

## Does regulation increase microfinance performance in Sub-Saharan Africa?

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### Abstract

Regulation of microfinance has gained momentum and raises high expectations in Sub-Saharan Africa. From 2001 to 2009, 31 countries passed new or revised microfinance legislation, while 24 countries adopted national microfinance strategies. On one hand donors and governments expect that setting up a special regulatory window for microfinance will speed the emergence of sustainable microfinance institutions (MFIs). On the other hand MFIs seek to transform into regulated entities to access cheap and local currency deposits. This research assesses the impact of regulation on microfinance performance (Operational Self Sufficiency) in a multivariate analysis using 2008 cross section data from 192 institutions in 32 Sub-Saharan African countries. The results do not show sufficient evidence that the regulatory status increases the sustainability of MFIs nor does the deposit intermediation. However, after controlling for the regulatory capacity, there is clear evidence that countries with a high Official Supervisory Power have more sustainable MFIs and it is only after integrating the Official Supervisory Power in the model that the deposit intermediation coefficient becomes significant and positively associated with the Operational Self sufficiency.

**“Nothing is more destructive of respect for the government and the law of the land than passing laws which cannot be enforced”**

**-Albert Einstein**

### Introduction

In the last two decades, many developing countries have witnessed a rapid growth of microfinance activities. The trends on the investment side have included increasing attention from socially responsible and capital markets investors. From an institutional set up, commercial banks are downscaling, MFIs are moving up market and convergence is happening between the so called finance for growth and finance for all. Recognizing that microfinance is more and more integrated in the mainstream financial system brings calls for regulation to set up the rules of the game in this industry (CGAP 2000).

The general tendency toward regulation is even reinforced by microfinance institutions' own self interest. Since regulation remains a precondition for deposit mobilisation in many countries, more MFIs seek to transform into regulated entities to access cheap and local currency deposits. Regulation opens also the door to a variety of funding opportunities and helps to reduce the overreliance on subsidies. Donors and microfinance practitioners are well aware that microlenders need to prepare for the day when subsidies disappear as donors choose to move on (Armendariz and Morduch, 2005). Understanding how regulation affects performance matters. On one hand costs of designing and enforcing regulatory policies to address the specific challenges of microfinance are substantial (Hartaska and Mersland, 2009). On the other hand, complying with supervisory requirements is costly.

Studies have analyzed the impact of regulation on financial intermediaries (including MFIs) worldwide, deriving potential implications of microfinance supervision in a consistent manner and moving one step beyond countries' anecdotal evidence. However the underrepresentation of some regions in the sample and the heterogeneity of microfinance institutions are a sufficient condition for replicating similar investigations at regional levels.

(Barth et al., 2004) have reviewed the implications of supervision on the performance of financial intermediaries. They found no evidence of a positive impact of higher regulatory power on bank performance and valuation. Instead, they found an institutional environment supportive of private sector supervision having a positive impact.

(Hartarska and Nadolnyak, 2007) have conducted a research using a positive approach to assess if regulated MFIs achieve better sustainability and outreach than unregulated MFIs. They have analyzed data from 114 MFIs in 62 countries using an empirical model where performance was specified as a function of MFI-specific, regulatory, macroeconomic and institutional variables. Their key finding was that regulatory involvement does not directly affect performance both in terms of operational self-sufficiency or outreach. As a policy implication, they concluded that MFIs' transformation into regulated financial intermediaries might not lead to improved financial results and outreach. However, they found institutions collecting savings reaching more borrowers, thus suggesting that regulation might have an indirect benefit if it is the only way allowing MFIs to collect deposits from the public.

(Cull R., et al, 2009) have assessed the implications of regulation on MFI's profitability and outreach to small scale borrowers and women, using data on 245 of the world's largest microfinance institutions. In addition, they have constructed data on onsite supervision. In a first model (Ordinary Least Squares)<sup>1</sup>, they have found that supervision had a negative impact on profitability. After controlling for the non-random assignment of supervision via treatment effects and instrumental variables regressions, they found supervision to be significantly associated with larger average loan sizes and less lending to women. However the estimate coefficient of supervision was not significantly associated with profitability.

This paper discusses the potential impact of regulatory on microfinance performance in Sub-Saharan Africa using cross section data from the mix market of 192 microfinance institutions from 32 different countries. Besides the introduction and the conclusion, the paper is structured in 3 sections. The first gives an overview of microfinance regulatory framework in Sub-Saharan Africa; the second section presents the data and the last section covers the methodology and the key findings.

## **1. Microfinance regulatory framework in Sub-Saharan Africa: an overview**

There is a clear tendency to regulate microfinance activities in Sub-Saharan Africa with diversified approaches on several dimensions. These include the type of legislation, the optimal timing for starting to regulate, and the object of regulation.

Concerning the type of legislation, MFIs are either regulated by a specialized law or accommodated within the banking law. Between these two alternatives, most countries have taken a pragmatic approach for the supervision of the sector. As of 2008, in total 29 countries had already put in place specialized laws to cover the microfinance industry. Some other countries (5) were drafting microfinance laws. In 14 countries, the approach consisted of placing the supervision of MFIs under the same body that supervises banks and other financial institutions. Only 3 countries had no legislation in place to regulate the microfinance sector.

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<sup>1</sup> The Ordinary Least Squares is an econometric method for estimating the unknown parameters in a linear regression model. This method minimizes the sum of squared vertical distances between the observed values in the dataset and the predicted values by the linear approximation.

**Table 1: Types of microfinance legislation in Sub-Saharan Africa**

	Countries (names in bold indicate a change occurred between 2007 and 2008)	
Specialized Microfinance Laws (29)	<b>Burundi</b> CEMAC Countries (6) <sup>2</sup> Comoros DRC <b>Djibouti</b> Ethiopia The Gambia Guinea Kenya	Madagascar Mauritania <b>Mozambique</b> <b>Rwanda</b> <b>Sudan</b> Uganda <b>WAEMU Countries (8)<sup>3</sup></b> Zambia
Drafting Specialized Microfinance Laws (5)	<b>Cape Verde</b> <b>Liberia</b> <b>Malawi</b>	<b>Sierra Leone</b> <b>Zimbabwe</b>
MFIs implicitly fall under banking or non banking financial Institutions legislations (14)	Angola Botswana Ghana Lesotho Liberia Malawi Mauritius	Namibia Nigeria Saotome Somalia South Africa Tanzania Zimbabwe
No Legislation framework (3)	Eritrea Seychelles	Swaziland

Source: CGAP, Overview of Microfinance-Related Legal and Policy Reform in Sub-Saharan Africa 2009

Concerning the second dimension: Optimal timing for starting to regulate, 2 approaches were applied across Sub-Saharan Africa, both aiming at promoting the goal of financial inclusion. The most popular approach “laissez-faire”, consisted of leaving the door opened to MFIs’ entry in the sector and giving enough time to institutions to develop and mature before starting to regulate. In contrast, the second approach consisted of setting up a regulatory framework at a very early stage of development of the microfinance sector. While the laissez-faire relies on the assumption that regulating the sector too early could stifle innovations and impede institutions to serve the poor, the second approach laid on a strong belief that some institutional forms were better positioned to reach out to the poor thus making an outstanding contribution to the goal of financial inclusion. The second approach was implemented from 1993 until July 2009 in the WAEMU countries where savings and credit cooperatives and their unions were substantially promoted

<sup>2</sup> CEMAC stands for Communauté Economique et Monétaire des Etats d’Afrique Centrale (Economic Community of Central African States) with 6 member countries (Cameroon, Central African Rep., Chad, Congo, Equatorial Guinea, and Gabon).

<sup>3</sup> WAEMU or Western African Economic and Monetary Union has eight member countries (Benin, Burkina Faso, Guinea Bissau, Ivory coast, Mali, Niger, Senegal and Togo).

The third dimension of microfinance regulation refers to its own objective. The experience from the last two decades reveals two models. In most countries, the object of the regulation was the microfinance activity which means that MFIs were not offered undue regulatory advantages on the simple basis of their institutional form. However, the CEMAC and WAEMU regions constituted an exception. Under the law PARMEC (Projet d'Appui à la Réglementation sur les Mutuelles d'Épargne et de Crédit) or Project for the regulation of credit unions, mutual institutions were the only supervised MFIs. They were offered tax exemptions and a clear long term operational visibility whereas other types of institutions were obliged to sign a framework agreement with the ministry of Finance. As highlighted by (Lolila-Ramin, 2005), the framework provided conditions under which these institutions registered and operated but agreements were not uniform as they depended on the unique situation of each MFI and their capacity to lobby with regulatory authorities. The situation on the ground has changed with the introduction of a new microfinance law in WAEMU.

### Highlights of the revised microfinance law in WAEMU

- The licensing process now applies to all MFIs (credit unions, private companies, and associations).
- All major MFIs (outstanding portfolio greater than 4 million USD) now fall under the supervision of the Central Bank (BCEAO) and the Banking Commission; small and medium-sized MFIs will be supervised by the ministries of finance.
- Major MFIs are required to have an annual external audit and report monthly financial information to authorities.
- The consolidation of savings and credit groups into medium-sized entities with more financial and technical capacities is recommended.
- A common accounting framework has been approved and is mandatory starting January 2010.
- All MFIs must be members of a recognized national microfinance association.

Source: CGAP and Mix Market, 2010, Sub-Saharan Africa 2009 Microfinance analysis and benchmarking report

Despite the differences, there are similarities or even a general consensus on 2 aspects of microfinance regulation in Sub-Saharan Africa. The first is the "teering" or categorization of MFIs by size or scope of activities. This structure provides opportunities and incentives for MFIs to graduate between tiers, and creates the appropriate regulatory requirements for the different type of institutions (Meagher, 2002). As pointed out by (Arun and Murinde, 2010), this approach has benefited the development of sustainable microfinance in some countries - for instance, Susus of Ghana and SACCOs in East Africa which both belong to these categories according to their size of operations by clearly identifying pathways for MFIs to become legitimate institutions and to gain access to financial services from commercial markets. The second aspect is a general tendency to put the supervision of MFIs under the authority of the Central Bank which was the case in 31 SSA countries in 2009.

## 2. Data and descriptive statistics

The data used for this research were gathered from four different sources. First, data on microfinance institutions characteristics were downloaded from the Microfinance Information Exchange website on an Excel format. The quantitative data provided valuable information on various areas of interest as the age, size, financing structure, outreach, efficiency, profitability and portfolio quality of the respective MFI. This information was complemented with qualitative data about the regulatory status of each MFI.

Our second source is the World Bank website where information on country specific variables as the GDP per capita and Inflation rate was gathered from the online data stream.

Additional data on Regulatory Quality were extracted from the 8th edition of the Governance Matters report where five other dimensions of governance are measured between 1996 and 2008: Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Rule of Law, and Control of Corruption.

Finally, we have used the indicator of Official Supervisory Power (OSP) provided by the latest version of the World Bank survey on Regulation and Supervision of Banks around the World. The OSP indicator is an aggregation of answers to 16 questions with a higher value indicating a higher supervisory power. Though the OSP data were

collected in 2003, we use it as a proxy for supervisory capacity in the absence of up-to-date information. More information on the rationale for using the index is provided in the next section.

### Comparative analysis between regulated and unregulated MFIs

After splitting the sample in 2 subgroups regulated and unregulated MFIs, we have performed a two sample mean difference test at 5% significance level.

**Table 2: A Two sample means difference test between Regulated and Unregulated MFIs**

	Regulated (mean)	Not Regulated (mean)	Difference in Means (t test at 95% CL)
Age	11.00654	7.948718	Yes
total assets	32700000	6217704	No
Deposit asset ratio	0.4668255	0.2078477	Yes
Capital asset ratio	0.2842302	0.3599359	No
Debt to equity	2.751745	3.368205	No
Avg. loan GNI p.capita	1.38694	0.7600308	No
Avg. dep/GNI p. Capita	0.310625	0.0996552	Yes
% of women bor.	0.5278452	0.7179632	Yes
Real yield on gross portfolio	0.1889248	0.3731139	Yes
OSS	1.056258	1.071065	No
Return on asset (RoA)	-0.02929	-0.0215342	No
Return on equity (RoE)	-0.1499825	-1.093376	No
NPL30	0.0973832	0.0896615	No

Source own calculations based on mix market data

The results reveal 4 core characteristics which differ significantly between regulated and unregulated MFIs in SSA: the age of the institution, the funding structure (deposit/asset ratio), the average deposit per depositor, yield on gross loan portfolio and the focus on female borrowers. Regulated MFIs are older than their peers. They mobilize more deposit as testifies the higher deposit/asset ratio. A further indication of their capacity to collect savings is shown by the higher level of deposit per depositor over GNI per Capita, which is also an indication of the higher market segment on which they operate. Regulated MFIs charge on average a lower interest rate which probably results from reduced financial costs due to deposit mobilization.

The financial performance does not reflect differences in regulatory status. The OSS, RoA and RoE are not statistically different between both subsamples. The same applies to the portfolio quality, the average loan size over GNI per Capita, the debt to equity ratio, level of capitalization and the institution size. Regulated MFIs are bigger institutions in terms of the volume of total assets, but this difference is not statistically significant. The test does neither support that regulated MFIs are more sustainable nor that they have a better portfolio quality. Both institutions lend to a clientele which is not significantly different. Although, on average regulated MFIs have a higher share of debt in percentage of their total liabilities, they do not attract more commercial funding as one would have expected. Unregulated MFIs are mainly funded via equity and to a greater extent than regulated MFIs but the level of capitalization is not a key distinctive feature between the two categories of institutions.

### 3. Estimation and findings

We have estimated Ordinary Least Squares (OLS) regressions where performance is defined in terms of operational self-sufficiency. This performance indicator is specified as a function of regulatory status, MFI specific factors and country's institutional and macroeconomic factors. The analysis uses cross-sectional data for the year 2008.

$$Y_i = \alpha + \beta (\text{regulatory status dummy}) + \gamma X_i + \delta Z_i$$

Where,

$Y_i$ : performance indicators

$X_i$ : Matrix of MFI specific-variables

$Z_i$ : Matrix of country-specific variables (macroeconomic and regulatory indicators)

For each regression, we have followed a narrow- to- broad approach, starting with the estimation of a simple model which has been expanded afterward by including new explanatory variables. At each intermediate step, we have checked the change on significance of the parameters of the model and tested for violation of OLS assumptions. Before presenting the results, we describe the variables and expected signs of the estimated parameters.

#### 3.1. Variables

##### 3.1.1 MFI specific-variables and related assumptions

###### a. Regulatory Status

The regulatory status is a dummy variable which takes the value 1 if an institution is regulated and 0 otherwise. Expectations from both supervisory authorities and microfinance institutions lead to a strong belief that regulation should increase the sustainability of MFIs. For this reason, we expect in our model that the regulatory status will be positively associated with the operational self sufficiency.<sup>4</sup>

Higher regulatory start-up costs (MIS improvement, branch infrastructure, license application) and ongoing costs (stringent reporting requirements) should oblige regulated MFIs to curtail outreach to the poor. In addition, we assume that most regulated MFIs are guided by the ultimate goal of profit maximization. In this view, the focus on social mission (poor clients) or women empowerment may not be a priority in their strategic objectives mix

###### b. Age

In general, older MFIs may be more experienced due to learning-curve effects resulting from trial-and-error processes (Müller Oliver and André Uhdeb, 2009). For this reason, we expect the age of the institution to have a positive impact on the operational self sufficiency.

###### c. Size

Experience shows that the size of the financial institution matters. The bigger the size of the financial institutions the more pronounced are the economies of scale and scope. We expect the size of total assets to be positively associated with the OSS. Zacharias (2008) and Demsetz and Strahan (1997) have found empirical evidence that

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<sup>4</sup> The Operational Self Sufficiency is a ratio that indicates if enough revenue has been earned to cover the Microfinance Institution's total costs (operational expenses, loan loss provisions and financial costs). As such, the ratio helps to determine the extent to which operations are becoming self-sustaining.

larger specialized microfinance banks are more able to gain benefits of diversification and economies of scale, thus making more profit and being financial sound.

d. Deposit asset ratio

The first independent variable related to the funding structure of the MFIs is the deposit asset ratio. The rationale for including this indicator in our model is to identify the extent to which deposit intermediation influences MFI's performance in SSA. Deposits constitute a lower cost of local currency funding. However, deposit intermediation does not only involve benefits. Lower funding cost and suppression of foreign exchange risk have a price. Deposit mobilization comes along with a liquidity risk (institution's failure) as well as higher start-up costs due to investment in acquisition and modernization of infrastructure, ongoing transaction cost and reporting costs to meet the regulatory standards. The general trend toward regulation in Sub-Saharan Africa suggests that all stakeholders including regulators and MFIs assume that benefits outweigh cost. In other words, they assume that deposit mobilization has a net positive impact on the Operational Self Sufficiency. However, we opt for a conservative view as this net positive impact should never be taken for granted.

e. Capital asset ratio

As a general assumption, MFIs with overreliance on equity are donor funded institutions and NGOs with little or no access to external borrowings. Although, the level of capitalization can be a function of internal managerial and strategic decisions of an MFI we do not consider the level of capitalization as a self motivated decision but rather as an outcome of the institutional form. The lack of profit motivation within highly capitalized institutions leads to consider a negative cause-effect relation between the level of capitalization and the operational self sufficiency. We pose the assumption that socially oriented MFIs (highly capitalized) care less about financial performance and focus more on social objectives.

f. Debt to equity

The debt to equity ratio is used as a proxy for the level of commercialization in our model with higher rate showing an easy access to commercial debt. We expect this indicator to have a positive impact on the OSS.

g. Average loan/GNI per capita

The average loan/GNI per capita is used in the regressions as the first proxy indicator of social mission.<sup>5</sup> For-profit MFIs should offer larger loans to reduce transaction costs and not for profit MFIs should focus more on the poor. Therefore the average loan/GNI should be positively associated with the OSS.

h. Average deposit/GNI per capita

Recent studies have argued that deposits services are even more valuable than credits for poor households (Robinson, 2001). The Average deposit/GNI per capita is used as our second proxy for social mission. We expect a positive relationship between the Average deposit/GNI per capita, and the OSS.

i. Percentage of Women Borrowers

The literature provides reasons for both positive and negative impacts of a higher percentage of female borrowers on the sustainability of microfinance. (Armendariz and Morduch, 2005) give three arguments supporting why lending to women should benefit an MFI. First, women are poor and have less access to capital than men. Based on the neoclassical theory, returns to capital for women should be higher than for men. Second, lending to women can be achieved with lower monitoring costs. In fact, women tend to be less mobile than men and are more likely to work in or near the home. The lower mobility facilitates delegated monitoring under group lending technology and reduces the incidence of strategic default due to fear of social sanctions. Third, women are more

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<sup>5</sup>A lower loan/GNI per capita ratio indicates that an MFI serves a lower income-market segment

risk averse and more conservative in their choice of investment projects. This makes it easier to secure debt repayment and create reputation for reliability.

Against this, there are arguments that male entrepreneurs may more aggressively expand enterprises when given access to credit. Therefore, there may be a trade-off between lending to women in the name of poverty alleviation and lending to men in the name of economic growth. In order to account for these two lines of thoughts, it is not clear how the gender focus of an institution should affect the OSS.

### 3.1.2 Country specific variables

These variables are used to control for country differences. As such, the relationship between this category of explanatory variables and the dependent variables is not straight forward.

#### a. Macroeconomic variables

We expect a positive relationship between the size of GDP per Capita and the sustainability of MFIs. A higher inflation rate should have a negative effect on the Operational Self sufficiency.

#### b. Governance indicators

We assume that a safe political and legal environment should enable institutions to operate efficiently and foster their sustainability. Governance indicators should be positively associated with the OSS.

#### c. Official Supervisory Power (OSP)

Finally, we have included the Official Supervisory Power index in our model. We expect a positive relationship between the OSP and the OSS. Although the OSP index was constructed from a survey on banking supervision in 2003, we believe that it is accurate to apply it to the microfinance sector for two major reasons. First, dramatic reforms aiming at strengthening the regulatory capacity of supervisory authorities (Central Banks) have not taken place in Sub-Saharan Africa since 2003. Most supervisory authorities in Sub-Saharan Africa still lack the human and financial resources to enforce existing regulations. The second reason stems from the fact that in most Sub-Saharan African countries, as we have already mentioned, MFIs and banks are increasingly under the supervision of the Central Bank.

## 3.2. Findings

The regulatory status is positively associated with the operational self sufficiency but the coefficient is not significant. However, a better general regulatory framework and higher official supervisory power improve the sustainability of Microfinance Institutions in Sub-Saharan Africa. Deposit intermediation per se does not significantly increase the Operational Self Sufficiency. The deposit/asset ratio coefficient becomes significant and positively associated with the Operational self sufficiency only if we control for country differences in Official Supervisory Power. This result suggests that expectations from MFIs seeking to transform into regulated entities in order to collect deposit and become self-sustainable will only materialize if they carefully integrate the regulatory capacity of the supervisory agency in their decision making process before applying for license.

We also find the age, size and level of capitalization to be significant and positively associated with the operational self sufficiency. The first two results confirm our prior expectations. However the latter violates our initial assumption which posed that MFIs are highly capitalized because they are poverty oriented and have restricted access to commercial funding which should result in a lower Operational Self Sufficiency.

We find higher loan size leading to a lower operational self sufficiency although the coefficient is not significant. However, after controlling for country differences in regulatory power, higher loan size increase the Operational Self Sufficiency. The percentage of female borrowers' coefficient is not significant. It is negative but becomes positive after integrating the official supervisory power indicator in the model. There is no evidence that the Ope-

rational Self Sufficiency is determined by institutional forms. We have run separate regressions in which we have included dummy variables for each charter status and the results were inconclusive.

**Table 3: Estimation results-Operational Self Sufficiency**

	(1)	(2)	(3)	(4)
	OSS	OSS	OSS	OSS
Regulatory status		0.02	0.03	0.09
		(0.077)	(0.076)	(0.090)
Age	0.0139***	0.0139***	0.0130***	0.0139***
	(0.004)	(0.004)	(0.004)	(0.004)
Total assets	0.0000***	0.0000***	0.0000***	0.0000***
	0	0	0	0
Deposit/total assets	0.14	0.13	0.15	0.3102**
	(0.145)	(0.160)	(0.154)	(0.148)
Capital/total assets	0.3909**	0.3841**	0.3846**	0.6637***
	(0.161)	(0.167)	(0.162)	(0.128)
Debt to equity ratio	0.00	0.00	0.00	0.00
	(0.003)	(0.003)	(0.003)	(0.001)
Average loan balance/GNI per capita	-0.01	-0.01	-0.01	0.0252***
	(0.024)	(0.024)	(0.024)	(0.009)
% of women borrowers	-0.08	-0.07	-0.05	0.07
	(0.123)	(0.128)	(0.126)	(0.108)
Log GDP per capita			-0.13	-0.20
			(0.176)	(0.160)
Inflation			-0.0049*	0.00
			(0.003)	(0.003)
Regulatory quality (2008)			0.0634	0.2007***
			(0.073)	(0.061)
Official Supervisory Power				0.0302**
				(0.012)
constant	0.7388***	0.7309***	1.1405**	0.6821
	(0.159)	(0.164)	(0.467)	(0.415)
aR-sqr	0.212	0.213	0.231	0.428
N	132	132	125	92
* p<0.10, ** p<0.05, *** p<0.01				

## Conclusion

Recent studies have analyzed the impact of regulation on financial intermediaries (including MFIs) worldwide, deriving potential implications of microfinance supervision in a consistent manner. However the underrepresentation of some regions in the sample and the heterogeneity of microfinance institutions are a sufficient condition for replicating similar investigations at regional levels. Our implicit assumptions while adopting a regional focus was that conclusions of global studies might not apply in a particular region like Sub-Saharan Africa.

In this perspective, the impact of regulation was assessed on one microfinance performance indicator (operational self sufficiency) in a multivariate analysis using cross section data for the year 2008 from 192 institutions in 32 Sub-Saharan African countries. The study has used a narrow-to-broad approach where a simple performance model was estimated in a first step and extended later on by including new explanatory variables. The key variable was a dummy for regulatory status which takes the value 1 if the MFI is regulated and 0 otherwise.

After running Ordinary Least Square regressions, we do not find sufficient evidence that the regulatory status increases the sustainability of microfinance institutions in Sub-Saharan Africa. The dummy coefficient is positive but not significant. In addition, we also find that deposit intermediation does not increase the operational self sufficiency. However, after controlling for the regulatory capacity, we find that a higher Official Supervisory Power leads to higher sustainability of microfinance. At the same time, the deposit intermediation coefficient becomes significant and positively associated with the Operational Self sufficiency.

Regulation of microfinance raises high expectations from all industry stakeholders. On one hand, donors and governments believe that regulating the sector will lead to the emergence of sustainable MFIs. On the other hand, MFIs perceive the regulation as an intermediate step toward deposit mobilization, diversification of funding sources and reduction of foreign exchange risks.

The findings of this research can have two major implications. On the public policy side, the central issue concerning the supervision of the microfinance sector in Sub-Saharan Africa is rather enforcing existing regulations than concentrating scarce resources on passing new legislations. Even the best law will not help if enough regulatory capacity is not in place to ensure compliance. Indeed, it is a major concern that limited supervisory capacity is often reported across Sub-Saharan Africa. Therefore, the quality of the regulatory framework matters more than the regulatory status of an MFI. The Supervisor should be well equipped for the oversight of financial institutions (including MFIs) in order to identify problems in a timely fashion and take prompt corrective actions. In addition, the authority should have a higher restructuring power to turn around weak financial institutions. Without providing the necessary skills and resources to the agency in charge of supervising the microfinance sector, regulated MFIs will remain as vulnerable as their peers with poor internal governance structures and similar financial performance.

For individual microfinance institutions, expectations will materialize only if in-depth analysis of the Supervisor's regulatory capacity is conducted before applying for a deposit-taking license. It is on MFI's ultimate interest to be regulated by a supervisory authority that possesses the attributes described above. Otherwise, the result will be a mix of higher supervisory startup costs and ongoing reporting requirements with little or no real benefit.

## References

- Armendariz de Aghion, Beatriz and Jonathan Morduch, 2005. *The Economics of Microfinance*, Cambridge, Ma: MIT Press.
- Arun T. and Murinde V., 2010, *Microfinance Regulation and Social Protection*, European Report on development Policy
- CGAP and Microfinance Information Exchange, 2009. *Sub-Saharan Africa Microfinance Analysis and Benchmarking Report*
- CGAP, 2009. *Overview of Microfinance-Related Legal and Policy Reform in Sub-Saharan Africa*
- Cull, Robert, Asli Demirgüç-Kunt, and Jonathan Morduch, 2009. "Does Regulatory Supervision Curtail Microfinance profitability and Outreach?" *World Bank Working Paper 4748*
- Cull, Robert, Asli Demirgüç-Kunt, and Jonathan Morduch, 2007. "Financial performance and outreach: a global analysis of leading microbanks", *Economic Journal*, 117(517): F107-F133
- Hartaska, Valentina and Denis Nadolyak, 2007. Do regulated Microfinance Institutions Achieve Better Sustainability and Outreach? Cross-Country Evidence." *Applied Economics* 39(10-12): 1207-1222
- James R. Barth, Gerard Caprio Jr. and Ross Levine, 2006, *Rethinking Bank Regulation: Till Angels Govern*, Cambridge Press University Press
- Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi, 2007: "Governance Matters VIII: Governance Indicators of 1996-2008." *World Bank Policy Paper ...*, Washington, DC
- Lolila-Ramin, 2005, *Regulation and Supervision of MFIs in the West African Monetary Union: How the PARMEC law impedes access to finance for SMEs and the poor*, Washington, DC: Consultative Group to Assist the Poor
- Meagher, P. (2002), *Microfinance regulation in South Africa: A Comparative Perspective*, *Development Bulletin*, 57, 48-52.
- Mersland, Roy, and R. Øystein Strøm. 2009, "Performance and Governance in Microfinance Institutions". *Journal of Banking and Finance*, 33 (2009): 662–669
- Müller Oliver and André Uhde, 2009, "The Impact of External Governance Quality on the Economic Success of Microfinance Institutions: Empirical Evidence"
- Thornton, Grant, 1993, "Regulatory Burden: The Cost to Community Banks." Study prepared for the Independent
- Zacharias, J., 2008. *An Investigation of Economies of Scale in Microfinance Institutions*. NYU Glucksman Fellowship Program Student Research Reports 2008-01, New York, NY