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## Commercial Banks and Microfinance

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## Commercial Banks and Microfinance

### Abstract

In the past 30 years, microfinance has proven to be a viable solution for the alleviation of poverty through international organizations, voluntary work and donations. Today, the challenge facing microfinance institutions is self-sufficiency. Consequently, the integration of microfinance with commercial banks will provide the necessary scale and outreach in making microfinance a self-sufficient and thus long-term solution for the alleviation of poverty. The goal of my research was to observe the role commercial banks play in microfinance and the challenges that these institutions encounter, having to operate in developing countries. In this respect, the study examines the financial data of four commercial microfinance banks: the Grameen Bank (Bangladesh), the Bank of Khyber (Pakistan), Banco Solidario, (Ecuador), Mibanco (Peru). In addition, the study also presents recent findings in the literature on microfinance regarding the effect of different lending types, interest rates and the delicate trade-off between profitability and outreach.

### Keywords

Microfinance, commercialization, banks, Tayyeb Shabbir, Tayyeb, Shabbir, Philosophy Politics & Econ

### Disciplines

Finance

Senior Honors Thesis

# **Commercial Banks and Microfinance**

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Submitted to the Philosophy, Politics and Economics Program at the University of  
Pennsylvania in Partial Fulfillment of the Requirements for Honors.

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May 4th, 2006

Acknowledgments

First of all, I would like to thank Professor Tayyeb Shabbir for always being patient with his time and generous with his advice as he supervised my work. I also greatly appreciate all the help that was offered by the Lippincott library, especially that of Ms. Cynthia Cronin Kardon as I struggled through the data. Finally, I would like to express my gratitude to my family who has always showed support in every step I took in life.

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## I. Introduction

### 1.1 Background: the commercialization of microfinance

Poverty is one of the few challenges that every single country in the world has to deal with and the numbers say it all. According to the World Bank, 2.7 billion people lived on less than \$2 a day in 2001. Despite the difficulties involved in changing this situation, there are solutions and microfinance is one of them. Starting with the Grameen Bank founded by Mohammad Yunus in the 1970s, microfinance represented a method of lending that was to be tailored specifically to the world's poorest populations. Throughout the years, microfinance has proved to be a viable solution for the alleviation of poverty. In fact, nowadays, the industry is facing a new phase in its history: commercialization.

Microfinance was initially a form of voluntary help to the most deprived populations. However today, it also represents a market solution to the mitigation of poverty. The success rates and achievements of microfinance fueled the interest of various institutions, NGOs, banking groups and governments throughout the years and continue to do so. However, in order to accommodate this interest, microfinance needs to become a structured, transparent and regulated industry where everyone can find a role for themselves. Individuals who have been working in microfinance for a long time express their discontent about the commercialization aspect, of the notion of profit entering the field. Nevertheless, the increase in the participation to microfinance, whether it is on behalf of a non-profit organization or a bank, is the only factor that can make a significant change in the alleviation of poverty.

At the present stage, individuals involved in microfinance agree that the demands of the clients of MFIs correspond to services offered by the formal financial sector. In the words of Malcolm Harper and Sukhwinder Singh Arora, this would mean that "Microfinance

institutions are redundant”<sup>1</sup>. What the poor have always needed is the extension of the formal financial sector for their use, what is now being called the commercialization of microfinance. According to Jean-Philippe de Schrevel, founder and Chief Operating Officer of BlueOrchard Finance, “Commercialization is not a goal in itself but a means of ensuring that financial intermediation products or services delivery are efficient”<sup>2</sup>. Indeed, Schrevel suggests that microfinance can be a profitable business with interest rates at market level and a repayment rate of 97% (larger than most commercial banks)<sup>3</sup>. Consequently, I shall argue that commercial banks are the most qualified to provide an extension of financial services to these new clients.

## 1.2 Outline and scope of the study

I will first present the reasons why commercial banks are best able to serve the goal of microfinance. In a subsequent chapter II, I will outline the many ways in which a commercial bank can partake in microfinance, an involvement ranging from a direct participation to an indirect provision of funds. In chapter III, I will examine the barriers to the further development of microfinance, especially institutional challenges but also macroeconomic ones. Later, in chapter IV, I will present a study of profitability and outreach, performed as a World Bank Policy Research Paper. This study seeks answers to the main economic and moral questions that concern the commercialization of microfinance.

In chapter V, I will present my own work concerning the performance of a sample of commercial banks specialized in microfinance. I have first taken a random sample of banks from the database BankScope and I have looked at the “Operating Income”, the “Net

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<sup>1</sup> Harper, Malcom and Arora, Sukhwinder Singh, page 1

<sup>2</sup> De Schrevel, Jean-Philippe, page 8

<sup>3</sup> De Schrevel, Jean-Philippe, page 8, (BlueOrchard Finance s.a. is a microfinance investment consultancy)

Income”, the “Net Interest Revenue”, the “Total Assets”, the “Equity” and, the “Deposits & Short Term Funding” in the last accounting year for 22 banks from around the world. Another set of data I compiled is comprised of a ratio analysis of the sample. The ratios include “Equity / Total Assets”, “Net Interest Margin”, “Return on Average Equity (ROAE)”, “Return on Average Assets (ROAA)”, “Cost to Income” and finally “Liquid Assets / Customer and Short Term Funding”.

The greatest challenge in compiling this information has been to find recent figures about the activities of these banks. Nevertheless, in forming this sample, I was able to use the list of commercial banks specialized in microfinance on “The Mix Market” website. I then searched for the statistics on these banks in the database BankScope: only 22 banks had up to date financial reports and they are the ones to form my sample. In order to examine these banks more closely, I chose to look at the case of four prominent banks in microfinance: the Grameen Bank (Bangladesh), Bank of Khyber (Pakistan), Banco Solidario (Ecuador) and Mibanco (Peru). For these four commercial banks, I made a diachronic comparison of their financial performance (general data and ratios) for each of them for the past four or five years. Furthermore, I also made a synchronic comparison of their last accounting year’s performance with that of the average of the sample.

In chapter VI, I will present the conclusions I have reached with regards to the role of commercial banks in microfinance and also suggest the most probable direction the industry will take in the future. Before I do so, I would like to start the survey with a historical outlook on the microfinance and why states have failed to provide this service.

### 1.3 The failure of state-owned banks to implement microfinance

One strategy that developing countries resorted to for economic growth was agricultural state banks that offered a lower interest rate than the market rates, often very high due to significant inflation. Nevertheless, state owned banks did not succeed in implementing a sustainable microfinance program in developing countries for several reasons. First of all, state-owned banks have eliminated the informal lending resources out of the market. This included friends, relatives, small business that would create a network of financial support. Nevertheless, the most crucial problem arose from the excess demand for loans: individuals, without weighing their financial prospect, resorted to these loans and many of them soon became non-performing loans. Indeed, the capital often became a tool of populist politics by being employed as a means of targeting certain social strata to obtain votes in the upcoming elections.

Also, state-owned banks have destroyed the natural selection mechanism that market interest rates create: if the interest rates had remained at the market level, only the individuals with a strong commitment to their project would have applied for a loan. As a result, the truly needy citizens and the ones with the most reliable profile did not receive any financial aid. This political pressure led to another serious problem which was the forgiving of unpaid loans by these state-owned banks which were continually subsidized by the government: banks did not have an incentive to collect outstanding loans. Consequently, the state-owned banks have eroded the possible financial discipline that could have been instituted in the rural areas.

### 1.4 The need for commercial banks

By definition, commercial banks are banks “that offer a broad range of deposit accounts, including checking, savings, and time deposits, and extend loans to individuals and businesses”<sup>4</sup> and they are well suited to play a role in microfinance for the following reasons. First of all, they are regulated and supervised. Indeed, the sources of capital that are obtained reside in an entity independent from the MFI. This is a very important factor that guarantees the flow of funds to microfinance as it installs trust in donors. Indeed, one of the problems encountered by microfinance institutions is the lack of a systematic control of these organizations. There are very few credit-rating agencies supervising these institutions leading, to difficulties in the procurement of capital. (This problem will be discussed further in part III, which deals with the barriers to microfinance).

A second reason why commercial banks are more suited to provide microfinance concerns the nature of their ownership. In this respect, under a private status, the owner would want to make profit and therefore systematically seek success in their projects. The financial institutions would therefore be strongly committed to the achievement of certain goals, such as financial viability. This point can be considered problematic for some advocates of microfinance from an ethical point of view.

I believe that if changes are to be made for a better financial prospect for everyone, then there needs to be a sense of viability instituted in society: microfinance should be an ordinary service that everyone has a right to access. Nevertheless, this is not to suggest that there is no room for both non-profit voluntary help and commercial banks in microfinance to coexist. Poverty is at such levels today that many individuals around the world struggle to find water and food every day of their life: such sufferings can only be mitigated through voluntary help

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<sup>4</sup> [www.countrystudies.us](http://www.countrystudies.us)

that is most urgently needed. In this respect, microfinance represents a subsequent level of help, a stage of integration for the deprived populations, a phase of adaptation to the norms of society with respect to basic needs and a means of becoming self-sufficient.

Thirdly, banks can offer a wider range of financial services to the poor, a trend that can already be observed in the goal of MFIs today. Another reason concerns the volume of capital they are able to attain. Commercial banks have a wide network for getting funds and can consequently increase the loan numbers offered or the size. Furthermore, through their branches, they can facilitate the access to their services through more efficient transactions and thus allow a better supervision of loans and projects.

From the perspective of the bank, microfinance appears as an advantage primarily as a means to diversify their capital. However, the most important reward for the bank is the creation of mainstream bank customers in a few generations: banks can increase profits by catering to a larger number of clients around the world. One such example is the case of BRI (Bank Rakyat Indonesia), a commercial bank offering microfinance services. BRI has experienced a significant growth due to its large savings mobilization from its microfinance clients and was able to use this source to subsidize its commercial loans division during the economic crisis in Indonesia in 1998.<sup>5</sup> Finally, another advantage for a bank involved in microfinance is the reinforcement of its public image: engaging in the alleviation of poverty will build more trust for the bank in the formal financial sector.

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<sup>5</sup> Campion, Anita, page 61

## II. The role of banks in microfinance

Commercial banks can engage in microfinance in many different ways, ranging from direct relations with borrowers to a more indirect participation through the raising of capital.

### 2.1 Direct lending

Firstly, banks can directly lend to micro entrepreneurs. Usually, a participation of this sort is observed in banks founded with the aim of solely serving the microfinance sector. The pioneer in this field is the Grameen Bank founded by Muhammad Yunus in 1976, with the sole goal of helping the impoverished through the provision of small loans to a group of borrowers. Group lending consists of the attribution of a loan to each person in the group, but the loans are not renewed to anyone in the group if ever one borrower defaults on the loan. Consequently, through social pressure, the group lending method gives individuals incentives to be financially disciplined and to repay their loans. Another example is the ProCredit group which provides loans to small and medium-sized enterprises through its 19 development oriented banks in Africa, Europe and Latin-American.

### 2.2 A microfinance subsidiary

Secondly, banks may choose to separate their microfinance operations through the creation of a new subsidiary. Primarily, such subdivisions can help banks mitigate the levels of risks associated with lending to the poor. Nevertheless, it can also be seen as a necessary step for banks providing both consumer finance and microfinance, as each sector requires a different approach to business and a distinct training of the employees. Furthermore, from the perspective of the borrower, separating the microfinance services from the consumer finances might generate more trust and acknowledgement of the bank's commitment to the goal of

reducing poverty. In this respect, Sogesol is the microfinance subsidiary of the commercial bank Sogebank, the largest commercial bank in Haiti. The many years of experience of Sogebank, bring some important advantages to Sogesol. The loans that originate from the microfinance subsidiary can be repaid through the branches of Sogebank. Furthermore, the parent company also provides other types of support to Sogesol such as human resources, legal affairs, auditing and marketing.

### 2.3 Partnership with a microfinance institution

Thirdly, banks can build partnerships with microfinance institutions. Banks can lend to microfinance institutions in the form of wholesale banking, and in turn, MFIs can employ the capital to lend to the poor. In the partnership, the bank usually provides the loan funds, the technology and evaluates the pricing and the levels of risk involved with the loans. On the other hand, the MFIs undertake the origination, monitoring and collection of the loan. Indeed, there are a lot of advantages for MFIs in engaging in partnerships with banks. With the greater amount of capital comes the increase in loan sizes, and the more branches a bank has, the greater the outreach achieved through geographical expansion.

Furthermore, the bank's personnel can also provide mentoring to MFIs in terms of improving the operational efficiencies of the organization and making it aware of standardized international practices in the world of finances if the bank has reached such a standard. One such example is the case of ICICI Bank in India which currently has partnerships with 72 MFIs throughout the country and aims to increase the number of its alliances to 200 by 2010. This kind of partnership can be the most beneficial and efficient for both the bank and the MFI.

#### 2.4 A microfinance fund: securitization

Fourthly, commercial banks can raise funds in domestic or international capital markets for the lending operations of microfinance institutions. These funds can be raised in the form of bonds in domestic markets such as the Mibanco bond of \$6 million issued in December 2002. Mibanco (Banco de la Microempresa S.A), a private bank established in 1992 in Peru, is seeking to diversify its funding sources through such bonds. Lucy Conger, in her article “To Market, To Market” suggests that these bonds are being bought by high net worth individuals or institutional investors, which suggests that microfinance is slowly becoming an integral part of the formal financial system. One role, large banking groups can play in microfinance was exemplified by Citigroup which placed and sold the Mibanco bond through a “Dutch auction”. Currently large commercial banks such as Citigroup, Deutsche Bank and Rabo bank have microfinance funds that provide capital to MFIs.

Deutsche Bank is involved in microfinance through the Deutsche Bank Microfinance Development Fund (DB MDF). The bank’s strategy is “to encourage and establish relationships between local commercial financial institutions and MFIs by providing high-risk catalytic funds as collateral for leveraged loans from local financial institutions.”<sup>6</sup> The fund makes loans with “very low-cost financing (1 percent to 3 percent a year) with maturities of one to five year”<sup>7</sup> to the MFI which earns market interest rates on this deposit in US dollars. The institution obtains the equivalent sum in the local currency which can then be lent out to micro-entrepreneurs. Indeed, the loans “may not be used as working capital or as

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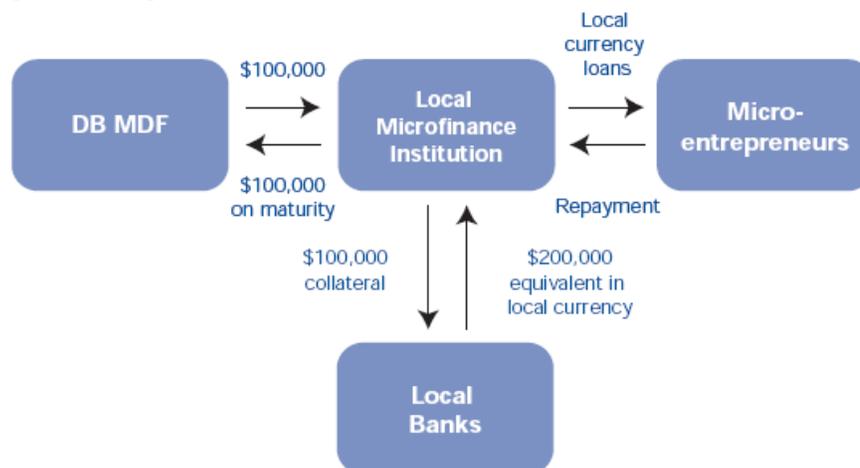
<sup>6</sup> Deutsche Bank Microcredit Development Fund, Report of Activities, page 2

<sup>7</sup> Deutsche Bank Microcredit Development Fund, Report of Activities, page 2

funds for direct lending”<sup>8</sup>. Consequently, the capital provided by Deutsche bank becomes a form of collateral for the MFI, a form of securitization.

### “A Typical DB MDF Loan Structure”<sup>9</sup>

- Loan size \$100,000
- 2% annual interest rate
- Quarterly interest payment in USD
- 3- to 5-year maturity



## III. Barriers to microfinance

### 3.1 The cultural dimension

Although microfinance appears as a viable solution to alleviate poverty around the world, certain issues generate strong barriers to the development of the industry. On the least

<sup>8</sup> Deutsche Bank Microcredit Development Fund, Report of Activities, page 2

<sup>9</sup> Deutsche Bank Microcredit Development Fund, Report of Activities, page 3

technical side, providers of microfinance need to overcome the skepticism of the poor, trapped in poverty cycles for generations: microfinance needs to be explained thoroughly to these new clients and advertised to microbusinesses. Furthermore, international institutions involved in microfinance need to express a careful understanding of the local cultures in order to gain the trust of the poor population, often isolated from the rest of the world.

### 3.2 Macroeconomic and bureaucratic impediments

From the perspective of the supplier of funds, the uncertainty in the economics and politics of the developing world, where local conditions change rapidly, comprise a major risk factor. For this reason, investors will be reluctant to provide capital and MFIs will have difficulties in financing their loans. Another problem arises from the ceilings on interest rates imposed by governments: microfinance institutions find themselves in a tension between the willingness to achieve financial self-sufficiency through higher interest rates in order to provide better services and the limits imposed on their capacity to develop through the low interest rates. Nevertheless, studies show that when interest rates go above a certain threshold, it lowers the incentive to borrow money. (Please refer to part IV for more information). Another barrier to microfinance is formed by judiciary problems where the lender of capital has to face the difficulty of enforcing contracts under a weak legal system, which is often the case in developing countries.

For commercial institutions, the most important issue comes from the lack of information on the poor: banks cannot rely on formal records of the citizen such as a credit history and will therefore face more risks. Furthermore, it is very hard for banks to verify if an honest effort has been invested in the project that is undertaken with the loan. As a matter of fact, these

problems show that in order to assess the credibility of clients, commercial banks need the experience of MFIs which sometimes have to resort to different methods of evaluation such as social relations and human psychology.

### 3.3 The lack of credit rating agencies

Credit rating in the field of microfinance is a deficiency the industry as a whole suffers from. It is essential for MFIs to work with big auditing and rating firms in order to secure better funding, to establish the trust of the capital suppliers and to be able to access other market mechanisms. Getting a rating can be costly for smaller MFIs. Nevertheless, funds for ratings can be obtained through for example the grants offered by the World Bank led consortium.<sup>10</sup> Five rating agencies that were approved by this consortium are Microrate, Pacific Credit Rating, Apoyo y Asociados, Equilibrium and Standard & Poor's. Generally, MFIs first seek to be rated by a domestic rating agency and then get a second evaluation by an international organization such as Standard & Poor's.

### 3.4 Challenges for commercial banks

There are also drawbacks to having commercial banks in microfinance. The first point that comes to mind is their degree of commitment to the cause involved behind this financial service. Commercial banks also need to address their microfinance customers with a different approach than the formal market financial methodology. In this respect, for issues such as their assessment of the client's risk level and communications methods, the bank is mostly going to rely on the approach of the employee, for whom the understanding of the local culture and traditions is going to be crucial. Consequently, providing microfinance as

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<sup>10</sup> Conger, Lucy, page 25

commercial banks requires the institutions to educate its staff towards the specificities of the client.

According to Anita Campion<sup>11</sup>, the main challenges that the commercialization of microfinance has to face include the donor subsidies, poor regulation and supervision, and limited management capacity of microfinance institutions.

Campion suggests that one of the greatest impediments to the commercialization phase appears as the subsidies that are continually directed towards the industry by the donors. Indeed, such grants are needed at the beginning of the process, at the start of a new microfinance institution in order to provide for the initial capital. Furthermore, such donor subsidies can also be used in research projects by the MFIs. Nevertheless, these grants do not allow the institution to reach a self-sufficient and efficient level if they are continually provided: they disrupt the expected financial interaction within the industry's market mechanisms. Consequently, the role of the donors is unclear with regards to the mature period of a microfinance institution.

Secondly, poor regulation and supervision of MFIs is an important problem as most of the countries needing such forms of support are unable to oversee and control the formal financial system. The core of the problem is the lack of understanding on behalf of the supervisors, of the differences between the traditional financial system and microfinance. In the microfinance industry, this includes a lower capital requirement, a waiver of usury rates,

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<sup>11</sup> Anita Campion is a Senior Manager at Chemonics International, a global consulting firm promoting economic growth and higher living standards in developing countries.

a different risk weighing of assets for unsecured loans, higher operational costs, and requirement for a customized reporting (different types of documentation).

Thirdly, MFIs have a limited management capacity and their background explains why. Most of them were NGOs with a goal to reduce poverty through the provision of capital, the initial stage of the microfinance industry. Over time, some of them became financial institutions as the needs of the clients evolved. However, these MFIs do not have the capacity and the experience to be part of the commercial financial system and therefore need management capacities in many different areas such as risk management, management of information and internal control, marketing and customer responsiveness and human resources development in order to minimize the transaction costs involved with each individual. Furthermore, these MFIs also have to face institutional inefficiencies in order to achieve financial self-sufficiency and attract more commercial capital. This may include the exploration of new technologies and a better system of accounting for expenses.

Furthermore, microfinance in rural areas has had more difficulties than in urban areas according to Campion. In this respect, rural banks must engage in microfinance by understanding the local agricultural facts such as the crop cycle, the revenues and expenditures affected by the seasonal fluctuations etc. If these factors are carefully observed, studies have shown that rural banks can also be financially self-sufficient and even profit-making. Indeed, the rural finance market is becoming an attractive new venture for banks in the face of profitable lending and stable savings.

Another point to notice is the need for MFIs to provide for savings to their clients. Nevertheless, most MFIs being NGOs, it is hard for them to offer this service as they are not regulated financial institutions most of the time. In this respect, commercial and microfinance oriented banks can play an important role. Indeed, Bank Rakyat Indonesia (BRI) has experienced a significant growth due to its large savings mobilization and has also used this microfinance source to stabilize its commercial loans division during the economic crisis in Indonesia.

Consequently, the commercialization of microfinance has to face several obstacles. The most important of all of them is the role that donor subsidies are going to play in the process. In this respect, they should limit their financial involvement in providing capital to the initial stages of the microfinance institution. In the later stages, they can help formalize the industry by funding for technology, technical training, regulations (credit bureaus) and information support systems. They should move away from direct subsidies and be involved in the enforcement of the industry.

#### IV. A study of profitability and outreach

A World Bank Policy Research Working Paper, “Financial Performance and Outreach: A Global Analysis of Leading Microbanks” by Cull, Demirgüç-Kunt and Morduch, investigates the reason why high repayment rates observed in microfinance are not always translated into profitability and thus self-sufficiency for institutions. The reason behind this phenomenon is the effect of different lending methods according to the authors who have looked at statistics

for 124 MFIs (the data was obtained from [www.mixmarket.org](http://www.mixmarket.org)). Although over half of these institutions were profitable, 20% of the sample was still subsidized. Individual, solidarity group and village type lending methods were the ones considered in this research.

Table 1: Subsidized Share of Funding <sup>12</sup>

	<b>Mean</b>	<b>Standard deviation</b>
Sample average	21.4%	29.3%
<i>By Lending Type</i>		
Individual-Based (n=56)	11.0	17.9
Solidarity Group (n=48)	27.7	37.3
Village Banks (n=20)	35.5	23.6
<i>By Profit Status</i>		
For-profit (n=28)	6.6	14.9
Not-for-profit (n=90)	26.2	31.6

#### 4.1 Lending types: individual, group and village

Individual-based lending “draws on traditional banking practices and involves a standard bilateral relationship between the bank and customer”<sup>13</sup>. It is mostly predominant in East Asia and the Pacific. This method appears as the most vulnerable one to weak enforcement policies and information asymmetries. Only for this type of lending the authors observe a positive return on assets. Furthermore, less than half of the customers are women. The authors have found that as the interest rate rises above the threshold of 60%, it generates lower profits in this category. Furthermore, increasing the investments on the workforce

<sup>12</sup> Cull, Robert; Demirgüç-Kunt, Asli and Morduch, Jonathan, page 36

<sup>13</sup> Cull, Robert; Demirgüç-Kunt, Asli and Morduch, Jonathan, page 5

increase the profits as the lender cannot rely on the client for information. In general, individual-based lending is practiced for larger loans (\$1220 on average) and therefore with less severe poverty levels. Furthermore, this method has proven to help MFIs become financially self-sufficient. The authors found that labor costs are associated with higher profitability with this method of lending as borrowers would receive larger loans once they are identified as reliable customers.

Group lending, initially employed by the Grameen Bank, is comprised of the voluntary gathering of several individuals who then “assume a joint liability for the repayment of the loans given to the group members.”<sup>14</sup> Group lending is practiced for individuals under more severe poverty situations (average loan size \$431) as opposed to individual-based lending and therefore costs are relatively higher than for individual-based lending. Furthermore the majority of the customers for group lending are formed by women. Some form of group lending is the most frequently observed lending method in South Asia and Sub-Saharan Africa.

The third lending method, village banking, is a form of group lending where “each branch forms a single, large group and is given a degree of self-governance<sup>15</sup>”. They make the smallest loans in size (\$149 on average); they charge the highest interest rates and face the highest average costs according to the survey. Village banks are the least profitable lending type as they serve the poorest and their customers are largely women. Village banks are the lending method to be comprised of the highest share of subsidies in their capital (over 30%).

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<sup>14</sup> Cull, Robert; Demirgüç-Kunt, Asli and Morduch, Jonathan, page 4

<sup>15</sup> Cull, Robert; Demirgüç-Kunt, Asli and Morduch, Jonathan, page 10

Indeed, the authors observe that the higher the share of subsidies for a MFI, the lower the profitability.

Table 2: Summary Statistics by Lending Type<sup>16</sup>

	Individual Lenders		Solidarity Lenders		Village Bank Lenders	
	Mean	Stdrd. Dev.	Mean	Stdrd. Dev.	Mean	Stdrd. Dev.
Financial Self-Sufficiency	1.11	0.29	0.98	0.32	0.95	0.47
Operational Self-Sufficiency	1.23	0.28	1.12	0.35	1.09	0.75
Return on Assets adjusted	0.01	0.08	-0.05	0.24	-0.08	0.22
Average Loan Size to GNP per capita	1.01	1.10	0.54	0.52	0.20	0.17
Age	11.12	8.67	8.60	5.85	6.95	3.71
Size of MFI Indicator	2.23	0.67	2.00	0.72	1.60	0.60
For-Profit Status	0.29	0.46	0.26	0.44	0.00	0.00
Real Gross Portfolio Yield	0.31	0.16	0.33	0.14	0.54	0.31
Capital Costs to Assets	2.43	8.62	34.64	126.94	24.07	72.03
Labor Costs to Assets	1.34	4.07	37.13	123.29	22.04	58.09
Loans to Assets	0.70	0.17	0.71	0.20	0.60	0.17
Donations to Loan Portfolio	0.02	0.06	0.17	0.43	0.30	0.47
Average Loan Size to GNP per capita of the poorest 20%	4.80	4.92	1.63	1.97	0.63	0.39
Average Loan Size (USD)	1220.23	1184.51	430.98	499.56	148.69	126.61
Women Borrowers	0.46	0.16	0.75	0.24	0.88	0.21
Portfolio Risk	0.04	0.04	0.03	0.05	0.03	0.04

Table 3: MFI Lending Style by Region<sup>17</sup>

	Individual	Solidarity	Village Bank	Total
East Asia and Pacific	7	4	0	11
Eastern Europe and Central Asia	8	11	2	21
Latin America	32	10	8	50
Middle East and North Africa	3	3	3	9
South Asia	1	9	2	12
Sub-Saharan Africa	5	11	5	21
Total	56	48	20	124

#### 4.2 Relation between rising interest rates, and repayment rates and profitability

The first question the paper investigates is the relation between rising interest rates and, repayment rates and profitability. With respect to individual lenders, they are more profit

<sup>16</sup> Cull, Robert; Demirgüç-Kunt, Asli and Morduch, Jonathan, page 35

<sup>17</sup> Cull, Robert; Demirgüç-Kunt, Asli and Morduch, Jonathan, page 34

generating with higher interest rates. Nevertheless, this profitability only exists up to a certain level of interest rate where beyond, the demand for loans decreases. In this sample, the individual-based lenders with the highest interest rates enjoy better repayment performances than for lower interest rates. Contrary to this, increasing interest rates result in poorer performances for solidarity groups.

Another observation was the effect of higher labor costs, as a fraction of total assets, on the lending methods. In this respect, individual-based lenders have experienced higher profitability levels: as the loan size grows, the lenders have to pay more attention to risk mitigation. Nevertheless, no significant correlation was observed with solidarity groups. In terms of the rates of non-repayment with higher interest rates, the authors find that this observation only holds for individual-based lenders. Consequently, raising interest rates result in an improved financial performance only for individual-based lenders and tend to be more profitable at high rates. Nevertheless, for the group lending and village banking, the authors did not observe a significant relation between higher interest rates versus repayment rates and profitability. For most group lending, the opposite of individual-based lending is true: their financial performances diminishes with higher interest rates.

#### 4.3 Trade-off between depth of outreach to the poor and profitability

Secondly, the authors investigated the trade-off between the depth of outreach to the poor and profitability. Their main conclusion is that achieving profitability and greater outreach to the poor is possible. Larger loan sizes are associated with lower average costs for individual and solidarity group lenders. Although larger loan could imply and lower outreach level to

the poor, it represents a betterment of welfare in general. Furthermore, institutions that make smaller loans were not found to be less profitable than other larger loan institutions.

#### 4.4 The possibilities of a mission drift

Finally, the paper investigates the possibilities of a mission drift “a shift in the composition of new clients, or a reorientation from poorer to wealthier clients among existing ones”<sup>18</sup> and concludes that there is not enough evidence to show such a development. Nevertheless the study shows that gender can be an issue. Individual-based lenders with lower average loan size lend more to women. The authors also found that larger microbanks tend to give out larger loans and to men more frequently than to women, suggesting that bigger size implies less outreach but more profitability. Mission drift on the other hand is a minor concern for group lender and village banks as such correlations were not observed for these methods. Nevertheless, with larger loans by individual and group lender tend not to reach women. The authors conclude these are insufficient to prove mission drift but do express the willingness of the institutions as they grow, to cater to customers able to manage larger loans.

#### Table 4: Summary of Mission Drift Result<sup>19</sup>

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<sup>18</sup> Cull, Robert; Demirgüç-Kunt, Asli and Morduch, Jonathan, page 23

<sup>19</sup> Cull, Robert; Demirgüç-Kunt, Asli and Morduch, Jonathan, page 42

	<b>Association with Size of Loans (significance)</b>	<b>Association with Proportion of Loans to Women (significance)</b>
<b><i>Individual-Based Lenders</i></b>		
Increases in:		
Age of firm	Larger (5%)	No significant relation
Size of firm	Larger (10%)	Lower (5%)
Financial Self-Sufficiency	Smaller (5%)	Higher (5%)
<b><i>Solidarity Group Lenders</i></b>		
Increases in:		
Age of firm	No significant relation	No significant relation
Size of firm	Larger (1%)	Lower (1%)
Financial Self-Sufficiency	No significant relation	Higher (5%)
<b><i>Village Banks</i></b>		
Increases in:		
Age of firm	No significant relation	No significant relation
Size of firm	No significant relation	No significant relation
Financial Self-Sufficiency	No significant relation	No significant relation

## V. Analysis of data: the performance of several microfinance banks

### 5.1 Sample Statistics: commercial banks specialized in microfinance

In order to evaluate the performance of banks specialized in microfinance, I took a sample of banks from the database BankScope. The sample is comprised of 22 banks from around the world for which the range of Total Assets spans from USD 6 million to USD 554 million in the last accounting year. Other available data include, the “Operating Income”, the “Net Income”, the “Net Interest Revenue”, “Equity” and “Deposits & Short Term funding”.

With respect to ratios, the first one is “Equity/ Total Assets”. It is a measure of the capital adequacy of a bank. It shows the role of equity within the financing structure of the bank.

Secondly, the “Net Interest Margin” is computed by dividing “Net Interest Income” by “Total Earning Assets”. It is an indicator of the profitability of the bank.

The third, ratio is the ROAE (Return on Average Equity) which is also a metric of profitability. The ratio is calculated by dividing annual “Net Income” by “Average Equity”, average amount of deployed capital.

The fourth ratio is the ROAA (Return on Average Assets), another metric of profitability. It shows how efficient the bank was at generating earnings from its assets. It is computed by dividing “Net Income” by “Total Assets”.

The next ratio is “Cost to Income” which is also a profitability and efficiency measure for a bank where “Operating Expenses” are divided by “Operating Income”.

The last ratio, which expresses the liquidity of the assets of the bank, is “Liquid Assets / Customer and Short Term Funding”.

The following two tables present a synchronic analysis of the 22 banks. In the next section, I will present a diachronic and synchronic approach to the performance of four banks: the Grameen Bank, the Bank of Khyber, Banco Solidario and Mibanco. For each bank, I will first look at some of the general data over time and compare the last accounting year to the sample of the 22 banks. I will then proceed in the same way for the analysis of the ratio: I will first present a diachronic observation of the ratios and then compare the ratio from the last accounting year to that of the ratios of the sample of 22 banks.

Sample of Banks Specialized in Microfinance: Data in Millions USD (Source: Bankscope)

Bank Name	Country	Accounting Year	Operating Income	Net Income	Net Interest Revenue	Total Assets	Equity	Deposits & Short term funding
ACBA Bank-Agricultural Cooperative Bank of Armenia	AM	2005	8	2	6	79	16	55
Aclecia Bank Ltd	KH	2004	15	2	13	84	17	50
Banco Los Andes ProCredit SA	BO	2004	16	2	15	138	15	117
Banco Solidario	EC	2005	47	3	10	298	24	218
Banco de Desarrollo Ademi SA	DO	2004	15	5	13	91	10	49
Banco de la Gente Emprendedora CA - BANGENTE	VE	2005	5	0	2	30	4	23
BancoSol-Banco Solidario	BO	2005	23	4	20	175	20	147
Bank of Khyber	PK	2004	14	4	12	403	31	339
CARD Bank, Inc., A Microfinance-Oriented Rural Bank	PH	2004	2	0	2	6	1	4
Grameen Bank	BD	2004	51	7	31	554	127	418
K-REP Bank	KE	2004	5	1	4	35	10	21
Mibanco - Banco de la Micro Empresa SA	PE	2005	55	13	54	254	43	198
NovoBanco S.A.R.L	MZ	2004	4	0	3	11	4	6
Opportunity Bank A.D, Podgorica	CS	2004	6	1	5	35	11	11
ProCredit Bank (Albania) Sh.A	AL	2005	19	3	18	225	21	191
ProCredit Bank (Bosnia & Herzegovina)	BA	2005	13	1	12	121	14	55
ProCredit Bank (Bulgaria) AD	BG	2004	21	4	18	245	29	123
ProCredit Bank Serbia	CS	2004	20	2	15	232	23	150
ProCredit Bank Ukraine	UA	2004	14	2	11	134	17	49
TEBA Bank Limited	ZA	2005	67	9	41	362	94	250
MAXIMUM			67	13	54	554	127	418
MINIMUM			2	0	2	6	1	4
TOTAL			420	65	305	3512	531	2474
AVERAGE			39.5217391	6.2173913	28.956522	329.73913	51.73913	233.4782609
STANDARD DEVIATION			18.7392074	3.2585919	13.26997	146.68383	30.841658	116.2443434

Sample of Banks Specialized in Microfinance: Ratios (Source: Bankscope)

Bank Name	Country	Equity / Total Assets	Net Interest Margin	Return on Average Equity (ROAE)	Return on Average Assets (ROAA)	Cost to Income Ratio	Liquid Assets / Cust & ST Funding
ACBA Bank-Agricultural Cooperative Bank of Armenia	AM	20.28	10.79	15.18	3.36	57.87	47.7
Aclea Bank Ltd	KH	20.46	23.65	12.53	3.13	78.7	27.08
Banco Los Andes ProCredit SA	BO	10.74	14.01	12.12	1.42	79.77	15.04
Banco Solidario	EC	8	3.87	14.38	1.16	78.68	17.9
Banco de Desarrollo Ademi SA	DO	11.15	19.71	50.42	6.16	65.45	41.17
Banco de la Gente Emprendedora CA - BANGENTE	VE	14.01	11.08	4.68	0.77	78.49	n.a.
BancoSol-Banco Solidario	BO	11.41	13.92	22.29	2.75	61.68	16.32
Bank of Khyber	PK	7.65	3.84	15.31	1.21	36.04	32.8
CARD Bank, Inc., A Microfinance-Oriented Rural Bank	PH	23.12	25.07	10.98	1.9	39.24	17.58
Grameen Bank	BD	22.85	7.39	5.3	1.39	53.71	31.56
K-REP Bank	KE	27.94	15.22	10.5	3.11	70.36	28.96
Mibanco - Banco de la Micro Empresa SA	PE	16.84	29.46	33.19	6.34	57.94	12.06
NovoBanco SARL	MZ	36.34	55.56	5.06	2.04	88.33	26.06
Opportunity Bank A.D. Podgorica	CS	31.4	19.46	9.66	3.26	65.85	18.29
ProCredit Bank (Albania) Sh.A	AL	9.39	10.42	16.43	1.59	59.6	5.01
ProCredit Bank (Bosnia & Herzegovina)	BA	11.43	14.28	10.07	1.3	81.82	32.9
ProCredit Bank (Bulgaria) AD	BG	11.99	9.98	17.03	2.16	64.31	4.76
ProCredit Bank Serbia	CS	9.89	9.22	12.12	1.22	92.98	5.75
ProCredit Bank Ukraine	UA	12.51	12.08	9.43	1.46	77.37	13.47
TEBA Bank Limited	ZA	25.88	12.26	9.71	2.49	75.77	7.17
MAXIMUM		36.34	55.56	50.42	6.34	92.98	32.9
MINIMUM		7.65	3.84	4.68	0.77	36.04	4.76
AVERAGE		17.164	16.0635	14.8195	2.411	68.198	21.13578947
STANDARD DEVIATION		8.399869297	11.4424079	10.5505033	1.533108	14.95648	10.67077711

## 5.2 The Grameen Bank, Bangladesh

Grameen Bank: General Data (Source: BankScope)

	2004	2003	2002	2001
	th USD	th USD	th USD	th USD
<b>Operating Income</b>	51243	42072	n.a.	37569
<b>Net Income</b>	6,949	6,082	n.a.	1,026
<b>Net Interest Revenue</b>	31,390	27,881	n.a.	35,318
<b>Total Assets</b>	554,031	463,950	390,366	347,035
<b>Equity</b>	126,602	140,077	99,639	36,747
<b>Deposits &amp; Short term funding</b>	417,720	321,850	290,190	306,637

The Grameen Bank has been the pioneer in microfinance since its creation in 1976. The latest data from BankScope show that “Total Assets”, “Equity” and “Net Income” have increased from 2001 to 2004, although there was a slight decrease for “Equity” in 2004. We can also see that the “Operating Income” has increased throughout the four years. Furthermore, we can see that the general trend in the “Net Interest Revenue” has been a decrease since 2001. Finally, “Deposits & Short term funding” has generally increased over the four years. Consequently, as the “Net Interest Revenue” has decreased, the bank must have resorted to other sources of financing such as the increase in “Deposits & Short term funding”.

In comparing the Grameen Bank’s performance in 2004 to its peers in the sample, we can see that it has a “Net Income” of USD 7 million, higher than the average USD 5.96 million. The same is true for its “Interest Revenue”, USD 31 million, whereas the average is USD 27.67 million. The Grameen Bank has the highest “Total Assets” in the group, USD 554 million and the highest “Deposits & Short term funding”, USD 418 million.

Grameen Bank: Ratios (Source: BankScope)

2004	2003	2002	2001
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<b>Capital</b>				
<b>Equity / Total Assets</b>	22.85	30.19	25.53	10.59
<b>Operations</b>				
<b>Net Interest Margin</b>	7.39	8.07	n.a.	12.18
<b>Return On Average Assets (ROAA)</b>	1.39	1.43	n.a.	0.3
<b>Return On Average Equity (ROAE)</b>	5.3	5.11	n.a.	2.79
<b>Cost To Income Ratio</b>	53.71	61.45	n.a.	63.77
<b>Liquidity</b>				
<b>Liquid Assets / Cust &amp; ST Funding</b>	31.56	31.21	26.47	31.81

With respect to the ratios, the first one, “Equity / Total Assets” show us that the share of assets financed by equity has been irregular although the general trend has been an increase from 2001 to 2004. The “Net Interest Margin” computed by interest income over the earnings assets, exhibits a decreasing share of the interest income in the earnings from the assets. Indeed, as the “Net Interest Revenue” has also been decreasing since 2001, this could suggest that the bank has to rely on other sources of income for its operations and thus had to suffer a decrease in self-sufficiency over the past few years. On the positive side, the ROAA and ROAE have generally increased from 2001 to 2004.

A higher ROAA suggests a more efficient use of the bank’s assets to generate income. Nevertheless, an increase in the ROAE could signal an increase of financing through debt. The ROAE is computed by as follows:  $ROAE = \text{Net Income} / \text{Stockholders' Equity}$ . We know that assets equal to the sum of stockholders’ equity and liabilities. In other words, stockholders’ equity equals assets minus liabilities. Consequently, if the ROAE is increasing, either “Net Income” is increasing or “Stockholders’ Equity” decreasing. If it is the later, that would mean an increase in liabilities. From the previous table, we have seen that the “Net Income” has increased over the four years. Nevertheless, the bank’s reliance on debt has probably increased too as the “Net Interest Revenue” has decreased. In addition, the “Cost to Income” ratio has decreased since 2001. Finally, “Liquid Assets / Cust & ST funding” ratio

has been fairly stable over the four years, implying that the bank was able to maintain, if not increase the number of loans given to customers.

Doing a synchronic comparison with the sample of banks, we can see that the bank's "Equity / Total Assets" ratio is very close to the average. Nevertheless, for "Liquid Assets / Cust & ST funding" ratio is one standard deviation above the mean, very close to the maximum of the sample. With respect to the operations ratios, the bank is significantly lower than the average for the ROAE and the ROAA, suggesting that the bank has room to improve its efficiency compared to other banks. Furthermore, the "Net Interest Margin" is also lower than the mean. We can see that the "Cost to Income Ratio" is significantly lower than the average, more than one standard deviation away, thus showing that the bank is relatively profitable. Lastly, the "Liquid Assets / Cust & ST funding" ratio is close to the highest of the sample, suggesting that the bank is more able to fund projects and give out loans than its peers.

### **5.3 The Bank of Khyber, Pakistan**

Bank of Khyber: General Data (Source: BankScope)

	2004	2003	2002	2001	2000
	th USD				
<b>Operating Income</b>	13,683	16,461	11,522	7,611	6,094
<b>Net Income</b>	4,381	5,324	2,417	3,795	-2,712
<b>Net Interest Revenue</b>	12,381	15,328	-2,716	-3,220	-2,359
<b>Total Assets</b>	402,853	331,948	321,911	283,070	264,626
<b>Equity</b>	30,812	27,313	21,492	18,346	10,951
<b>Deposits &amp; Short term funding</b>	338,516	287,066	265,084	244,570	235,375

In terms of the general data, the “Operating Income” and the “Net Income” have increased throughout the five years for the Bank of Khyber. Although the “Net Interest Revenue” was up to \$15,328,000 in 2003 from the negatives in 2000 and 2001, the bank saw a decrease in 2004 down to \$ 12,381,000. In terms of the “Total Assets”, the bank was able to increase it significantly throughout the years. We can also see that the general trend for the “Deposits & Short term funding” was an overall increase until 2004.

In terms of comparing the bank to the sample, we can see that it has a significantly lower “Operating Income” and “Net Income”. This is also true for its “Net Interest Revenue” where the average is \$27,670,000. The bank has the second largest “Total Assets” and is fairly close to the average in the amount of “Equity”. Finally, its “Deposits & Short term funding”, \$339,000,000, is significantly above the average \$223,708,400.

Bank of Khyber: Ratios (Source: BankScope)

	2004	2003	2002	2001	2000
<b>Capital</b>					
<b>Equity / Total Assets</b>	7.65	8.23	6.68	6.48	4.14

<b>Operations</b>					
<b>Net Interest Margin</b>	3.84	5.27	-1.02	-1.36	-1.09
<b>Return on Average Assets (ROAA)</b>	1.21	1.61	0.79	1.42	-1.1
<b>Return on Average Equity (ROAE)</b>	15.31	21.6	11.92	26.37	-23.42
<b>Cost to Income Ratio</b>	36.04	35.61	37.37	51.25	58.88
<b>Liquidity</b>					
<b>Liquid Assets / Cust &amp; ST Funding</b>	32.8	18.81	55.16	51.38	55.55

In terms of the ratios, the general trend is an increase in “Equity / Total Assets”, although there was a slight decrease for 2004, which shows that equity has played a larger role in the financing structure of the bank over time. With respect to the operations ratios, the “Net Interest Margin” has been negative from 2000 to 2002, but was at 5.27 for 2003 and stayed positive for the following year, although it decreased. The overall tendency for the ROAA was an increase however the ROAE has been very irregular. The changes in the ROAE suggest that the financing means of the bank are unstable, whether through debt or equity. However, a more positive point is the decrease of the “Cost to Income Ratio” since 2000. Finally, we can see that the liquidity of the bank has decreased over the years, which would imply that the bank is able to accommodate fewer loans.

When we compare the performance of the bank with its peers in the sample, we can see that the bank is more than one standard deviation below the average for “Equity / Total Assets”. This is also the case for the “Net Interest Margin” which actually is the lowest of the sample. These two observations suggest that the bank might be resorting exterior sources of funding rather than equity or interest revenue. Whereas the ROAE is very close to the average, a positive point for the bank, the ROAA is much lower than the mean. In terms of the “Cost to Income Ratio” the bank is the best performer: it has the lowest value in the sample (36.04) and with the “Liquid Assets / Cust & ST Funding” (32.8), the bank has a value very close to the maximum (32.9).

## 5.4 Banco Solidario, Ecuador

### Banco Solidario: General Data (Source: BankScope)

	2005	2004	2003	2002	2001
	th USD				
<b>Operating Income</b>	46,900	34,000	26,600	20,400	10,400
<b>Net Income</b>	3,200	3,600	3,400	3,000	1,200
<b>Net Interest Revenue</b>	9,500	9,300	7,700	7,800	3,100
<b>Total Assets</b>	297,600	256,600	181,600	158,200	113,400
<b>Equity</b>	23,800	20,700	17,400	13,000	11,000
<b>Deposits &amp; Short term funding</b>	218,400	190,900	136,900	127,600	96,900

Banco Solidario exhibits a stable financial situation throughout the five years. In most cases the numbers have doubled from 2001 to 2005, which is the case for the “Equity” and “Deposits & Short term funding”, if not approximately tripled, such as “Operating Income”, “Net Income”, “Net Interest Revenue” and “Total Assets”.

Comparing this outlook with the sample, we can see that has an “Operating Income” higher than the average, but a “Net Income” lower than the mean. Furthermore, its “Interest Revenue” is also significantly lower, more than one standard deviation away. Although the bank ranks third in terms of “Total Assets”, it is also significantly lower than the average in “Equity”, more than one standard deviation.

### Banco Solidario: Ratios (Source: BankScope)

	2005	2004	2003	2002	2001
<b>Capital</b>					
<b>Equity / Total Assets</b>	8	8.07	9.58	8.22	9.7
<b>Operations</b>					
<b>Net Interest Margin</b>	3.87	4.83	5.18	6.62	3.95
<b>Return on Average Assets (ROAA)</b>	1.16	1.64	2	2.21	1.3
<b>Return on Average Equity (ROAE)</b>	14.38	18.9	22.37	25	11.71

<b>Cost to Income Ratio</b>	78.68	87.06	84.96	81.37	95.19
<b>Liquidity</b>					
<b>Liquid Assets / Cust &amp; ST Funding</b>	17.9	15.77	12.56	7.45	14.65

When we look at the performance of Banco Solidario with respect to ratios, we can notice that the “Equity/ Total Assets” ratio has been quite stable over the course of five years, although there was a slight decrease. However, the “Net Interest Margin”, 3.87, has decreased to a level lower than its 2001 performance of 3.95, after having showed some improvements. The “Cost to Income Ratio” has decreased over time. We can also see that the ROAA has not increased, which would suggest that the bank was not able to increase its efficiency in terms of its assets.

However, we see that the ROAE has increased, implying that the bank might have resorted to financing with debt, through an increase in liabilities (Recall the denominator of the ROAE, Stockholders’ Equity = Assets – Liabilities), or that the assets might have increased significantly. From the previous table, we had observed that the assets of the bank had almost tripled. Nevertheless, the ROAA has decreased. Consequently, Banco Solidario is a bank that is abundant in capital, but that was not able to make use of it efficiently. With respect to the liquidity of the bank, we can see that it has increased over the years, suggesting that Banco Solidario’s capability to give out loans has increased.

In comparison to its peers, the bank is significantly below the average in “Equity / Total Assets” and in the “Net Interest Margin”. However, Banco Solidario is in the range of the mean in terms of its other operations ratios such as the ROAE, the ROAA and the “Cost to Income Ratio”. Finally, we can see that the “Liquid Assets / Cust & ST Funding” ratio is also close to the average of the sample.

## 5.5 Mibanco, Peru

### Mibanco: General Data (Source: BankScope)

	2005	2004	2003	2002	2001
	th USD	th USD	th USD	th USD	th USD
<b>Operating Income</b>	54572	43855	40899	29852	19486
<b>Net Income</b>	13,009	7,807	7,248	5,435	3,165
<b>Net Interest Revenue</b>	53,989	43,672	40,889	30,478	19,515
<b>Total Assets</b>	254,455	162,763	138,984	108,281	73,820
<b>Equity</b>	42,847	37,176	31,909	23,847	18,237
<b>Deposits &amp; Short term funding</b>	197,637	106,648	83,252	70,546	50,937

The last bank, Mibanco, exhibits an increasing trend in all of the variables. We can see that some have almost doubled, such as the “Operating Income”, the “Net interest Revenue” and the “Equity”. Furthermore, some variables have tripled, or quadrupled such as the “Net Income”, the “Total Assets” and the “Deposits & Short Term funding”.

When comparing Mibanco to the sample, we can see that it is the fourth largest bank with respect to “Total Assets” but has a significantly higher “Operating Income” than the average. It also has the highest “Net Income” in the sample, with also the highest “Net Interest Revenue”. These would suggest that the bank is highly self-sufficient and profitable, with a high degree of success in its loans. Furthermore, it has “Equity” and “Deposits & Short Term funding” levels close to the average.

### Mibanco: Ratios (Source: BankScope)

	2005	2004	2003	2002	2001
<b>Capital</b>					
<b>Equity / Total Assets</b>	16.84	22.84	22.96	22.02	24.71
<b>Operations</b>					
<b>Net Interest Margin</b>	29.46	31.61	36.92	37.95	37.04
<b>Return on Average Assets (ROAA)</b>	6.34	5.04	5.82	6.02	5.25
<b>Return on Average Equity (ROAE)</b>	33.19	22.03	25.84	26.06	18.79

<b>Cost to Income Ratio</b>	57.94	60.92	60.31	64.92	66.17
<b>Liquidity</b>					
<b>Liquid Assets / Cust &amp; ST Funding</b>	12.06	17.07	10.82	11.34	6.61

The “Equity / Total Assets” ratio suggests that the share of equity in assets has decreased over the course of the five years and so has the “Net Interest Margin”. These would suggest that the bank’s revenue from other sources of income have increased in these years. We can see that the ROAA has been fairly stable since 2001 whereas the ROAE has increased significantly, probably due to the increase in “Total Assets” (see previous table) or an increase in liabilities. Although the “Cost to Income Ratio” has decreased slightly, it has been fairly constant. Finally, a positive point for the bank is the increase in its liquidity level.

Comparing Mibanco to the sample, we can see that the “Equity / Total Assets” is lower that situation is similar for the liquidity level of the bank. Nevertheless, Mibanco appears has a well-run bank as it has significantly higher ratios than the average in operations such as the “Net Interest Margin”, the ROAE, the ROAA and the “Cost to Income Ratio”. All of these suggest that the bank is making an efficient use of its resources.

### 5.6 Conclusions on the analysis

Consequently, we can say that the four banks with the highest total assets are exhibiting a positive outlook in terms of the growth of their revenue and their assets. Their deposits have also increased continually throughout the years suggesting that they were able to serve an increasing number of customers. Furthermore, they were able to make a more efficient use of their assets and equity, expressed through the increase in the ROAA and the ROAE. Nevertheless, they are still struggling to maintain consistency: even the Grameen Bank which

is the most experienced in microbanking, has seen its “Net Interest Margin” fall in the last years, suggesting a fall in the interest revenue. The Bank of Khyber had three years of negative “Net Interest Revenue” before 2003. In this respect, stability is a key factor that microfinance banks need to strive for in order to generate a regular source of funding and to maintain self-sufficiency, the overarching goal of the microfinance sector in general.

## VI. Conclusions: the future of microfinance

During its relatively short history, micro credit has evolved into microfinance, reflecting the drastic change in the approach to the alleviation of poverty around the world. The industry has started through the volunteering of idealist NGOs and has now come to embody a morally acceptable sub-industry for the formal financial market: “Microfinance presents itself as a new market-based strategy for poverty reduction”<sup>20</sup>. Microfinance is now seen as a “win-win” situation for both partakers: the lender of the capital and the small borrower. In this approach, the role the subsidies should be play would ideally be limited to the initiation of a microfinance project and then the organization would reach a self-sustaining, if not profit making entity through the savings of the clients, the bonds that are being issued and the funds from commercial sources.

According to Jean-Philippe de Schrevel, founder of BlueOrchard Finance, the future of microfinance lies in the formal financial market that will make the industry self-sustainable. The goal of microfinance in the future is to become a transparent and regulated industry. In this respect, the most important development to be achieved is the linkage of microfinance to

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<sup>20</sup> Armendáriz de Aghion, Beatriz and Jonathan Morduch, page 16

the commercial capital market in order to satisfy the growing needs of the clients of this industry.

Furthermore he suggests that the role of international investments in microfinance remains crucial in the achievement of these goals. International funding can widen the opportunities presented by a local capital market and can isolate MFIs from economic uncertainties observed in developing countries. Secondly, this international capital has the potential to attract more international businesses in the industry and allow the offering of more diverse services to the poor. Consequently, international investments are expected to have a positive impact by bringing dynamism to the commercial financing of MFIs.

BlueOrchard, as a microfinance investment consultancy, portrays this new approach to microfinance by managing debt funds and attracting commercial investors to the microfinance industry. BlueOrchard Finance manages and advises investments worth USD 135 million through partnerships with other financial institutions. BlueOrchard also developed the first fully commercial microfinance fund, Dexia Micro-Credit, and continues to create other funds, including local microfinance funds.

Consequently, microfinance can be a commercial business in addition to its non-profit aspect; but it is a different one, not to be approached like consumer finances. The participation of commercial banks in microfinance requires that they first and foremost have an extensive network of branches, an understanding of local cultures, make use of economies of scale and train their credit agents for a successful monitoring of a loan.

Nevertheless, the direct involvement of a commercial bank in microfinance without experience can be costly. In this respect, a partnership with a microfinance institution or an indirect participation might be preferable. In any case, in the near future, we can expect more commercial banks to be involved in microfinance. This participation is most likely going to be in an indirect fashion such as securitization through microfinance bonds and funds. Indeed, this suggests that the microfinance industry is in the right direction, creating ties with the formal financial system in order to achieve the necessary scale to make the required changes for the financially deprived population of the world.

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