European Online Journal of Natural and Social Sciences 2018; Vol.7, No 1 pp. 127-137 ISSN 1805-3602

www.european-science.com

# Ownership structure and microfinance institutions' performance: A case of Latin America

# Waqas Amin<sup>1\*</sup>, Fengming Qin<sup>1</sup>, Fayyaz Ahmad<sup>2</sup>, Abdul Rauf<sup>3</sup>

<sup>1</sup>School of Economics, Shandong University. Jinan. China; <sup>2</sup>School of Economics, Lanzhou University Lanzhou, Gansu, China; <sup>3</sup>School of Economics and Management Sciences. South East University. Nanjing. China

\*E-mail: <u>waqas.amin97@yahoo.com</u> Tel.: +86 15662662012

Received for publication: 10 October 2017. Accepted for publication: 28 December 2017.

#### **Abstract**

The purpose of the paper is to determine how financial performance and social performance are influenced by ownership status of micro finance institutions (MFIs). For this purpose, data is collected from Latin American MFIs. As dependent variables are dichotomous including NGO-type MFIs and Bank-type MFIs, we used logit and probit model. The results show that NGO-type MFIs are negatively related with financial performance and Bank-type MFIs are negatively related with social performance. The results confirm the previous studies as well as logical relations. The study negates the presence of mission drift in case of NGO-type MFIs and Bank-type MFIs that may open up a new wave of discussion and encourage future researchers to highlight antecedents of such relations.

**Keywords:** ownership status, outreach, financial performance, Latin American MFIs

#### Introduction

Most of the MFIs report their primary purpose is to serve poor, though they do not follow the same methodology to achieve their purpose (Schreiner, 2002). The objectives of MFIs are twofold: obtaining financial sustainability and reaching to the poorest of the poor i.e. outreach. How the duality of objective is influenced by ownership type? The literature poses that these two objectives are contrary to each other and are likely to have tradeoff (Armendariz and Morduch, 2010). In other words, MFIs that attempt to achieve financial objectives sacrifice their social objectives. To pursue their financial objective, MFIs fail to follow their traditional function of reaching to the poor.

One group of researchers believes that commercialized MFIs having high profitability leads to lower depth of outreach. Another group of researchers believes that commercialized MFIs are better able to reach to the depth of outreach due to their high profitability and their desire to extend their services to the newer markets (Mersland and Strom, 2010). Traditionally, it is believed and experienced that NGO – type MFIs are more concerned with serving bottom line poor and non-NGO type MFIs are more concerned for generating profits. However, recently it has been observed that NGO-type MFIs are also focusing on generating profits and non-NGO-type- MFIs are having equivalent social mission as NGOs. However, the effect of ownership is not as clear as appears (Mersland and Strom, 2009).

Growth in MFIs is heavily dependent upon financial sustainability, though reaching the poorest clients and providing quality services is also crucial for MFIs. Thus, neither financial nor social objectives can be ignored by the MFIs. MFIs are seeking new methods to measure social performance over and above financial performance. The new methods of measuring social

performance determine the impact of financial products on borrowers' life. MFIs are required to report the way they are progressing towards their objectives and either they are achieving it or not (CGAP, 2007).

As the key objective of MFIs is to lend poor to mitigate poverty, therefore, the study aims at determining how ownership has influence over social performance. More clearly, the study intends to determine how NGO-type and Bank-type MFIs affect social and financial performance. It is proposed that NGO-type MFIs has prime concern for social performance and bank-type MFIs are more concerned for financial performance.

#### Literature

# Financial Performance

The primary purpose of MFIs is to mitigate poverty, though the perquisite for accomplishing social mission is to achieve financial mission (Cull et al. 2007). The financial mission of MFIs is to operate without depending upon donations and subsidies (Conning, 1999). Luzzi and Weber (2006) states that MFIs are required to face duality of objectives: lending to the bottom line poor i.e. outreach and earning sufficient amount to avoid bankruptcy i.e. sustainability.

Financial sustainability denotes to the MFIs' ability to function for a significant longer period of time including budgets such as endowments, aids and other fund hovering cost self-sufficiently (Pollinger et al., 2007; Von Pischke, 1996).

The benefits of financial sustainability to several stakeholders including government, politics and overall economy are described by Robinson (2001). Government is not required to provide subsidies to sustainable institutions, the economy is boosted with incubation of new resources and political environment become favorable due to these sustainable institutions. Moreover, profitability has been measured using accounting ratios such as return on assets (ROA), return on equity (ROE) and interest margin etc (Mersland and Strom, 2010; Cull et al., 2007; Hartarska, 2007).

### Outreach

The performance measurement of MFIs is different from other financial institutions due to some distinct features that MFIs own (Nieto et al. 2007) such as size, market and purpose. The MFIs are usually smaller in size than other financial institutions; market of MFIs generally consists of poor people and the purpose of MFIs is not only to generate profits rather providing services to the poor. On the basis of these particular features of MFIs, the assessment of performance cannot be conducted merely by measuring profitability. The performance measurement must be incorporated with outreach i.e. the extent to which MFIs reach to the poor (Cull et al. 2007 and Thrikawala, Locke and Reddy (2013).

Outreach is defined as the extent to which MFIs reach to the bottom line poor. MFIs are divided into two categories including depth and breadth of outreach (Schreiner, 2002). Depth of outreach measures how deep financial services of the MFIs reach to the poorest clients. It defines the extent to which MFIs serve the poorest households. Schreiner (2002) states that depth of outreach is the value associated with the net benefit of a borrower by the society. According to welfarist, depth is a relative weight given to a borrower. According to Quayes (2012), reaching to the poorest clients require larger depth of outreach. It is concerned with net payoff to each member, not only direct members but also including households and others enjoying indirect benefits over a specific time period (Copestake, 2007).

Depth of outreach determines the quality of micro-lending, finding a reasonable measure for it is always difficult as poverty line is hard to measure due to un-accessibility of information about individual client (Quayes, 2012; Rhyne, 1998). Therefore, average loan size is reasonably be used as a proxy for depth of outreach (Morduch, 2000; Rhyne, 1998).

The other dimension of outreach is breadth of outreach that measures the number of active borrowers in a given time (Navajas et al., 2000). Breadth of outreach measures the number of borrowers served at a given layer of depth by microfinance. In developing countries, the financial inclusion of poor can be expanded by increasing the breadth of outreach as small number of target population have reach to formal financial services. Moreover, breadth can improve financial position of MFIs due to economies of scale (Gonzalez-Vega, 1998).

# Tradeoff and Ownership-type

The most important issue in microfinance literature is the tradeoff between financial and social performance that are the main objectives for which MFIs exist (Mori and Mersland, 2014). Social performance may be the extent to which MFIs attempt to approach greater number of poorer clients to reduce poverty, financial performance may be the extent to which MFIs attempt to target better off customers to lend money (Simonsen, 2016; Barth et al. 2012). These two objectives are generally viewed as conflicting by the researchers. Financial and social goals are found to have tradeoff as it is expensive to lend to the poor. A large number of MFIs simultaneously ponder financial as well as social objectives. Barth et al. (2012) states that duality of objectives renders the governance of the organization more difficult relative to the organization having single objective. Some researchers states that non-NGO type of MFIs are more effective in cost control, in obtaining finance and have better governance (Mori and Mersland, 2014).

Robinson (2001) argues that donation dependent MFIs are restricted to outreach therefore the study distinguished commercialized MFIs that gave rise to the debate on two conflicting approaches namely institutionalist approach and welfarist approach (Brau and Woller, 2004). Both of the views claim the presence of tradeoff between financial and social performance though their inferences are different. The institutionalist argues vitality of financial sustainability for serving bottom line poor and welfarist claims that donations and subsidies are necessary for obtaining outreach mission of MFIs.

The literature that evidences the tradeoff between outreach and financial performance chiefly points high per borrower cost while lending small loans. The increase in breadth of outreach may result in correspondence increase in likelihood of crediting to riskier borrowers that creates risky portfolio and thus high non-payment rate (demand side effect). The small sized loans lead higher per unit cost as these loans require monitoring cost (supply side effect). The fixed component of cost is not in actuality a problem as it can be subordinated with economies of scale. Variable cost may also be recuperated by charging higher interest rate however it may exacerbate repayment rate and thus deteriorate profitability.

Later, the concept of mission drift i.e. propensity of MFIs to lend to the better off borrowers gave impetus to the discussion of tradeoff between financial performance and outreach. Samuel (2009) argues tradeoff relation between poverty index and operational self-sufficiency in case of Ghanaian MFIs. Hermes and Lensink (2011) measured depth of outreach with average loan balance and performance with efficiency and found tradeoff between them using extensive dataset for 435 MFIs over five regions. Kablan (2012) measured social mission with poverty index and found its relation with efficiency that showed tradeoff relation. Recently, Abate (2014) measured depth of outreach with average loan size and percentage of women borrowers and found tradeoff relation with efficiency in case of Ethiopian MFIs. Boss and Millone (2015) estimated operational efficiency using Leibenstein's notion and found that MFIs with primary concern for outreach depth are more efficient that result in high profitability. The results support the presence of compatibility of relation between outreach and profitability.

The tradeoff relation between outreach and performance is not independent and intervened by several other factors such as institutional characteristics such as ownership structure and type (Boss and Millone, 2015). In corporate governance literature, ownership is an important factor that determines the performance of organizations (Campion, 1998). The concept of ownership is classified in two aspects namely concentration and composition. Concentration denotes the division of ownership between owners and managers or division of ownership between small investors and large investors. Composition refers to the status of the ownership. In case of MFIs, composition may include bank, NGO, NBFI or credit unions (Mersland, 2007; Barth et al. 2012).

This study focuses on two types of ownership including NGO-type and Non-NGO type (including banks and NBFIs). NGO-type of MFIs is the oldest MFIs that are the first to provide services to the poor. Most of the NGOs are funded by the donors. The profit of NGOs is not allowed to be paid to the investors rather it is kept as retained earnings for use in future. As no person has claim over the income of NGOs, there is no owner of NGO (Hansmann, 1996).

In contrary to NGOs, Banks and NBFIs have controlling shareholders and these organizations also distribute profits among investors (Mersland, 1009). Banks are traditionally profit oriented organizations and governed by central bank of the country. Their range of financial products includes commercial advancing, providing saving services and transfer of money. NBFIs are also profit oriented organizations with different financial structure as NBFIs heavily depends on loans and donations and they are restrained from collecting deposits from customers. The services of NBFIs are alike banks with the exception of saving services from which usually NBFIs are prohibited.

The relation between MFI-ownership and MFI performance has been investigated in literature though leaves the room for further studies as results found by these studies are ambiguous (Thrikawala et al. 2013). Mang'unyi (2011) states that ownership type effects corporate governance that subsequently affects firm performance. Mersland and Strom (2007) claims ownership to be one of the most important elements of corporate governance and determined the relation between ownership and performance. The studies specifically dealing MFI ownership and performance include Mersland (2007), Cull et al. (2009), Servin et al. (2011) and Thrikawala et al. (2013).

Nieto et al. (2007) also determined the difference in performance of shareholders owned MFIs and non-profit MFIs. Using data for 30 microfinance institutions in Latin America, the study found that shareholders owned MFIS are superior in performance than non-profit MFIs. Mersland (2008) conducted the same study using non-profit MFIs and investor ownership as ownership types. The study does not find any significant difference between performances of these two types.

Cull et al. (2009) divided MFIs in several types such as Banks, NGOs, NBFIs, Credit Unions and Rural banks. The study found significant difference in performance among several types of MFIs. Servin et al. (2011) determined the impact of ownership types on technical efficiency and found that banks and NBFIs have higher technical efficiency than NGOs and credit unions.

Thrikawala et al. (2013) studied MFIs dividing them in four types including non-profit, forprofit, cooperatives and shareholders owned MFIs. The study found that ownership significantly influence corporate governance and thus outreach and performance.

Singapurwoko (2014) investigated the impact of ownership-type of MFIs on performance. The study used government owned MFIs and NBFIs as types of MFIs. The study found significant difference in performance and outreach among these types of ownership.

# Methodology

For the purpose of the study, ownership type of MFIs is taken as NGO-type and bank-type that divides analysis in two parts: one for NGO-type and second for Bank-type MFIs. When we took

NGO-type as dependent variable, we assigned 1 if MFI is NGO and 0 if it is not and when we took bank-type as dependent variable, we assigned 1 if MFI is bank-type and 0 otherwise. Financial performance is measured with Return of Assets (ROA) and social performance is measured with breadth of outreach taking number of active borrowers (NAB).

Other control variables include number of offices in a country (NOF), size of MFIs (Size), Age of MFIs (Age), regulation status (REG), capital ratio (CAP), economic growth (GDP) and number of MFIs in a country (NO).

Data is collected from MIxMarket database and World Bank development indicators. Data is related with 405 MFIs in Latin America for the year 2005 to 2014. For obtaining coefficients, we applied classical regression, Logit model and Probit model.

Logistic regression is a technique that is applied if criterion variable is binary i.e. it takes only two values, rather than continuous. The criterion variable for our study is either MFI is NGO or not. We take value "1" if it is an NGO and "0" if it is other than an NGO. Therefore, classical regression is not feasible to be applied in our study but adjusted regression including Logit and Probit models (Spuchl'aková & Cúg, 2014). Logit model predicts the probability of occurrence or non-occurrence of an event that varies from 0 to 1.

Probit model is used as a substitute of logit model. The major difference between these models is that the Probit model assumes normality of distribution of independent variables in the model. However, practically these models are used alternatively.

#### Results

The results are divided into two parts: from table 1 to 3, the analysis for NGO-type of MFIs is presented and from table 4 to 6 the analysis for Bank-type of MFIs is presented. The analysis is organized as classical regression, Logit regression and Probit regression models are run to obtain coefficients. As our dependent variable is dichotomous, the analysis cannot be restricted to classical regression and therefore, we used Logit and Probit models.

### NGO-type MFIs

In logit and probit models, the coefficients can merely be interpreted as "more likely or less likely" though the magnitude of coefficients cannot be known. For this purpose, the marginal effects of these models are found. Additionally, logistic model is run that interpret the coefficients in terms of odd ratio that ranges from 0 to infinity.

Table 1 shows OLS, probit and logit models. These models show similar relations of independent variables with dichotomous dependent variable. The results show that high ROA is less likely to be related to NGO-type MFIs. The result is consistent in all three models. On the other side, outreach is found to be insignificant in all models. The models are statistically good fit such as classical regression has f-stat 285.44 (significant at less than 1%), R-square 53%; Logit has LR chi square 1582.31 (significant at less than 1%), Pseudo R2 51%; and Probit has LR chi square 1567.05 (significant at less than 1%), Pseudo R2 51%.

Table 2 represents marginal effects of the models. It shows the similar results as found in table 1. However, it also shows magnitude of relation between dependent and independent variables. In classical regression, the coefficient of ROA is -0.242 i.e. ROA is 24% less likely to be related to NGO-type MFIs. The coefficient is significant at less than 1%. In logit and probit models, we found that high ROA is 18% and 17% less likely to be related with NGO-type MFIs. The probabilities are significant at less than 1%. Outreach is found to be insignificant in either model.

Table 1. Financial and Social Performance – NGO type MFIs

	O	LS	Pro	obit	Lo	git	
NGO	Coef	t	Coef	Z	Coef	Z	
ROA	2423596	-3.21*	-1.028414	-2.60*	-1.647374	-2.38*	
NAB	.0104502	1.01	.0946956	1.85	.1401662	1.57	
NOF	.0164937	1.46	.0639638	1.13	.1271205	1.27	
Size	0679477	-8.00*	4289653	-9.52*	7432082	-9.22*	
Age	.2577825	14.47*	1.323115	12.12*	2.309999	11.48*	
REG	5312483	-27.46*	-2.088108	-20.27*	-3.572615	-19.24*	
CAP	.1310214	3.28*	.5017921	2.63*	.8205467	2.47*	
GDP	0554068	-10.10*	2721316	-9.67*	4649898	-9.36*	
NO	.0311624	2.62*	.237559	3.47*	.4159215	3.44*	
C	2.166345	13.29*	8.613035	9.98*	14.8788	9.51*	
Obs.	2262		Obs.	2262	Obs.	2262	
F( 9,	285.44		LR chi2(9)	1582.31	LR chi2(9)	1567.05	
2252)							
Prob > F	0.0000		Prob >	0.0000	Prob >	0.0000	
			chi2		chi2		
R-squared	0.5329		Pseudo R2	0.5174	Pseudo R2	0.5124	
Adj R2	0.5310						
* significant < 1, ** significant < 5%,							

Table 2 Financial and Social Performance – NGO type MFIs - Marginal Effects

	0	LS	Pro	obit	Logit				
NGO	dy/dx	Z	dy/dx	Z	dy/dx	Z			
ROA	2423596	-3.21*	1836553	-2.62*	1679535	-2.39*			
NAB	.0104502	1.01	.0169108	1.86	.0142903	1.57			
NOF	.0164937	1.46	.0114227	1.13	.0129602	1.27			
Size	0679477	-8.00*	0766051	-10.06*	0757717	-9.71*			
Age	.2577825	14.47*	.2362833	13.42*	.2355095	13.00*			
REG	5312483	-27.46*	3728966	-30.16*	3642361	-31.05*			
CAP	.1310214	3.28*	.0896105	2.65*	.0836566	2.48*			
GDP	0554068	-10.10*	0485976	-10.33*	0474067	-10.06*			
NO	.0311624	2.62*	.0424235	3.50*	.0424041	3.47*			
* significant	* significant < 1, ** significant < 5%,								

Table 3 shows the results of logistic regression. ROA has odd ratio 0.19 that shows with 1 unit increase in ROA, the probability that it relates to NGO-type MFIs is decreased by 19%. It can also be interpreted as the probability that increase in ROA is related to NGO-type MFI is 19% less than the probability that it relates to non-NGO MFIs. However, outreach is not significant in any model. Moreover, goodness of fit tests shows model is a good fit such as LR chi square is 1567.05 at less than 1 % and Pseudo R2 is 51%.

Additionally, the model must adequately correctly classify MFIs into NGO and non-NGO types of MFIs. The logit as well as probit models show that about 84% of the MFIs are correctly classified.

**Table 3 Logistic Regression - NGO-type MFIs** 

NGO	Odds	Std. Err.		<u>.                                    </u>	P>z	[95%	[Interval]	
	Ratio				·	Conf.		
ROA	.1925548	.1334888	-2.38		0.017	.0494833	.7492909	
NAB	1.150465	.1030153	1.57		0.117	.9652834	1.371172	
NOF	1.135554	.1134812	1.27		0.203	.9335621	1.38125	
Size	.4755857	.0383453	-9.22		0.000	.4060677	.557005	
Age	10.07441	2.026963	11.48		0.000	6.791388	14.94448	
REG	.0280823	.0052155	-19.24	1	0.000	.019514	.0404128	
CAP	2.271742	.7542482	2.47		0.013	1.185083	4.354809	
GDP	.6281415	.0312044	-9.36		0.000	.5698651	.6923775	
NO	1.515767	.1835226	3.44		0.001	1.195563	1.92173	
С	2895878	4531482	9.51		0.000	134839.3	6.22e+07	
Obs.	2262							
LR chi2(9)	1567.05							
Prob > chi2	0.0000							
Pseudo R2	0.5124							
Model				Correctly Classified				
Probit				84.17%				
Logit				84.17%				
* significant < 1, ** significant < 5%,								

# Bank-type MFIs

Table 4 shows classical regression, Probit regression and Logit regression for Bank-type MFIs. The models shows that better off clients are more likely to be related with bank-type MFIs. The coefficients are significant in all models. However, ROA is found to be insignificantly related with bank-type MFIs in either model. The models are found to be statistically significant such as f-stat 106.71 significant at less than 1% shows goodness of fit for classical regression; LR chi square for logit and probit models are 797.98 and 791.14 respectively that are significant at less than 1 percent. Pseudo R square is 47 percent each for logit and probit models.

Marginal effects of these models are given in table 5 that shows magnitude of the effects of independent variables. In classical regression, outreach is 0.019 that shows breadth of outreach is 1.93% more likely to be linked with bank-type MFIs. The magnitude in logit and probit models is 2.9% and 2.5% respectively. However, ROA is found to be insignificant in either model.

Table 6 shows logistic regression for bank-type MFIs. Outreach has odd ratio 1.53 that shows with 1 unit increase in outreach breadth, the probability that it relates to bank-type MFIs is increased by 53%. It can also be interpreted as increase in outreach is 53& more likely to be related with bank-type MFIs relative to other MFIs. However, ROA is not significant in any of the models. Additionally, goodness of fit tests show model is good fit such as LR chi square is 791.14 at less than 1 percent significant leverl and Pseudo R square is 47%. The logit model 91.34% correctly classifies MFIs and probit model does 91.38%.

Table 4 Financial and Social Performance – Bank type MFIs

Bank	O	LS		bit	Logit			
	Coef.	t	Coef.	Z	Coef.	Z		
ROA	071182	-1.16	3679417	-0.46	3411922	-0.22		
NAB	.0193843	2.30*	.2763014	3.40*	.4306119	2.89*		
NOF	0160425	-1.75	2372461	-2.61*	4003262	-2.41**		
Size	.0683906	9.92*	.5356764	8.78*	.9965955	8.54*		
Age	0530412	-3.67*	5770546	-4.44*	9562464	-3.93*		
REG	.1357047	8.64*	1.628055	8.07*	3.077135	7.48*		
CAP	.0927032	2.86*	1.274085	3.15*	2.60017	3.44*		
GDP	.001727	0.39	1613714	-3.70*	3235025	-4.16*		
NO	0978135	-10.12*	5736728	-7.67*	-1.001646	-7.51*		
C	8207045	-6.20*	-6.826484	-5.66*	-11.96827	-5.51*		
Obs.	2262		Obs.	2262	Obs.	2262		
F( 9,	106.71		LR chi2(9)	797.98	LR chi2(9)	791.14		
2252)								
Prob > F	0.0000		Prob >	0.0000	Prob >	0.0000		
			chi2		chi2			
R-squared	0.2990		Pseudo R2	0.4789	Pseudo R2	0.4748		
Adj R2	0.2962							
* significant	* significant < 1, ** significant < 5%,							

Table 5 Financial and Social Performance – Bank type MFIs - Marginal Effects

	OLS		•	obit	Logit		
Bank	dy/dx	Z	dy/dx	Z	dy/dx	Z	
ROA	071182	-1.16	038876	-0.46	0202474	-0.22	
NAB	.0193843	2.30*	.0291935	3.46*	.0255538	2.92*	
NOF	0160425	-1.75	025067	-2.63*	0237566	-2.42*	
Size	.0683906	9.92*	.0565986	9.43*	.059141	9.32*	
Age	0530412	-3.67*	0609705	-4.55*	0567466	-4.02*	
REG	.1357047	8.64*	.1720173	8.46*	.1826066	7.67*	
CAP	.0927032	2.86*	.1346175	3.16*	.1543021	3.46*	
GDP	.001727	0.39	0170502	-3.73*	0191976	-4.23*	
NO	0978135	-10.12*	0606132	-8.24*	0594408	-8.25*	
* significant < 1, ** significant < 5%,							

**Table 6 Logistic Regression – Bank-type MFIs** 

Bank	Odds	Std. Err.	Z	P>z	[95%	Interval]
	Ratio				Conf.	
ROA	.7109222	1.121563	-0.22	0.829	.0322814	15.6564
NAB	1.538198	.2294532	2.89	0.004	1.148256	2.060564
NOF	.6701015	.1113522	-2.41	0.016	.4838319	.9280825
Size	2.709043	.3159977	8.54	0.000	2.155396	3.404903
Age	.3843328	.0934622	-3.93	0.000	.2386229	.6190175
REG	21.69615	8.924288	7.48	0.000	9.68852	48.58563

Bank	Odds	Std. Err.	7	Z	P>z	[95%	Interval]	
	Ratio					Conf.		
CAP	13.46602	10.18272	3.	44	0.001	3.058997	59.27884	
GDP	.7236101	.0562139	-4.	.16	0.000	.6214108	.8426175	
NO	.3672743	.0489705	-7.	.51	0.000	.2828106	.4769638	
C	6.34e-06	.0000138	-5.	.51	0.000	9.00e-08	.0004467	
Obs.	2262							
LR chi2(9)	791.14							
Prob >	0.0000							
chi2								
Pseudo R2	0.4748							
Model					Correctly Classified			
Probit					91.38%			
Logit			91.34%					

#### Conclusion

The purpose of the article is to determine how ownership status affects financial and social performance of MFIs. The objectives of MFIs are obtaining financial sustainability on one side and reaching to the poorest of the poor on the other side. The literature shows that these two objectives are contrary to each other and are likely to have tradeoff.

Traditionally, it is believed and experienced that NGO – type MFIs are more concerned with serving bottom line poor and non-NGO type MFIs are more concerned for generating profits. However, recently it has been observed that NGO-type MFIs are also focusing on generating profits and non-NGO-type- MFIs are having equivalent social mission as NGOs. However, the effect of ownership is not as clear as appears (Mersland and Strom, 2008).

On the basis of nature of the study, the most suitable empirical techniques were applied namely logit and probit analysis. However, classical regression is also applied though not sufficient to accomplish the purpose of the study. Data is collected from MFIs in Latin America for 10 years from 2005 to 2014.

The empirical analysis show that models are consistent and statistically good fit. The results found are as expected logically and theoretically. NGO-type MFIs are found to be less concerned with high profitability that shows such MFIs does not prioritize financial performance. On the other side, bank-type MFIs are more likely to be related with attracting better off clients that shows instead of reaching to the poor, bank-type MFIs focus on financial performance.

# Limitation

Due to unavailability of data, we could not find data for years later than 2014.

#### References

Abate, G. T., Borzaga, C., & Getnet, K. (2014). Cost-Efficiency And Outreach Of Microfinance Institutions: Trade-Offs And The Role Of Ownership. *Journal of International Development*, 26(6), 923-932.

Armendáriz, B., & Morduch, J. (2010). The economics of microfinance. MIT press.

Barth, J. R., Lin, C., & Wihlborg, C. (Eds.). (2012). Research handbook on international banking and governance. Edward Elgar Publishing.

- Bos, J. W., & Millone, M. (2015). Practice what you preach: Microfinance business models and operational efficiency. *World Development*, 70, 28-42.
- Brau, J. C., & Woller, G. M. (2004). Microfinance: A comprehensive review of the existing literature. *The Journal of Entrepreneurial Finance*, 9(1), 1.
- Campion, A. (1998). Current Governance Practices of Microfinance Institutions: A Survey Summary. Microfinance Network.
- Conning, J. (1999), Outreach, sustainability and leverage in monitored and peermonitored lending, *Journal of Development Economics*, Vol. 60, No. 1, pp. 51-77.
- Copestake, J. (2007). Mainstreaming microfinance: Social performance management or mission drift?. *World Development*, *35*(10), 1721-1738.
- Cull, R., Demirgu-Kunt, A., Morduch, J. (2007), Financial performance and outreach: A global analysis of leading microbanks, *The Economic Journal*, 117(517), 107-133.
- Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2009). Microfinance meets the market. In *Moving Beyond Storytelling: Emerging Research in Microfinance*(pp. 1-30). Emerald Group Publishing Limited.
- Ferro-Luzzi, G., & Weber, S. (2006). Measuring the performance of microfinance institutions.
- Gutierrez-Nieto, B., Serrano-Cinca, C., & Molinero, C. M. (2007). Microfinance institutions and efficiency. *Omega*, 35(2), 131-142.
- Hartarska, V., & Nadolnyak, D. (2007). Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence. *Applied economics*, 39(10), 1207-1222.
- Hermes, N., & Lensink, R. (2007). The empirics of microfinance: what do we know?. *The Economic Journal*, 117(517).
- Hermes, N., & Lensink, R. (2011). Microfinance: its impact, outreach, and sustainability. *World development*, 39(6), 875-881.
- Kablan, S. (2012). Microfinance efficiency in the West African economic and monetary union: have reforms promoted sustainability or outreach?.
- Mang'unyi, E. E. (2011). Ownership structure and Corporate Governance and its effects on performance: A case of selected Banks in Kenya. *International Journal of Business Administration*, 2(3), 2.
- Mersland, R., & Strøm, R. Ø. (2008). Performance and trade-offs in Microfinance Organisations— Does ownership matter?. *Journal of International Development*, 20(5), 598-612.
- Mersland, R., & Strøm, R. Ø. (2009). Performance and governance in microfinance institutions. *Journal of Banking & Finance*, 33(4), 662-669.
- Mersland, R., Strom, R. O. (2010), Microfinance mission drift?, World Development, 38(1), 28-36.
- Mori, N., & Mersland, R. (2014). Boards in microfinance institutions: how do stakeholders matter?. *Journal of Management & Governance*, 18(1), 285-313.
- Navajas, S., Schreiner, M., Meyer, R. L., Gonzalez-Vega, C., & Rodriguez-Meza, J. (2000). Microcredit and the Poorest of the Poor: Theory and Evidence from Bolivia. *World development*, 28(2), 333-346.
- Pollinger, J. J., Outhwaite, J., & Cordero-Guzmán, H. (2007). The question of sustainability for microfinance institutions. *Journal of Small Business Management*, 45(1), 23-41.
- Quayes, S. (2012). Depth of outreach and financial sustainability of microfinance institutions. *Applied Economics*, 44(26), 3421-3433.
- Robinson, M. (2001). *The microfinance revolution: Sustainable finance for the poor*. World Bank Publications.
- Rhyne, E. (2001). *Mainstreaming microfinance: How lending to the poor began, grew, and came of age in Bolivia* (No. 332.1 R4.). Bloomfield, CT: Kumarian Press.
  - Openly accessible at http://www.european-science.com

- Schreiner, M. (2002). Aspects of outreach: A framework for discussion of the social benefits of microfinance. *Journal of international development*, 14(5), 591-603.
- Servin, R., Lensink, R., & Van den Berg, M. (2012). Ownership and technical efficiency of microfinance institutions: Empirical evidence from Latin America. *Journal of Banking & Finance*, 36(7), 2136-2144.
- Simonsen, M. S. (2016). *Effect of Ownership Types on the Social Performance in Microfinance Institutions* (Master's thesis, Universitetet i Agder; University of Agder).
- Singapurwoko, A. (2014). Ownership type and the triangle of microfinance: empirical evidence from Indonesia microfinance institutions. *The Business & Management Review*, 5(2), 68.
- Spuch aková, E., & Cúg, J. (2014). Lost Given Default and the Credit Risk. Proceedings of ICMEBIS 2014 International Conference on Management, Education, Business, and Information Science, Shanghai, China, EDUGait Press, Canada, 12-15.
- Thrikawala, S., Locke, S., & Reddy, K. (2013). Corporate governance–performance relationship in microfinance institutions (MFIs).
- Von Pischke, J. D. (1996). Measuring the trade-off between outreach and sustainability of microenterprise lenders. *Journal of International Development*, 8(2), 225-239.