Social and Financial Performance of Microfinance Institutions

By

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Abstract

The paper studies the relationship between social performance of the microfinance institutions (MFIs) and their financial performance. Achieving both high depths of outreach and financial sustainability is challenging, besides, it may seem contradictory. By trying to become financially sustainable, i.e. targeting better financial performance, microfinance institutions may failure to achieve their main goal to help the poor. Therefore, microfinance institutions may face trade-off between social and financial objectives. To analyze this relationship, I use GLS random effect regression model over the sample of 2,403 microfinance institutions from six regions in 116 countries, beginning from 2009 to 2019. The results of regression analysis show no relationship between the social performance and financial performance.

Keywords:

Microfinance, microfinance institutions, financial performance, social performance, depth of outreach, poverty reduction, panel data.

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List of abbreviations

GDP	Gross Domestic Product
GLP	Gross Loan Portfolio
GLS	Generalized Least Squires
GNI	Gross National Income
LM	Lending Methodology
MFI	Microfinance Institution
MIX	Microfinance Information Exchange
NGO	Non-Governmental Organization
OLS	Ordinary Least Squires
OSS	Operational Self-Sufficiency
PAR	Portfolio-at-risk
PFB	Percentage of Female Borrowers
ROA	Return on Assets
ROE	Return on Equity
SRI	Social Range Index

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Chapter 1: Introduction

Accessibility of financial resources plays an essential role in economic growth. One of the fundamental purposes of the microfinance companies is to provide lending under affordable interest rates to the people who belong to poor segment of society. Abrar (2019) defines two main reasons why the poor are not able to get loans. Firstly, the problems are triggered by low-income individuals lacking guarantee which can be used to provide against credits and loans. Another reason is underdeveloped legal systems, where enforcement is problematic, in case a client is not being able to repay his debt (Abrar, 2019). Overall, low-income individuals are not able to receive financial services from traditional banking institutions. These are the key reasons for lack of access to loans and other financial services, which results in income inequality.

The original purpose of the MFIs is to get the social outreach achieved. According to Bassem (2012) microfinance is seen as one of the key instruments proposed for poverty reduction. The industry has two main goals; one of them is to fulfill the needs of the poor, therefore reduce inequality, and another is to maintain its financial sustainability. Microfinance institutions provide loans to customers who cannot access traditional bank services due to the lack of guaranty. The main challenge of microfinance institutions is to create a system that allows a greater number of the poor to access financial services on a sustainable basis (Bassem, 2012). As Demirguc-Kunt & Klapper (2012) reported in their study, 2.7 billion people have no access to financial services worldwide.

Financial performance is paid much attention: microfinance institutions do everything to have better financial performance. Therefore, close attention needs to be paid to the profitability of the MFIs moving them away from one of the main social purpose - providing loans to low-

income individuals. This can be caused by too strict selections of customers, based on the collateral. On the contrary, concentration on solely social objectives to make it affordable for the poor can lead to reduced lending interest rates which puts a risk on microfinance institution`s feasibility. Therefore, microfinance institutions may face a contradiction which is subject to prioritization.

In this thesis, I assume that financial and social objectives of MFIs, contradict each other, thereby creating trade-off. I would like to examine if the microfinance institutions face trade-off while achieving both a high depth of outreach and good financial performance. After taking into consideration the high risks of lending to the poorest, many MFIs attempt to stand back from their main objective of providing financial lending and other facilities to the people from low-income segments, by orienting themselves to wealthier and therefore less risky clients.

In this thesis, I investigate whether targeting the poorest creates an obstacle for the microfinance company to achieve better financial performance and if these two objectives can be achieved simultaneously.

The paper includes return on assets (ROA), return on equity (ROE), and operational self-sufficiency (OSS) indicators as measurement of financial performance. At the same time, the social range index (SRI) and the percentage of female borrowers (PFB) are used for measuring depth of outreach. I make use of incorporated control variables in the paper, such as MFI`s size, age, and lending methodology, which help to capture variations. To determine the empirical relationship between the variables, I use panel data Generalized Least Squire (GLS) random-effect estimation techniques.

The study is therefore justified by the negligence of the MFI`s customer dimension. Several academic works, that investigate the relationship between financial performance and social

performance are available and will be further covered in the literature review Chapter 2. The paper contributes to the existing works by examining the trade-off between financial and social performance, and by using large and comparatively comprehensive global dataset. This academic research progresses as follows: a microfinance concept and literature review are presented in Chapter 2, the overview of the data collected, and estimation method is provided in Chapter 3, whereas the research methodology is introduced in Chapter 4. Thereafter, discussion and empirical results are provided in Chapter 5. Finally, Chapter 6 concludes the study, and propose recommendations.

Chapter 2: Literature Review

There are different types of banking one of which is microfinance that is usually defined as lending in small amounts targeting low-income segments of society, small-size business activities. The contract between lender and borrower serves as a formal basis for such kind of lending, upon which the debtor undertakes to make on-time repayment of the debt. Generally, the loan is repaid in short periods, varying from three to twenty-four months (Mersland & Strøm, 2009). The microfinance banking loan portfolio generally can be semi-collateralized or uncollateralized. Herewith, in contrast to the traditional financial system that essentially pursues the profitability, the MFIs should meet a double bottom line: the social objective which comes first and helps a special category of individuals, who cannot access the conventional banking. And a financial objective as a second goal, which helps to achieve the social objective on a constant basis.

In Mersland & Strom`s (2014) *Microfinance Institutions: Financial and Social Performance,* the authors identify various reasons why microfinance performance research is needed besides "the trade-off dilemma*"*. Firstly, it is expected that microfinance soon become the largest banking market, in terms of number of customers. Secondly, too many originations, are involved in supplying microfinance services, starting form self-managed savings to small commercial banks. Thirdly, microfinance institutions provide not only credit but a full range of financial services, which includes payment systems, savings, insurance, and money transfers. These changes to the nature of microfinance industry increases the importance of reducing risks as a performance dimension. And finally, MFIs have broadened the funding sources and they started to include national public funds, local depositors, bondholders, stockholders, and national

public funds (Mersland & Strom, 2014). Nowadays, MFIs need to outwatch their performance dimension and lending margin, which were not discussed sufficiently enough in literature so far.

As discussed in the work of Jonathan (2000) in this process, microfinance institutions will be able to serve the poorest, if they are financially sustainable than when they are subsidized By achieving financial sustainability and eschewing subsidies MFIs can grow without the constraints created by budget contributors.

Two different approaches to microfinance operations and its financial and social objectives were compared in the work of Bassem (2012): one is *welfarist* and the second one is *institutionalist*. Though these two views follow the same goal of helping the poor and therefore reducing inequality, they nonetheless differ in the method of providing loans and credits to customers. *The institutionalist approach* provides not only loans to the poor but also supports in providing non-financial services as well, which aim "to provide access to banking services on a sustainable basis" through training and financial literacy courses (Bassem, 2012). However, *the welfarist approach* emphasizes depth of outreach, by being more interested in improving the wellbeing of participants, directly improving their life (usually emphasizing on women and children). The main examples of such approach are "Grameen Bank in Bangladesh and its replicates in other countries, and FINCA-style village banking programs in Latin America and, more recently, in Africa and Asia" (Woller, Dunford, & Warner, 1999).

Supporters of *welfarist approach* are more interested in the actual social effect and changes before and after accession to MFIs. The determination of this approach is to evaluate the real effect on the living standards of the poor, changes in terms of improved well-being and healthcare, education, and insurance accessibility. However, institutionalists approach representatives do not

support such research and see it as additional cost and methodological difficulties that are possible to encounter.

One of the studies done before "Depth of outreach and financial sustainability of microfinance institutions" (Quayes, 2012) with data collected from 702 microfinance institutions providing financial services in 83 countries studied the relationship between financial and social performance of MFIs. First, the analysis of the work has revealed "the empirical evidence of a positive complementary relationship between financial sustainability and the depth of social outreach". Therefore, the study says that "one of the primary justifications for subsidizing MFIs is the enhancement of social welfare by extending credit to the poor" (Quayes, 2012) But later, Quayes focused on financial independence concern that the social outreach mission may be adversely affected.

Moreover, previous studies similarly reveal different results in different countries. Cull et al. (2007) have found little evidence of agency problems, outreach-profit trade-offs, or mission drift. Mersland and Strom (2009) have investigated that "the mechanism of corporate governance has minor impact on the financial and social performance of the MFIs". The researchers have used panel data with fixed-effect models. Eventually, "the analysis has revealed that loan size is positively affected by profitability of microfinance" (Mersland & Strom, 2014).

In later studies, carried out by Schmied (2014) the trade-off between social goals and profits had been studied by using empirical evidence from the panel dataset taken from MIX market, that contains observations from 1995-2010. The work found that profit-driven MFIs serve a higher fraction of people, which provides support to the hypothesis of a commercializing microcredit.

On the one hand, Nurmakhanova et al. (2015) declare "advocators of financial sustainability approach claim that there is no trade-off between good financial performance and depth of outreach; which means, that financial sustainability of microfinance institutions can be achieved along with outreach. These researchers argue that financial self-sufficiency will assure sustainability of operations of microfinance and will allow them to deliver financial services to a large scale of poor in the long run, which in turn will have better social performance". Additionally, by adopting this, MFIs will be able to scale-up and minimize transactions and risks, which for its part will make the most of attaining the core objectives and therewith serve poor people. Hence, social objectives and financial sustainability are not contradictory. On the other hand, Cull et al. (2007) discussed that financial sustainability of MFIs may drive the depth of outreach down.

As it is apparent, though they have mutual goal of reducing poverty, the dispute between *welfarists* and institutionalists is far from the end. If *the welfarists* are not keen to provision of banking services, such as loans or credits, to low-income individuals, they emphasize on the depth of outreach. In contrast to them, *the institutionalists* claim that financial sustainability is more preferred, therewith they stress on breadth of outreach.

There is no unique model of microfinancing designed to address numerous difficulties of poor people over the globe. There is a room for a variety of microfinance programs to be instituted. The analysis in this paper attempts to fill this gap in research.

Chapter 3: Data

The data I have used in the analysis was taken from the MIX (Microfinance Information Exchange - a non-profit organization that gathers the information and provides reports on microfinance). The dataset includes 2,403 microfinance companies from six regions: Africa, East Asia, and the Pacific, Eastern Europe and Central Asia, Latin America and The Caribbean, Middle East and North Africa, South Asia, which operate in 116 countries. The time range of the data starts from 2009 to 2019.

From the selected MFIs, I will build a model to define the relationship between the microfinance companies' depth of outreach and financial performance. Moreover, the most important question is whether a microfinance institution can reach two goals simultaneously. First is the sector's primary purpose of helping the poor by providing affordable loans for low-income citizens and second – to be financially sustainable with increasing financial performance year over year.

I want to check the relationship and understand how social and financial performance relate to each other, using the whole sample of 2,403 MFIs. The relationship between these two concepts allows us to see if there is a trade-off exists. Hence "a negative relationship will confirm the theory of Friedman, which states that better social performance involves extra financial costs, which creates a competitive disadvantage" (1970). On the other hand, the positive link may refer to an interaction, and the last – neutral relationship may suggest no meaningful connection between financial performance and social outreach.

This study is based on the work of D'Arcimoles & Trebucq (2002) "The corporate social and financial performance link: evidence from France" and Bassem (2012) "Social and financial

performance of microfinance institutions: is there a trade-off?". I have used the financial and social performance relationship of corporate firms and applied them to microfinance institutions. In this research, I want to find if it is possible to reach stable financial performance and better social performance simultaneously or if there is a trade-off between social performance and financial performance of MFIs exits. Thus, for my analysis, I use key financial metrics as indicators of financial performance. Whereas for social goals, I have taken the level of poverty reached to assess the depth of outreach.

Reduction in poverty and hunger, schooling access to healthcare services, social capital, and women empowerment are the social outreach indicators presented in Bhatnagar (2008). According to Piza, Comim, Gonzalez, & Maciel (2008), "to comprehend the impact of microfinance on the poor", I should qualify the importance of the depth of outreach in multidimensional terms. Thus, "the depth of outreach and social purposes help by providing financial services to the poor" (Piza et al., 2008).

In the analysis, I have used 2 social outreach variables, 3 defining financial performance ratios, and 4 control variables.

3.1 Social performance variables

I have chosen the depth of outreach, as social performance indicator, which includes the percentage of female borrowers. The ratio is calculated by dividing number of female borrowers over total number of borrowers. This allows us to emphasize not on the number of loans provided, but on the types of clients served.

Another social performance indicator used in this study is the average loan size per borrower / GNI per capita (in percentage), so-called social range index. As Bassem (2012)

explains, “the lower the average loan size per borrower based on Gross National Income is, the more an MFI, is moving towards the very poor”.

3.2 Financial performance variables

Accounting variables represent the financial performance: return on assets, return on equity, and operational self-sufficiency. ROE measures the ability to reward its shareholders` investment, built its equity base through additional equity investment, and retained earnings (Rao, Kumar, & Srinivas, 2016). As Tucker and Miles (2004) state in their work: “superior ROA for self-sufficient MFIs further illustrates how well MFIs use their smaller asset base”.

Therefore, “OSS indicates as to whether an MFI is earning adequate revenue to cover its expenses, which includes operational cost, financial cost, and loan loss provisions”. (Esampally & Joshi, 2016). Whereas, ROA and ROE measure the financial performance of the companies.

3.3 Control variables

The control variables such as, age of MFI, age of the MFI, portfolio at risk, and lending methodology are used in of this analysis. “Portfolio at risk is a key MFI indicator of risk associated with the non-repayment of loans. It will determine future revenues and the ability of the microfinance institution to expand the services in the future” (Bassem, 2012). This indicator is obtained by dividing over one month overdue (PAR 30) outstanding balance of loans by gross loan portfolio. Thus, “the higher the percentage of PAR 30, the higher the amount of total loan portfolio is late in repayment at 30 days or more” (Bassem, 2012). I have also included the company's age and size, which are presented by number of years the MFI operates and total number of borrowers. The lending methodology is one more control variable used in the analysis of this research,

represented by the amount of individual versus group lending (dummy). To note these two values are not mutually exclusive. In my thesis, I consider MFIs to have the lending methodology (individual lending vs. group lending) based on the higher lending amount.

Table 1. List of variable names

	Variable
SRI	$Social\ range\ index = average\ loan\ size\ per\ borrower\ based\ on\ GNI\ per\ capita\ compared\ to\ the\ two\ poverty\ lines\ income\ (1\ \$\ and\ \$\ 2\ per\ day)\ in\ \%$
PFB	$Percentage\ of\ female\ borrowers = \frac{number\ of\ active\ women\ borrowers}{number\ of\ active\ borrowers}$
ROA	$Return\ on\ assets\ = \frac{net\ operating\ income, net\ of\ taxes}{average\ total\ assets}$
ROE	$Return\ on\ equity\ = \frac{net\ operating\ income, net\ of\ taxes}{average\ total\ equity}$
OSS	$Operational\ self-sufficiency = financial\ revenue\ /\ (financial\ expense + operating\ expense + net\ loan\ loss\ provision\ expense)$
RISK	$Risk = \frac{outstanding\ balance, loans\ > 30\ days\ overdue}{\text{gross loan portfolio}}$
AGE	*Age of MFI in years*
SIZE	*Total number of borrowers*
LM	*Group lending vs. Individual lending – dummy variable*

Chapter 4: Research Methodology

I would like to know if there is a relationship between social and financial performance of MFIs and if it is positive or negative or neutral. To do so, I use regression models to find a correlation between variables. I have selected GLS regression model with individual random effects.

4.1 Financial performance indicators as independent variables

For the first hypothesis, I use the regression model where the dependent variable is social outreach indicator. There are two such indicators: the social range index and percentage of female borrowers and I run a separate regression for each of them. My independent variables include financial performance indicators proxied by last year`s risk (PAR>30) and size, represented by number of borrowers.

H_1: Better financial performance of MFIs results in greater depth of social outreach

Based on D'Arcimoles's & Trebucq's work (2002), I run a multiple regression model. To deal with endogeneity, I have included lags. Endogeneity is a fundamental concern of the analysis. "When a variable, observed, or unobserved that is not included in the models, is related to a variable I incorporated in my models" (Pinzón, 2016).

According to Bassem (2012), "endogeneity implies the existence of variables in the error term that are correlated with the explanatory variables previously assumed to be exogenous.

To test the hypothesis, I have taken the social range index and percentage of female borrowers – the social outreach indicator, as dependent variables. Whereas independent variables

are presented by ROA, ROE, and OSS. Furthermore, age, risk, size, and lending methodology were used as control variables.

Table 2. Descriptive data

Variable	Number of observations	Mean	Standard deviation	Minimum	Maximum
SRI	10028	1.619	40.778	0	3827.531
PFB	8214	64.407	26.969	0	183.178
ROA	9086	.01	.143	-7.464	2.089
ROE	9048	-.031	11.747	-1058.785	276.974
OSS	10096	1.149	.757	-47.845	31.964
RISK	8876	.077	.16	0	7.114
AGE	11611	7.519	4.703	1	20
SIZE	10447	99471.4	475000	0	8930000
LM	9122	1.492	.659	0	2

The model conforming the regression analysis with t from 2009 to 2019 and i = 1 to 2,403:

$$SP_{t,i} = f(FP_{t-1,i}, RISK_{t-1,i}, AGE_{t-1,i}, SIZE_{t-1,i}, LM_{t-1,i})$$

Where: $SP_{t,i}$ = proxies for the depth of outreach [social range index (SRI) and percentage of female borrowers (PFB)], $FP_{t-1,i}$ = financial performance for the previous year, $RISK_{t-1,i}$ = proxy for the risk of MFI_i in the previous year (portfolio at risk > 30 days), $AGE_{t-1,i}$ = of the MFI_i in the last year, $SIZE_{t-1,i}$ = proxy for the size of MFI_i for the one year before (number of total customers for the previous year), $LM_{t-1,i}$ = lending methodology (dummy variable: Group lending methodology vs. Individual lending methodology).

4.2 Social performance indicators as independent variables

The second hypothesis used in the analysis of this research is going to be tested similarly as previous one, but instead I have used social performance indicators as independent variable and financial performance indicators as dependent variables. Thereby indicators of the depth of outreach are selected as independent variables. In the second model, the same control variables have been used.

H_2: MFIs with greater depth of social outreach result in better financial performance

The model used in the analysis with t starting from 2009 till 2019 and i = 1 to 2,403 is:

$$FP_{t,i} = f\,(SP_{t-1,i}, RISK_{t-1,i}, SIZE_{t-1,i}, AGE_{t-1,i}, LM_{t-1,i})$$

Generalized least squares (GLS) random effect method was used to estimate the models in the analysis. To conduct the analysis the STATA software was used. The ordinary least squares (OLS) were not used since the analysis includes panel data in these models.

Chapter 5: Empirical Results

Based on the models described in previous section, I have got the results which are represented below. Moreover, I calculate correlation confident to get an understanding of the relationship that may be detected among the variables. The correlation matrix is demonstrated on Table 3.

Table 3. Cross correlation matrix

	(1) SRI	PFB	ROA	ROE	OSS	RISK	AGE	SIZE	LM
SRI	1								
PFB	-0.395***	1							
ROA	-0.00840	0.00712	1						
ROE	0.00636	-0.0149	0.0414*	1					
OSS	-0.0180	-0.00778	0.534***	0.0216	1				
RISK	0.0246	-0.0693***	-0.0927***	0.0112	-0.109***	1			
AGE	0.0906***	-0.0412*	0.101***	0.0123	0.0632***	-0.0460**	1		
SIZE	-0.0605***	0.128***	0.0315	0.0106	0.0572***	0.0362*	0.0904***	1	
LM	0.0941***	-0.128***	0.0377*	0.0351*	0.0475**	0.0351*	0.00435	0.0189	1

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The social outreach indicators are negatively related (a highly significant correlation coefficient is -0.395). Thus, the higher depth of outreach leads to lower social range index and a higher percentage of female borrowers. The OSS and ROA have a highly significant correlation (0.534). Whereas ROE and ROA are positively related (significant correlation of 0.0414). I did not find any significant correlation coefficients between financial and social performance indicators. The regression analysis results should show if the initial outcome is sufficiently robust.

Table 4. Regression on social performance

VARIABLE	(1) Social Range Index	(2) Percentage of Female Borrowers
Independent variables:		
ROA	-0.128	0.414
	(0.118)	(2.342)
ROE	-5.03e-05	-0.00389
	(0.000422)	(0.0290)
OSS	0.0190	-0.311
	(0.0346)	(0.646)
Control variables:		
RISK	-0.0391	0.112
	(0.0408)	(0.802)
AGE	-0.0601**	-0.289*
	(0.0269)	(0.169)
SIZE	-1.81e-08	4.44e-06***
	(4.88e-08)	(9.08e-07)
LM	0.0255	-1.055***
	(0.0163)	(0.330)
Constant	(0.212)	(1.450)
	0.963***	70.24***
Fiscal year fixed effect	yes	yes
Observations	4,069	3,600
Number of MFIID	1,253	1,156

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The empirical analysis of this research focuses on how social and financial performance of MFIs relate to each other. The multiple regression model had run to find the mutual influence of these factors and understand if microfinance companies face a trade-off. The results of testing the hypothesis are presented in Table 4.

The social range index which measures the depth of outreach has the P-value less than 5%, i.e. the regression results are significant overall. Therefore, I reject the null hypothesis which implies that a better social range index improves MFIs` financial performance. Other study written by Cull, Demirguç-Kunt, & Morduch (2007) on the impact of lending methodology, has "shown that group lending has a positive impact on social performance".

The MFIs` age, size, and lending methodology play an important role in estimating the percentage of female borrowers. The lending methodology has a negative impact on the number of female borrowers served and therefore the mission drift observed. The percentage of female borrower is positively affected by size. The analysis has shown that the percentage of female borrowers increases in line with increase in microfinance institutions` size. However, another study, by Bassem (2012) has shown a negative effect of the size of microfinance institution on the percentage of female borrowers.

The regression results presented in Table 5 shows the output of testing my second hypothesis. When testing the financial performance indicators, social range index and percentage of female borrowers are significant at 5%. Thus I can reject the null hypothesis with the model being significant as well. Whereas I use ROA as financial performance indicator and its p-value is significant at 5%. I reject the null hypothesis: improved financial performance leads to greater social outreach. So, better financial performance has not positively impacted the depth of outreach. I cannot reject null hypothesis of no effect.

Table 5. Regression on financial performance

VARIABLE	(1) ROA	(2) ROE	(3) OSS
Independent variables:			
SRI	2.24e-06	-0.000168	0.00265
	(0.000301)	(0.0452)	(0.00166)
PFB	0.000156	-0.00541	0.000207
	(9.56e-05)	(0.0154)	(0.000441)
Control variables:	(0.0100)	(0.590)	(0.0767)
RISK	-0.0196***	-0.179	-0.0907***
	(0.00648)	(1.517)	(0.0248)
AGE	0.00148**	0.0420	-0.00291
	(0.000732)	(0.102)	(0.00404)
SIZE	-8.89e-09	8.42e-07	-5.31e-08**
	(5.61e-09)	(8.68e-07)	(2.60e-08)
LM	0.00483*	1.163**	0.0217**
	(0.00255)	(0.541)	(0.00999)
Constant	-0.0116	-2.887*	1.175***
	(0.00926)	(1.636)	(0.0429)
Fiscal year fixed effect	yes	yes	yes
Observations	3,897	3,891	3,936
Number of MFIID	1,214	1,213	1,226

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Similar results were demonstrated in the research made by Quayes (2012), in the analysis author used cross-section data, where "the initial results show that financial sustainability has no impact on the depth of outreach". Moreover, the study has shown that NGO microfinance institutions have better social outreach but worse financial performance comparing to for-profit microfinance institutions.

When ROE ratio is used as financial performance indicator, the p-value of R-squared is above 0.05, which implies that my overall model is not significant. The model with ROE as a dependent variable have low explanatory power.

It is found that risk is the one variable that heavily influences financial performance of MFIs. The negative relationship shown above, demonstrates that a higher portfolio at risk, the indicator used to measure the risk, prevents from having improved financial performance. The correlation coefficient is negative and statistically significant at 1%. Hence the MFI can improve its portfolio at risk and therefore ensure its sustainability. Whereas lending methodology influence the financial performance as well but with lower from 10% to 5% correlation coefficient.

This has shown the presence of a trade-off between better portfolio at risk, suggesting the contribution to greater depth of outreach and improved financial performance. When microfiannce institutions intend to reduce the potential risk, they shift away from providing banking services to the poor as it is riskier. But I have not identified a significant correlation between the risk and indicators of the depth of outreach, which can show a negative link among them.

Chapter 6: Conclusion and Recommendations

The study attempts to answer a question related to microfinance institutions, i.e. how does financial and social perfromance relate to each other? It is critical to know if the expectations grown up by microfinance institutions in reducing income inequality do exist. By refering to D`Arcimoles (2002), I have estimated two models, to test the hypotheses using the panel data from 116 countries.

The correlation coefficients from the regression analysis shows a neutral relationship between the depth of outreach and financial perfromance. After rejecting all the hypotheses, I have not identified a significant negative link between financial and social indicators of the MFIs.

However, microfinance companies are motivated to have better PAR, in order to improve financial sustainability. MFIs hold a course to move away from the poorest population. In such a case, the move away from core mission is not reasonable. The analysis has not proved that depth of outreach and better financial performance are incompatible. Though the attainment of better PAR is worthy, I have not found its association with lower depth of outreach indicators ans thus with low-income population.

When I use social range index as the depth of outreach indicator, the model is significant, and I reject the null hypothesis, that implies that MFIs with greater depth of outreach result in better financial performance. However, according to the model with the PFB used as dependent variable, which has shown significant results, with the MFIs increasing in size the percentage of female borrowers increases as well. So, healthier MFIs in terms of financial performance have not positively impacted the social performance. As I could not discover a significant coefficient to confirm the hypothesis, therefore the effect is neutral.

The analysis of this thesis has not shown a contradiction of being financially sustainable and the depth of social outreach. Even though the portfolio at risk significantly affects ROA and OSS, I still have not detected that this is related to social performance, i.e. serving poor people.

Finally, despite that I identify the existence of the trade-off between financial and social performance, it does not imply that achieving both primary objectives is impossible, even though it is not easy to achieve. Microfinance institutions can at the same time achieve their financial goals, by providing banking facilities to the poorest, who do not have access to providers of traditional banking services. The obtained results agree with Cull, Demirguç-Kunt, & Morduch, (2007) who also attests "the presence of a trade-off between financial sustainability (profitability) and social performance". Those results have shown that even if there are very limited number of microfinance institutions, which achieve better social impact and improved financial performance at the same time.

Further, I am providing some policy recommendations addressed to microfinance institutions and microfinance banking sector as a whole. As the number of MFIs are increasing year over year all around the globe. Microfinance institutions should keep on concentration on proving financial services to women, therefore enabling them to add to the welfare of their families and communities. As in the example of Grameen Bank in Bangladesh and similar small-scale individual and group-based credit providers.

There is a necessity of the supervisory and regulatory framework development, for the MFIs globally. It is needed to regulate the MFIs which mobilize savings afterward lend these finances to their clients. Microfinance institutions that does not relate to this type can stay self-regulated.

More microfinance research needed to be implemented, since microfinance institutions target poor people, therefore in order to decrease income and wealth inequality, microfinance institutions` performance needed to be studied.

Furthermore, the way of improving social performance along with financial performance should be paid more attention. These will make the microfinance institutions financially sustainable which allows to escape from subsidizing and grands provided by NGO and other organizations. In addition, this will permit MFIs to help to larger number of low-income people, rather than when microfinance institutions account on limited subsidized budget.

It would be interesting to see the relationship between financial performance and the breadth of outreach of the MFIs. Also, bigger contribution could be done if managemant efficiency indicators would be included in the analysis. And analysing the relationship beween financial and social performance of MFIs, by dviding them into regions, in order to find the associations and their differ.

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