130	95	5695.79	951240.7895	n.a.
SCULLT	Makongo teachers	Kinondoni	1	0.110	164	2069.13	523356.2805	n.a.
SCULLT	Makuburi Cath. Church	Kinondoni	1	0.130	163	n.a.	312883.4356	n.a.
SCULLT	Mabibo com.	Kinondoni	1	0.180	260	2043.01	303286.2423	n.a.
SCULLT	Methobox	Temeke	1	0.240	55	4545.45	400000	0.109
SCULLT	Alaf Sacco	Temeke	3	0.300	300	4984.27	n.a.	n.a.
SCULLT	Gospel Compaign	temeke	1	0.150	130	2059.65	29840.05385	n.a.
SCULLT	harbour	Temeke	1	0.240	151	10483.91	78350.99338	n.a.
SCULLT	Bandari	Temeke	2	0.240	410	5420.32	50060.97561	n.a.
posta na simu	Dar es Salaam	Illala	2	0.120	2200	18465.91	1477542.902	n.a.

WAIR = Weighted average interest rate

Cost/member = Total operating costs / # clients

Loan / member = Outstanding amount of loans / # (loan) clients

PAR 30 days = Portfolio at risk of 30 days

Appendix E - Jarque –Bera

Variables in the area catergories

	COSTS_I	COSTS_I_K	COSTS_K	COSTS_T	LOAN_I	LOAN_I_K	LOAN_K	LOAN_T
Mean	8489.042	8110.177	7830.147	6395.232	844089.9	658513.6	487783.3	192110.4
Median	8229.587	5533.882	5371.975	5316.293	909090.9	525956.8	312883.4	115368.3
Maximum	18465.91	33788.71	33788.71	13521.69	1862253.	1923077.	1923077.	730460.2
Minimum	3462.725	1542.532	1542.532	2059.654	4146.718	4146.718	6634.176	26830.59
Std. Dev.	5010.854	6699.616	7817.599	3508.962	582460.7	543658.2	452169.9	209333.8
Skewness	0.701274	1.737974	1.889998	0.691424	0.047929	0.663093	1.420022	1.557124
Kurtosis	2.208828	6.596078	6.400224	2.481967	1.709130	2.355053	5.021506	4.606225
Jarque-Bera	1.836777	41.69000	24.77282	1.090312	1.605721	4.349452	12.65868	6.139251
Probability	0.399162	**0.000000**[30]	**0.000004**	0.579751	0.448046	0.113639	**0.001783**	**0.046439**
Sum	144313.7	324407.1	180093.4	76742.79	19414067	31608651	12194583	2305325.
Sum Sq. Dev.	4.02E+08	1.75E+09	1.34E+09	1.35E+08	7.46E+12	1.39E+13	4.91E+12	4.82E+11
Observations	17	40	23	12	23	48	25	12

	PAR_I	PAR_I_K	PAR_K	PAR_T	WAIR_I	WAIR_I_K	WAIR_K	WAIR_T
Mean	0.134961	0.123118	0.103986	0.143466	0.250790	0.246463	0.242308	0.256663
Median	0.057829	0.053915	0.046400	0.102199	0.217324	0.217236	0.211821	0.245000
Maximum	0.378738	0.475722	0.475722	0.483608	0.424014	0.486702	0.486702	0.478026
Minimum	0.000000	0.000000	0.012585	0.010909	0.120000	0.081347	0.081347	0.150000
Std. Dev.	0.131511	0.130778	0.132535	0.175037	0.081028	0.096752	0.111325	0.080577
Skewness	0.664976	1.110388	1.903351	1.420457	0.692605	0.602434	0.597083	1.666035
Kurtosis	1.841163	3.043864	5.788036	3.571867	2.521827	2.571693	2.354086	6.052431
Jarque-Bera	2.722717	6.989507	12.05973	2.099456	2.147458	3.338437	1.920038	10.21001
Probability	0.256312	**0.030356**	**0.002406**	0.350033	0.341732	0.188394	0.382886	**0.006066**
Sum	2.834186	4.186004	1.351819	0.860798	6.018958	12.07667	6.057708	3.079956
Sum Sq. Dev.	0.345905	0.564396	0.210787	0.153191	0.151009	0.449327	0.297437	0.071419
Observations	21	34	13	6	24	49	25	12

[30] The numbers that are bold are means that variable isn’t normally distributed.

Variables in the perceived competition catergories

	COST_1_2	COSTS_3	COSTS_4_5	LOAN_1_2	LOAN_3	LOAN_4_5
Mean	7274.609	8141.265	7794.019	690709.9	732182.8	209173.8
Median	6033.039	5250.000	6505.220	641243.5	748259.6	179119.3
Maximum	18465.91	33788.71	16851.05	1923077.	1862253.	528557.4
Minimum	2043.013	1542.532	2210.000	4146.718	70000.00	26830.59
Std. Dev.	4939.259	7475.659	5042.939	602299.7	520672.6	130278.0
Skewness	0.849965	2.095482	0.469895	0.504376	0.415584	0.916279
Kurtosis	2.978965	7.222117	1.807272	2.072342	2.300027	3.532435
Jarque-Bera	1.565527	33.91584	1.441127	1.565109	1.131603	2.276099
Probability	0.457141	**0.000000**	0.486478	0.457237	0.567905	0.320443
Sum	94569.92	187249.1	116910.3	13814198	16840204	3137606.
Sum Sq. Dev.	2.93E+08	1.23E+09	3.56E+08	6.89E+12	5.96E+12	2.38E+11
Observations	13	23	15	20	23	15

	PAR_1_2	PAR_3	PAR_4_5	WAIR_1_2	WAIR_3	WAIR_4_5
Mean	0.174066	0.135806	0.050470	0.205832	0.279564	0.253180
Median	0.154699	0.058761	0.027500	0.189466	0.232535	0.250000
Maximum	0.350000	0.483608	0.193100	0.360000	0.486702	0.355500
Minimum	0.024491	0.000000	0.010909	0.110000	0.081347	0.180000
Std. Dev.	0.131786	0.151430	0.059481	0.071716	0.115209	0.054520
Skewness	0.216412	1.251296	1.755424	0.811355	0.305258	0.250109
Kurtosis	1.394030	3.336730	4.774299	3.014378	1.993623	2.648978
Jarque-Bera	1.152699	5.579311	5.802821	2.194496	1.443255	0.248956
Probability	0.561946	0.061442	0.054946	0.333788	0.485961	0.882957
Sum	1.740655	2.851917	0.454229	4.116639	6.989104	4.050879
Sum Sq. Dev.	0.156309	0.458621	0.028304	0.097721	0.318555	0.044587
Observations	10	21	9	20	25	16

COSTS = Costs per client

LOAN = Loan per client

PAR = Portfolio at risk 30 days

WAIR = Weighted average interest rate

I = Illala

K = Kinondoni

T = Temeke

1-2 = perceived competition 1 or 2

3 = perceived competition 3

4 -5 = perceived competition 4 or 5

Appendix F - Contact information

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