

**THE NEW REGULATION FRAMEWORK OF BOLIVIAN NGO MICROFINANCE  
INSTITUTIONS. PERCEPTIONS ON RISK MANAGEMENT, SOLVENCY AND SOCIAL  
PERFORMANCE**

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# **THE NEW REGULATION FRAMEWORK OF BOLIVIAN NGO MICROFINANCE INSTITUTIONS. PERCEPTIONS ON RISK MANAGEMENT, SOLVENCY AND SOCIAL PERFORMANCE**

## **Abstract:**

A new upgrading model is being developed in Bolivian microfinance, which is regarded as one of the world references in the sector. NGO MFIs are going to be considered as financial intermediaries. They will be allowed to offer a wide range of financial services including deposits; keeping their legal status and, moreover, their non-profit status. This paper presents the results from a survey taken to evaluate prospectively Bolivian NGO MFIs in a regulated environment. The survey asked 32 international experts in Bolivian microfinance. They expressed their opinions on the performance of these institutions in a regulated environment stressing three aspects: risk management, solvency and social performance. Are these aspects a prerequisite for regulation or a consequence of it? The paper uses the cross-impact matrix method and a hypotheses test to analyze survey data. Results show that Bolivian NGO MFIs are well positioned in social performance, but a future scenario with good performance in all the three aspects is not likely. Stronger efforts need to be made in maintaining the social performance. However, it is important to improve, at the same time, the professionalization of the institutions, particularly in the supply of timely information for the regulator.

## **Keywords:**

Microfinance, Microcredit, Regulation, Risk Management, Solvency, Social Performance, Bolivia.

## 1. Introduction

According to the data from the latest Microbanking Bulletin (TheMix 2008), from 340 Microfinance Institutions (MFIs) that reported information in December 2006, 41% were Non-Governmental Organizations (NGOs). Many authors claim for the need of regulation because they consider that regulated MFIs will offer the poor a wide range of financial services (Arun 2005, Gallardo 2001). Transformation would also increase funding access through commercial borrowings, deposits or equity (Lauer 2008). Being the price of deposits cheaper than the price of debt, this would be an opportunity to lower the interest rate charged on microcredit, which is a source of debate in the sector (Rosemberg et al 2009). But Christen (2001), among others, highlights that the model can result in mission drift and not covering customers' needs. The ideal aim would be to maintain the very best of NGOs at the same time as holding the very best of banks. In this paper we analyze the pros and cons of the new regulation in Bolivian NGO MFIs, evaluating three aspects: risk management, solvency and social performance. If they are going to be under the same supervisory regime as banks and financial intermediaries, will this affect their solvency and risk management? Moreover, what will happen with their performance if they are going to keep their legal status?

Bolivian microfinance sector is considered as one of the most innovative in the world, and several studies have analyzed its success (Navajas et al 2000, Schreiner and Woller 2003, Maldonado and González-Vega 2008). Two recent pieces of research by The Economist Intelligence Unit (2007 and 2008) affirm that Bolivian microfinance has a remarkable institutional development and regulatory framework among Latin American countries. The commercialization model was first tested in Bolivia when the Superintendence of Banks and Financial Entities (SBEF) authorized the transformation of an NGO into a Bank called Bancosol in 1992. In 1995 the SBEF created a kind of financial company called Private Financial Fund (PFF). These PFFs would allow the transformation of NGOs into private companies under financial regulation. This experience has been followed by other regulators in different countries (González-Vega et al. 1997, Mosley 1996, Trigo et al. 2004).

The most common process followed by an NGO to be able to offer more financial services, is the transformation into a company regulated and supervised by a government body (Christen and Rosenberg 2000, Ledgerwood and White 2001). The company will have shareholders to account for its performance. This model is known as commercialization of microfinance and has been widely

followed to get cheaper funds and also because it was believed that transformed MFIs grow faster (Drake and Rhyne 2002).

After 15 years of this upgrading model, the SBEF has decided to move forward in financial regulation, passing new resolutions (SBEF 2008a, SBEF 2008b) specially designed for not previously regulated NGOs. The main difference with the preceding model is that NGOs will not need to be transformed into private companies like PFFs. Instead, NGOs will keep their non-profit status and will be allowed to collect deposits and offer extra financial services. NGOs MFIs will have the nature of non banking financial intermediaries and will be under the same rules as banks and financial entities. To this aim, they will have to obtain an operating license provided that they are in compliance with SBEF rules. This way the non-profit nature of NGOs and their focus on poor clients are preserved. Mersland (2009) affirms that keeping different ownership status in a given microfinance sector benefits the customers.

Although there is not evidence on the existence of identical microfinance models, regulated NGOs MFIs would be similar to Spanish Savings Banks in their legal status, authorized operations, and the nature of their regulation. But they would be different in the provision of microcredit. Spanish Savings Banks differ from traditional banks in their legal status, which obliges them to invest some of their profits into “good causes” such as supporting the arts or providing for the elderly (Serrano-Cinca et al. 2004). Some years ago those entities had a local market and were savings driven. Nowadays they are fully recognized players in the national market, offering a wide range of financial services. Despite the non-profit nature of Spanish Savings Banks, they are fully financial institutions, outperforming commercial banks’ market share (Purroy and Salas 2000, Jiménez and Saurina 2004, Crespí et al 2004, Delgado et al. 2007).

We have prepared a survey to evaluate NGO positioning in risk management, solvency and social performance. We have used the forecasting methodology called cross-impact matrix to assess if NGOs would meet satisfactory standards of risk management, solvency and social performance in the future. We have established the institutional variables more important for NGOs. Finally, we have performed a hypotheses test to analyze the differences between the actual and the future scenario, identifying those aspects that NGOs should improve.

The paper is structured as follows. Section 2 analyzes Bolivian microfinance. Section 3 presents regulatory issues. Section 4 presents the empirical study. Section 5 discusses the results and finally, section 6 presents the conclusions.

## 2. Regulatory and institutional issues in Bolivian Microfinance

There are four kinds of regulated financial institutions in Bolivia: Banks (BANK), Private Financial Funds (PFF), Savings and Loans Associations (SLA), and Credit Unions (CU). Outside of the field of regulation, but towards achieving it, there are: MFI NGOs and two kinds of entities that also offer loans: Cooperative Thrift and Credit Societies (CTCS), and Pawnbroking Companies (PC). Besides the ownership structure, the main differences among all these institutions are the financial products they are allowed to offer, and their differentiated nature, legal status and supervision. Table 1 shows the total number of entities and some data of the Bolivian financial sector. Due its relevance and research interest, this paper is going to focus on Banks, Private Financial Funds and MFI NGOs.

\*\*\*\* Table 1 \*\*\*\*

A recent survey on the Bolivian financial market shows that banks hold 69% of the national loan portfolio, which amounts to 5246 million USD. But they only service 35% of the borrowers in the country, which amounts to 1,128,411 individuals (Fundación PROFIN 2009). It is remarkable that almost half of the percentage comes from banks Solidario and Los Andes Procredit, traditionally considered as microfinance institutions. PFFs and NGOs contribute, respectively, to the 11% and 5% of the national portfolio, and service the 26% and 22% of the borrowers. Both entities play an important role in Bolivian financial deepening.

Three of the nine cities in the central axis of the country (La Paz, Cochabamba and Santa Cruz) represent 88% of the loan portfolio, 67% of the Gross Domestic Product and 71% of the population. In geographical coverage, SLAs have the highest urban presence, because 90% of their branches are in urban areas. Banks account for 81%, PFFs 65%, CUs 52% and NGOs are more rural oriented, because only 44% of their branches are in urban areas.

Focusing our analysis on Banks, PFF, and MFI NGOs, we find interesting differences. The first one comes from the strength of regulated MFIs (Banks and PFFs) coming from deposits. Up to August 2008 1.2 million depositors provided more than 60% of the liabilities of these entities. The second difference is size. The 15 NGOs have aggregate assets of 230 million USD. The two banks and six PFFs have aggregate assets of more than 1500 million USD. The third difference is profitability. In regulated institutions this is a key issue for sustainability and they have achieved higher profitability levels than other Bolivian commercial financial institutions. But the non-regulated

NGOs prefer outreach to sustainability, by reaching more clients in remote areas: out of a total number of 2304 customer service points of all Bolivian financial institutions, non-regulated entities have 528 customer service points, many of them in rural areas (ASOFIN 2008, FINRURAL 2008).

Bolivian MFI started with some NGOs operating in the 80s. Later, in 1992, regulation appeared in microfinance when an NGO called PRODEM transformed into Bancosol (González-Vega et al. 1997, Mosley 1996). The main difference between a microfinance bank and a commercial bank is the niche market they target and the credit technologies they use. Since its inception, Bancosol was designed to offer all kinds of financial services, and this makes it different from a PFF, that have some limited operations. Bancosol became a milestone in microfinance, not only for being the first commercially regulated bank in the world created from an NGO, but also because it was the first time that the regulator accepted microfinance guarantees, very different from traditional collateral. These solidarity guarantees are intended to manage credit risk. A second microfinance bank was created in Bolivia in 2004 from the FFP Los Andes into Bank Los Andes Procredit. More PFFs are now trying to transform into banks.

From 1995 onwards, other NGOs transformed into PFFs. By doing so, they were authorized to collect deposits and to offer a range of financial products specially designed for their clients. These entities are private companies, and as such, they are better positioned for financial sustainability and scale economies. It is important to remark that the growth of Bolivian NGOs before regulation –into banks or into PFFs- was based not only on donations, but also on debt in market conditions. And it is also important to say that external aid agencies had to authorize the transformation of NGOs surplus – that coming from donations - into shares of the new regulated MFIs.

If we analyze the opposite effect, that is, commercial banks entering the microfinance sector, there were some attempts in the past, but because of a bad use of credit technologies, they had to move out of the microfinance market.

Notwithstanding this regulation trend, a group of NGO remained out of financial supervision. In regulation they found risks of losing mission and vision, and also a lack of flexibility to their lending methodologies. There was also a high price to pay in improving their information, communication and accounting systems. All these factors discouraged any attempt to transformation. So NGOs decided to self-regulate in 2004.

Facing these differences, it is interesting to wonder if the regulated status caused the growth or the decline of some institutions. It is also interesting to know if the niche market improved its access

to financial services. But it is even more interesting to wonder what will happen in the short and long term with the new Bolivian financial scenario.

### **3. Regulation and its importance in microfinance**

If regulation is a key issue in banking, nowadays it is crucial, given the context of the banking crisis that started in 2008. Policymakers, economists or financial specialists find that the lack of regulation has triggered the crisis. In fact, the text signed by the leaders of the G-20 at the Summit on Financial Markets and the World Economy held in Washington in November 2008 repeats 52 times the word “regulation” or similar words, in a 10 page document. This way, the Declaration recognizes the regulation role in the prevention of future crises: “we will implement reforms that will strengthen financial markets and regulatory regimes so as to avoid future crises” (p. 2). This regulation has to be reasonable, especially in developing countries: “Recognizing the necessity to improve financial sector regulation, we must avoid over-regulation that would hamper economic growth and exacerbate the contraction of capital flows, including to developing countries” (p. 4). In line with what is intended in Bolivia, where we can find operations and institutions outside regulation, the Declaration recommends a regulation adapted to markets, products and participants: “we pledge to strengthen our regulatory regimes, prudential oversight, and risk management, and ensure that all financial markets, products and participants are regulated or subject to oversight, as appropriate to their circumstances” (p. 3). This is in line with Greuning et al. (1998), when they analyze regulation in the microfinancial context: they propose an approach that considers the different kinds of microfinance institutions, their products, and their markets.

Microfinance regulation can be approached from three sides: political, regulatory and institutional (Staschen 2003). A change in regulation can only be possible with a good political support. At regulatory level, a new rule would need a revision and evaluation of the preceding regulation. Finally, a change in regulation is only possible when the institutions to be regulated have a clear institutional strength. In this respect, we think that if NGOs are to be regulated with the aim of offering the same products as other regulated financial institutions, even deposits, they have to meet the same requisites as conventional financial institutions. So we consider that the institutional study is important in NGO regulation. This way, we will analyze three institutional aspects: risk management, solvency and social performance.

Financial solvency and risk management are key issues in the evaluation of a financial institution by regulators (Booth and Currie 2003, Heffernan 2005, Barth et al. 2006, Gray and Hamilton 2006). Supervision on financial solvency has the objective of reducing the probability of bankruptcy in a financial institution, regarding the protection of the clients, especially depositors. This issue has been analyzed by Kahane (1979), Kim and Santomero (1988), Koehn and Santomero (1980) and Rochet (1992 and 1999). Risk management is an issue that has gained importance in the last decades. This has been mainly due to the publication in 1988 of Basel I Accords and its revision in 2004, known as Basel II (Basel Committee on Banking Supervision 1988 and 2004). A well managed institution anticipates problems caused by different kinds of risk (credit, operational, market, or liquidity).

In our analysis we introduce the social issue. Social and financial aspects are both sides of the coin in microfinance. It was in 1994 when Yaron proposed that the performance of MFIs should be analyzed from both points of view. Even though there is not any evidence of concerns for social performance in financial regulation, and it is not predictable that SBEF would consider it, we think that it is a distinctive feature of Bolivian NGO MFIs. Hashemi and Anand (2007) provide a conceptual framework to understand the importance of social performance in microfinance.

Taking into account the literature of previous paragraphs, we present three definitions of the three aspects (see Table 2). In risk management and solvency we have checked the rules of Bolivia, Chile and Peru Banking Superintendences. As for social performance, we have based our definitions on the considerations of the Social Performance Task Force, an international network created to address issues on measuring and managing social performance in microfinance.

\*\*\*\* Table2 \*\*\*\*

## **4. Empirical study. Sample, questionnaire and statistical techniques**

### ***4.1. Sample and questionnaire***

To carry out the empirical study we designed a questionnaire with multiple choice questions to assess the opinions of a group of experts on Bolivian microfinance. The initial number of experts was 51; they were senior managers of NGOs and regulated MFIs, members of microfinance apex

institutions, funding institutions, Bolivian Financial Superintendence, external aid agencies, academics, and recognized consultants. We finally received 32 questionnaires correctly answered. We performed a statistical test to find differences in the answers according to the different categories of respondents. No significant differences were found.

The questionnaire was divided into three sections; each one related to one of the following aims: (1) To assess NGO positioning in risk management, solvency and social performance, compared with other regulated financial institutions, (2) to assess if NGOs would meet in the future satisfactory standards of risk management, solvency and social performance and (3) to analyze the differences between the present and the future scenario, identifying those aspects that NGO MFIs should improve.

#### **4.2. Statistical techniques**

The first part of the survey contained questions with three criteria and three alternatives. The three criteria were the three kinds of Bolivian financial institutions: commercial banks (BANK), microfinance regulated institutions under the form of microfinance banks or PFFs, and NGOs in regulating processes. The three alternatives were risk management, solvency and social performance. According to the decisional methodology we assigned initial weights to the different criteria, so we chose a 1/3 value, because we did not want to prioritize any criterion. In this way, experts would only assess their preferences among the three kinds of institutions.

The cross-impact matrix forecasting methodology (Gordon and Hayward 1968) was used to analyze data in the second section of the questionnaire. This methodology considers that most of the future events are connected one to each other, so it deals with this problem by using conditional probabilities (for example the likelihood that social performance will be high if risk management is achieved). A cross-impact matrix is an  $n \times n$  matrix, where  $n$  are events. Each entry of the matrix,  $a_{ij}$ , represents the impact on (or conditional probability of) event  $i$  given the occurrence of event  $j$ . Each expert quantifies the probability of occurrence of a given future event. After that, the expert evaluates the probability of occurrence of each event subject to the fulfilment or unfulfilment of the rest. Then, a statistical process was applied to make the set of estimations consistent (Gordon 1994). The experts assigned simple and conditional probabilities (ranging between 10% and 90%) to the achievement of good standards in risk management, solvency and social performance by NGOs to be regulated (see Table 3). We analyze our data with Prob-Expert software.

The third section analyzes a set of relevant variables in the regulation process. We want to establish the most important variables today and the variables that deserve more attention in the future. We used a 1-5 scale, where 1 means an unfavourable assessment and 5 means a favourable assessment. A Mann-Whitney means test allows us to determine if there are significant differences between the actual importance of a given variable and the level of future effort needed to achieve an acceptable standard in this variable.

## **5. Results and discussion**

### ***5.1. NGOs positioning***

58.6% of the experts finds that NGOs have a social bias, with lower preferences to risk management and financial solvency, compared with other entities. By contrast, the experts affirm that both PFFs and Banks prefer solvency, especially banks (47.3 and 58.2% respectively), see Figure 1.

An interesting finding is that PFFs are not perceived as institutions with a high level of social concern. In fact, their priorities reveal that they are acting as banks (not so deeply, notice that social performance is 18.8% in PFFs and 6.4% in Banks), and for this reason the regulator has chosen a forth way. We wonder if these entities are not using their social capabilities appropriately, or if there is really a mission drift.

Risk management has to be considered, because it is the least important attribute for NGOs, according to the experts' opinions. Figure 1 shows that banks and PFFs are a step ahead in risk management. This fact confirms previous studies, which affirm that banks and PFFs, especially those with foreign stakeholders, have notable skills in risk management.

\*\*\*Figure 1\*\*\*

To sum up, our results show that there is no type of equilibrium (balance) among any of the three aspects in any of the three entities. So we wonder in the next section if it is possible to achieve this balance or contrarily, the trade offs between social and financial aims are unavoidable.

### ***5.2. Future NGO performance***

The respondents were asked to quantify the probability of occurrence of the events in Table 3

in NGO MFIs. Cross-impact matrix allows us to obtain gross and net probabilities. Net probabilities reflect the impact of the rest of the variables.

\*\*\*Table 3\*\*\*

As can be seen in Table 3, which in the first column shows the simple gross probabilities of occurrence of the three future events in NGO MFIs, as expressed by the experts, the one that has the highest probability is solvency (60%), followed by social performance (59.4%) and finally, risk management (54.4%).

We then obtained net probabilities, making this way the analysis coherent with the conditional probabilities, which are shown later. Simple net probabilities are lower than simple gross probabilities. The most striking fact is the fall in social performance: in more than 16 percentage points, to 43.2%. Solvency continues to be the most probable event (51.3%) and risk management is now even higher than social performance (46.5%). Thus, simple net probabilities show what the experts really think.

What can be said from Table 3 is that, given net probabilities of 50% or lower, we cannot forecast high fulfilment rates for any of the three aspects. To sum up: perceptions on future performance are not good, and as we saw in the preceding analysis NGO MFIs are not well positioned in risk management and solvency. How can we explain the SBEF plans towards regulation given the opinion of the experts? Is this a problem of lack of information from NGOs and even from the SBEF?

We now analyze the matrix of positive conditional probabilities. We clearly observe that all the aspects are positively related, that is, the fulfilment of one of them has a positive impact on the rest. In Table 4 we can see that if risk management is fulfilled, (1) the probability of fulfilment of solvency rises from 51.3% to 80.9% and (2) the probability of fulfilment of social performance rises from 43.2% to 63.9%. Similar positive changes can be observed in the rest of the columns.

\*\*\*Table 4\*\*\*

Two important issues can be highlighted from Table 4. Firstly, risk management and solvency are closely related, because the fulfilment of one of them provokes a higher probability of fulfilment in the other. Secondly, at no given time will social performance improve risk or solvency records. Although all the variables have a positive impact on the rest, risk management and solvency have a better impact as follows. If social performance is achieved, risk management rises from 46.5% to

68.8%, but it could reach 73.4% if solvency is achieved. Something similar happens with solvency: it rises from 51.3% to 74.3% if social performance is achieved; but it could reach 80.9% if risk management is achieved. These results show that social performance appears to have a higher independence degree. Results from the matrix of negative conditional probabilities simply confirm this analysis.

In fact, if NGOs continue emphasizing social performance (as we saw in the first analysis), there is an opportunity cost in terms of risk management and solvency. By contrast, if risk management or solvency are achieved, both aims are improved and social performance as well.

Finally, as can be seen in Table 5 there are very different opinions on the future performance of NGOs in a regulated environment. The most predicted scenarios are totally polarized. Many experts are sceptical, because a 34.6% indicates that NGOs will not achieve any of the aims. Some others are optimistic, saying that a 23.8% will achieve all the three aims.

\*\*\* Table 5\*\*\*

From those results, more questions arise. Which aspect will bring a better impact? Which combination is more suitable to NGOs strategy? The ideal proposal would be to establish a given scenario and a set of variables that help to achieve it. Results from the next section can shed light on these questions.

### **5.3. Actual and future priority rankings for NGO MFIs**

Table 6 sums up the experts' assessments on a set of variables in the case of NGOs. At the beginning of the regulation process, the three most important variables are closely related to social performance: "Service provision in remote and rural areas", "Geographical coverage and distribution channels" and "Development and improvement of financial products". These variables, jointly with "Better financing conditions" in the fifth place, are usually among the NGOs arguments in their requests for regulation.

\*\*\* Table 6 \*\*\*

The only variables related to risk management and solvency that appear in the top ten are "Credit risk management", and "Provision set up".

Among the ten less important variables for NGOs, we find six variables closely related to risk

management: “Convergence towards Basel II”, “Risk measurement models”, “Market risk management”, “Convergence towards International Accounting Standards”, “Ability to generate timely information for the regulator”, “Operational risk management”. This fits with our previous findings, when experts recognized that risk management is not a great concern for NGO MFIs. For the same reason, it is not surprising to find “Corporate governance” a key issue for risk management in the 24<sup>th</sup> place.

The second column in Table 6 shows the opinions on future efforts to reach acceptable standards in the variables analyzed. There are three clear trends. Firstly, there is a concern about transparency, reflected in the first place of “Ability to generate timely information for the regulator”, and in the third place of “Client information transparency”. It is also interesting to remark on the ninth place of “Robust client databases”. This is in line with Demirgüç-Kunt et al (2008), when they say that those aiming to upgrade banking regulation should prioritize information provision. It is also in line with G-20 Declaration: "Financial institutions must also bear their responsibility for the turmoil and should do their part by recognizing losses, improving disclosure and strengthening their governance and risk management practices" (p. 2).

Secondly, there is a concern for clients and their satisfaction. This is so because the variable “Institutional image, reputation and public trust” is in second place, and the variable “Quality in customer service and complaints solving” is in fourth place. We can relate this to “Client information transparency”, previously mentioned.

Thirdly, there is also a concern for risk management in the future, in line with the mentioned G-20 recommendations. Variables from fifth to eighth place are the following challenges: “Liquidity risk management” (5<sup>th</sup>), “Operating risk management” (6<sup>th</sup>), “Convergence towards International Accounting Standards” (7<sup>th</sup>), and “Risk measurement models” (8<sup>th</sup>). But compliance with Basel II does not seem to be necessary, since this variable is found in 21<sup>st</sup> place.

We finally performed a hypotheses test to find differences between the present and future situation. We expected to find no differences in social aspects, formally H1 “*There are no statistically significant differences between present and future social involvement of NGO MFIs*”. By contrast, we expected that regulation would bring about changes in the rest of the topics: financial and reporting issues, professionalism, and improvement in information systems. H2 is “*There are statistically significant differences between present and future situation of NGO MFIs in no social aspects*”.

A Mann-Whitney test was performed. Both hypotheses were confirmed by the data. Questions related to “Service provision in remote and rural areas” or “Social corporate responsibility” did not expected great differences. Experts do think that aspects related to management, transparency or systems are going to improve, and these differences are statistically significant. So, what is important now for these entities (social aspects), will be important in the future. But issues not so important now (financial and disclosure aspects) are going to be important and would need future effort. So experts confirm our previous results on the relevance of financial aspects in a future regulated environment.

## **6. Conclusions**

A new upgrading model is being developed in Bolivian microfinance, one of the countries with a most developed microfinance sector in the World. NGO MFIs are at the centre of this new regulatory model. They will keep their legal status, and will be allowed to hold deposits and other financial services in areas now excluded from the formal financial system, especially remote and rural areas. Given that the priorities of PFFs (formerly NGOs transformed into private companies) reveal that they are acting as banks, the regulator has chosen to implement a fourth way to reach rural areas and poorest population.

This study evaluates risk management, solvency and social performance in Bolivian MFIs NGOs through a survey conducted to Bolivian microfinance experts. The financial regulation process entails institutional challenges that only NGOs with good solvency and risk management would be ready to accept, benefiting at the same time the niche market they service. Those two financial aspects are carefully monitored by the regulator. However, social performance is a key unique NGO characteristic that cannot be ignored.

Our results show that NGO MFIs are not well positioned in risk management and solvency, compared with other Bolivian financial institutions. By contrast, these institutions are clearly related to a good social performance.

Facing the future, experts do not think that NGO would be able to simultaneously meet satisfactory standards of risk management, solvency and financial performance. But there is agreement on the fact that good risk management would improve solvency (+29.6), and vice-versa: good solvency would improve risk management (+26.9). Experts think that social performance has

not a significant influence on the rest of the aspects. Although all the variables have a positive impact on the rest, risk management and solvency have a better impact than social performance.

Experts also highlight that future challenges for NGOs involve the generation of timely information for the regulator and transparency towards their clients. NGOs should also improve variables related to client satisfaction, service quality and complaints solving. Risk management is also considered a future challenge, but not necessarily meeting Basel II.

It was expected to find no differences between the present and future situation of NGO MFIs in social aspects. The hypothesis was confirmed by the data. It was also expected that regulation will bring about changes in the rest of the (non- social) variables. This hypothesis was also confirmed by the data.

Given all these facts, we wonder if solvency, social performance and above all, risk management, are a consequence of regulation or should be a prerequisite of it. The diversity of Bolivian NGO MFIs does not allow a simple generalization. Some polarized results would show a group of NGOs which are ready in all the three aspects to accept the challenges of regulation. They can consider regulation as a reward for their past and present efforts to service their poor clients, being at the same time solvent and efficient. By contrast, there is another group of NGOs, smaller and weaker. These have to demonstrate if regulation would help them to consolidate as fully financial institutions with a social mission. It must be remarked that the consequences of not being sufficiently qualified for regulation could result in not meeting their social goals.

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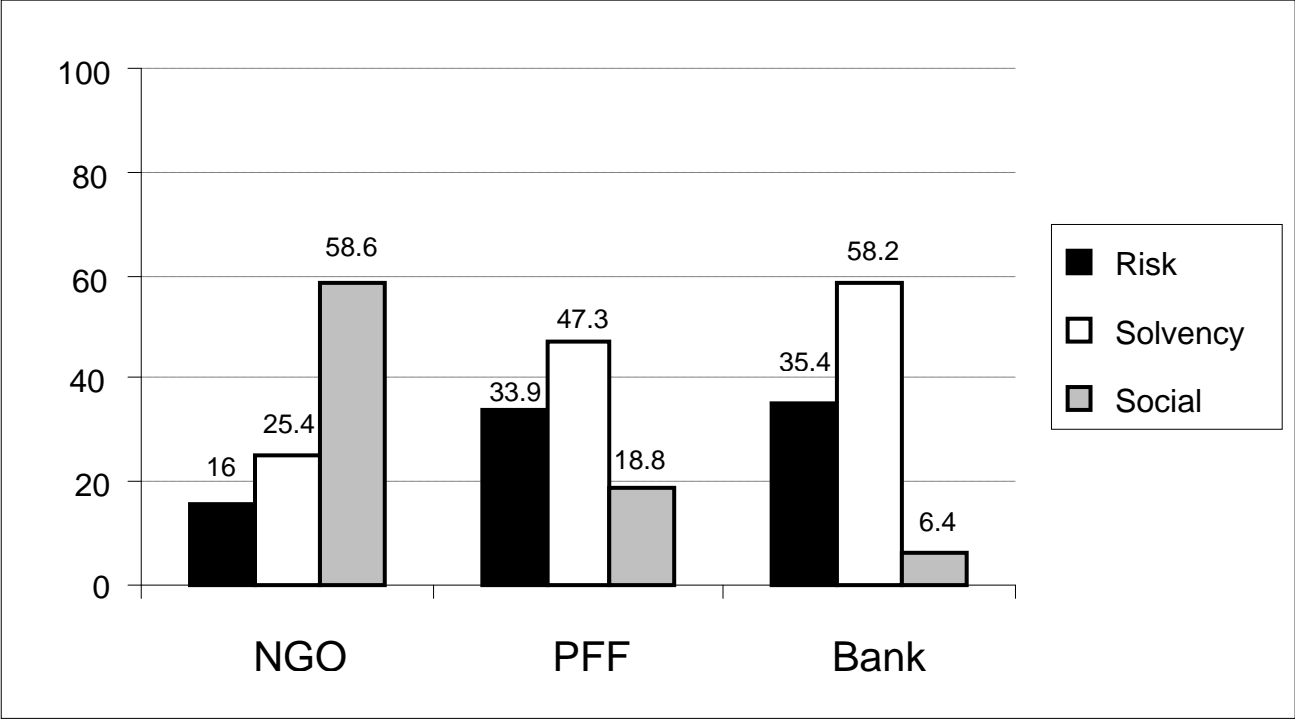
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	<i>Number of entities</i>	<i>Loan portfolio (in USD,000)</i>	<i>Clients</i>	<i>Urban branches</i>	<i>Rural branches</i>
<i>BANK</i>	12	3611679	401091	287	69
<i>PFF</i>	6	580394	250665	132	72
<i>CU</i>	23	308981	81246	48	44
<i>SLA</i>	8	260332	18685	28	3
<i>CTCS</i>	N/A	194315	60802	N/A	N/A
<i>NGO</i>	15	268203	294751	148	190
<i>PC</i>	N/A	22596	21171	N/A	N/A

**Table 1.** Bolivian financial sector figures. Source: Fundacion PROFIN (2009)

<p><b>Risk management</b></p>	<p>Set of aims, procedures and initiatives of a given institution to identify, measure, control and mitigate credit, liquidity, operational and market risks, based on good corporate governance and a culture of risk.</p> <p>A typical MFI NGO, in the medium term, will have a better institutional development in terms of culture of risk, so it will be well positioned to identify, measure, control and mitigate credit, liquidity, operational and market risks.</p>
<p><b>Solvency</b></p>	<p>Levels of equity and provisions adequate to the exposure of the institution to financial risk, allowing the fulfillment of its commitments, and its future operations.</p> <p>A typical MFI NGO, in the medium term, will have a high solvency that will meet regulatory standards and will secure its future operations.</p>
<p><b>Social performance</b></p>	<p>Level of fulfilment of the institution's mission, by reaching its target clients, adapting their products and services, improving the social capital of its clients and their corporate social responsibility.</p> <p>A typical MFI NGO, in the medium term, will have a good social performance level among the microfinance sector. It will totally fulfil its institutional mission of reaching poor and rural clients, benefiting women, peasants and indigenous people. It will offer a wide range of products using financial technologies adapted to its clients.</p>

**Table 2:** Definitions of risk management, solvency and financial performance contained in the questionnaire



**Figure 2:** Positioning of NGO PFF and Banks in risk management, solvency and social performance\*

\* Microfinance Banks Solidario and Los Andes ProCredit are considered as PFFs

Future event	Simple gross probabilities	Simple net probabilities
<i>Risk management</i>	54.4%	46.5%
<i>Solvency</i>	60.0%	51.3%
<i>Social performance</i>	59.4%	43.2%

**Table 3:** Simple gross and net probabilities of future events

Future event	Risk management	Solvency	Social performance
<i>Risk management</i>	<b>46.5%</b>	73.4%	68.8%
<i>Solvency</i>	80.9%	<b>51.3%</b>	74.3%
<i>Social performance</i>	63.9%	62.5%	<b>43.2%</b>

**Table 4:** Positive conditional probabilities

Risk management	Solvency	Social performance	%
0	0	0	34.6%
1	1	1	23.8%
1	1	0	13.8%
0	1	1	8.3%
1	0	1	5.9%
0	1	0	5.4%
0	0	1	5.2%
1	0	0	3.0%

1: The aim will be achieved  
0: The aim will not be achieved

**Table 5:** Future scenarios for regulated MFI NGOs

		<i>Actual importance</i>	<i>Future effort</i>	<i>Mann-Whitney U (p-value)</i>
1	Development and improvement of financial products	3.47	3.91	401.5 (0.117)
2	Provision of loans for SMEs and consumption	2.81	3.47	383 (0.071)
3	Provision of loans for the productive sector	3.41	3.59	470 (0.552)
4	Service provision in remote and rural areas	3.81	3.41	401 (0.122)
5	Provision of other services (training, health)	3.09	2.75	429 (0.253)
6	Geographical coverage and distribution channels	3.56	3.78	436 (0.284)
7	Risk assessment by rating agencies	3.03	4.19	280.5 (0.001)**
8	Ability to attract funds (in capital markets and others)	2.47	3.94	194 (0.000)**
9	Better financing conditions (interest rates, instalments currency)	3.38	4.09	318 (0.006)**
10	Independence from funders	3.13	3.81	342 (0.017)*
11	Institutional image, reputation and public trust	3.25	4.38	253.5 (0.000)**
12	Independence from politicians	3.38	3.84	410.5 (0.158)
13	Negotiation power with internal and external agents	3.03	3.75	326.5 (0.009)**
14	Professional level of senior executives	3.38	4.31	276 (0.001)**
15	Professional level of the staff in general	3.13	4.09	236 (0.000)**
16	Client information transparency	3.09	4.38	205 (0.000)**
17	Quality in customer service and complaints solving	3.06	4.38	211.5 (0.000)**
18	Ability to reduce the price of the services (for example, interest rates)	2.84	3.88	225.5 (0.000)**
19	Social corporate responsibility	2.91	3.56	364 (0.040)*
20	Corporate governance	2.88	4.25	225 (0.000)**
21	Administrative costs management	3.09	4.28	210 (0.000)**
22	Credit risk management	3.38	4.28	296 (0.002)**
23	Liquidity risk management	2.91	4.34	224 (0.000)**
24	Market risk management	2.75	4.28	211.5 (0.000)**
25	Operational risk management	2.84	4.34	213 (0.000)**
26	Risk measurement models	2.41	4.31	143.5 (0.000)**
27	Convergence towards International Accounting Standards	2.75	4.31	163 (0.000)**
28	Convergence towards Basel II	2.09	3.97	142 (0.000)**
29	Provision set up	3.28	4.28	275 (0.001)**
30	Profits generation	2.97	3.91	249.5 (0.000)**
31	Robust client databases	2.94	4.34	208 (0.000)**
32	Management information systems	2.94	4.31	163 (0.000)**
33	Online information systems	2.66	4.25	163.5 (0.000)**
34	Ability to generate timely information for the regulator	2.81	4.44	160 (0.000)**

**Table 6.** Experts' assessments on NGO MFIs variables. Columns show means in actual importance and future effort.

(N=32). Last column show the results from a means test. \* significant at 0.05 \*\* significant at 0.01