Initial Public Offerings in the Microfinance Industry: Does a Mission Drift Occur?

The Honors Program
Senior Capstone Project
Student's Name: Sarah Segill
Faculty Sponsor: Asli Ascioglu
April 2013

Table of Contents

ACKNOWLEDGMENTS

I would like to thank those that have supported me throughout the course of this capstone project, for without them this accomplishment would not have been possible.

First, I would like to thank my faculty sponsor, Professor Asli Ascioglu for her dedication, constructive feedback, help with SAS coding, and encouragement over the last year. Even though she has been on sabbatical, she was always willing to help me as soon as possible and provide me with many great ideas to make this project a success.

Next, I would like to thank Professor Phyllis Schumacher for being the Editorial Reviewer for this paper. She provided me with the support and encouragement I needed to finalize my project. I could not have done it without her positive feedback.

I would also like to thank Dr. Jim Segovis, the coordinator of the honors program. His support of my research and the opportunity given to me to complete this project allowed me to grow and learn from this experience.

Finally, I would like to thank my friends and family for their continuous love and support. I could not have completed this project without them by my side.

ABSTRACT

This thesis analyzes whether or not there is a mission drift when microfinance organizations become publicly traded entities. One of the most debated criticisms of microfinance institutions (MFIs) today involves becoming for-profit organizations in attempt to raise more capital. Donor funding is limited for non-profit organizations and does not give an MFI much room to grow to serve a maximal number of people. The entry of for-profit microfinance institutions has a great deal of possibility in terms of generating scale, efficiency and innovation. Yet these for-profit institutions can easily lose track of their social mission to serve the poor and instead focus solely on profit driven incentives. This profit driven focus is defined as mission drift. There is a huge market to profit from those at the bottom of the economic pyramid thus concerning many critics of for-profit institutions. Current research has been done with the data from microfinance institutions all over the world looking specifically at for-profit versus non-profit MFIs. There seems to be a large amount of information around the debate of becoming a for-profit institution but not much analytical evidence currently proving that change in profit status leads to mission drift. My research takes this profit status debate a step further by looking at publicly traded microfinance companies. There are currently three publicly traded microfinance organizations according to JP Morgan: SKS in India, Compartamos Banco in Mexico, and Equity Bank in Kenya. This thesis includes a time series analysis looking at these companies both before and after the initial public offering has been issued, as well as a cross sectional component comparing each of these three companies with industry data in the MFI's respective country and region.

INTRODUCTION

"Money, says the proverb, makes money. When you have got a little, it is often easy to get more. The great difficulty is to get that little." –Adam Smith

Microfinance refers to the institutional setup that enables small loans ("microcredit") and many other financial services such as savings, insurance and payment services to low income people (Nawaz). Microfinance Institutions (MFIs) offer innovative solutions through group and individual lending to stimulate economic growth for those at the bottom of the economic pyramid in countries all over the world. Traditional banks do not want to lend to the poor because of riskiness and unprofitability thus poor people do not have access to capital. If the poor were to borrow from a moneylender also known as a loan shark, they would be charged usurious rates difficult to pay back (Khavul). It has been seen repeatedly in the microfinance world that large numbers of poor people are both smart and very entrepreneurial. With microfinance, the poor are given the tools to escape poverty that they've never had access to before (Akula). As Adam Smith wrote in "Wealth of Nations," "Money, says the proverb, makes money. When you have got a little, it is often easy to get more. The great difficulty is to get that little."

The microfinance industry has grown dramatically over the last 30 years; however there is still much controversy and criticism with this rapid growth. There are many debates as to whether these microfinance organizations are targeting the right people, making the best social impact, and charging interest rates that are too high. Some clients have become over-indebted with interest rates almost as high as those of loan sharks in which the poor become indebted in a cycle of trying to pay back the loan that they cannot escape (Hamam and Schwank). Yet, perhaps one of the biggest controversies within the microfinance industry exists within the profit status of a company; more specifically, gaining access to capital markets. There are debates that suggest that when a MFI becomes a for-profit institution, a mission drift will occur.

Mission drift can be defined as losing sight of the social mission at hand. In terms of a microfinance company, mission drift is defined as focusing on profit driven incentives instead

of the social mission of helping the poor escape poverty. The mission of all MFIs is to provide banking services to the poor by lending small sums of money to the very poor borrowers. However, with a large market to profit off of the poor, there is a concern among critics of for-profit institutions. Historically, banking towards the poor has been dominated by mutual and non-profit ownership, not by investors (Mersland and Strom). The controversy that exists around profit-seeking institutions is one that is not easily justified or settled as not many studies have been done around the issue. Thus ideology tends to dominate these two contradicting views. There are positive arguments for for-profit MFIs one being that with shareholder equity, microfinance institutions can reach more people at the bottom of the economic pyramid as they will have more money to grow. MFIs are still largely donor driven and the number of these donors is limited. Additionally, MFIs are expensive to maintain as the loans to borrowers are risky. Therefore, by becoming for-profit, the organization can gain access to more capital in order to operate more efficiently. Current research has been done with the data from microfinance institutions all over the world looking specifically at for-profit versus non-profit MFIs. Overall, profit oriented MFIs are viewed as moving towards a more businesslike sector of microfinance rather than focusing on their social mission (Roberts). With these profit making incentives, critics fear an overall mission drift (Mersland and Strom).

Currently studies conclude that there is no analytical evidence of mission drift when a MFI becomes for-profit to back up this ongoing debate. Yet, an even bigger controversy exists when an MFI becomes publicly traded as there is an even greater opportunity to profit off the poor as well as more pressure to make profits to satisfy investors. Therefore, my research takes this profit status analysis a step further by looking at whether or not there is a mission drift when an MFI becomes a publicly traded entity also referred to as issuing an initial public offering (IPO). There are currently three publicly traded microfinance organizations according to JP Morgan: SKS, Banco Compartamos, and Equity Bank (Glisovic, Gonsalez). The country, region, and IPO date of the three companies of interest are shown in Table 1 below. Using data on these publicly traded companies along with data on competing MFIs in the industry, my analysis helps answer some questions on this ongoing debate of mission drift when becoming publicly traded.

Table 1

Publically Traded Company Name	Country	Region	Date Started	Date of IPO
SKS	India	South Asia	1998	August 2010
Compartamos Banco	Mexico	Latin America and the Caribbean	1990	April 2007
Equity Bank	Kenya	Africa	1984	August 2006

LITERATURE REVIEW

Poverty

"What I did not know yet about hunger, but would find out over the next twenty-one years, was that brilliant theorist of economics, do not find it worthwhile to spend time discussing issues of poverty and hunger. They believe that these issues will be resolved when general economic prosperity increases. These economists spend all their talents detailing the process of development and prosperity, but rarely reflect on the origin and development of poverty and hunger. As a result, poverty continues." –Muhammad Yunus

Before going into the details of microfinance, it is important to have a general understanding of poverty in the world today and how it is actually defined. The extreme poverty line set by the World Bank is stated as those who live with an income of US $1.25 or less a day. Nearly 1.3 billion people remain below this extreme poverty line; 600 million of these people are children. Close to 2.8 billion of the world's 6.5 billion people live on less than US $2 a day, which is more than one-third of the world's population and defined by the World Bank as the absolute poverty line in 2001. Additionally in most developing countries, there is a wide gap that is continuing to widen between the rich and poor. The threats of natural disasters is a worldwide issue that can instantly remove any progress made to narrow this gap (World Bank). If these statistics aren't shocking enough, an estimated 30,000 children die each day due to poverty, which is equivalent to 18 children per minute. Most of the poor population is stuck in a cycle of poverty in which there is no opportunity to escape from. Many of these people do not have access to formal financial institutions mainly because of lack of collateral. Therefore, they are forced to resort to informal credit markets such as moneylenders. These moneylenders can get away with charging extreme interest rates on loans keeping the poor in a constant cycle of taking out loans that they cannot escape from (Mallick).

The Beginning of Microfinance

The concept of microfinance was founded by economist, Muhammad Yunus who had the goal to end world poverty in the mid 1970's. As a child, Yunus watched his mother put away money for poor distant relatives, which sparked his interest in economics and social reform.

Yunus became a professor at a university near Jobra village in Bangladesh, India. Yunus realized with the current situation in 1970, in order for a poor citizen to receive a loan, they would have to form a relationship with a borrower that charged high interest rates to pay back the loan. These usurious rates were so standardized and socially acceptable in Third World countries that borrowers became stuck in this relationship with the lender and could never fully pay back their loan. Therefore, micro financing started off as an experiment of Yunus' in the small suburb Jobra in Bangladesh when $27 was loaned to 42 people without interest. When these borrowers proved their trust and repaid, Yunus began to expand his loans and soon went on to start Grameen Bank which grew rapidly in India. From here, Grameen Bank was replicated in other poor countries with the help of Yunus. Yunus believed "The Poor are very creative. They know how to earn a living and how to change their lives. All they need is opportunity. Credit brings that opportunity." Yunus' eventual end goal is to create a world without poverty; it should only be displayed in museums. He has the belief that creating a world without poverty is not something that has to be invented; it is inherent in people (Yunus).

When Yunus first started his experiment in Jobra, he quickly discovered that not only were poor people in Bangladesh eager to start their own micro-enterprises, they were surprisingly very good at it. Therefore, he realized the people who knew most about how to help the poor where poor themselves. They just needed that small amount of money to get them started. Microfinance gives the poor the power to help themselves, rather than simply presenting misguided help on them (Akula). Thus communication with the poor became a key factor in the success of microfinance. In the Grameen Bank model as well as many others today, a loan officer is placed in charged to traveling to villages to collect the loan payments and help the poor in any way they can. They also ensure the smooth running of the MFI and enforce the rules on the poor. It is important to be strict in enforcing the rules of repayment and using the loan as promised it would be used to provide security to the loan, maximum impact on helping the poor and smooth running of the microfinance institution.

When microfinance was started, a group loan system seemed to work best for maximum ability to pay back loans. The poor have no access to traditional banking because they have

no collateral, thus banking to the poor is too risky. If a traditional bank were to give a loan to a poor person based on the banks traditional standards, the loan would be incredibly risky and unsecured. Forming a group to gain access to microfinance, allows an MFI to overcome this problem of an insecure loan. If one member of the group where to default on a loan, the entire group takes responsibility and cannot take out another loan or move on until the group pays their returns. Microfinance organization, SKS, created strict standards in which the group would not be able to leave a meeting with the loan officers until the loan was taken care of (Akula). Borrowers also have incentives implemented to encourage each other to succeed in their business (Yunus). Group lending is popular among lenders even today as it alleviates moral hazard because groups work with one another to ensure their loans are paid off and inspire one another to succeed (Kahvul). Vikram Akula believes that trust among the poor is a key factor to success in microfinance and sums up the group loan system based on trust in his book. He states in his book "A Fistful of Rice", "we have to trust our borrowers to repay unsecured loans. The borrowers have to trust others in their group to make payments, as no one receives a new loan unless everyone makes her payment. Our lenders have to trust that we'll protect their funds. And our investors have to trust that we'll steward their money in a way that will bring returns. Trust is the essential element of everything we do" (Akula).

The majority of microfinance entrepreneurs are women (Chowdhury). When Grameen Bank was started by Yunus, they lent almost exclusively to women. Men had proven to be more likely to spend extra cash such as loans on personal items instead of on their household needs or business needs. Women had also proven to be great entrepreneurs allowing them to overcome cultural biases (Akula). As microfinance began to grow in developing nations, it was discovered that women were the most reliable to target as they make up a large majority of the poor and socially disadvantaged, yet with a family to support they proved to be more willing to pay back loans. Loans allowed women to work at home and gave them opportunity (Yunus). Women are generally more vulnerable than men, and therefore poor women have less of a chance to escape poverty. With access to finances women's vulnerability is reduced which correlates to reduction in poverty (Daley Harris). Microfinance proved to empower women as they have the ability to make self-decisions, participate in business, and gain access to resources within and outside their homes (Chowdhury, and Sarahat). Most importantly,

these women are empowered because they are given the opportunity through microfinance to reach their full potential. Additionally, according to research done by the World Bank, gender inequalities in developing society's prevent economic growth and development. The World Bank study confirms that societies discriminating on gender experience greater poverty, slower economic growth, and have a much lower living standard (Daley-Harris). Giving women access to jobs and capital through microfinance allows the economy as a whole to develop faster. Women's productivity can maximize economic output. Women have also been proven to spend most of their money on their families; therefore, with access to credit, the welfare of the family is improved thus helping more people in poverty.

Since Yunus experimented with microfinance, the innovation has continued and improved. Today, the World Bank estimates that around 160 million people in developing countries alone are served by microfinance (World Bank). Microfinance gives the poor the little they need to be innovative and to achieve the spark they need to break the cycle of poverty. Currently, microfinance institutions (MFI) exist all over the world including the United States and there are many different models.

Microfinance Today

"Am I not too poor? Do I not deserve a chance to get my family out of poverty?" – Remote Indian Village poor woman trying to gain access to micro credit

It was in a remote Indian Village that Vikram Akula, founder of the largest microfinance institution in India, SKS, realized he wanted to help as many poor people as possible to eradicate poverty. In 2008 according to World Bank Statistics, 42% of people in India alone live on less than $1.25 a day; this is below the poverty line and equivalent to approximately 450 million poor people. To put this number into perspective, this is more than the population of the United States, Germany, and France combined. If this number isn't shocking, additionally, 828 million Indians, or 75.6% of the population in India, live on less than $2.00 a day. This 850 million people is equivalent to 12% of the population on Earth (Akula). Akula, along with many other microfinance leaders set out to expand to give these people the chance they needed. Yet there are many different approaches to how this is done.

It was and still is Yunus' goal to eliminate poverty in 2050. This does not mean that there will not be differences in social classes at this point in time. If this goal is met, everyone should be able to take care of themselves instead of relying on aid and charity. He believes that this will take social entrepreneurs and technology in order to free the poor from their chains (Yunus). Yunus compares micro-credit to inventing the airplane because although it was unsafe at first, it is a remarkable accomplishment. He states "like food, credit is a human right" and the creativity of the poor needs to be unleashed (Yunus). It is more beneficial to invest in a social business than to charity because money goes directly to the right places, helps others, and the investor gets this original amount of money back. Microfinance has been proven over and over that large numbers of poor people are both very smart and entrepreneurial and with that small access to credit, they are given the tools that they need to establish themselves that they have never had the access to before (Akula). In fact, it was reported in 2009, by the Microcredit Summit Campaign that over 100 million of the poorest people have been reached with microfinance (Downey and Conroy).

Today, there are many different Microfinance models to reach out to the poor. For example, Kiva is a unique online organization in which a lender can choose a borrower and lend $25 or more to this borrower. The lender is presented with a portfolio of the borrower and know who exactly their money is going to as Kiva works with microfinance institutions all over the world to provide loans to people without access to traditional banking systems. Through the website, lenders can choose a specific borrower or group of borrowers based on who they would like to support. Therefore, lenders have somewhat of a personal connection to where their money is going. Kiva lenders can also be assured that 100% of their loan is going to fund the borrower. Currently the organization has received $302 million in loans to 60 different countries and they have had a 98.9% repayment rate. Instead of donating money, people are lending it, meaning 98.9% of the time they will get this money back. With this return, lenders can hopefully continue the cycle of this loan and choose somebody else to lend money to helping more people, or take this money back as a check (Kiva).

Another successful but different microfinance model is Mibanco, located in Peru. This bank was founded on the principals of helping the poor. Mibanco takes a personalized approach to

marketing directly to their clients. They call their marketing strategy "Micro-Marketing." Mibanco segments its clients and customizes products and services for a large and changing number of client needs. Management looks at exactly what their client's desire, and what base of the pyramid to target them at. Mibanco field agents then proceed to approach clients and potential at their homes or in the markets and other gathering places in Peru. They explain what these products can do and how Mibanco can be beneficial to them. Mibanco has also been profitable since its first year of operation in 1998. A main reason why the growth of Mibanco is so successful is because of their mission and desire for profitability while still sticking to their social mission (Chu).

In the United States, Microfinance presents a challenging situation as the standard of living is much higher thus making it difficult to issue small micro-loans. As a developed country, loan sizes must be larger for an impact to be visible. Making a microfinance institution work in a developed country is different and in many ways more difficult than in a developing country. The US and other developed nations have a more formal and advanced economy that requires filing tax returns, completing licensing, certification, and inspection requirements which are not likely to be required in the developing world. Also in the US, entrepreneurs require more capital and more advanced training (Morduch and Schreiner). Therefore, there is a greater need to be creative to still make a social impact yet keep costs low and more must be done to address this challenge in helping the US poor. Additionally, Micro-entrepreneurs in the US face competition from large firms like Wal-Mart and McDonalds (Khavul). Therefore, it is not has easy for a poor person to start their own company in the US. Although there are many challenges for microfinance in the US, the industry presents many opportunities in the United States such as serving the unbanked which is more than 15 million people. Microfinance institutions have also branched out since they were formed to improve people's lives through not just small loans for businesses but also to help people with education and even health insurance (Morduch and Schreiner). Microfinance loans even been distributed through different structures in developed nations, such as through a car loan so a client can drive to work or a technology loan so a client can buy a personal computer to enhance their lives (Khavul).

Criticisms of Microfinance Today

There are many criticisms in Microfinance that still exist today. There is a fear that MFI's will move away from serving the poorest of the poor and move towards providing larger loans instead of reaching out to the neediest. This brings up the question if microfinance practitioners are moving away from their primary objectives. MFI's are still largely donor-driven and expensive to maintain. Yet many microfinance organizations would like to become self-sufficient so as not to rely solely on donors. By rushing to self-sufficiency there could be serious consequences such as not targeting the right people (Augsburg, Britta, and Cyril).

A common wide criticism of microfinance is that interest rates are too high. These rates are usually lower than those of many short-term lenders typically referred to as "loan sharks." Typical rates in the microfinance industry range from 20% to 70% and the global average is about 30%. These rates vary by country (Sandberg). The nature of microcredit is that loans are kept small; this means that interest rates need to be high to return the cost of the loan (Kiva). Many microfinance institutions want to make their operation financially sustainable, and to do this interest rates need to be high enough to cover all their costs, thus being able to best insure keeping the organization around and expanding the services they can provide. If a microfinance institution is sustainable on its own, it can not only continue to serve clients without the need of constant contributions, it can fund exponential growth of services and products. Administrative costs are also high for a MFI compared to a regular bank as a lot more small loans are given out. This brings in the need to pay for more staff salaries and a lot more work. A microfinance institution must pay for the cost of money it lends, the cost of loan defaults, and transaction costs. Therefore, interest rates must also be higher to cover these three costs. Although these rates are often higher than a commercial bank which the poor do not have access to, they are most likely a lot lower than the rates a village money lender and other informal sources may charge. There are exceptions to this standard and even cases in which MFI's try to profit off the poor by charging excessive interest rates. Yet, for the most part, MFI interest rates averaged about 28% in 2006 and this rate has been declining by 2.3% a year since 2003. Therefore, these high interest rates are justifiable in most cases and the poor are able to pay back their loans and in most cases profit off of these loans

(CGAP). Microfinance organizations continue to show high repayment rates which is a key measure of proof that these interest rates are not too high (Augsburg). Most customers repay their loans and then are able to return for new loans which show that these loans are allowing them to make money that outweighs the interest they have to pay (Sandberg). If interest rates could be lowered for a microfinance institution, this would be preferable. Nonetheless, the reality is, these organizations would not be able to operate on lower interest rates without heavily relying on governments, the international political community, commercial banks, or overseas investors (Sandberg).

Another issue of Microfinance is that this concept is sometimes promoted as the means to solve world poverty and therefore, thousands of MFIs around the world view lending to the poor as an opportunity to "do well by doing good" (Khavul). Thus, microfinance has for some companies turned into an international industry with stakeholders causing these organizations to grow uncontrollably and lose sight of the social mission to end poverty. For example, critics of major MFI, SKS, the largest Indian microfinance company in terms of borrowers, branches, and total loans, argue against its structure to create private capital and Initial Public Offerings to expand. With profit driven incentives of maximizing share prices, some believe that SKS moved away from its social mission (Thirani).

<u>One of the main criticisms: The Issue of For-Profit Microfinance and Shareholder Capital</u>

"This is pushing microfinance in the loansharking direction; by offering an IPO, you are sending a message to the people buying the IPO there is an exciting chance of making money out of poor people. This is an idea that is repulsive to me. Microfinance is in the direction of helping the poor retain their money rather than redirecting it in the direction of rich people." -Yunus

A large majority of MFIs are funded through donor or government funding mainly by grants or concessional loans. Yet, donor funding is very limited and does not give an MFI much room to grow and serve a maximal amount of people. Even when reaching critical stages of growth, it is difficult for an MFI to be sustainable with just donor support (Ledgerwood). The opportunity for a MFI to have a positive net income and an inclination to gain market shares

has been a recent attraction leading to firms becoming for-profit. For-profit moneylenders have always been part of the credit market to the poor, most commonly, loan sharks. Though, only recently did for-profit microfinance enter the market (Downey and Conroy). The entry of for-profit financial institutions into the microfinance realm has a great deal of possibility in terms of generating scale, efficiency, and innovation yet there are risks. Shareholder Capital could be used in efficient way as a means to raise more funds and gain access to more capital. This money should be then invested in the clients, not a way to make profit for the company (Reno-Weber).

There is fear that when becoming a for-profit status some of these MFI's will move away from providing loans to the poorest people and move towards providing larger loans. This would prevent these organizations from reaching out to the neediest (Augsburg). Some also argue that microfinance being a for-profit business attracts the wrong crowd of commercial investors as there are potentially attractive returns. For publicly traded companies the goal is to make money for its shareholders, yet the mission of a microfinance organization with small loans, is to give people access to credit and lift them out of poverty, therefore these two missions do not seem to line up. When becoming a for-profit organization it is important to avoid personal interests when money is at stake as this is a common problem. There are potentially attractive returns in microfinance and it is not ethical to make money off the poor as they need this money more than investors. This could cause movement away from the social mission of an MFI (Reno-Weber). Therefore, a main challenge in becoming for-profit is to align the personal interests of the founders, investors, and other stakeholders with the long run mission to help the poor (MIX). Over one billion people in the world live in poverty, yet about 150 million people currently have access to microfinance; this means that there is still plenty of unmet demand for microfinance and a chance to easily take advantage of the poor.

The entry of for-profit microfinance institutions does have possibility in terms of efficiency, generating a large scale operation, and expanding innovation. With shareholder capital, a microfinance institution can become a financially sustainable business and target more people. A microfinance institution has the potential to earn a "double bottom line" with both

financial and societal rewards. There are also people who are willing and able to make relatively low-interest investments to microfinance institutions, when the bank goes for-profit. These people are social investors looking for a good and safe cause to invest their money with small returns. With the high repayment rates for microfinance institutions, it is clear that these organizations are a safe investment (Salmon).

According to data collected by the Microfinance Information Exchange (MIX) high-yield, high-return MFIs are outliers and serve less than 10% of clients worldwide. Most clients borrow from those MFIs that charge less than 30% interest and make about a 30% return on equity. Additionally, according to MIX, Return on Assets for MFIs have been higher for non-profit institutions than for-profit and for-profit MFIs do not generally charge clients more than non-profit MFIs.

Shareholder Capital: Yunus vs. Akula

When Vikram Akula started the microfinance organization, SKS, he had the goal in mind to eventually make it a for profit organization. He believed that as a for-profit organization, it would be able to have faster, broader, and more sustainable growth than nonprofits. After six years of running SKS, Akula had established a firm culture of accountability, and had more than 40 thousand members and $1 million in cumulative loans disbursed. At this point, SKS finally broke even and Akula believed this was the time for SKS to make the switch from nonprofit to for-profit. SKS had a 99% payback rate and possible investors saw the company as a rapidly growing business with tremendous profit potential. It is difficult to put a value on a company that had grown so fast, and was like no other company. However, in 2006, Sequoia invested $11.5 million into SKS which eventually led to an initial public offering in 2010 (Akula).

Yunus strongly disagrees with for-profit microfinance. This was never his intention with microfinance when starting Grameen Bank. He quotes “This is pushing microfinance in the loan-sharking direction, by offering an IPO; you are sending a message to the people buying the IPO that there is an exciting chance of making money out of poor people. This is an idea that is repulsive to me. Microfinance is in the direction of helping the poor retain their money

rather than redirecting it in the direction of rich people." He thinks that there should be stricter government regulation of microfinance entities believing that interest rates should be capped at just 15 percentage points over the cost of fund. Grameen actually operate on a spread of 10 percentage points (Salmon).

Yunus won the Nobel Peace prize in 2006 for his pioneering work in microfinance. This was right around the time SKS wanted to become a for-profit organization. Therefore, Yunus was able to gain a lot of attention around this issue and he criticized Akula and SKS greatly. SKS became a natural target of criticism and suddenly after Yunus won this prize, the debate about nonprofit microfinance versus for-profit became a big issue to discuss (Akula). Non-profit supporters believed that the only ethical way to cater to the poor is to charge an interest rate that solely covers expenses and a very small profit to encourage some growth. These non-profit supporters believed investments from large venture capitalists and promising healthy returns to investors was considered exploitation. Yunus believes that MFI's should seek their capital from either donors or social investors, who would be content with just getting their principal back, thus not requiring high interest rates. However, there is a very limited pool of social investors. Additionally, some MFIs take advantage of these high interest rates to extreme levels notably in Latin America. There have been reports of some organizations charging sometimes over 100%. Compartamos bank routinely charged around 85% and there are reports that this organization gave its field agents bonuses for disbursing larger loans and maintaining high repayment rates which encourages unethical collection methods.

Taking advantage of the poor through high interest rates is something that SKS has never done and will never do. Akula thinks differently from Yunus. He actually argues that it is not only ethical for MFIs to earn high profits; it's actually more ethical than practicing nonprofit microfinance because it gives more poor people access to credit. He believes there is not enough donor capital in the world which is a limitation to non-profit MFIs. Akula believes that the only place where an MFI can get enough capital to meet their large lending needs is through commercial markets. Yet, the only way to get commercial capital is by offering high profits in return. This is because investors will not invest unless they see the return potential (Akula).

If a microfinance organization follows Yunus' way, not all MFIs will be able to get the capital they needed to achieve the exponential growth required to serve all the poor who need loans. Akula believes that achieving this goal is the most important need today because "every day that SKS cannot afford to offer a loan to a poor person is a day that person remains unnecessarily mired in poverty" (Akula). Most people have heard that if you take a penny and double it for a month you will eventually have over 5 million dollars. That is the same concept as with microfinance. With low interest rates and high profits for investors, the power of numbers adds up quick.

Taking a look back at some statistics from Grameen Bank, 7 million clients are currently being reached. Yet, this took the organization 35 years to reach this capacity. In India alone, there are around 150 million households that would significantly benefit from microfinance (MIX). At the rate Grameen is progressing, it will take many generations to reach Yunus' goal of banishing poverty so that it only "belongs in museums so future generations can wonder how a few people could live in luxury while billions dwelt in misery" (Yunus). A more rapid approach of scaling would be necessary to reach this vision Yunus has. With just three rounds of venture capital prior to SKS's IPO in 2010, SKS was able to grow from a nonprofit with 2000 borrowers in 2001 to a large for-profit organization with 4.7 million borrowers in 2009. The IPO allows SKS to further expand.

Current Research on the Financial Structure of Microfinance

"It is not mission drift. It's endangering the whole mission"- Yunus on SKS's IPO

With these two diverging views of for-profit versus non-profit Microfinance, the debate is endless around the possibilities and limits of this industry. There are many possibilities to expand the microfinance industry, as well as socially restricting limits (Cull, Dermiguc, and Morduch). The underlying fact remains that roughly 40 to 80 percent of the populations in most developing economies lack access to the formal sector banking services therefore there is a need for microfinance to continue and expand at rapid paces. The poor deserve a chance to escape poverty as well has have access to basic needs that allow households to recover from emergencies and natural disasters (Cull, Dermirguc-Kunt, and Morduch). With profit

seeking MFIs, hundreds of thousands of poor customers are able to be served who otherwise would have even worse or no financial options. Additionally, investors solely seeking profit would not likely have much interest in investing in a company that is only serving poorer customers.

From an economics standpoint, the big difference between for-profit and non-profit institutions is simply the ability to distribute profits. In a non-profit organization, there are greater costs, but these institutions have to recycle their earnings back into the business in order to further the social mission. For-profit institutions can use their money as desired with after-tax profits. The difference between these structures exists in the outreach and scale of the institutions (Cull, Dermirguc-Kunt, and Morduch). However, the role of commercial for-profit microfinance institutions remains highly controversial. Critics are fearful that with profit driven incentives, MFIs can become too focused on profits at the expense of poor customers and thus lose sight of social objectives. Profit oriented MFIs are seen as moving towards a more businesslike sector of microfinance rather than focusing on their social mission (Roberts). With these profit making incentives, critics fear that MFIs move away from the outreach to poorer customers (Mersland and Strom).

The mission of all MFIs is to provide banking services to the poor by lending small sums of money to the very poor borrowers. Therefore, when looking at this point of view, researchers are expecting what is called a mission drift in for-profit MFIs (Mersland and Strom). High interest rates and large profits directly correlate with a mission drift in a MFI. It is agreeable that there is a large demand for reliable financial services to the poor, and this access would help hundreds of millions of low-income people without access to banks. These MFIs are likely to have larger loans sizes, fewer women borrowers, lower costs per dollar lent, and greater profits. These commercial MFIs are likely to serve low income borrowers rather than the poorest of the poor. (Cull, Dermiguc, and Morduch).

Historically, banking towards the poor has been dominated by mutual and non-profit ownership, not through investors (Mersland and Strom). The controversy that exists around profit-seeking institutions is one that is not easily justified or settled yet not many studies have been done around the issue thus ideology tends to dominate these two contradicting views.

Studies done by Mersland and Strom on Mission Drift have concluded that there is no current analytical evidence on mission drift between for-profit and non-profit MFIs. Additionally, according to studies done by Roberts, there is no obvious indication of mission drift among the more profit-oriented MFIs. There is a slight tendency for more profit-oriented MFIs to avoid targeting rural clients, yet they both offer similar average loan sizes (Roberts).

Publicly traded MFIs receive even larger criticism than just for-profit organizations as these companies are known to have profit driven incentives to maximize shareholders. As Yunus was upset about SKS' IPO he said, "There is an exciting opportunity to profit off the poor." Therefore, this industry of publicly traded MFIs presents a different analysis than just for-profit versus non-profit MFIs. Moreover, there are not many studies done with the data of these publicly traded companies. According to JP Morgan, currently, there are three MFIs listed as publicly traded, SKS in India, Compartamos Banco in Mexico, and Equity Bank in Kenya (more information on these MFIs below) (Glisovic and Gonzalez).

SKS

SKS was launched in 1998 and is one of the fastest growing microfinance organizations. In 2009, the company had $698 million worth of outstanding loans with 5.3 million women borrowers in the poorest regions of India. With this growth, the company has also managed to maintain a repayment rate of 99%. SKS offers interest-free loans for emergencies and life insurance. SKS had 1,627 branches in 2009 across India (MIX). Since SKS issued its IPO in August 2010, the company has received both positive and negative feedback. Akula has been accused of aggressive collection tactics for loan repayment and some 200 borrowers were said to have committed suicide since the IPO in 2010 (Thirani). However, there has been much positive feedback as Akula stated "The only place you can get the amount of money that is needed to help the poor is in the capital markets" (Akula).

Banco Compartamos

Banco Compartamos was started in Mexico in 1990 and quickly provided opportunities to offer credits and contribute to Mexico's development. The MFIs credit quality has been rated by Standard & Poor's and by Fitch; this has allowed them to enter the market by issuing bonds. Thus, Compartamos Banco is the first microfinance company in the world to issue

debt on the stock market with its own collateral, and become a financial intermediate between large investors and low- income groups (MIX). The debate about profit's place in the micro lending market came full force in April 2007 when Compartamos listed its shares publicly as the original investors made huge profits and sometimes charged more than 80% annual interest on the poor (Bellman).

Equity Bank

Equity Bank is a relatively young yet fast growing MFI. The main challenges of Equity bank are management of growth, institutional capacity building, and capital needs to support outreach. The bank focuses on offering credit, savings, and fund transfer services in Kenya, southern Sudan, and Uganda. This bank accounts for about half of Kenya Bank accounts. By 2012, Equity Bank had more than 8 million customers making it the largest bank in terms of customers in Africa. Equity Bank became publicly listed on the Kenyan stock exchange in August, 2006. Currently, Equity Bank has a $1.3 billion gross loan portfolio and 630,088 active borrowers.

HYPOTHESES

Based on current research by Mersland and Strom as well as by Cull, Demirguc, and Morduch, it is questionable as to whether microfinance is evolving in a way that is advantageous to serving the poorest of the poor. These studies focus on whether or not there is a mission drift in for-profit microfinance organizations and formed a basis for how I conduct my analysis. Average loan size per borrower and percent of women borrowers served are the two main variables looked at to determine mission drift. These studies use loan size as a proxy variable to determine whether or not a microfinance organization is targeting the poorest of the poor clients. A larger average loan size indicates that microfinance organizations may be drifting towards targeting low income households instead of the bottom of the economic pyramid. Additionally, these studies use the percentage of lending to women borrowers as an indicator as well to see if a drift is occurring. One of the goals of microfinance organizations originally was to empower women with access to capital. Yunus found that women were the most reliable to target as they make up a large majority of the poor and socially disadvantaged, yet with a family to support they proved to be more willing to pay back loans. If less women borrowers are being targeted, this signifies a mission drift.[1] Other variables to look at include: return on equity, return on assets, loan losses, operational sustainability, operational costs, number of clients, real portfolio yield, costs, average loan portfolio etc. These additional variables allow us to see the publicly traded MFIs growth, profitability, quality of the loan portfolio, and efficiency as well as productivity of the MFI before and after the IPO has been issued.

Main Hypothesis:

When a Microfinance Institution becomes publicly traded, we expect to see a mission drift.

With a mission drift it is expected that interest rates become higher, costs become higher, and outreach to a different client base occurs. The MFI no longer reaches out to serve the poorest of the poor and is instead looking at low income households. The goal of a publicly traded

[1] The outreach and empowerment to women is discussed further in my literature review

company in general is to maximize stock prices therefore, the company will be putting more pressure on clients to collect loans, increase prices, and minimize losses. Yunus sees these organizations as nothing but a "loan shark business" rather than a "social business."

From the variables being analyzed we expect[2]:

- The average loan size of the publicly traded MFI to increase when it becomes publicly traded as well as be higher than the industry average as this variable shows that the MFI is giving out larger loans, thus catering to wealthier clients instead of the poorest of the poor.
- The percentage of borrowers who are women to decrease when the MFI becomes publicly traded. Serving women has been a priority since the beginning of microfinance. With shareholder value maximization at the forefront we would expect the priority given to women to disappear, thus, a decrease in women borrowers shows movement away from a MFIs original mission.
- The interest rate or the real portfolio yield to increase, the return on Equity and the Return on Assets to increase as the MFI tries to maximize profits
- The number of clients served, financial sustainability, and the write-off ratio of the MFI to increase with the pressure to financially perform better,
- The loan losses, operational costs, operational expenses/ average gross loan portfolio and the cost per borrower to decrease with pressure from the financial markets (shareholders, financial analysts, etc.) a company's goal is to operate with higher efficiency, lower costs, and higher returns.

[2] A description of these variables can be found in table 2 at the end of the next section on page 27 (end of methodology section)

METHODOLOGY

Using data on these three publicly traded companies also referred to in this paper as "target companies" my analysis looks at the possibility of mission drift occurring. The data for this analysis came from Mix Market which is known as one of the premier sources for microfinance performance data and analysis. On this website there is instant access to financial and social performance data from about 2,000 MFIs all over the world. Through purchasing access to the student package for analysis on this website, I was able to access all of this data and convert it into an excel file with about 30 different variables that included each of these 2,000 MFI's by Fiscal Year starting in 1996 and ending in 2011. The 2012 data has not yet been made available. I was able to break this data down into three different excel workbooks, representing each of the three publicly traded MFIs. I pulled out the data on the competing MFIs for the three different regions these publicly traded companies exist in, Latin America and The Caribbean, Africa, and South Asia. I also separated the data breaking it down further in the corresponding workbooks by the competing MFIs in the country for each publicly traded MFI. Some of the variables did not originally appear in the data set I initially downloaded. Therefore, this issue was fixed by gathering additional data sets off of Mix Market and concatenating the sets using excel to the corresponding categories. After a tedious clean-up process of each of these data sets, versions of these files were converted into documents readable by SAS, while another version was used for analysis in Excel. The variables we are interested in looking at for this analysis can be seen in table 2 at the end of this section.

To capture the effect overtime of the IPO on each of the three MFIs of interest, a time series analysis was conducted with the variables shown in table 2. The data on each variable for the three target MFIs was pulled out to a separate tab in excel and plotted over time. Two sets of charts were then created for each variable. The first set of charts for each of the three publicly traded companies contains a plot with the IPO company averages for each year pulled directly from the data, a plot of the averages in each year for all of the competing MFI's in the Region of the target MFI, and a plot of the averages for all of the competing MFI's in the same country as the target MFI. Each variable also is broken down further in a second set of charts. This second set of charts includes the average values of these variables for the competing

MFIs broken down by profit status. The non-profit and the for-profit MFIs in the same country and region as the publicly traded MFI each represent a different plot on this second set of charts along with a plot of the target MFI. Each of these sets of graphs also have a yellow vertical line at the year the IPO was issued for the target MFI, therefore allowing a visual to see what happened to the data before and after the IPO was issued.[3] The results of these graphs will be discussed in detail in the results section. With these plots we can compare the evolution of each of the publicly traded MFIs with its control sample competitors and capture the effects of the IPO.[4]

One of the challenges in the quantitative aspect of this study is that there are currently only three publicly traded for-profit MFIs according to JP Morgan. Hence, calculating summary statistics (means, medians, etc.) for this group of MFIs is not meaningful due to this small sample size. Instead, for our cross-sectional analysis, we compared the variables of interest for each of the three publicly traded MFIs both before and after the year of the IPO to the industry average of those variables for non-profit and privately held for-profit MFIs operating in the same country and region. Therefore, in order to test whether there is a significant difference in the variables used before and after the IPO issue date, the Wilcoxon Rank Sum Test, also called the Mann–Whitney–Wilcoxon Test (MWW) was used. The MWW test was chosen because we cannot assume that our data is normally distributed as there are not enough data points and the two groups of means are not equally distributed before and after the IPO date. This test was used for both target companies Banco Compartamos, and Equity Bank, with data from these companies before and after the IPO issue date and data on both profit and non-profit MFI's in the region and country of these two organizations. Looking at just the publicly traded company, there are also not an equal number of years before and after the IPO was issued. Therefore, to determine if a variable changed significantly just within the target company after the IPO was issued, the MWW test was used again for this process. [5] However,

[3] A selection of these graphs can be seen in Appendix B

[4] The Medians for each variable in table 1 were also looked at and plotted. However, for analysis purposes, we decided to use the charts with the averages plotted as the medians did appear to differ much.

[5] Summary tables of these results can be seen in Appendix A

MWW statistical tests in SAS were not done on SKS because the IPO issue date for SKS was 2010, giving us only one data point in 2011 to see the difference after the IPO. Therefore SKS was analyzed solely by looking at averages in the graphs from the data collection I have explained earlier. Additionally, articles on SKS were read to accompany the data and determine conclusions on the company's performance.

The Mann-Whitney-Wilcoxon Test is a non-parametric statistical hypothesis test for two sample sets of data. It assesses whether one of the two samples of independent observations tend to have significantly larger values than the other one. This is done by ranking the set of observations as if the two sets came from one large group. Thus the two groups of data are combined into one sample group and each value is given a rank; the smallest observation receives a rank of 1, and the largest observation receives a rank of N. By ranking the observations instead of using numerical averages, we can abandon specific assumptions about the shape of the distribution (Moore and McCabe).

We did the MWW test in two situations. The first was only on Banco Compartamos and Equity Bank in the years before and after the IPO was issued with the results summarized in Appendix A, Table 1. In the case of this analysis, the two samples consist of the cluster for each variable in the years before the IPO was issue and the cluster for each variable in the years after the IPO was issued. SAS programming was used to complete this test by analyzing the results from the two-tailed test at a 0.10 level of significance. We use the two tailed test because we are not testing for equality of means but instead looking at whether our two groups of means differ significantly. With this test, we are able to test our various hypotheses discussed in sections above to see if a mission drift appears to be occurring within the target MFI when IPO is issued. The second situation using the MWW test was used as a cross-sectional analysis; just looking at the publicly traded company in the years before the IPO was listed as compared to those same years for all of the Non-Profit MFI's in the region as well as country that the target MFI is located in. This same process was repeated to compare the IPO MFI in the years before the IPO with the For-Profit MFI's in the region as well as country that the publicly traded MFI is in. Finally, the same tests were done in the years after the IPO was issued. The output for this second set of MWW tests enabled us to see if there is a significant increase or decrease in the target MFI before and after the IPO was

issued as compared to the For-Profit and Non-Profit companies in the country and region. This allowed a comparison of the target MFI to its competitors to get an overview of the industry performance over the years giving us another way to see if a mission drift actually seems to be occurring.

The initial graphs created provide a visual element to the hypotheses originally developed, and to be able to have a significant value from the MWW Test helps to further confirm or reject the original hypotheses.

Table 2: Description of Variables being looked at

Variable Name	Description
Average Loan Balance per Borrower	Loan Portfolio, Gross/ Number of Active Borrowers
Cost per Borrower	Operating Expense/ Number of Active Borrowers , average
Loan Portfolio, gross	All outstanding principals due for all outstanding client loans. This includes current, delinquent, and renegotiated loans, but not loans that have been written off. It does not include interest receivable.
Number of Active Clients	Number of individuals who are active borrowers and/or savers with the MFI. A person with more than just one such account (i.e. with a loan and a savings account) is counted as a single client in this measure.
Operating Expense / Loan Portfolio (%)	Operating Expense / Loan Portfolio, gross, average
Operational Self-Sufficiency (%)	Financial Revenue / (Financial Expense + Impairment Loss + Operating Expense)
Percent of Women Borrowers (%)	Number of Active Borrowers who are women/ number of active borrowers
Portfolio at Risk > 30 days Ratio (%)	Portfolio at Risk > 30 days/ Loan Portfolio, gross
Return on Assets (ROA) (%)	(Net Operating Income, less Taxes)/ Assets, average
Return on Equity (ROE) (%)	(Net operating income, less taxes)/ Equity, average
Write off Ratio (%)	Write Offs/ Loan Portfolio, gross, average
Yield on Gross Portfolio (Nominal) %	Interest and Fees on Loan Portfolio / Loan Portfolio, Gross, Average
Yield on Gross Portfolio (Real) (%)	(Yield on Gross Portfolio (nominal) - Inflation Rate)/ (1 + Inflation Rate)

SKS RESULTS

As described above in my literature review and methodology, SKS issued its IPO on July 28, 2010. Therefore, there is not yet sufficient information available to complete a full analysis in SAS using the Wilcoxon Rank Sum Test. There is only data available for SKS in 2011 after the IPO was issued. Therefore, the analysis of mission drift for SKS relies on the data provided before the IPO, and 1 year after the IPO in 2011, as well as articles on this company.

First, looking at the articles on SKS, there are many mixed reviews on whether or not the IPO was successful with most of these articles being published in 2010 directly after the IPO has been issued. In 2010, SKS had the perfect set up for an IPO as the largest MFI in India with nearly 7 million clients. As stated in my literature review, when Vikram Akula started SKS, he had full intentions of making it a for-profit organization as he believed there would be room for faster and more sustainable growth than nonprofits. Yunus was strongly against this model as he saw it strictly as an opportunity to make money off of the bottom of the economic pyramid. Akula was not convinced by the founder of microfinance, Yunus, and generated $350 million through an IPO with plans to become the largest MFI in the world by 2012 with 15 million clients (Microfinance Gateway Staff). According to market standards, the IPO is considered to be a great success with an attractive valuation and shares listed at a premium and increasing quickly in 2010. SKS also has a lot of room for growth with plans laid out in the coming years. These plans involve going beyond just lending money to the bottom of the pyramid such as distributing different goods and offering new financial products (Reille). This is possible to accomplish with the capital raised from the IPO.

SKS has been accused of aggressive collection methods. Akula also admitted "bringing private capital into social enterprise was much harder than anticipated" (Tirani). With the financial success of SKS's IPO, the microfinance industry in India acquired a negative reputation when it came to actually helping the poor borrowers. Reports were made that nearly 200 borrowers had committed suicide after being unable to repay their loans. According to the New York Times, reports show that SKS is aware that loan officers are using intimidating methods to collect loans which resulting in some suicides. As a consequence of this criticism, Akula chose to step down from his leadership roles as executive chairperson of SKS in November 2011(Tirani). Akula still has a role in SKS at a policy level

and is involved in a mobile banking initiative. Additionally, in September of 2010, SKS fired its CEO, Mr. Suresh Gurmani. With this timing of getting rid of Gurumani, the governance quality of SKS was brought back into the news with negative stories. The reasons for firing Gurmani were unknown and caused the press to dig deeper into the organization's history which is how the harsh collection tactics and suicide stories emerged (Sriram). The switch in management of SKS right after the IPO was issued brought much negative press on the IPO.

The variables chosen for analysis in this thesis for the most part agree with the hypotheses originally created during the IPO year of 2010, although some cases show the opposite of what was originally predicted. Through the graph analysis I have done with the data from Mix Market on the averages of South Asia (region), India (country), and SKS (MFI), there is a clear dramatic change in the numbers during the IPO year in 2010-2011. A summary of the numbers before and after the IPO was issued can be seen in Table 1 in appendix A as well as in the graphs in appendix B.

The number of clients served increased from 978,944 before the IPO was issued to 4,621,537 in 2011. The dramatic increase in clients served can be seen in the graphs as SKS started in 1998 with only 19 reported clients and steadily grew until about 2007, when the increase of number of clients grew exponentially until 2010. After 2007, the number of clients served for SKS surpassed the average number of clients for both for-profit and non-profit MFI's in the region and country. However, in 2011, the number of clients served decreased by about 1.5 million. The increase up to 2010 follows with our hypothesis as SKS prepared for the perfect set up to issue an IPO. It is possible that the company grew too fast and had to cut back on clients in 201l, or these clients were no longer interested in SKS due to the negative press the IPO brought.

The gross portfolio increased from about an average of $150 million before the IPO to $328 million after the IPO was issued. This variable follows the same pattern as the number of clients served. There is a sharp increase in loan portfolio up to 2010 which surpasses the averages in the region and country of both profit and non-profit MFI's. Yet there is a decrease from $1.2 billion in 2010 to $328 million in gross loan portfolio in 2011. The gross loan portfolio includes all outstanding loans and dues that have not been written off.

Therefore, next looking at the write-off ratio, the data shows a large increase in loans written off with a small average of 0.42% before the IPO was issued to 42.25% in 2011 after the IPO. Therefore, the decrease in gross loan portfolio is most likely due to defaults in loans being written off. This write-off ratio is substantially higher than the ratio of non-profit and for-profit MFI's in both the region and country.

The real yield on gross portfolio was expected to increase after the IPO, yet decreased from an average of 19.4% before the IPO to 3.62% after the IPO. The Yield after the IPO is lower than the average portfolio yield for Non-Profit and For-Profit MFI's in the region and country. There is also no mission drift in the percentage of borrowers who are women as this number remained at a constant 100% according to the data. SKS solely lends to women borrowers and this did not change after the IPO as hypothesized. We also expected the Return on Assets and Return on Equity variables to increase after the IPO was issued. Again, this was not the case for SKS as these numbers decreased substantially into the negatives after the IPO was issued. The ROA and ROE both increased slightly in 2010 which indicates some mission drift but then drastically decreased in 2011 as shown in the graphs. The operational self-sufficiency of SKS decreased from 81.08% before the IPO to 25.36% after the IPO. A company's goal after an IPO is issued was predicted to operate with a higher efficiency and lower costs thus creating higher returns. This number shows that SKS is not making a profit from its clients as they are reportedly spending more money than receiving it in revenue. Therefore, this shows that the company could be operating more sufficiently as they should have some revenue with a ratio of over 100%, but not so high that the company is taking this money home in profits.

The average loan balance per borrower was expected to increase after the IPO as this would show that the MFI is giving out larger loans and therefore catering to wealthier clients instead of the poorest of the poor. The opposite was shown in the SKS data set as the average loan size decreased from $181 in 2010 to $77 in 2011. The average loan size per borrower for SKS before the IPO was issued from the years 1998-2009 was $121. As stated above, this number decreased to $77 in 2011. This is also lower than the average loan size in South Asia and India. Additionally, the $77 average loan size per borrower in 2011 is also lower than the average of non-profit companies in the country and region. This number was highest in 2010

when the IPO was issued at $181 for SKS. This number is actually higher than the average of for-profit and non-profit companies in the region and country in 2010. This follows suit with a mission drift in 2010 as there was a large turnover in management and negative press. However, for this variable, SKS appears to have recovered after 2010. We also expected the operating expense/loan portfolio percentage to decrease as the MFI improves operating efficiency which proves to be the case. This percentage decreased from 74.15% before the IPO to 15.27% after the IPO was issued. SKS had a very high Operational Expense ratio when first starting up; but, this number slowly decreased and is now in the same range as for-profit and non-profit MFI's in the country and region.

Lastly, the cost per borrower average before the IPO was $65 which decreased to $18 after the IPO was issued. We expected this number to decrease as a company's goal is to lower costs with pressure from financial markets. Looking at the cost per borrower from the year 2002 to 2011, the range does not differ much. SKS started with a very high cost per borrower which makes sense with the low number of clients in the early years. After the start-up years, SKS appears to be currently operating efficiently in terms of managing the cost of the company to maintain each client. This number is currently in 2011 even lower than the average cost per borrower for non-profit and for-profit MFI's in the country and region.

SKS seems to have experienced a slight mission drift in the year after the IPO was issued with a major shift in management and an increase in loans written off. Though it appears SKS recovered quickly away from a potential mission drift in 2011. The company maintained its mission to cater to women thus empowering them and maintaining a big priority since the beginning of microfinance. The company also maintained the cost per client and decreased the average loan size per borrower showing its mission to lend to the poorest of the poor. The number of clients also increased largely in 2010 but decreased in 2011 along with the company's gross loan portfolio which shows that the company may have tried to expand too fast directly after issuing the IPO but then fell back to where it should be. The main variables that indicate there could be a slight mission drift in SKS are the write-off ratio and the operating expense ratio. However, with a profit from the IPO, new products constantly being developed, and a mission to make microfinance financially self-sustainable, SKS appears to have the initiative to stick to their social mission to fight poverty and the capital to do so.

BANCO COMPARTAMOS RESULTS

Banco Compartamos issued an IPO in April 2007 for 30% of the company. Compartamos raised $467 million from this IPO. Yet this IPO also sparked controversy in the microfinance industry. Similar to SKS, Yunus expressed his discontent with the IPO declaring "the Mexican bank is no better than an old-fashioned loan shark, earning its huge profits by charging poor borrowers a usurious interest rate" (Cagna and Santos). A large profit was generated for shareholders at the expense of poor borrowers. However, Compartamos CEOs elaborated that the MFIs original mission to help the poor has not deviated and instead additional capital would be beneficial to re-invest to provide better financial services (Cagna and Santos). Banco Compartamos remained non-profit since its start up in 1990 until 2000 when 2 new CEOs Carlos Danel and Carlos Labarthe took over and made it a for-profit organization. Once it became for-profit, the bank received loans from public development agencies and socially-oriented investors. The bank grew rapidly in these years before the IPO yet the bank charged high interest rates around 80% to grow quicker. However, the IPO in 2007 was said to be successful in the microfinance industry. Not many articles are available on Compartamos after the IPO was issued therefore looking at the variables analyzed in this study, through both the Wilcoxon Rank Sum Test and the averages plotted in charts we can truly see if Banco Compartamos experienced mission drift after the IPO was issued.

For the variable, Number of Clients Served, the average before the IPO was issued was 186,152 borrowers. After the IPO was issued, this variable increased to 1.7 million borrowers. The Wilcoxon mean score before the Banco Compartamos IPO was issued is 6, while after the IPO was issued, the Wilcoxon mean score is 13.50. With a two-sided P Value of 0.0050, we can conclude that the number of active borrowers after the IPO was issued is significantly larger than before the IPO was issued. Looking at the charts for the Average Number of Clients Served, there appears to be a large growth in borrowers in years just before the IPO as well as after. These numbers are also significantly higher than those of non-profit and for-profit MFIs in Mexico and Latin America as indicated by the MWW test statistics in Tables 2A, 2B, 3A, and 3B for Banco Compartamos. The gross loan portfolio of Banco Compartamos also showed a significantly large increase with an average of $64 million before the IPO to an average of $653 million after the IPO with a MWW P Value of 0.005.

This indicates that the company issued more loans after the IPO was issued to the increase in borrowers discussed above. This increase in gross loan portfolio before the IPO was issued is significant to the Non-Profit MFI's in Mexico at 0.0946 but not to those Non-Profit MFI's in Latin America with a P Value of 0.1679. Neither P Value is significant before the IPO compared to For-Profit MFI's in the region and country. However, both of these values are significant after the IPO was issued as compared to those MFI's in the country and region for both For-Profit and Non-Profit MFI's with the same P Value of 0.0304 for each combination. This concept is reiterated in the charts as Compartamos falls very close to the Non-Profit and For-Profit MFI's in the Country and Region before the IPO is issued and then depicts a large increase in the years leading up to the IPO and after. These two combined variables follow a similar trend as they depend on each other and follow the original hypotheses. Yet these two variables alone cannot explain if there is a mission drift.

The variables indicating outreach to the poor include average loan size and the percent of borrowers that are women. The average loan size increased after the IPO was issued from $227 to $375. The Wilcoxon mean score before the IPO yields the result 6.72 and after the IPO yields the result 11.5. With a two-sided P Value of 0.0780, the average loan size per borrower is significantly larger after the IPO is issued. Therefore, there was a significant increase in the average loan size per borrower after the IPO was issued confirming a major hypothesis made to the data and indicating a possible mission drift in the company after the IPO was issued. Interestingly, the average loan size is significantly lower in Banco Compartamos compared to the average of Non-Profit MFIs in the country and region before the IPO was issued as well as after the IPO was issued. For For-Profit MFIs, there is no significance in the Average loan size in Mexico before and after the IPO was issued. However in the region, again the For-Profit MFI's yield a significantly higher average loan size than Banco Compartamos. This shows that there may not be mission drift for Banco Compartamos with this variable because although the variable did significantly increase after the IPO, it follows the same trend as competitors in the industry and the average loan balance per borrower consistently falls below the industry average for both non-profit and for-profit MFIs. The percent of women borrowers did decrease slightly but significantly from 98.36% to 97.34% with a MWW P Value of 0.077. However, the 98.36% average before the IPO is

significantly higher than the average percent of women borrowers in the country and region of both for-profit and non-profit MFIs before the IPO was issued. Additionally, the 97.34% of women borrowers is also significantly higher than the industry average percentages in the country and region. With the goal of an MFI to serve and empower as many women borrowers as possible, Banco Compartamos, does not appear to be drifting away from this mission compared to those MFIs competing with Compartamos.

From the profitability ratios of Banco Compartamos, Return on Assets is the only variable that shows a significant result in the years after the IPO was issued. This ratio decreased from 26.13% before the IPO to 17.58% after the IPO. This contradicts the hypothesis that the ROA would increase after the IPO. Furthermore, the ROA for Banco Compartamos is significantly higher before and after the IPO to non-profit and for-profit MFI's in both country and region. This is also the same case with the other two profitability variables chosen for analysis, Operational Self-Sufficiency, and Return on Equity. The ROE, ROA, and Operational Self-Sufficiency ratio are consistently higher than the non-profit and for-profit MFI's in the country and region as shown in the charts indicating that Compartamos was always profiting at a level higher than its competitors and there was no mission drift with profitability after the IPO.

The write-off ratio for Banco Compartamos is significantly higher after the IPO was issued as it averaged out to be 0.62% before the IPO and 2.68% after the IPO at a 0.0058 level of significance. The write-off ratios before and after the IPO is significantly lower than for-profit MFI competitors before the IPO in Mexico. It is also lower than non-profit MFI's in Mexico before the IPO but not significantly lower with a P Value of 0.8333. In the region for Non-Profit and For-Profit MFI's before the IPO, the write-off ratio of Banco Compartamos is significantly lower than that of the industry competitors. After the IPO was issued, Banco Compartamos' write-off ratio does not show significant results from the MWW test in the country for non-profit companies, although it is significantly lower than for-profit MFIs in Mexico. There is also no significant difference in Latin America in the write-off ratio after the IPO for both non-profit and for-profit MFIs. Additionally, the portfolio at risk for 30 days increased from 1.08% to 2.47% which is significant with a P Value of 0.015. This indicates the Banco Compartamos is operating less efficiently after the IPO was issued as there are

more late loans outstanding. Before the IPO, the Portfolio at risk for 30 days is significantly lower than both the non-profit and for-profit MFIs in the Country and Region. The portfolio at risk for 30 days is also significantly lower than both non-profit and for-profit MFIs after the IPO was issued. Therefore, although Compartamos lost some quality in its loan portfolio after the IPO, it is still lower than the averages from Mexico and Latin America indicating that mission drift for the quality of the loan portfolio may not be as harsh as the data from just Compartamos shows.

Lastly the cost per client significantly increased from $93 before the IPO to $137 after the IPO at a significant P Value of 0.0401 while the Operating expense to Loan Portfolio ratio significantly decreased from 48% to 34.97% at a 0.0770 P Value. We expected both of these variables to decrease after the IPO in order to operate with higher efficiency. Again looking at a comparison to the Region and Country for the cost per client, Compartamos falls below the two industry averages at all cases and this value is significant before the IPO for both Profit and Non-Profit MFIs. It is also significant for each case after the IPO except for non-profit MFI's in Mexico with the P Value falling just above the 0.10 level of significance at 0.1124 although the cost per client is still lower for Compartamos. This shows that Compartamos has always tried to keep costs down even before the IPO was issued.

Overall, looking only at Banco Compartamos data, there does appear to be some slight instances of mission drift after the IPO when just looking at the MFI itself. There is an increase in the number of clients with an increase in average loan size per borrower and an increase in lending to men. However, compared to data in the region and country, the mission drift does not appear to be out of proportion. Compartamos Banco in Mexico has been able to grow quicker as a publicly traded microfinance institution than if it had remained a nonprofit group. This growth leads to more credit for the Mexican borrowers; otherwise its borrowers could be forced to turn to loan sharks (Salmon).

EQUITY BANK RESULTS

According to articles on Equity Bank, the MFI has experienced much success since its start up and is widely considered a global leader in the microfinance industry. Some main challenges of Equity Bank are the management of the fast growing company, and capital needs to support outreach. Today, half of all bank accounts in Kenya are with Equity Bank. The bank is said to have transformed the lives of thousands of Kenyans by providing capital that they otherwise would not have had access to. The bank also continues to be recognized globally receiving an award in 2008 as the best bank in Kenya. In 2008, Equity Bank was also rated the best microfinance bank in Africa and the third best in the world by Micro Capital of the US. Financially, the bank also appears to post successful results. Equity Bank also uses the funds raised to invest in university education in Kenya and to partner with the agricultural sector in Kenya to promote a green revolution in Africa (Euromoney).

Like SKS and Banco Compartamos, not much is written on Equity Bank about the MFI's successes or failures after the IPO was issued. Therefore, the data gathered tells a story of what is happening within the company after the IPO was issued in 2006. The number of clients served significantly increased from 34,075 before the IPO to 561,206 after the IPO with a MWW two-sided P Value of 0.0034. Compared to Non-Profit MFI's in the country and region, the number of clients served was not significant before the IPO was issued and followed a similar trend as Banco Compartamos. This is the same when compared to For-Profit MFI's before the IPO was issued to Equity Bank. However, after the IPO was issued, the number of clients is significantly larger for Equity Bank than all Non-Profit and For-Profit MFI's in both Kenya and Africa. Each of these Post-IPO categories with MWW scores of 0.0122. From the graphs, it can be seen that Equity Bank's average number of clients served follows a very similar trend as SKS and Banco Compartamos. The bank started off serving a minimal number of clients, built up the clients base just before the IPO and sky-rocketed after the IPO increasing in a client base that is significantly higher than all Non-Profit and For-Profit MFI's in the country and region. The Average Gross Loan Portfolio also follows the same trend as the average number of clients served. Equity bank had an average gross loan portfolio of around $20 million in the year before the IPO. This portfolio increased to about $781 million after the IPO with a significant value of 0.0034. Although it is difficult to

visualize on the graphs, the averages also show that Equity Bank had a higher gross loan portfolio than those of non-profit and for-profit MFI's before the IPO was issued. Each of these values in the country and region has a significant P Value with Equity Bank having a significantly higher gross loan portfolio. This can be seen in charts 4A and 5A in appendix A. After the IPO, the difference in Equity Bank compared to both Profit and Non-profit MFI's in the country and region increases even more with the same significant P Value 0f 0.0122. These 2 variables follow our initial hypothesis that with an IPO the company will increase clients and therefore increase the amount of loans given out and profits to collect. Additionally, the fact that these two variables are significantly higher than all other MFI's in the country and region indicate a mission drift for Number of clients served and gross loan portfolio. However, in order to completely analyze mission drift, conclusions cannot be made simply on these two variables alone.

The real yield on gross portfolio gives an indicator of the interest rates the MFI is charging. The yield decreases after the IPO from 16% to 6.5% although this decrease is not significant with a P Value of 0.2330. This variable follows an interesting trend that can be seen on the Portfolio yield chart. The yield decreases from 2003 to 2004 followed by an increase just before the IPO. The yield then levels out and decreases to almost 0 after the IPO. The yield then increases slightly after the IPO is issued. The MFI's in the country and region follow this same trend with Equity Bank having the lowest portfolio yields than its competitors. Non-Profit and For-Profit MFIs also follow this same trend. After the IPO is issued, the real portfolio yield average for Equity Bank is actually significantly lower than its competitors in region and country. This contradicts our hypothesis that the portfolio yield would increase after the IPO in hopes of collecting more profit.

One of our major hypotheses predicted that the average loan size per borrower would increase indicating that the MFI is no longer lending to the poorest of the poor clients. Equity Banks average loan size per borrower decreased by just $2.00 from an average of $1,365 before the IPO to an average of $1,363 after the IPO was issued. This decrease is not significant with a P value of 0.2301. When comparing this variable to the average loan size for non-profit competitors, Equity Bank has a significantly higher average loan size both before and after the IPO, although the average loan size does increase within non-profit MFI's over the years

operating closer to the level of equity bank. The For-Profit MFIs have a higher average loan size per borrower than the Non-Profit MFIs which is expected. However, Equity Bank's average loan size is significantly higher than the for-profit MFIs before the IPO is issued. After the IPO, there is not a significant difference in the averages between Equity Bank and the For-Profit MFIs in Kenya with a P value of 0.2963. There is, a significant difference between the For-Profit MFIs and Equity Bank in Africa with Equity Bank issuing a significantly higher average loan size per borrower. The chart plotted for Equity Bank indicates that the MFI started off issuing very large loans, which decreased over the years and then increased slightly after the IPO and levels off making a wide U shape in the graph. The For-Profit and Non-Profit competitors also follow a similar trend although lower than Equity Bank. Mission drift appears to be possible for the average loan size per borrower. This is because the average loan size for Equity Bank decreases right before the IPO and then appears to be increasing over the years, as well as the averages being significantly higher than its competitors in the country and region. However, mission drift cannot be concluded from this variable alone because the average loan size in just Equity Bank did not show a significant difference before and after the IPO was issued.

The percentage of women served is also a major indicator of mission drift. Equity Bank has a lower percentage of women served than both SKS and Banco Compartamos, as shown in table 1, appendix A. Yet, the percent of women served did significantly increase after the IPO from 37% to 48% with a P value of 0.0828. Equity Bank appears to be lending to men borrowers more than the competitors in Kenya and also Africa as the percentage of women served is significantly higher than Equity Bank for all Non-Profit MFIs in Africa and Kenya before and after the IPO is issued. The For-Profit percent of women served decreases over the years before and after the IPO is issued. Although the percent of women served for Equity Bank is significantly lower than the For-Profit percent of women served before the IPO is issued, it is not significantly lower than the percent of women served in Kenya after the IPO is issued. This percentage is however significantly lower than the percent of women served in Africa. Similar to the average loan size per borrower where Equity Bank is giving out larger loans than its competitors before and after the IPO, the Bank is also lending to less women borrowers and therefore more men borrowers than its competitors both before and after the

IPO. The plot for Equity Bank appears to be level before and after the IPO with a sharp decrease in lending to women around 2010 which seems to be what is pulling the average down. However, the graph also shows that Equity Bank is always lending to more men borrowers than its competitors. Therefore, it does not appear to be the effect of the IPO as to why Equity Bank is lending to fewer women borrowers as this has been occurring since the Banks start-up. Additionally, the percent of women served as I mentioned significantly increased after the IPO was issued which could show that Equity Bank is using the capital to try and improve its outreach to women borrowers.

All three profitability ratios we are looking at for analysis significantly increased as shown in appendix A, table 1. These include the operational self-sufficiency, the Return on Assets, and Return on Equity ratios. The operational self-sufficiency indicates that the revenue is covering the MFIs expenses. While the Return on Assets and Return on Equity indicate the amount of assets or equity respectively that is covering the MFIs income. With an IPO, the MFI is expected to get more capital which can be shown by an increase in these three ratios. Looking at the charts for these three ratios, Equity Bank appears to be consistently generating higher profits than the competing MFIs in the country and region. Equity Bank appears to have a constant increasing trend leading up to the IPO with a continued increase after the IPO for all three of these ratios. While the for-profit and non-profit MFI profitability trends seem to have no consistent pattern as these ratios spike up and down over the years. These graphs can be seen in appendix B. This trend is also shown in the numbers on charts 4 A and B and charts 5 A and B in appendix A. Before the IPO, Equity Bank has a higher but not significantly higher Operational Self-Sufficiency ratio than the competing Non-profit MFIs in the country with this ratio being significantly higher than the competing Non-profit MFIs in the region with a P value of 0.0005. The return on Equity is significantly lower before the IPO than the non-profit MFIs in Kenya and significantly higher than the non-profit MFIs in Africa. The return on assets follows the same trend for non-profit MFIs before the IPO is issued. After the IPO is issued, these three ratios are each significantly higher than the competing non-profit MFIs in Kenya and Africa. Looking at the profitability ratios for Equity Bank as compared to the for-profit MFIs in Kenya and Africa, Equity Bank's ratios are significantly higher for all cases both before and after the IPO as shown in tables 5A and 5B.

With pressure to perform better, we expected the Write-Off ratio and Portfolio at risk to increase in attempt to make the MFIs financial statements look better. With these ratios increasing, it shows that the MFI is clearing its books of risky loans that are most likely to default and are liabilities therefore, making the company more appealing to investors. However, the write-off ratio for Equity Bank actually decreased although not significantly after the IPO is issued. The portfolio at risk for 30 days also decreased after the IPO has been issued. For for-profit and non-profit MFIs in Kenya and Africa both the write off ratio and portfolio at risk were significantly higher in Equity Bank before the IPO was issued. After the IPO was issued, these two ratios for Equity Bank are still slightly higher than the non-profit competitors in the country with neither of these values being significant. The write-off ratio is actually significantly lower than the non-profit MFIs in the region with a P value of 0.0367 after the IPO is issued. There are also no significant results when comparing Equity Bank to for-profit MFIs in the country and region after the IPO is issued.

Lastly, we can look at Equity Banks efficiency and productivity. Equity Banks operating expense to gross loan portfolio significantly decreased from 25% to 16% after the IPO with a P value of 0.0043. The cost per client also decreased after the IPO but not significantly with a P value of 0.82. With these variables both decreasing, it shows that Equity Bank is operating with a higher efficiency after the IPO. Before the IPO was issued, Equity Bank had a higher operating expense ratio than its non-profit competitors in Kenya but not significantly higher. The MFI also had a significantly lower operating expense ratio than its non-profit competitors in the region. However, the cost per borrower was significantly higher than all non-profit competitors in the country and region before the IPO was issued. Additionally, Equity Bank had a significantly lower operating expense ratio and a significantly higher cost per borrower as compared to the for-profit competitors before the IPO was issued. After the IPO was issued, Equity Bank has a significantly lower operating expense ratio than its for-profit and non-profit competitors in the country and region. The cost per client is higher for equity bank than both for-profit and non-profit MFIs in Kenya and lower for Equity Bank than both for-profit and non-profit MFIs in Africa although not significant. Therefore, overall it appears as if Equity Bank is following the original hypothesis of increasing efficiency and lower costs. This however does not indicate mission drift alone as operating with higher efficiency is a

good goal for any company to have no matter the profit status. It would indicate mission drift if other variable such as average loan size per borrower was increasing and the percent of women served was decreasing, along with the quality of loan portfolio decreasing.

It does not seem like it is the IPO that is causing Equity Bank to operate on a different level than its competitors. With an increase in borrowers, and an increase in gross loan portfolio, it makes sense for the company to operate at a higher profit level and increase efficiency by lowering expenses. It is how the MFI is using these increased funds that truly indicate a mission drift. However, as I pointed out, the percent of women borrowers actually increased after the IPO, and the average loan balance per borrower did not change significantly. Even though Equity Bank does lend to more men than its competitors, the time plot trend shows that this is what the MFI has been doing since its start-up before the IPO was issued. Equity Bank has also been giving out larger loan sizes than its competitors as the averages and trend plots show since its start-up. Therefore, mission drift from the IPO does not seem to be the case for Equity Bank.

OVERALL CONCLUSIONS

Some Similar trends can be seen for each of the three publicly traded MFIs. Each of the three MFIs appears to have increased in gross loan portfolio leading up to the IPO with a significant increase after the IPO. This same trend is evident in the number of clients served for each of the three MFIs. These two variables are also higher in all three cases than the competing MFIs in the country and region of the target MFI. The operating expense to gross loan portfolio ratio also appears to decrease in all three cases in the years before the IPO to the years after the IPO.

With the variables listed above increasing in all three cases, it is important to observe what happens over time to the two most important variables looked at: average loan size per borrower and percent of women served. The level at which these variables change are different for all three companies. To summarize what has happened, we can see that for SKS, the MFI has always loaned to 100% women borrowers before and after the IPO is issued. Therefore, there is no mission drift for this variable. The average loan size has also actually decreased after the IPO from $121 to $77. This average loan balance per borrower spikes up in 2010 for SKS but then actually falls below its competitors in 2011 indicating that there may have been some mission drift right after the IPO, but changed quickly to issue smaller average loan sizes than before the IPO was issued. Banco Compartamos decreased its lending to women borrowers and increased in average loan size per borrower. Within this company this is a red flag for a mission drift after the IPO. However, when comparing Banco Compartamos to its competitors, the percent of women borrowers is consistently significantly higher for both for-profit and non-profit MFIs. Additionally, the average loan size per borrower is consistently lower than its competitors. This shows that although the MFI does show some mission drift after the IPO was issued, it is still operating at a significantly different level than its competitors in Mexico and Latin America. Lastly, Equity Bank presents a different situation than the other two MFIs. The average loan size per borrower did not change significantly before and after the IPO and the percent of women served within Equity Bank actually significantly increased. However, its competitors appear to constantly issue lower loan sizes per borrower and cater to a higher percentage of women. This is the same situation both before and after the IPO indicating that it was not becoming publicly

traded that caused Equity Bank to serve less women and issue higher loan sizes as it always has been operating at this level. Additionally, Equity Bank decreases interest rates after the IPO as indicated by the real portfolio yield and has a lower rate than its competitors which indicates that the MFI is catering to help the poor by charging lower interest rates with the additional capital gained from the IPO.

Therefore, I conclude that although there does seem to be some evidence of mission drift through certain variables in these three companies, there is not enough evidence for mission drift to be conclusive when looking at the big picture. Each of these companies increase in total outreach with the number of clients served and loan portfolio, however interest rates to not seem to be rising according to the yield on gross portfolio. The IPO does appear to be helping with profitability of the each publicly traded MFI yet the MFIs appear to be using this additional money efficiently to reach out to more clients and grow without drifting away from its social mission to reach out to the poor. Additionally, each of these companies also seem to be constantly growing over the years after the IPO in terms of the number of clients being served and in terms of profitability, however the percent of women served and average loan size per borrower look as if they have leveled off at a constant rate after the IPO. Within this small sample of three publicly traded MFIs, I overall do not see the harm of issuing an IPO. With profits, these three MFIs are able to increase the outreach to the bottom of the economic pyramid without taking advantage of the poor.

FUTURE RESEARCH

There has not been much information on what exactly happens to the mission of a microfinance company after an IPO is issued. Therefore, this analysis provides a basis showing that the three microfinance companies that have issued an IPO appear to be maintaining the social mission to help the poorest of the poor.

More time passing would definitely help to improve on this study allowing more data points after the IPO has been issued. Since the data for this analysis starts in 1995 and ends in 2011, it would be interesting to see if the same results can be concluded after more time has passed. All three of these publicly traded MFI's could be analyzed again after more time has passed. In particular, for SKS as there is only one data point available after the IPO has been issued. For SKS, I draw conclusions that it appears the company is able to recover from their losses in 2010 the following year. But, if there were more data, it would truly be able to be seen whether or not SKS is drifting away from its social mission with the IPO.

Another improvement of this study would be to look at what type of Microfinance Company it takes to issue an IPO. The three companies that have issued IPOs have done it successfully, however, it appears these companies used caution and prepared years in advance to become public. Therefore, it would be beneficial to look into the specific characteristics that allowed these IPOs to be a success as well as to see if other microfinance companies could sustain an IPO. I was able to conclude from this study that a mission drift is not occurring for these three companies, yet that may not be true for all MFIs that decide to go public. Thus to look at the precise qualities that the company might need to have in order to issue a successful IPO would be interesting to see if issuing an IPO is scalable for other MFIs around the world.

APPENDICES

Appendix A – (Wilcoxon Test Summary Charts)

Table 1 Comparison of IPO MFI Variable Averages Before and After IPO

		SKS IPO yr 2010		Equity Bank IPO yr 2006			Banco Compartamos IPO yr 2007		
	Variables	Bef. IPO	Aft. IPO	Bef. IPO	Aft. IPO	Prob (MWW Test)	Bef. IPO	Aft. IPO	Prob (MWW Test)
	Number of clients served	978,944	4,621,537	34,075	561,206	0.0034	186,152	1,716,221	0.005
	Gross portfolio	$150,086,790	$328,072,345	$ 20,613,438	$781,658,936	0.0034	$ 64,174,232	$653,204,076	0.005
	Yield on gross portfolio (real)	19.40%	3.62%	16.38%	6.48%	0.2330	78.12%	66.67%	0.0304
Outreach to Poor									
	Average loan size	$ 121	$ 77	$ 1,365	$ 1,363	0.2301	$ 227	$ 375	0.078
	% of borrowers that are women	100%	100%	37.41%	48.03%	0.0828	98.36%	97.34%	0.0777
Profitability									
	Operational Self-Sufficiency **(%)**	81.08%	25.36%	123.09%	164.64%	0.0034	165.74%	167.21%	1
	ROE	-9.72%	-111.57%	22.30%	25.00%	0.0071	47.71%	42.61%	0.621
	ROA	-11.96%	-45.88%	2.72%	5.75%	0.0000	26.13%	17.58%	0.048
Quality of loan portfolio									
	Write-off ratio	0.42%	42.25%	2.25%	1.73%	0.9417	0.62%	2.68%	0.0058
	Portfolio at risk 30 day	0.68%	N/A	19.69%	9.00%	0.0348	1.08%	2.47%	0.015
	Portfolio at risk 90 day	0.98%	N/A	14.09%	4.99%	0.0369	0.43%	2.13%	0.0304
Efficiency and productivity									
	Operating expense / Loan Portfolio %	74.15%	15.27%	25.15%	16.54%	0.0043	48.00%	34.97%	0.0770
	Cost per client	$ 65	$ 18	$ 295	$ 176	0.8262	$ 93	$ 137	0.0401

Table 2A Comparison of Banco Compartamos Versus Non-Profit Companies in Country and Region Before IPO Date (1996-2006)

		Country		Region	
	Banco Compartamos	Non Profit MFI's	Prob (MWW Test)	Non-Profit MFI's	Prob (MWW Test)
Variables					
Number of clients	186,152	6,078	0.0003	11,651	<.0001
Gross portfolio	$ 64,174,232	$ 4,912,754	0.0946	$ 6,627,387	0.1679
Yield on gross portfolio (real)	78%	55.43%	0.1052	30.59%	0.0304
Outreach to Poor					
Average loan size	$ 227	$ 3,038	0.0352	$ 860	<.0001
% of borrowers that are women	98%	86.54%	0.0003	68%	<.0001
Profitability					
Operational Self-Sufficiency **(%)**	165.74%	83.93%	0.0003	113.74%	0.0013
ROE	47.71%	0.56%	0.0008	4.58%	0.0002
ROA	26.13%	-0.08%	0.0008	1.36%	0.0002
Quality of loan portfolio					
Write-off ratio	0.62%	1.32%	0.8833	1.93%	0.0010
Portfolio at risk 30 day	1.08%	4.86%	0.0685	5.49%	<.0001
Portfolio at risk 90 day	0.43%	1.96%	0.0518	3.77%	0.0304
Efficiency and productivity					
Operating expense / Loan Portfolio %	48.00%	37.77%	0.2617	39.60%	0.0604
Cost per client	$ 93	$ 295	0.0011	$ 166	0.0003

Table 2B Comparison of Banco Compartamos Versus Non-Profit Companies in Country and Region After IPO Date (2008-2011)

		Country		Region	
	Banco Compartamos	Non Profit MFI's	Prob (MWW Test)	Non-Profit MFI's	Prob (MWW Test)
Variables					
Number of clients	1,716,221	12,504	0.0304	19,317	0.0304
Gross portfolio	$ 653,204,076	5,026,989	0.0304	$ 25,822,873	0.0304
Yield on gross portfolio (real)	66.67%	46.62%	0.0304	25.22%	0.0304
Outreach to Poor					
Average loan size	$ 375	$ 502.34	0.0304	$ 1,523	0.0304
% of borrowers that are women	97.34%	78.58%	0.0304	64.03%	0.0304
Profitability					
Operational Self-Sufficiency **(%)**	167.21%	84.57%	0.0304	107.86%	0.0304
ROE	42.61%	11.01%	0.0304	-7.56%	0.0304
ROA	17.58%	4.64%	0.0304	-0.46%	0.0304
Quality of loan portfolio					
Write-off ratio	2.68%	2.89%	0.8852	2.16%	0.1939
Portfolio at risk 30 day	2.47%	5.69%	0.0304	6.91%	0.0304
Portfolio at risk 90 day	2.13%	2.13%	1.0000	4.99%	0.0304
Efficiency and productivity					
Operating expense / Loan Portfolio %	34.97%	38.26%	0.1124	28.89%	0.0304
Cost per client	$ 137	$ 162.69	0.1124	$ 234	0.0304

Table 3A Comparison of Banco Compartamos Versus For-Profit Companies in Country and Region Before IPO Date (1996-2006)

		Country		Region	
	Banco Compartamos	For- Profit MFI's	Prob (MWW Test)	For-Profit MFI's	Prob (MWW Test)
Variables					
Number of clients	186,152	26,344	0.0062	28,249	0.0006
Gross portfolio	$ 64,174,232	$ 5,929,589	0.1300	26,607,896	1
Yield on gross portfolio (real)	78%	75.28%	0.3768	30.41%	0.0304
Outreach to Poor					
Average loan size	$ 227	$ 349	0.1965	$ 816	<.0001
% of borrowers that are women	98%	73.57%	0.0011	64.12%	<.0001
Profitability					
Operational Self-Sufficiency **(%)**	165.74%	81.45%	0.0001	105.93%	0.0001
ROE	47.71%	-47.75%	0.0012	1.13%	0.0002
ROA	26.13%	-12.54%	0.0004	2.73%	0.0002
Quality of loan portfolio					
Write-off ratio	0.62%	2.48%	0.0225	1.92%	0.001
Portfolio at risk 30 day	1.08%	4.21%	0.0027	4.79%	<0.0001
Portfolio at risk 90 day	0.43%	2.06%	0.0518	3.00%	0.034
Efficiency and productivity					
Operating expense / Loan Portfolio %	48.00%	136.97%	0.0009	33.36%	0.0073
Cost per client	$ 93	$ 313	0.0014	$ 174	0.0017

Table 3B Comparison of Banco Compartamos Versus For-Profit Companies in Country and Region After IPO Date (2008-2011)

		Country		Region	
	Banco Compartamos	For- Profit MFI's	Prob (MWW Test)	For-Profit MFI's	Prob (MWW Test)
Variables					
Number of clients	1,716,221	97,422	0.0304	91,862	0.0304
Gross portfolio	$ 653,204,076	$ 28,754,329	0.0304	$ 122,537,885	0.0304
Yield on gross portfolio (real)	66.67%	72.71%	0.1124	40.31%	0.0304
Outreach to Poor					
Average loan size	$ 375	$ 601	0.3123	$ 1,786	0.0304
% of borrowers that are women	97.34%	80.81%	0.0304	64.37%	0.0304
Profitability					
Operational Self-Sufficiency **(%)**	167.21%	94.55%	0.0304	103.32%	0.0304
ROE	42.61%	6.85%	0.0304	15.46%	0.0304
ROA	17.58%	1.02%	0.0304	0.88%	0.0304
Quality of loan portfolio					
Write-off ratio	2.68%	7.75%	0.0304	4.44%	0.1939
Portfolio at risk 30 day	2.47%	7.83%	0.0304	6.96%	0.0304
Portfolio at risk 90 day	2.13%	4.62%	0.0304	4.60%	0.0304
Efficiency and productivity					
Operating expense / Loan Portfolio %	34.97%	63.23%	0.0304	36.91%	0.0304
Cost per client	$ 137	$ 243	0.0304	$ 305	0.0304

Table 4A Comparison of Equity Bank Versus Non-Profit Companies in Country and Region Before IPO Date (1996-2005)					
		Country		Region	
	Equity Bank	Non Profit MFI's	Prob (MWW Test)	Non-Profit MFI's	Prob (MWW Test)
Variables					
Number of clients served	34,075	9,017	0.5791	13,764	0.7911
Gross portfolio	$ 20,613,438	1,142,264	0.0162	$ 3,570,803	0.02
Yield on gross portfolio (real)	16.38%	1.23%	0.3711	30.42%	0.0809
Outreach to Poor					
Average loan size	$ 1,365	$ 113	0.0162	$ 302	0.0062
% of borrowers that are women	37.41%	65.53%	0.0933	74.76%	0.0018
Profitability					
Operational Self-Sufficiency **(%)**	123.09%	121.13%	0.5791	90.44%	0.0005
ROE	22.30%	32.46%	0.0304	-2.34%	0.0016
ROA	2.72%	3.57%	0.0304	-3.97%	0.0009
Quality of loan portfolio					
Write-off ratio	2.25%	0.78%	0.0304	2.53%	0.665
Portfolio at risk 30 day	19.69%	7.46%	0.1106	4.88%	0.0021
Portfolio at risk 90 day	14.09%	N/A	N/A	3.25%	0.0809
Efficiency and productivity					
Operating expense / Loan Portfolio %	25.15%	21.77%	1	65.60%	0.0004
Cost per client	$ 295	$ 24.50	0.0502	$ 77	0.0028

Table 4B Comparison of Equity Bank Versus Non-Profit Companies in Country and Region After IPO Date (2007-2011)					
		Country		Region	
	Equity Bank	Non Profit MFI's	Prob (MWW Test)	Non-Profit MFI's	Prob (MWW Test)
Variables					
Number of clients	561,206	17,096	0.0122	25,740	0.0122
Gross portfolio	$ 781,658,936	$ 4,926,231	0.0122	$ 14,749,288	0.0122
Yield on gross portfolio (real)	6.48%	13.10%	0.2963	28.02%	0.0122
Outreach to Poor					
Average loan size	$ 1,363	$ 273	0.0122	$ 613	0.0122
% of borrowers that are women	48.03%	66.72%	0.0216	64.33%	0.0122
Profitability					
Operational Self-Sufficiency **(%)**	164.64%	99.71%	0.0122	83.20%	0.0122
ROE	25.00%	6.84%	0.0122	-2.25%	0.0122
ROA	5.75%	0.74%	0.0122	-4.88%	0.0122
Quality of loan portfolio					
Write-off ratio	1.73%	1.67%	0.6288	3.55%	0.0367
Portfolio at risk 30 day	9.00%	7.46%	0.5309	8.15%	1
Portfolio at risk 90 day	4.99%	4.74%	0.5309	4.91%	1
Efficiency and productivity					
Operating expense / Loan Portfolio %	16.54%	23.39%	0.0947	50.59%	0.0122
Cost per client	$ 176	$ 66	0.0122	$ 242	0.6761

Table 5A Comparison of Equity Bank Versus For-Profit Companies in Country and Region Before IPO Date (1996-2005)

		Country		Region	
	Equity Bank	For- Profit MFI's	Prob (MWW Test)	For-Profit MFI's	Prob (MWW Test)
Variables					
Number of clients	34,075	26,189	0.8597	34,187	0.5962
Gross portfolio	$ 20,613,438	$ 4,296,502	0.0343	$ 3,550,987	0.0171
Yield on gross portfolio (real)	16.38%	24.84%	0.3711	30.09%	0.0809
Outreach to poor					
Average loan size	$ 1,365	$ 200.22	0.0018	$ 155	0.0006
% of borrowers that are women	37.41%	85.56%	0.0124	76.29%	0.0018
Profitability					
Operational Self-Sufficiency **(%)**	123.09%	81.72%	0.0010	82.77%	0.0008
ROE	22.30%	-10.46%	0.0081	-7.92%	0.0009
ROA	2.72%	-6.18%	0.0454	-4.14%	0.0039
Quality of loan portfolio					
Write-off ratio	2.25%	0.57%	0.0724	0.53%	0.1893
Portfolio at risk 30 day	19.69%	2.01%	0.0021	1.75%	0.0022
Portfolio at risk 90 day	14.09%	0.64%	0.3711	1.24%	0.0809
Efficiency and productivity					
Operating expense / Loan Portfolio %	25.15%	48.88%	0.0024	51.71%	0.0009
Cost per client	$ 295	$ 76	0.0068	$ 60	0.0019

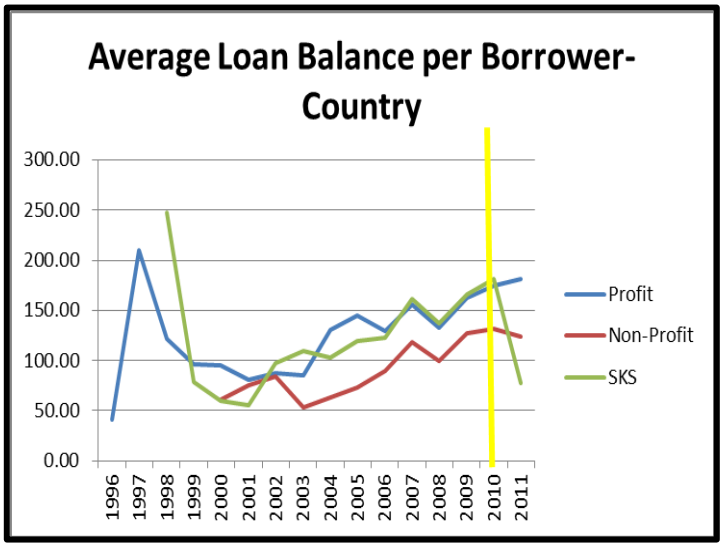
Table 5B Comparison of Equity Bank Versus For-Profit Companies in Country and Region After IPO Date (2007-2011)

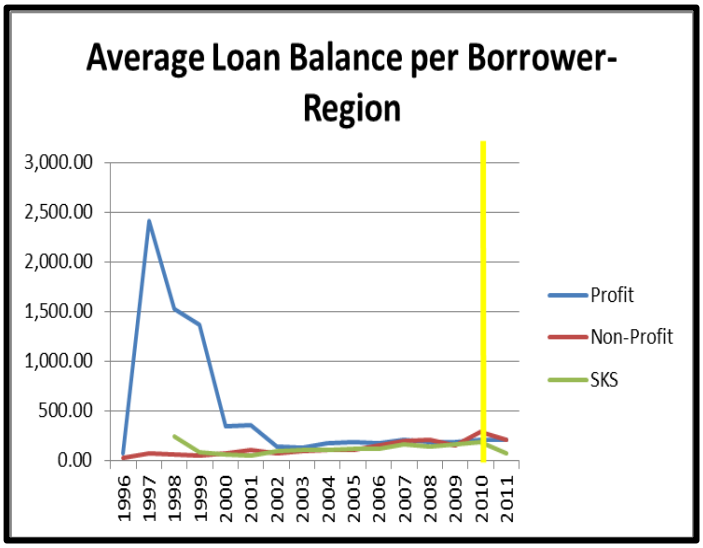
		Country		Region	
	Equity Bank	For- Profit MFI's	Prob (MWW Test)	For-Profit MFI's	Prob (MWW Test)
Variables					
Number of clients	561,206	52,681	0.0122	61,610	0.0122
Gross portfolio	$781,658,936	$ 17,854,150	0.0122	$ 14,223,214	0.0122
Yield on gross portfolio (real)	6.48%	19.63%	0.0947	31.32%	0.0122
Outreach to poor					
Average loan size	$ 1,363	$ 894	0.2963	$ 580	0.0122
% of borrowers that are women	48.03%	57.59%	0.1437	58.84%	0.0122
Profitability					
Operational Self-Sufficiency **(%)**	164.64%	59.84%	0.0122	89.64%	0.0122
ROE	25.00%	-4.58%	0.0601	-4.88%	0.0122
ROA	5.75%	0.11%	0.1437	-2.62%	0.0122
Quality of loan portfolio					
Write-off ratio	1.73%	2.90%	0.2963	-	0.2101
Portfolio at risk 30 day	9.00%	9.09%	0.2963	8.02%	0.8345
Portfolio at risk 90 day	4.99%	4.32%	0.8345	4.62%	0.6761
Efficiency and productivity					
Operating expense / Loan Portfolio %	16.54%	34.09%	0.0122	46.80%	0.0122
Cost per client	$ 176	$ 151	0.2101	$ 280	1

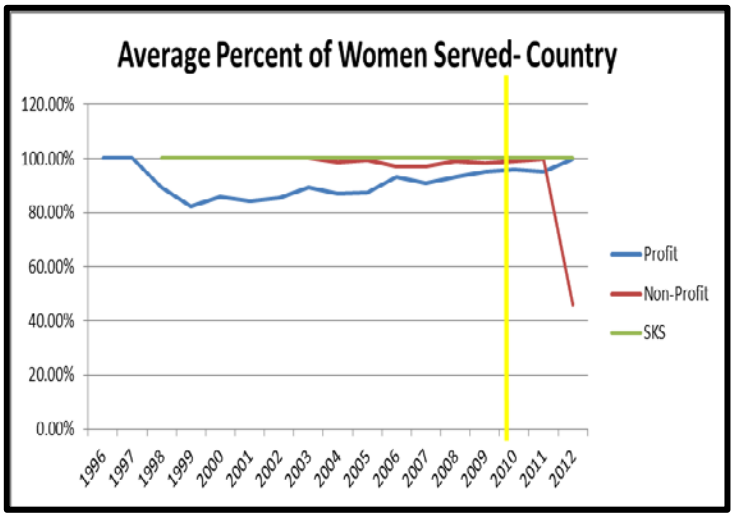
Appendix B – (Time Series Plots)[6]

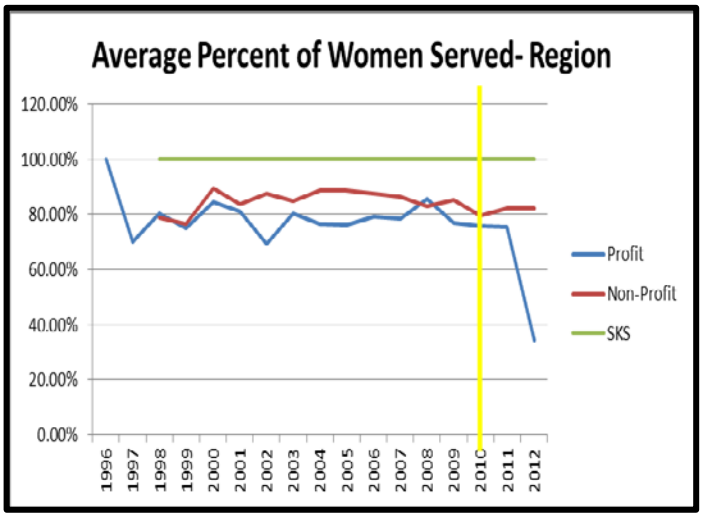
In the following plots, the vertical yellow line signifies the year the company of interest became publicly traded. The green line always represents the MFI that became publicly traded while the red and blue lines represent the industry for-profit and non-profit competitors. Plots of the industry medians were also looked at and considered. For analysis purposes, the mean plots were used as both sets of graphs turned out to have very similar trends.

SKS

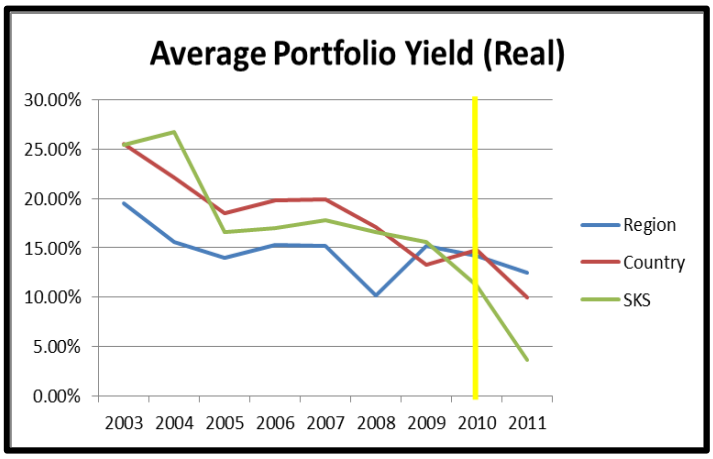


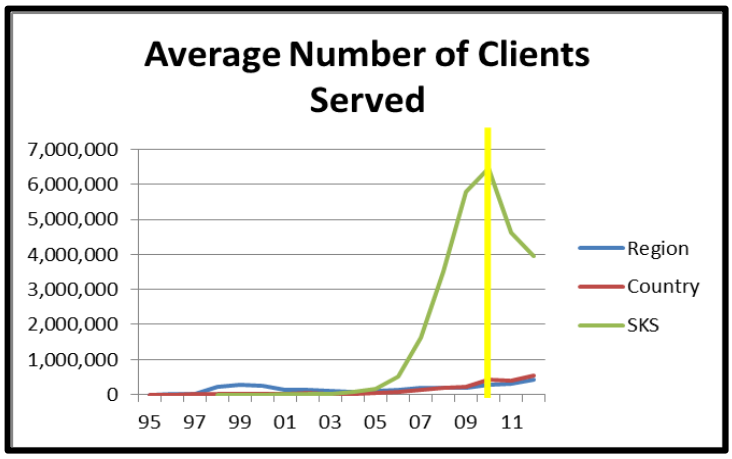


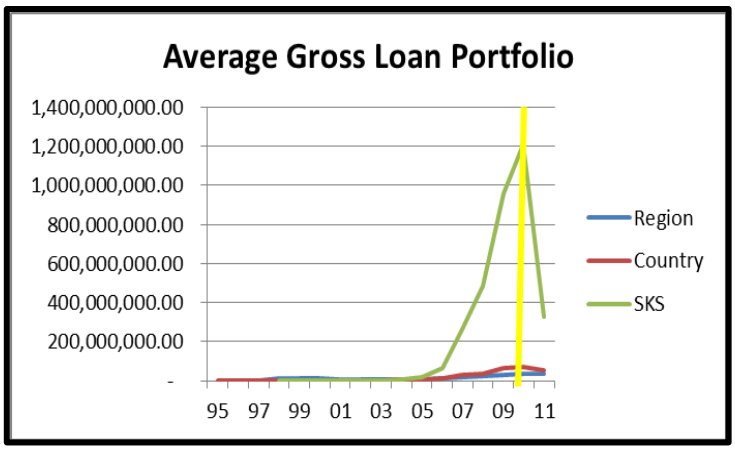


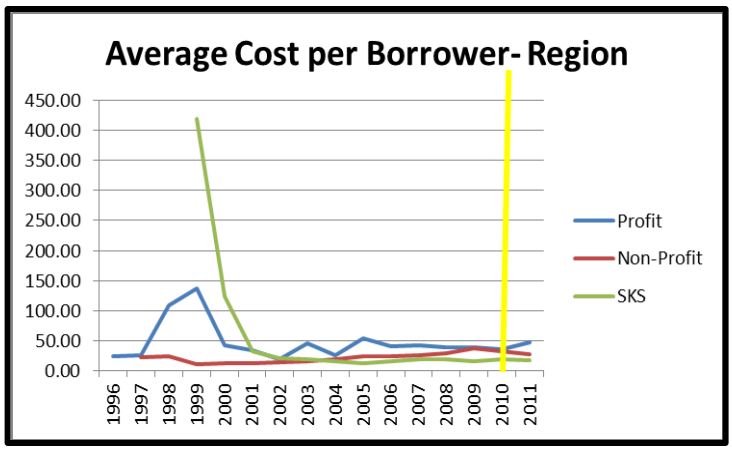


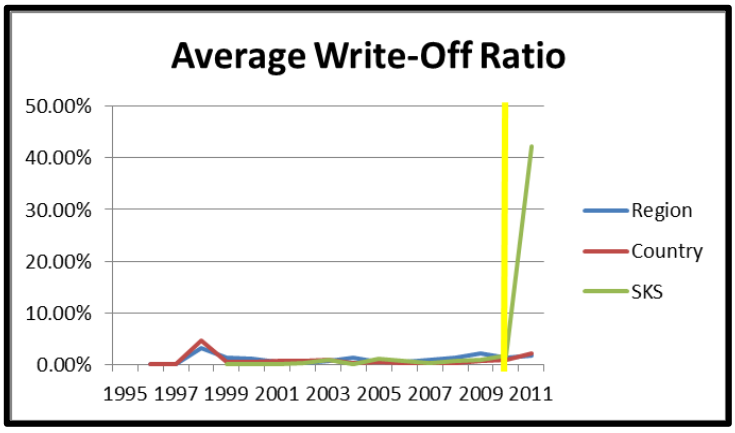
[6] Not all plots created are included in this appendix. Plots included for each variable are the ones I felt best depicted the total picture of the publicly traded MFI.

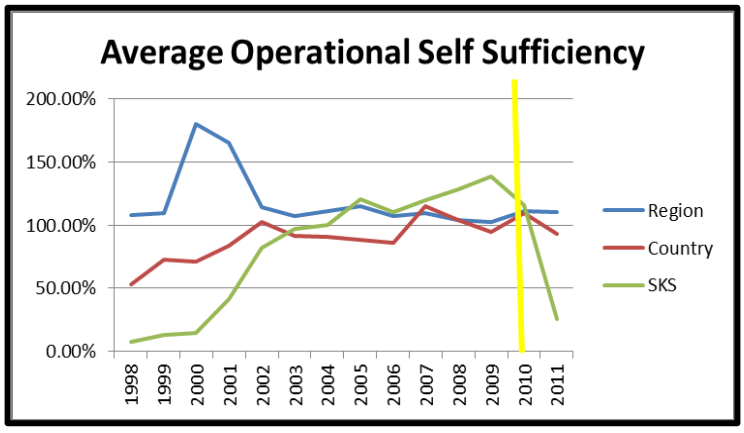

Average Portfolio Yield (Real)
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
2003 2004 2005 2006 2007 2008 2009 2010 2011
Region
Country
SKS


Average Number of Clients Served
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
95 97 99 01 03 05 07 09 11
Region
Country
SKS

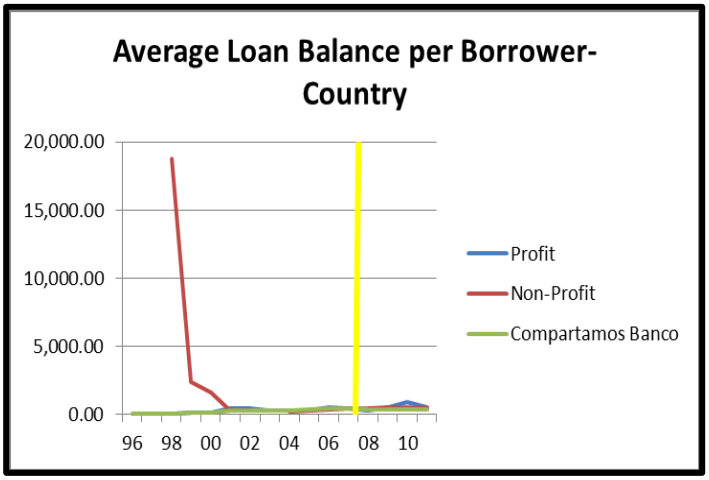

Average Gross Loan Portfolio
1,400,000,000.00
1,200,000,000.00
1,000,000,000.00
800,000,000.00
600,000,000.00
400,000,000.00
200,000,000.00
-
95 97 99 01 03 05 07 09 11
Region
Country
SKS

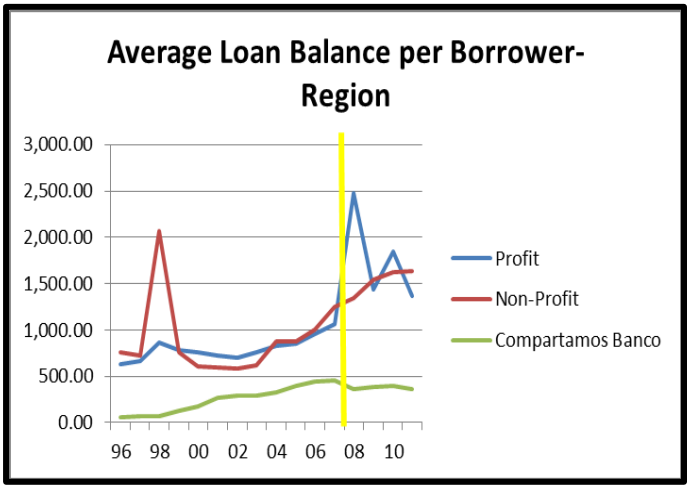

Average Cost per Borrower- Region
450.00
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
Profit
Non-Profit
SKS

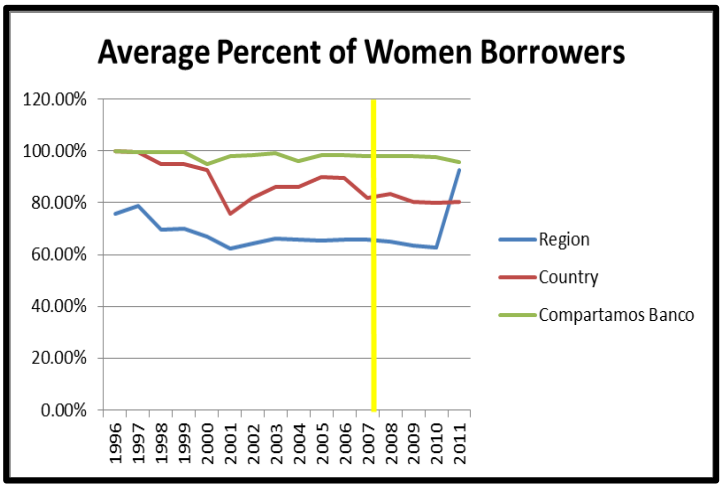

Average Write-Off Ratio
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
1995 1997 1999 2001 2003 2005 2007 2009 2011
Region
Country
SKS

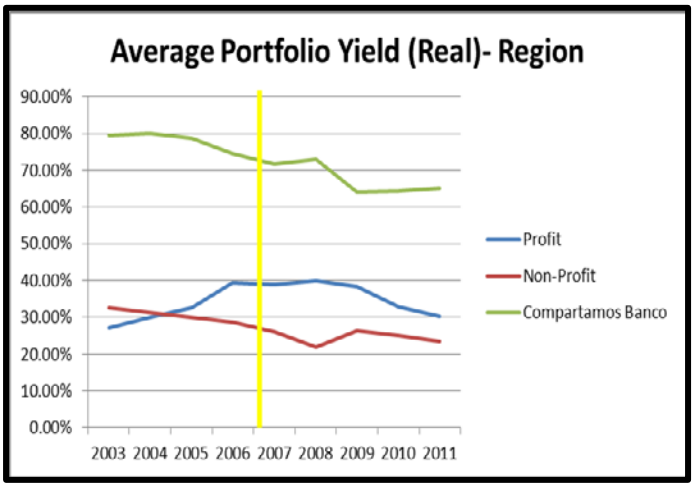

Average Operational Self Sufficiency
200.00%
150.00%
100.00%
50.00%
0.00%
1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
Region
Country
SKS

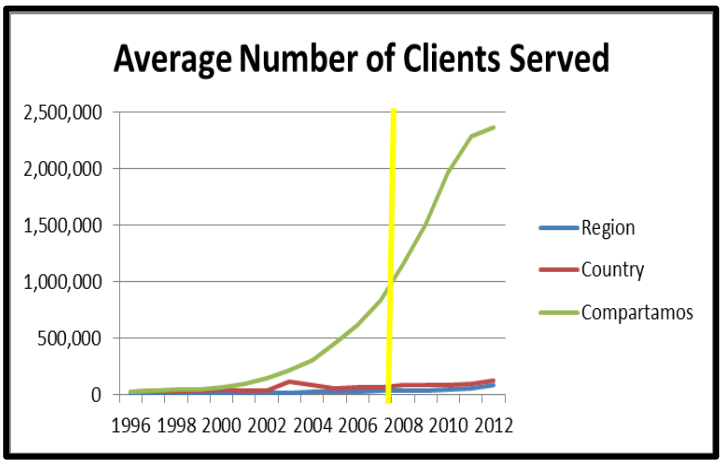
Banco Compartamos

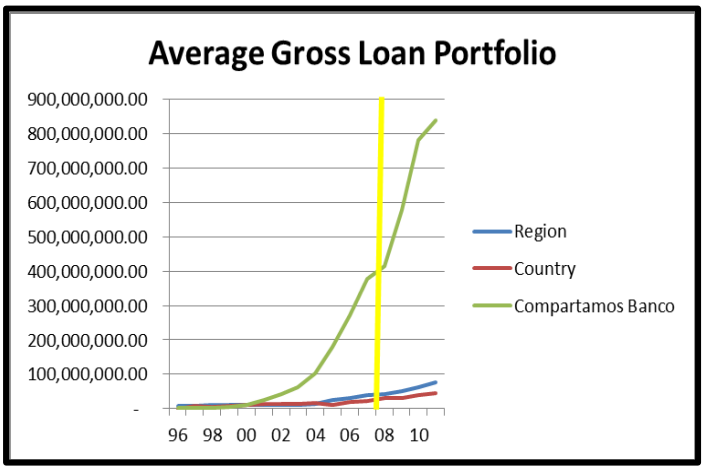


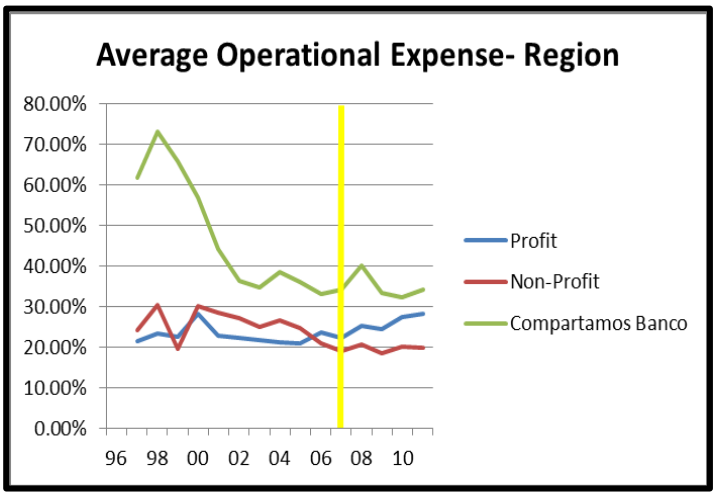


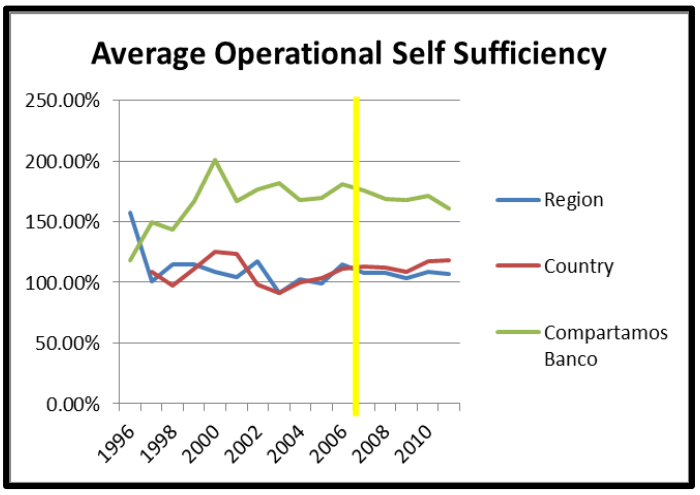


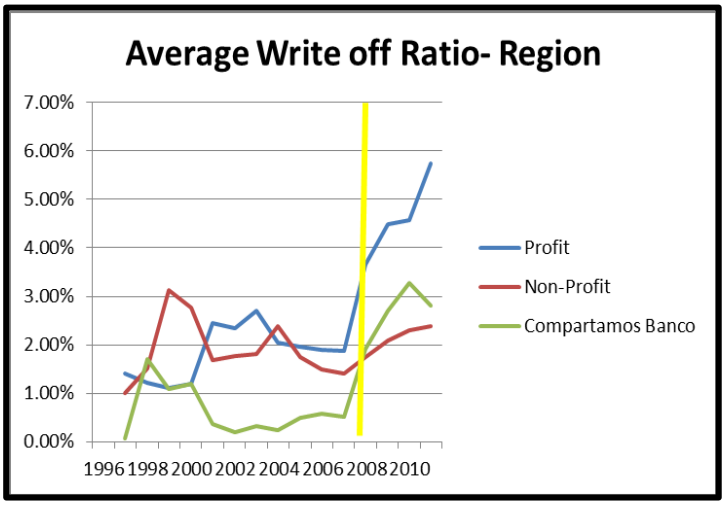


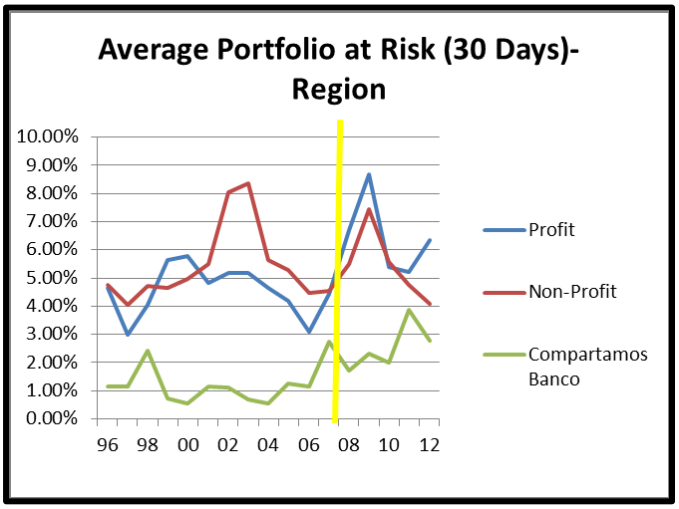

Average Number of Clients Served
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
1996 1998 2000 2002 2004 2006 2008 2010 2012
Region
Country
Compartamos


Average Gross Loan Portfolio
900,000,000.00
800,000,000.00
700,000,000.00
600,000,000.00
500,000,000.00
400,000,000.00
300,000,000.00
200,000,000.00
100,000,000.00
-
96 98 00 02 04 06 08 10
Region
Country
Compartamos Banco

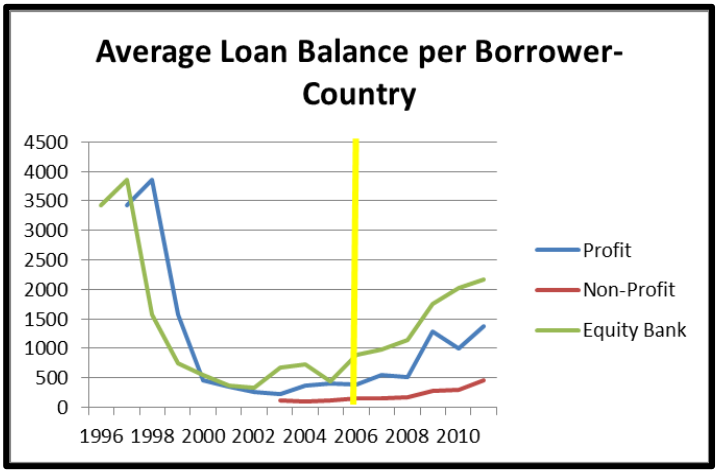

Average Operational Expense- Region
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
96 98 00 02 04 06 08 10
Profit
Non-Profit
Compartamos Banco

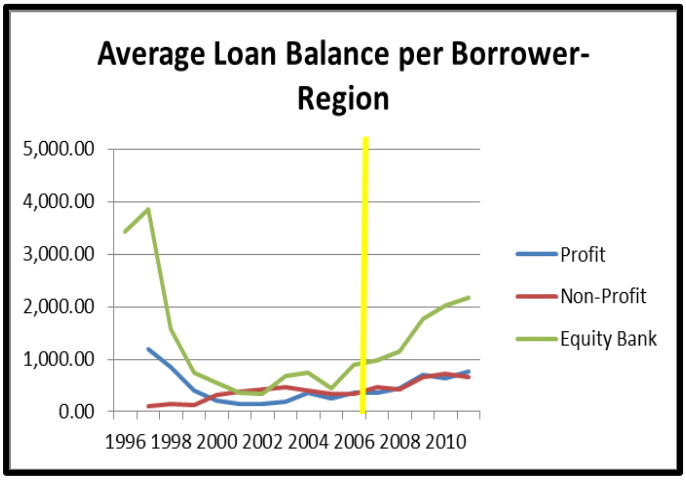

Average Operational Self Sufficiency
250.00%
200.00%
150.00%
100.00%
50.00%
0.00%
1996 1998 2000 2002 2004 2006 2008 2010
Region
Country
Compartamos Banco

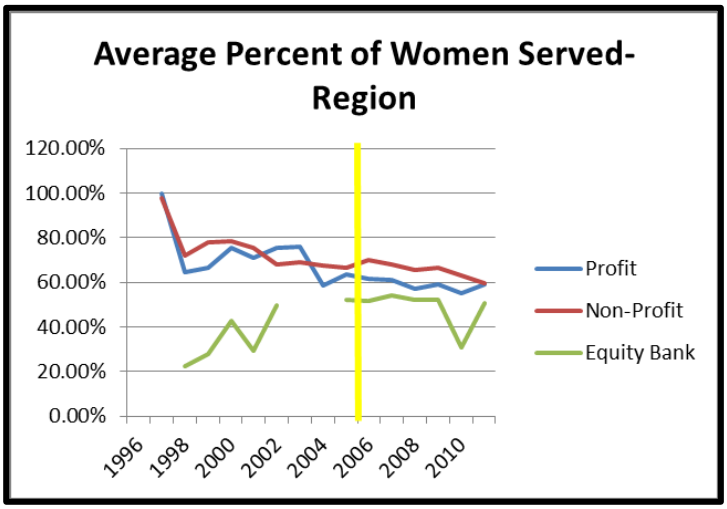

Average Write off Ratio- Region
7.00%
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
1996 1998 2000 2002 2004 2006 2008 2010
Profit
Non-Profit
Compartamos Banco

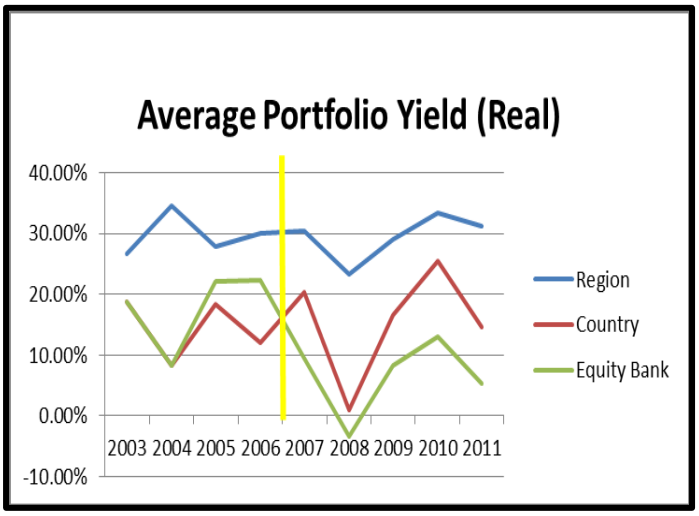

Average Portfolio at Risk (30 Days)- Region
10.00%
9.00%
8.00%
7.00%
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
96 98 00 02 04 06 08 10 12
Profit
Non-Profit
Compartamos Banco

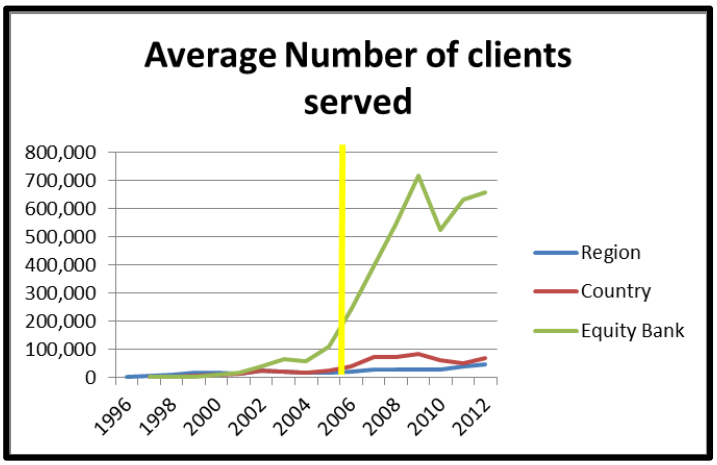
Equity Bank

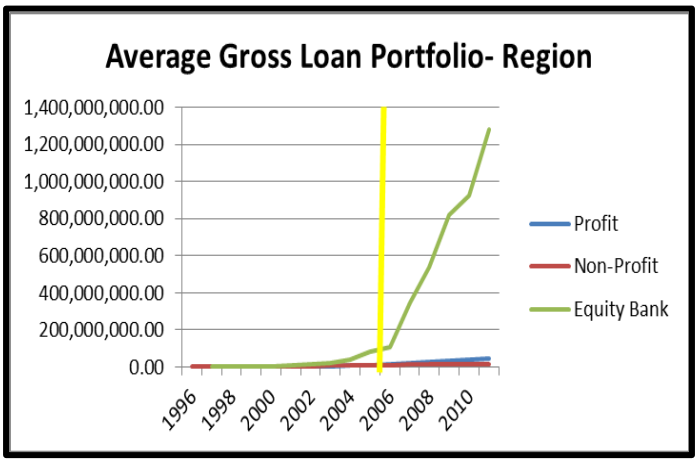

Average Loan Balance per Borrower-Country
4500
4000
3500
3000
2500
2000
1500
1000
500
0
1996 1998 2000 2002 2004 2006 2008 2010
Profit
Non-Profit
Equity Bank

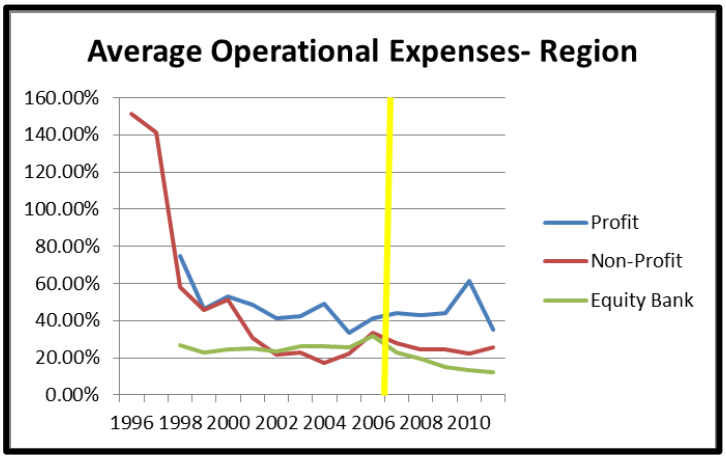

Average Loan Balance per Borrower-Region
5,000.00
4,000.00
3,000.00
2,000.00
1,000.00
0.00
1996 1998 2000 2002 2004 2006 2008 2010
Profit
Non-Profit
Equity Bank

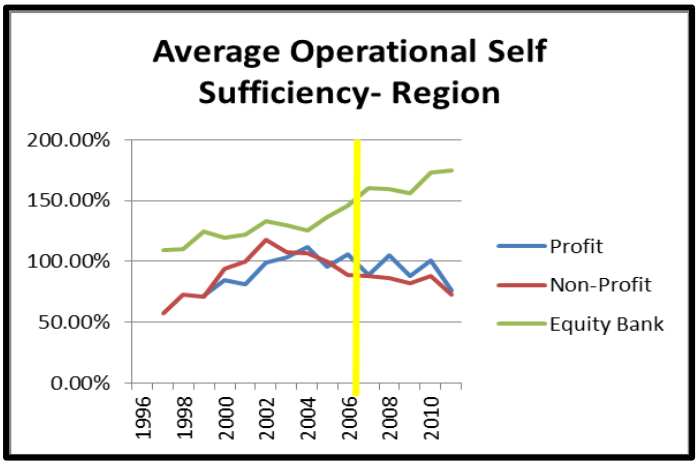

Average Percent of Women Served-Region
120.00%
100.00%
80.00%
60.00%
40.00%
20.00%
0.00%
1996
1998
2000
2002
2004
2006
2008
2010
Profit
Non-Profit
Equity Bank

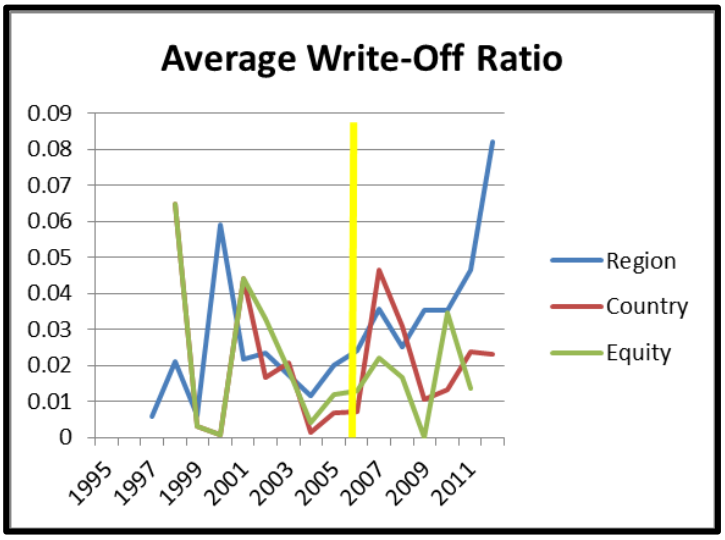

Average Portfolio Yield (Real)
40.00%
30.00%
20.00%
10.00%
0.00%
-10.00%
2003 2004 2005 2006 2007 2008 2009 2010 2011
Region
Country
Equity Bank

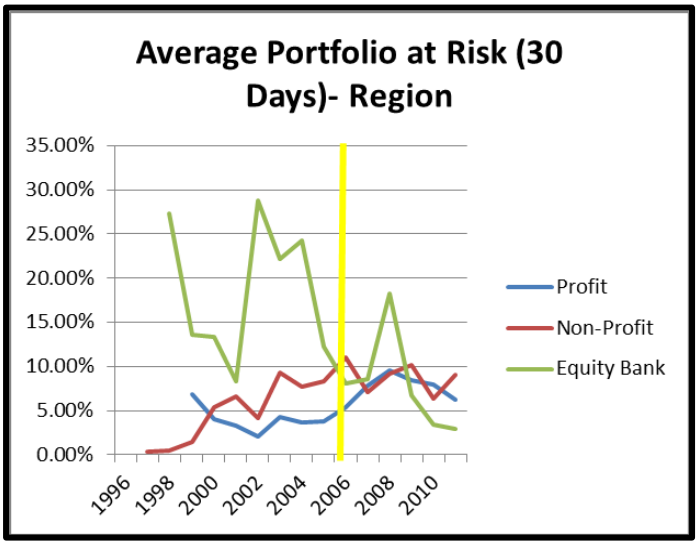

Average Number of clients served
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
1996
1998
2000
2002
2004
2006
2008
2010
2012
Region
Country
Equity Bank


Average Gross Loan Portfolio- Region
1,400,000,000.00
1,200,000,000.00
1,000,000,000.00
800,000,000.00
600,000,000.00
400,000,000.00
200,000,000.00
0.00
1996
1998
2000
2002
2004
2006
2008
2010
Profit
Non-Profit
Equity Bank


Average Operational Expenses- Region
160.00%
140.00%
120.00%
100.00%
80.00%
60.00%
40.00%
20.00%
0.00%
1996 1998 2000 2002 2004 2006 2008 2010
Profit
Non-Profit
Equity Bank


Average Operational Self Sufficiency- Region
200.00%
150.00%
100.00%
50.00%
0.00%
1996
1998
2000
2002
2004
2006
2008
2010
Profit
Non-Profit
Equity Bank


Average Write-Off Ratio
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
1995
1997
1999
2001
2003
2005
2007
2009
2011
Region
Country
Equity


Average Portfolio at Risk (30 Days)- Region
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
1996
1998
2000
2002
2004
2006
2008
2010
Profit
Non-Profit
Equity Bank

REFERENCES

Akula, Vikram. *A Fistful of Rice: My Unexpected Quest to End Poverty through Profitability*. Boston, MA: Harvard Business Review, 2011. Print.

Augsburg, Britta, and Cyril Fouillet. 2010. "Profit Empowerment: The Microfinance Institution's Mission Drift." *Perspectives On Global Development & Technology* 9, no. 3/4: 327-355. *Academic Search Premier*, EBSCO*host* (accessed March 8, 2012).

Bellman, Eric. "IPO Pits Profit vs. Altruism." *The Wall Street Journal: Business*. The Wall Street Journal, 9 July 2010. Web. 5 Dec. 2012.

Carrick-Cagna, Anne-Marie, and Filipe Santos. "Social vs Commercial Enterprises: The Compartamos Debate and the Battle for the Soul of Microfinance." *Insead-The Business School for the World*. N.p., 2009. Web. 19 Mar. 2013.

"CGAP: Advancing Financial Access for the World's Poor." *CGAP*. N.p., 2012. Web. 18 Nov. 2012. <http://www.cgap.org/>.

Chowdhury, Sarahat Salma, and Sifat Adiya Chowdhury. 2011. "Microfinance and Women Empowerment: A Panel Data Analysis Using Evidence from Rural Bangladesh." *International Journal Of Economics & Finance* 3, no. 5: 86-96. *Business Source Complete*, EBSCO*host* (accessed March 8, 2012).

Cull, Robert, Asli Dermiguc-Kunt, and Jonathan Morduch. "Does Regulatory Supervision Curtail Microfinance Profitability and Outreach?" *World Development* 39.6 (2011): 949-65. *Helen*. Web. 1 Dec. 2012.

Cull, Robert, Asli Demirgüç-Kunt, and Jonathan Morduch. "Microfinance Meets the Market." *Journal of Economic Perspectives* 23.1 (2009): 167-92. Print.

Daley-Harris, Sam. *Pathways out of Poverty: Innovations in Microfinance for the Poorest Families*. Bloomfield, CT: Kumarian, 2002. Print.

Downey, K., Conroy, S. (2010). Microfinance: The Impact of Nonprofit and For-Profit Status on Financial Performance and Outreach. *Academy of Economics and Finance* , 37th A

"Equity Bank Reaches Out To The 'Unbanked'." *Euromoney* (2008): 6-7. *Business Source Alumni Edition*. Web. 24 Mar. 2013.

Glisovic, Jasmina, and Henry Gonzalez. "Volume Growth and Valuation Contraction- Global

Microfinance Equity Valuation Survey 2012." *J.P. Morgan Global Social-Finance Research* (2012): 1-22. Print.

Hamam, David M., and Oliver Schwank. "Microfinance: What Role in Africa's Development? Africa Renewal Online." *UN News Center*. UN, Aug. 2011. Web. 15 Nov. 2012. <http://www.un.org/africarenewal/magazine/august-2011/microfinance-what-role-africas-development>.

Khavul, Susanna. 2010. "Microfinance: Creating Opportunities for the Poor?." *Academy Of Management Perspectives* 24, no. 3: 58-72. *Business Source Alumni Edition*, EBSCO*host* (accessed March 8, 2012).

"Kiva." *Kiva*. N.p., n.d. Web. 10 Nov. 2012. <http://www.kiva.org/>.

Ledgerwood, Joanna. *Microfinance Handbook: An Institutional and Financial Perspective*. Washington, D.C.: World Bank, 1999. Print.

Mallick, D. (2012). Microfinance and Moneylender Interest Rate: Evidence from Bangladesh. *World Development, 40*(6), 1181-1189. doi:10.1016/j.worlddev.2011.12.011

Mersland, Roy, and R. Øystein Strøm. "Microfinance Mission Drift?" *World Development* 38.1 (2010): 28-36. Print.

Mersland, Roy, and Reidar Øystein Strøm. "Performance and Trade-offs in Microfinance Organisations—Does Ownership Matter?" *Journal of International Development* 20.5 (2008): 598-612. Print.

Microfinance Gateway Staff. "Microfinance GatewayWhat Does the SKS IPO Mean for Poor People?" *Microfinance GatewayWhat Does the SKS IPO Mean for Poor People?*CGAP, 9 Aug. 2010. Web. 18 Mar. 2013

Morduch, Jonathan, and Mark Schreiner. "Replicating Microfinance in the United States: Opportunities and Challenges." *IDEAS: Economics and Finance Research*. Woodrow Wilson Center Press, 14 May 2001.

Reille, Xavier. "SKS IPO Success and Excess." *CGAP*. CGAP, 11 Aug. 2010. Web. 18 Mar. 2013.

Reno-Weber, Ben. 2008. "MICROFINANCE GOES MAINSTREAM." *Kennedy School Review* 8, 123-128. *Academic Search Premier*, EBSCO*host* (accessed March 8, 2012).

Roberts, Peter W. "The Profit Orientation of Microfinance Institutions and Effective Interest Rates." *World Development* 41 (2012): 120-31. Print.

Salmon, Felix. "Why Yunus Is Right about For-profit Microfinance." Thomson Reuters, 16 Jan. 2011. Web. 23 Nov. 2012. <http://blogs.reuters.com/felix-salmon/2011/01/16/why-yunus-is-right-about-for-profit-microfinance/>.

Sandberg, Joakim. "Mega-interest on Microcredit: Are Lenders Exploiting the Poor?" *Journal of Applied Philosophy* 29.3 (2012): 169-85. Print.

Sriram, M. S. 2012. "The AP Microfinance Crisis 2010: Discipline or Death?." *Vikalpa: The Journal For Decision Makers* 37, no. 4: 113-127. *Business Source Alumni Edition*, EBSCO*host* (accessed February 12, 2013).

Thirani, Neha. "'Yunus Was Right,' SKS Microfinance Founder Says." *New York Times*[New York City] 27 Feb. 2012: n. pag. Print.

World Bank Group. N.p., n.d. Web. 18 Nov. 2012 <http://www.worldbank.org/en/topic/poverty/>.

Yunus, Muhammad, and Alan Jolis. *Banker to the Poor: Micro-lending and the Battle against World Poverty*. New York: PublicAffairs, 1999. Print.