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# USAID IMPROVING ACCESS TO FINANCIAL SERVICES PROJECT

SPECIAL REPORT – THE PERFORMANCE SYSTEM

**DECEMBER 31, 2013**

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# USAID Improving Access to Financial Services Project

SPECIAL REPORT: THE PERFORMANCE SYSTEM  
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Prepared for  
Kail Padgitt  
Contracting Officer's Representative  
Economic Growth Office  
USAID/El Salvador  
Telephone: (503) 2501-3362  
[kpapgitt@usaid.gov](mailto:kpapgitt@usaid.gov)

Prepared by  
Global Business Solutions, Inc. / Weidemann Associates, Inc.  
1010 Vermont Avenue, Suite 506  
Washington, DC 20005

## **DISCLAIMER**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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## ABBREVIATIONS

AMC	Cooperative Society of Savings and Loans – a Non-Bank Financial Institution
ASOMI	Association of Microfinance Institutions of El Salvador
COP	Chief of Party of the Improving Access to Financial Services Project
CRB	Central Reserve Bank
GBSI	Global Business Solutions, Inc. – Prime Contractor
LOU	Letter of Understanding
MSEs	Micro and Small Enterprises
NBFIs	Non-Bank Financial Institutions
OTA	Office of Technical Assistance of the U.S. Treasury
SFS	Superintendency of the Financial System
STTA	Short-term Technical Assistance
UNDP	United Nations Development Programme
Weidemann	Weidemann Associations, Inc. – Sub-Contractor

## I. INTRODUCTION

The USAID Improving Access to Financial Services Project (“Project”) contributes to the accomplishment of the USAID/El Salvador’s Mission Strategic Objective “Economic Freedom: Open, Diversified, and Expanding Economies,” through Intermediate Result No. 2.1 “Business Enabling Environment Improved” by creating a positive enabling environment for business and increasing the capacity of Non-Bank Financial Institutions (NBFIs) to provide appropriate and permanent services for MSEs. It also orients all strategies to be consistent with the objectives and goals delineated in the Partnership for Growth agreement between El Salvador and the United States.

Consistent with the orientation of the *US Forward* initiative, the USAID IAFS Project is providing support to the Central Reserve Bank (“*Central Bank*”) and the Superintendency of the Financial System (“*Superintendency*”) for promoting financial inclusion via the development of mobile financial services, and is working directly with NBFIs to prepare them for eventual supervision by the Superintendency.

The objective of the Project is:

*“...to create, promote and implement practical and innovative solutions to address and overcome current obstacles to the flow of financial services for MSEs in the areas of systems, institutional capacity and appropriate products and methodologies in order to increase the quantity and quality of effective financial products and services.”<sup>1</sup>*

The contract document further states that “[i]t is important ... to help financial institutions to perform a more efficient delivery of services.”<sup>2</sup> The Project was tasked with creating two new products and in the process succeeded in creating six new products<sup>3</sup>, most of which are designed explicitly to help partner institutions deliver more efficient financial services to its clients. *The Performance System* was intended to be yet another new product that could perhaps be sold or distributed through NBFI associations to their members.

*The Performance System* is a design for monthly financial monitoring which has been installed to very good effect in microfinance institutions in the Middle East and South East Asia. The intent of the Project was to replicate this experience within its partner institutions in El Salvador. This intent did not succeed in the ways originally anticipated. However, the results generated during the process of attempted installation in a number of institutional partners both confirmed the over-all Project orientation about the importance of microfinance institutions becoming full financial intermediaries supervised by the Superintendency and oriented the Project towards other products required by the partner institutions to strengthen and streamline their operations.

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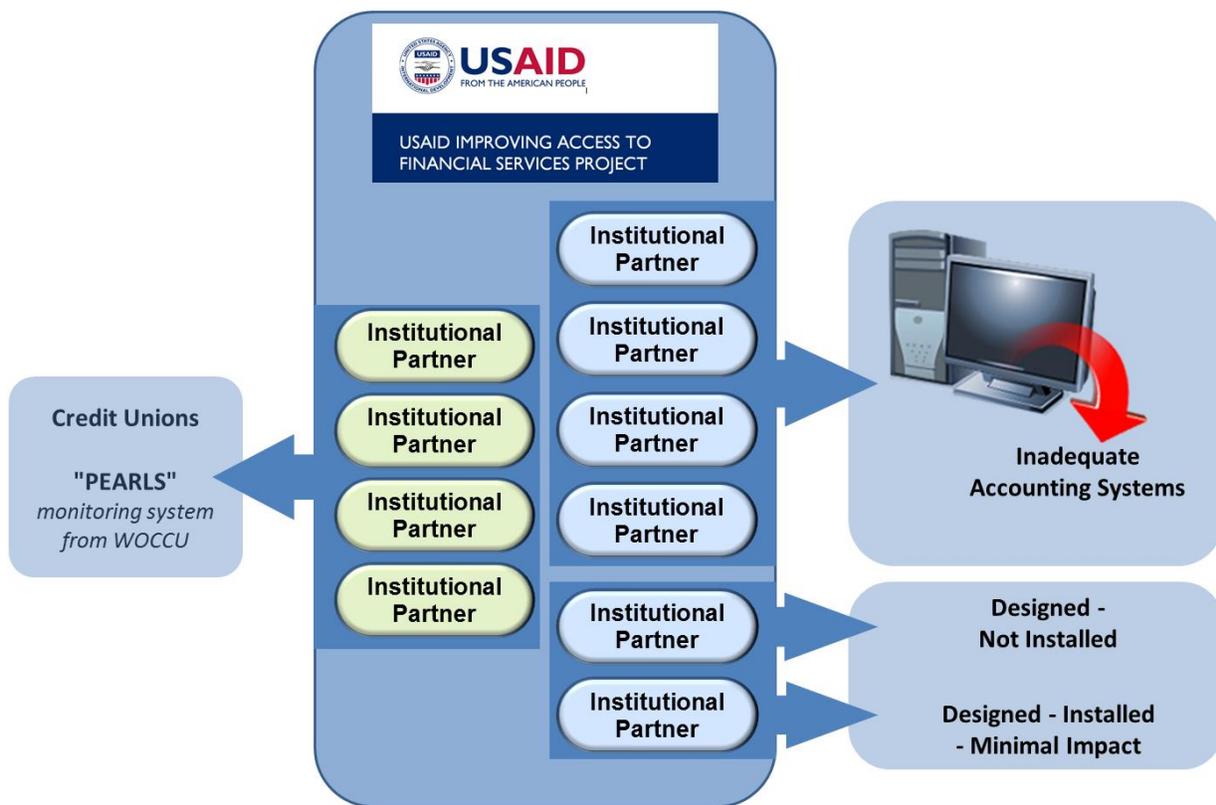
<sup>1</sup> Global Business Solutions, Inc. Project Contract, page 5 of 50 pages.

<sup>2</sup> Ibid, page 9 of 50 pages

<sup>3</sup> (1) savings in INTEGRAL; (2) the EQUIFAX Indebtedness Reports; (3) Credit cards within AMC; (4) the Superintendency’s website to assist institutions to become supervised; (5) FUNDAMICRO’s Superintendency-compliant accounting software; (6) MIDO mobile services software for ENLACE. Legislative approval of the Project-developed proposed law to authorize mobile financial services for all Salvadorans is imminent and will represent the seventh and most important new product developed as a direct result of Project interventions.

The intent of this document is to provide evidence of the process used, the challenges encountered and provide guidance for future actions that could be taken to improve the competitiveness of finance for MSMEs in El Salvador.

It is possible to learn as much as or possibly more from lost opportunities than from successes. This document presents the minimum requirements for implementing the *Performance System* and how this beneficially impacts institutional efficiencies in El Salvador. Section II introduces the conceptual design of the *Performance System*. Since the intent of the *Performance System* is to ensure profitability through ever-improving efficiencies, Annex I presents an analysis of the current profitability of the microfinance industry as a point of reference. Section III describes the attempts to implement the system in several partner institutions Section IV describes the results generated by the Project and Section V presents conclusions and recommendations for future interventions.



## II. THE PERFORMANCE SYSTEM

*Underlying Principles* The role of institutional governing bodies is to establish targets for return on equity and (*should*) demand increasing levels of leverage from senior management until a prudent ceiling is achieved. The role of management is to achieve these targets. Branch offices are where profits are

actually generated and the *Performance System* orients everyone’s focus on the monthly profitability of each and every branch.

The “*Performance System*” is a tool developed for microfinance institutions to improve their operational and financial efficiencies by providing relevant information in a timely manner to branch managers so that they may make more informed decisions. The core of the “*Performance System*” is the *Common-Size Income Statement*. Whereas often branch managers focus primarily on loan portfolio volumes and quality, the common-size income statement brings these and other elements into one coherent whole which makes it easy for branch managers to assess their performance. When combined with a custom-designed graphical interface presenting trend lines for key indicators and the introduction of a positive, friendly competition between branches, the *Performance System* can become a powerful tool for institutional growth.

**Definition of “Common Size Income Statement”**

“An income statement in which each account is expressed as a percentage of [income]. This type of financial statement can be used to allow for easy analysis between companies or between time periods of a company.”

Source: Investopedia.com

In many cases, the requirements of the *Performance System* unveil weaknesses in accounting policies and/or procedures which must be addressed prior to its implementation. In fact, the correction of these weaknesses brings the institution into closer alignment with standard policies of prudential management. It is not unusual for institutional strengthening to occur simply by initiating the design process of the *Performance System*. As will be seen further in this document, this has occurred for several Program partners.

The design elements of the *Performance System* are summarized as follows:

<b><i>Demanding</i></b>	The accounting department must generate and distribute quickly to branch managers accurate monthly income statements.
<b><i>Simple</i></b>	The monthly income statements are presented to branch managers in a common-size format to simplify analysis.
<b><i>Competitive</i></b>	Branches are ranked based solely on their monthly profit margin
<b><i>Transparent</i></b>	All branch managers see results of everyone else, including efficiency trends of the head office
<b><i>Empowering</i></b>	Branch ranking depends solely on branch actions
<b><i>Equitable</i></b>	With the common-size format, branches of different size are able to compete effectively with each other on a level playing field
<b><i>Educational</i></b>	Branch managers enhance operational and financial management skills as they apply strategies to increase their profit margins
<b><i>Motivational</i></b>	Custom-designed branch manager incentive systems are based on rankings
<b><i>Sustained</i></b>	The monthly competition is never-ending; results continually improve assuming appropriate incentive systems.

Finally, installing the *Performance System* within NBFIs is an important part of preparing them to qualify for licensing as a registered and supervised financial intermediary and is consistent with Chapter IV, Article 14 of Norm 4-47 covering the Integral Risk Management of Financial Intermediaries, as emitted by the Superintendency of the Financial System of El Salvador. (See text box below.) This objective is fully consistent with the Project’s expected result of at least two NBFIs ready for external supervision as well as all Project activities designed to support the Superintendency of the Financial System:

*“[T]he Superintendent of the Financial System has expressed interest in: a) continuing the dialogue they have already started with groups of stakeholders proposing improvements to the laws and regulations; b) creating incentives to encourage NBFIs to become regulated institutions to add an element of control on the system, as recommended by the World Bank; c) designing regulations by stages in order to allow NBFIs to gradually adapt by phases to the requirements of the SFS in their path to becoming regulated entities; d) developing standards and methodologies to assess the risks related to microfinance operations; and e) strengthening of operation risk analysis and assessment including the oversight processes related to risk.”<sup>4</sup>*

The sections below describe the conceptual framework pertaining to the design of the *Performance System*, the positive competition which it engenders among branch managers and stresses the internal urgencies which demand higher organization, discipline and speed from the accounting department as well as ongoing vigilance by upper management and governing bodies of incentive policies and procedures.

### **A. The Conceptual Framework**

Multiple elements in many microfinance institutions frequently inhibit the ability of branch managers to analyze results and improve performance:

- Branch managers receive only a limited amount of information pertaining to their operational and financial efficiencies. Frequently, branch managers focus almost exclusively on loans disbursed and portfolio quality;
- When head offices attempt to provide branch managers with information, the way in which it is presented does little to contribute to a rapid and complete understanding of past and present results, and seldom does it provide useful comparisons between branches;

**Norm 4-47**

**Norms for Integrated Risk Management of  
Financial Institutions**

**Chapter IV**

**Information and Control Systems**

**Management Information Systems**

Art. 14 – *The institution should have a management information system and statistical databases which facilitate the generation of rapid, reliable, consistent and standardized information and the preparation of periodic reports for the Board of Directors, Risk Committee and senior management as well as all others charged with the responsibility of managing risks.*

IAFS Program translation

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<sup>4</sup> IAFS Contract Document; AID-519-C-12-00001, Page 8 of 50 pages

- The time required by the head office to prepare and distribute the data to the branch managers often leaves little opportunity for the managers to implement enhancements before the subsequent report is due to be prepared;

At the other end of the spectrum are microfinance institutions with sophisticated interconnected accounting and finance systems which allow branch managers to access daily updates to financial information, or companies with very complex algorithms to distribute, for example, head office overhead to its various branch offices. In the first case, branch managers may struggle to interpret, in the brief moments available to them when they are not managing the branch, the wealth of information available to them. In the second case, branch managers may be left wondering what decisions they might take in order to decrease their portion of head office expenses and therefore increase their branch's performance.

## B. The Competition

Often, microfinance incentive systems are designed solely for field agents who work directly with borrowers. The *Performance System* includes the branch managers as well and the incentive – which need not always be monetary – is based on the branch's ranking and this ranking is based solely on the profit margin as generated by the common-size income statement<sup>5</sup>. Often, the monthly profit margins between branches differ only slightly, creating multiple opportunities for branches to increase their rank by making minor improvements in productivity or efficiency. For example, increases in branch income depend on the volume and quality of the loan portfolio. *Performance System* indicators inform branch staff about the branch's productivity (i.e. number and volume of loans per credit agent, portfolio risk levels, etc.) compared with the averages for all branches. Indeed, the *Performance System* informs all branches about the results from all other branches. Transparency is an important element of the *Performance System*: all branch managers see the results of all other branches. Everyone knows the ranking of everyone else. (See table below.)

<b>08 2012</b>					
	<b>Branch 1</b>	<b>Branch 2</b>	<b>Branch 3</b>	<b>Branch 4</b>	<b>. . . . .</b>
Income	100.0%	100.0%	100.0%	100.0%	. . . . .
Cost of Funds / Income	25.2%	23.3%	17.9%	27.4%	. . . . .
Operating Expenses / Income	35.1%	36.1%	43.1%	32.2%	. . . . .
Loan Loss Provisions / Income	1.8%	2.5%	1.5%	2.0%	. . . . .
Head Office Expenses / Income	26.7%	26.7%	26.7%	26.7%	. . . . .
Taxes / Income	3.1%	3.1%	3.1%	3.1%	. . . . .
Profit Margin	8.1%	8.3%	7.7%	8.5%	
<b>Ranking</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>5</b>	<b>. . . . .</b>

<sup>5</sup> Profit Margin = Net Result after Taxes ÷ Revenue

Another example of transparency *and equity* is the method for distributing both head office expenses and similar expenses, such as taxes, as described below.

### 1) *Head Office Expenses*

MFIs have created a wide variety of ways to distribute head office expenses to branches. In most every case, these methods have two things in common:

- a) when expressed as a percentage of branch revenue, the head office expenses for each branch vary, meaning that for every \$100 of revenue generated by each branch, one branch might have to allocated, say \$15 to cover head office expenses, another might be assessed \$18 and a third might be charged a greater amount; and
- b) branch managers have little to no way of knowing how they can reduce this expense.

The *Performance System* distributes head office expense equally among all branches. In the example shown above: each branch must use 26.7% of its monthly revenue to cover the head office overhead. That is, for every \$100 generated as revenue, every branch must allocate exactly \$26.70 to cover head office expenses. Although it is true that larger branches generating more revenue will, in monetary terms, cover a greater monetary portion of head office expenses, the percentage of revenue is constant. Although branch managers have no control over this expense, they readily accept that all branches should carry the same burden once they realize that this strategy for allocating head office expense among all branches will have no effect on the branches' ranking.

“The good thing about common-size analysis is that ... interpreting the results is [easy]. Even ... users who are not proficient in analysis techniques can gain insight of [a] company’s financial performance ... from common size financial statements ...”

Source: PakAccountants.com

An added benefit of this distribution policy is that since the same head office number is applied equally to all branches, that number can be *and is* monitored month-to-month by the branch managers and head office personnel alike to assess the trend over time of this overhead expenses generated by the head office. Often for the very first time, head office staff feels pressured to generate increased levels of efficiencies at their end as well. Thus, with the *Performance System* overall institutional efficiency improves.

### 2) *Municipal Taxes*

Where municipal taxes are involved, inequity among branches can result if one jurisdiction applies a higher or lower tax rate than elsewhere. Branch managers have no control over the municipal taxes assessed, and in any case, why should one branch benefit over others simply because it operates in a municipality with a lower tax rate? A policy of equitable distributions requires that all taxes be consolidated at the head office and then distributed equally among all branches as a percentage of their income. In the example above, every branch must allocate 3.1% of its revenues to cover taxes. All branches pay the same and therefore, taxes will not affect a branch’s ranking.

With these adjustments in internal policy, an additional element of the *Performance System* is introduced: first, transparency and fairness, and now *empowerment*. Branch rankings are determined solely by (i) revenue, (ii) cost of funds, (iii) operating expenses and (iv) loan loss reserves. That is, rankings are determined solely by the actions of the branches themselves. The following paragraphs explore elements which influence results for these four activities.

### 3) *Income*

Institutions tend to apply the same interest rate policy throughout its branch network. This means that branch managers cannot normally increase interest rates to borrowers as a strategy to increase their branch ranking. Managers must seek other ways to increase income.

An approach to increase income with which branch managers are most familiar is to simply increase the volume and quality of the outstanding loan portfolio. From an institutional viewpoint, it is desirable that branch managers remain focused on increasing the volume and quality of the loan portfolio.

Some microfinance institutions may apply different interest rates to different products. In these instances, branch managers may be motivated to expand their higher-yielding portfolios as a way to generate more income and increase their profit margins/rankings. The *Performance System* requires a tighter understanding and management of interest rate policy, and this too is desirable.

Income is a critical element of the common-size income statement since revenue is the denominator for all cost indicators:

Revenue / **Revenue** = 100% = the start of all common-size income statements  
Cost of Funds / **Revenue**  
Operating Expenses / **Revenue**  
Loan Loss Provisions / **Revenue**  
Head Office Expenses / **Revenue**  
Taxes / **Revenue**  
Net Result / **Revenue** = the Profit Margin

Branch managers often focus first on strategies to reduce the various cost elements within the income statement. This is good and reflects a focus on the *numerator* of the formulas above. With the common-size income statement, it is also often a good idea to focus on the *denominator* as a way to lower the cost elements and increase the resulting profit margin. With its role as the denominator for these formulae, the role and importance of income is heightened further.

### 4) *Cost of Funds*

Often, microfinance institutions secure external lines of credit to fund the branch loan portfolios. In such instances, the borrowing costs of these funds must be distributed to branches. To calculate the total cost, the *Performance System* considers the total volume of cash required by the branch; that is, the amount of the outstanding loan portfolio plus cash on hand less savings captured by the branch. This provides the volume of funds required by each branch and the cost of the external loans are distributed according to these requirements. The lower-cost savings are

then added to this distributed expense to determine the total cost of funds for branches which capture savings.

Regarding the analysis of cash on hand, it is not unusual to discover excessive levels of cash sitting idly in branch bank accounts. This extra cash may make the branch manager's life more comfortable but it also increases the overall institutional requirement and therefore cost of funds. By including the amount of cash on hand in the cost of funds calculation, branch managers quickly realize that they can decrease their monthly cost of funds and increase their ranking by projecting cash requirements more carefully and reducing the volume of cash on hand. This is a desirable line of thinking. Special care must be taken by the Branch Manager to anticipate short term high cash demand periods and to optimize between the cost of funds and increased costs of frequent inter-branch cash transfers.

As mentioned in Annex I, savings have embedded themselves fully into the microfinance industry, but more can be expected in the coming years. The *Performance System* contributes to this trend by taking into consideration success in capturing savings as an effective strategy for lowering a branch's cost of funds and therefore increasing its rank. An easy way to explain this is through the following example:

	Branch A	Branch B
Cash on Hand	50,000	50,000
Loan Portfolio	1,000,000	1,000,000
Savings	<u>200,000</u>	<u>-</u>
Total Funding Requirement	850,000	1,050,000
Cost of Funds	10.0%	
Cost of Savings	5.0%	
Cost of Funding	85,000	105,000
Cost of Savings	<u>10,000</u>	<u>-</u>
Total Cost of Funds	95,000	105,000

*Both branches have \$50,000 cash on hand and both have a loan portfolio of \$1,000,000. Branch A has savings of \$200,000 which reduces its total funding needs from the head office to \$850,000 as opposed to the \$1,050,000 required by Branch B. The head office charges 10% for providing funds to the branches and the market price for savings is 5%. Applying these costs to the two branches, the total cost of funds for Branch A is \$95,000 due to its use of the lower-cost savings. Without having captured any savings at all, Branch B's total cost of funds is \$105,000. All else being equal, Branch A will have a higher rank than Branch B because the lower cost of funds will generate a higher profit margin.*

### 5) *Operating Expenses*

Branch managers are quite familiar with the elements contained in this line item. The world of microfinance has stressed operational efficiency and has developed many ratios to measure it. Many of these measurements are selected by interested institutions to be incorporated into the design of the *Performance System*. The monthly side-by-side comparison of this line item with other branches proves to be a strong motivator to look at *all* elements which add to operating expenses. Branch managers soon realize that reducing expenses by only 0.1% can often affect their ranking!

### 6) *Loan Loss Provisions*

This line item, along with revenue, reflects the over-all quality of the loan portfolio in each branch office. This is a “cost” that the branch staff does have control over and so will work to lower it. Adequate internal controls are needed to ensure the accuracy of the loan loss provision. Lowering this indicator helps the branch twice: once with the cost itself and again with increased revenue, generating declines in *all* line items.

To summarize, the design of the *Performance System* forces branch managers to focus on managing a growing loan portfolio of the highest possible quality with the lowest possible operating expense, using low-cost funds (ideally, savings) while minimizing cash on hand. And then it lines the branch managers up side by side to see who is accomplishing that the best. (And, not so incidentally, who is not.) It is a compelling design that generates a never-ending desire on the part of branch managers to excel.

## **C. The Internal Urgency**

With the introduction of a transparent and fair monitoring design which empowers branch managers, a frequent and predictable reaction on the part of the branch managers is to demand updated reports as quickly as possible to give them a chance to assess their past performance and discuss current-month strategies with their staff to improve their ranking. That is, the branches pressure the head office to decrease the time required to close the accounting month and prepare the new *Performance System* reports.

The *Performance System* requires a well-functioning and efficient accounting department. A major finding in El Salvador as the Project attempted to install the *Performance System* in various institutions, is that in several instances the accounting department simply could not provide reliable branch-segregated information. This finding motivated the Project to reassess and explore strategies which would address first the need to strengthen back office operations in its institutional partners.

### III. IMPLEMENTATION

As presented in the work plan for Fiscal Year 1:

*“Occasionally, ineffective information systems within ... NBFIs offer highly cost-effective opportunities to enhance efficiencies, safety & soundness and returns, simply by introducing a proven approach for rapidly distributing appropriate information to those within the organization most able to effect positive change: the branch managers. The “Performance System” is designed with this purpose in mind.”<sup>6</sup>*

To implement the plan, the Project established partner selection criteria, presented to selected NBFIs the core design of the *Performance System*, and met on multiple occasions with executives to determine their preferences for specific indicators to be embedded in their design which are above and beyond the core indicators. At this point, the Project developed the software to include both the core and preferred indicators, and the NBFIs carried out the work required to create data bases to include at least six months of data. With this information in hand, the Project created the trend lines and proceeded to validate the information contained in the databases. An important finding in this implementation process was that most interested institutions proved unable to pass the data validation process. The final step in the process was the monthly distribution to branch managers; this too generated a rather surprising impediment for the full implementation of the *Performance System*, as will be presented in the Section V. Conclusions and Recommendations.

#### A. Partner Selection Criteria

In order for the competition generated by the *Performance System* to work, partner institutions must have multiple branch offices to allow for branch comparisons. All partner institutions which signed Letters of Understanding with the Project complied with this selection requirement. A translation of the section of each Letter of Understanding which refers to the *Performance System* is presented below:

Institution	# Branches	# Borrowers at Start
AMC	12	14,416
ASEI	6	10,075
ENLACE	10	37,963
FINCA	10	8,222
Fundación CAMPO	26	9,525
INTEGRAL	9	32,472

#### ***Increase the Decision-Making Capability of Branch Managers***

*The Project will work with the team of [NAME OF INSTITUTION] in order to implement a management information system to facilitate the analysis of operational and financial tendencies on the part of senior executives and branch managers of the organization. In addition to*

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<sup>6</sup> IAFS Project Work Plan, Fiscal Year 1, page 8

*designing the presentation of the monthly information, internal accounting procedures will be reviewed in order to ensure that the new monthly reports can be prepared and distributed quickly. This objective is consistent with the requirements of the Superintendency of the Financial System in terms of the effective monitoring of all financial tendencies and risks of the organizations which aspire to be regulated.*

*During the design process, the [NAME OF INSTITUTION] commits to ensure the availability of its executives and other required personnel so that they may actively participate in the design process. The [NAME OF INSTITUTION] commits to prepare the monthly reports within agreed-upon timeframes and then share them with the Project to allow for a mutual monitoring of institutional advances as well as an analysis of the new design's effectiveness. In order to establish a reference point for this analysis, the [NAME OF INSTITUTION] will provide its financial statements to the Project for the last six months, if possible by branch. On the basis of this information, [NAME OF INSTITUTION] and the Project together will establish a series of expected targets for specific indicators (e.g. institutional equity, number of new clients, loan portfolio quality, operational efficiency, etc.).*

Credit unions represent a special case. In the early 1990s, the World Council of Credit Unions (WOCCU) created a new financial ratio monitoring system called “PEARLS”. This technically powerful monitoring system encouraged credit unions around the world to apply financial strategies designed to strengthen balance sheets. Examples included a more robust policy for generating loan loss reserves and a major shift in credit union strategy for funding its assets, away from external, often subsidized funds and towards capturing savings from the very same communities in which the credit union provided loans.<sup>7</sup>

Given the democratic nature of credit unions, year-to-year leadership changes in the credit union's governance structure are the norm. Therefore, leadership training activities are never-ending, requiring the development of training materials to ensure that the members of the governing body can fulfill their obligations through a thorough understanding of the credit union's finances. In the case of the Project's credit union partners, the *PEARLS* monitoring system was already firmly embedded within the monthly financial procedures to creating trends reports for senior management, and an extensive library of training materials already existed to train leaders in the specifics of the *PEARLS* system. (See Annex IV for an example.) Although the intent of both the *PEARLS* and the *Performance System* is the same, the ratios themselves vary. After discussions with its credit union partners, the Project concluded that there was no

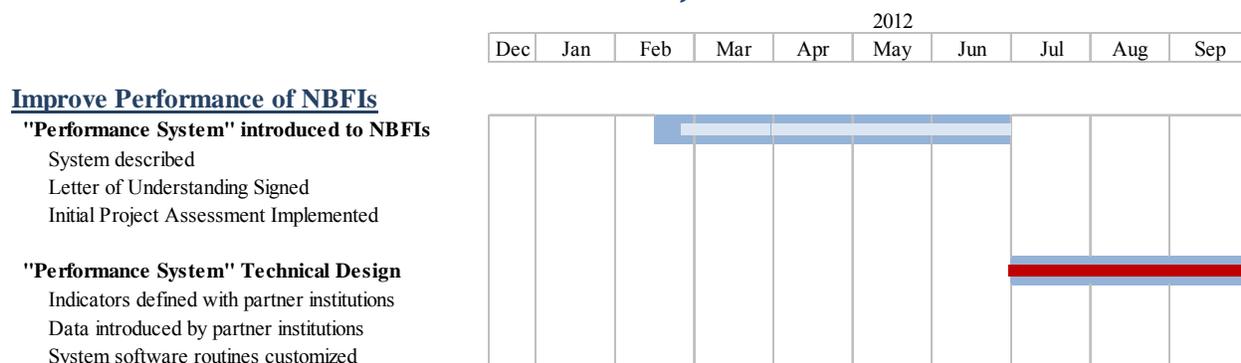
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<sup>7</sup> Although the *PEARLS* loan loss reserves policy represented an important step forward in its day, the Project's *Gap Analysis* demonstrated repeatedly the need for El Salvador's credit unions to strengthen their balance sheets even further by applying the policy stipulated by the Superintendency.

need to change in the credit unions that which was already functioning well. The implementation focus of the *Performance System*, therefore, was limited to the Project’s non-credit union partners.

As of June 30<sup>th</sup>, 2012 and as per the Project’s Work Plan, the Project had signed Letters of Understanding with ENLACE, AMC, FINCA, INTEGRAL, Fundación CAMPO and ASEI. By the following quarter efforts were well underway to customize the system’s design for each partner.

## Year I Work Plan, Calendar of Activities



### B. Core Design

The six participating Project partners accepted the following four core design elements of the *Performance System*:

- The use of common-size income statements to monitor branch performance. This is actually significant: in general, the world of microfinance has yet to include orthodox financial ratios to its operations. By orthodox, this document refers to common-size income statements and common-size balance sheets. As indicated in a previous section, the MIX Market includes many useful ratios for measuring operating efficiencies, but it does not yet include the one ratio which financial literature routinely refers to as “operational efficiency”: operating expenses ÷ revenue. Complications arise when pulling numerators and denominators from different financial statements: the *Performance System* applies a design found in most every textbook on accounting.
- The Project-proposed approach for distributing head office expenses. This too represented a significant development. Two partner institutions had developed very sophisticated (and complicated) tools for distributing head office expenses to branches. Apart from the conceptual legitimacy of these designs, the end result was that different branches had to absorb different levels of head office expenses and branch managers had little way of knowing how to reduce this cost. As indicated previously, crucial design elements of the *Performance System* are accountability and empowerment: that is, a branch’s rank is determined solely by the activities of the branch. Externalities need to be distributed equally among all branches: they all carry the same (proportional) burden. Head office expenses are an externality.

- The Project-proposed approach for distributing Municipal taxes. Municipalities with lower tax rates create an unfair advantage for the branches operating there: the branch managers did nothing to influence that cost, why should their profit margin rise and their ranking improve as a result? The inverse is also true: branches operating in higher-taxed Municipalities should not be penalized as a result. The solution is to consolidate all Municipal taxes at the Head Office level and distribute them as part of the Head Office expense as per the previous bullet point. This policy reinforces the accountability and empowerment features of the *Performance System*: branch managers, upon learning of these policies, come to realize that their rank depends solely on those activities which are under their explicit control.
- Income tax distribution: with the approval of the previous three policies, this final issue was readily addressed with all Partners. Institutional income taxes are consolidated at the Head Office level and then distributed to branches equitably as a percentage of their revenue.

The table below presents a second example of branch results for one month. Branch managers are told that their rank is determined by their profit margin and they can readily see that all branch managers pay the exact same cost for Head Office expenses and taxes. The *System* is fair.

<b>Nov-12</b>	<b>Branch 1</b>	<b>Branch 2</b>	<b>Branch 3</b>	<b>::</b>
Total Revenue	100.0%	100.0%	100.0%	::
Cost of Funds	19.8%	17.9%	22.7%	::
Operating Expenses	45.0%	42.5%	40.0%	::
Loan Loss Reserves	1.4%	2.0%	0.8%	::
Head Office Expenses	26.4%	26.4%	26.4%	::
Taxes	1.0%	1.0%	1.0%	::
Profit Margin	6.4%	10.2%	9.1%	::
<b>Branch Ranking</b>	<b>14</b>	<b>11</b>	<b>12</b>	

### C. Customized Designs

With the common size income statement firmly established as the core structure for determining branch rank, Project efforts were then directed towards providing branch managers with timely information designed solely to help them improve their ranking. In other words, to help them continuously improve their profit margin.

The *Performance System* accommodates customized designs in recognition of the fact that different institutions apply different strategies for monitoring performance. The next step, therefore, was to work with the six participating microfinance institutions to determine their specific design.

The first difference encountered was the desire to monitor separately the yield on different lines of credit. The table below presents the PS design frameworks for the six participating Project partners:

ENLACE INTEGRAL AMC	FINCA	FUNDACIÓN CAMPO	ASEI
Portfolio Yield	Yield on Individual Loans	Yield on Individual Loans	Yield on Solidarity Group Loans
			Yield on Communal Bank Loans
	Yield on Group Loans	Yield on Communal Loans	Yield on Parallel Loans
			Yield on Individual Loans

In addition to presenting trends for the institution as a whole, the *Performance System* portrays trends for each branch. Therefore, in the case of FINCA and Fundación Campo, the request to develop trend lines for two distinct lines of credit simultaneously requires their commitment to disaggregate information each month twice; that is, the branch-level information pertaining to their loan data must then be disaggregated by credit line. In the case of ASEI, data for four lines of credit, by branch, would have to be compiled by its accounting department each month in order to comply with the design preferences of this institution. The *Performance System* accommodates these preferences: the question was whether the institution could generate the data required to produce the desired trend analysis. This proved to be an important obstacle for most of the participating institutions. But that discovery came later in the implementation process.

A second level of differentiation among the six participating institutions was the level of detail used to monitor non-performing loans:

ASEI FUNDACIÓN CAMPO	AMC INTEGRAL	ENLACE	FINCA
1 - 30 days	> 1 day	1 - 30 days	1 - 30 days
	> 30 days	31 - 60 days	31 - 60 days
> 30 days	> 90 days	61 - 90 days	61 - 90 days
	Refinanced Loans	> 90 days	91 - 180 days
			> 180 days

As before, the *Performance System* can accommodate these differences. The only consideration was that if more information was requested, the monthly burden on the accounting department would increase. All six institutions requested the following information for their branch managers:

	FUNDACIÓN CAMPO	INTEGRAL	AMC	FINCA	ENLACE	ASEI
Outstanding Loan Portfolio	X	X	X	X	X	X
# Borrowers	X	X	X	X	X	X
# Loans Disbursed	X	X	X	X	X	X
# Borrowers / Credit Agent	X	X	X	X	X	X

All other indicators were institution-specific. Examples include:

- Savings indicators for INTEGRAL and AMC, including # of savings accounts, average balance, etc.

- Probably due to its savings accounts, INTEGRAL requested information about its balance sheet, specifically the distribution of its assets since this involves proper risk management
- Other popular indicators included total income, cash as a percentage of the loan portfolio, the amount of loans disbursed, the value of the outstanding loan portfolio per credit agent, the participation of women in the loan portfolio and the number of credit agents.

The primary criterion for each indicator is its ability to inform branch managers about performance. For example, one partner institution proposed “Rotation of Loan Portfolio” as an indicator to monitor. This prompted discussions to determine how a branch would be able to interpret this indicator and how it might influence branch behavior. It was subsequently dropped.

A final Project-proposed indicator monitored the speed with which the accounting department closed each month in order to provide the branch managers with updated information as quickly as possible. Considering the reporting requirements of the Superintendency, the target for this indicator was a maximum of five days. The graph at right presents the desired trend line for a hypothetical institution.



#### D. The Software

Annex II presents an example of the software routines developed for the NBFIs. Although most of the routines are common across all NBFi designs, variations exist due to the different preferences of the participating institutions. The routines were developed in Visual Basic for Excel.

The drawing on the following page portrays for one participating NBFi, the linkages among the various routines and sub-routines of the software. As will be described in the section below covering the Trend Lines, with the click of a button the user in this example can select between four sets of 10 graphs per set, can toggle through branches one at a time or select a specific branch for analysis, and can choose whether six or twelve months of data will be displayed in the trend lines.

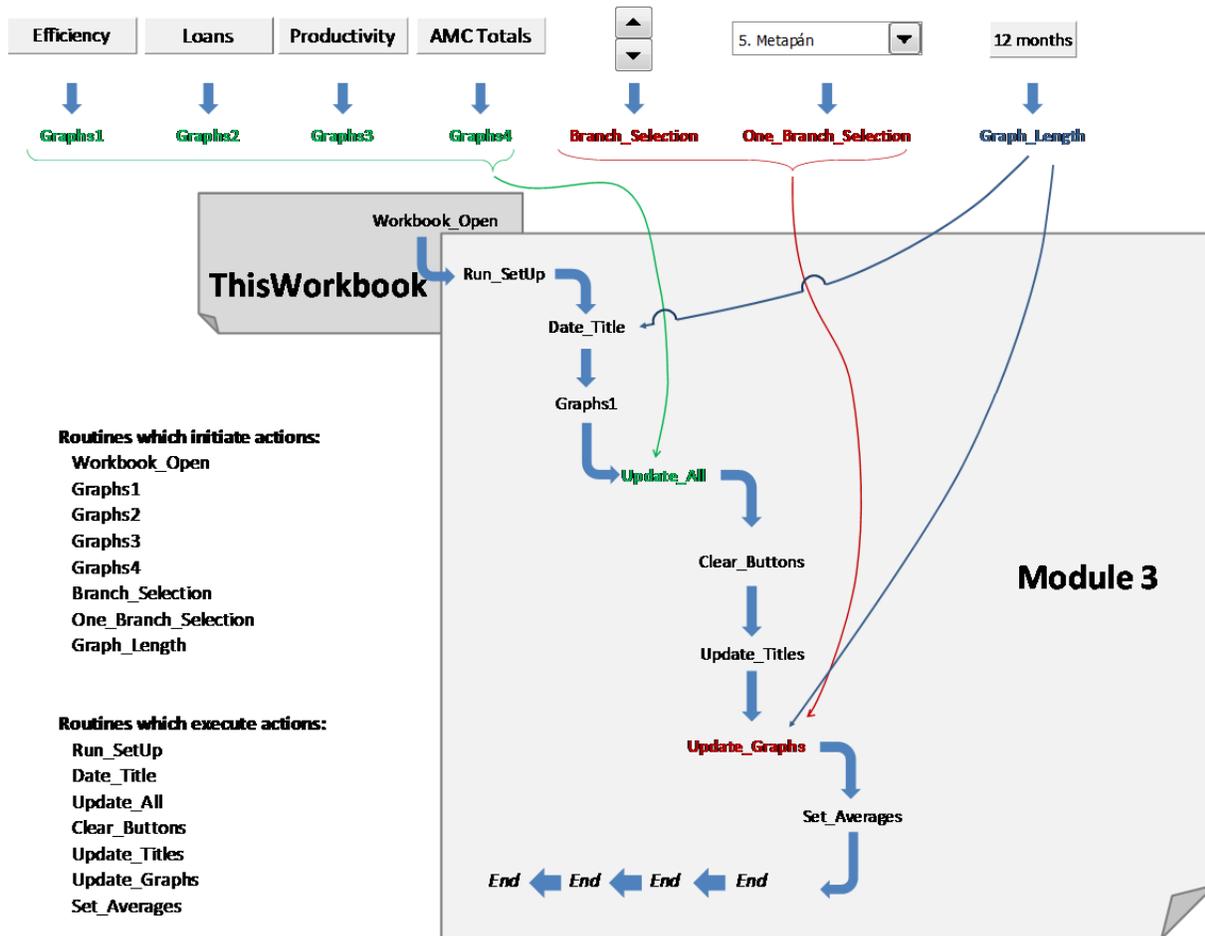
A design objective was to simplify to the extent possible the use of the *Performance System*. No special application was required: all branches already have Excel on their computers<sup>8</sup> nor did branch managers require or have to learn special computer skills to manage this product.

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<sup>8</sup> Although in one instance an updated version of Excel was required.

## **The Performance System**

### **AMC Buttons for Trend Lines**



#### **E. The Data Base**

Once the complete list of indicators to be monitored was established, the Program designed the individualized “Data Base” worksheet. This is the sheet which contains all of the accounting data, by month and by branch, which is used to generate the trend lines. Below is an example of one piece of information (“Total Income”) which the institutions were required to compile. Similar tables on the Data Base worksheet were developed to accommodate every indicator requested by the institutions. A minimum of six months of data was required to generate the trend lines:

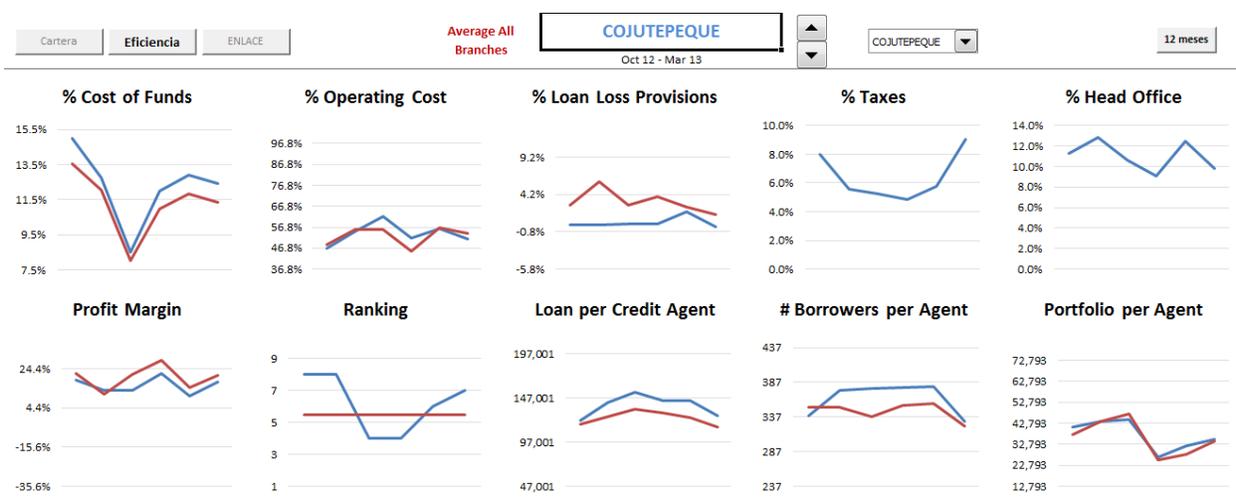
	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13
<b>Total Income</b>						
<b>Branches</b>						
San Francisco Gotera	43,907.14	43,793.66	41,295.48	41,340.60	41,517.07	40,679.88
Ciudad Barrios	22,806.03	22,057.96	20,035.48	20,308.03	22,172.81	20,902.79
Santa Rosa de Lima	27,044.92	24,760.68	23,109.91	23,405.78	24,833.79	23,864.63
La Unión	36,931.51	33,961.05	31,521.74	32,278.93	33,949.84	32,537.35
Usulután	32,999.33	33,784.53	30,266.90	32,282.84	33,260.39	36,456.65
San Miguel	48,573.50	48,605.98	43,632.53	45,287.42	51,903.19	47,658.57
San Vicente	29,583.05	28,956.50	24,900.77	25,980.17	27,947.05	25,341.35
Cojutepeque	19,399.68	17,194.80	16,824.85	16,459.33	18,293.49	17,543.35
Ilobasco	25,650.16	22,814.54	20,894.06	21,914.59	22,382.50	21,233.21
Sensuntepeque	33,995.66	31,348.98	30,376.52	30,783.76	34,274.82	33,307.95
Zacatecoluca	46,065.78	41,561.96	39,667.29	38,643.45	50,183.98	42,629.51
Sonsonate	28,596.45	27,895.22	24,707.38	26,833.15	27,091.31	21,807.63
Santa Ana	41,043.99	33,409.43	31,945.21	37,348.59	31,860.21	30,923.44
Chalatenango	14,175.26	14,485.27	13,854.44	14,307.21	15,091.50	12,718.55
Santa Tecla	23,515.00	23,303.18	22,919.92	23,172.50	24,456.89	23,968.71
Santiago de María	27,655.34	27,549.96	24,214.72	26,601.85	26,060.30	26,473.20
Total All Branches	501,942.80	475,483.70	440,167.20	456,948.20	485,279.14	458,046.77
Average All Branches	31,371.43	29,717.73	27,510.45	28,559.26	30,329.95	28,627.92

With this information, the *Performance System* automatically calculates institutional totals and the averages of all branches. In the example above, branch revenue for May 2013 totaled \$458,046.77 and averaged \$28,627.92. As mentioned previously, with more information requested (e.g. loan portfolio data separated by credit line), more data tables needed to be completed by the institutions. In the case of ASEI, for example, the Data Base, including automatic calculations, extended from row 6 to row 2233.

## F. The Trend Lines

The *Performance System* prepares trend lines for every indicator selected by the institution. As indicated previously, the minimum time period for presenting trends is six months; once the Data Base contains twelve or more months of data, the user can toggle between trend lines of twelve or six months. Indicators are grouped into screens showing 10 graphs. Users can select which set of graphs they wish to view. Over time, as users become familiar with the capabilities of the data analysis, more analyses can be embedded into the *Performance System*, such as comparisons of previous with current year months to accommodate institutions with seasonal lending products.

For most indicators, two lines are presented: a blue line showing the trends of the indicated branch and a red line showing the average of all branches for that indicator. In this manner, the branch manager can readily see whether or not the results of her branch are above or below the average of all branches. The analysis is immediate and clear.



The observations below are taken from the example portrayed above, obtained from a Program partner. The comments refer to the top row of graphs, moving from left to right. The lower set of five graphs present the same design:

- The cost of funds for the Cojutepeque branch is higher than the average of its peers and indeed has been higher throughout the six-months being portrayed.<sup>9</sup> To improve performance, the branch manager may try to decrease the amount of cash on hand or, if her institution is authorized to capture savings, redouble efforts to open new savings accounts.
- Over the past six months, the operating cost has matched exceeded and been below the branch average. For the most recent month, the result is below average, which is positive. The branch manager might speak with branch staff to understand better why expenses increase in certain months above the average of their peers and to develop strategies to avoid this.
- The quality of this branch's loan portfolio is better than average, generating loan loss provisions below that of its peers. However, the trend line for the branch average is declining; if this branch is not careful, it could soon find itself above the average. Efforts to enhance portfolio quality must never end.
- Taxes, expressed as a percentage of revenue, have increased (equally for all branches) over the past two months. Since this number is the same for all branches, only one line is visible.
- Similarly, only one line portrays the trend for the head office expense, shouldered equally by all branches. This graph creates at the head office as well, professional interest in projecting efficient operations.

<sup>9</sup> The time period of the graphs is shown immediately below the Branch name.

## G. Data Validation

The next step in the process was data verification. Of the six institutional partners for whom *Performance System* designs were developed, four proved unable to pass validation tests. This was a significant finding which influenced the focus of subsequent technical assistance investments.

The analysis carried out to test the accuracy of the information contained in the Data Base worksheet was consistent with the validation procedure applied monthly to regulated institutions by the Superintendency. The Project's findings provoked in-depth assessments of the institutions' accounting systems, policies and procedures and motivated the Project to support the development of an accounting system designed for microfinance institutions which complied fully with Superintendency reporting requirements.<sup>10</sup> This will be covered further in the RESULTS section of this document.

Finally, two institutions *did* pass data validation tests but in one instance the decision to install the *Performance System* was never made, notwithstanding the positive recommendations from senior managers to implement it.<sup>11</sup> The second case is more intriguing: the *Performance System* was installed but the ranking of the branches based on their profit margin proved ineffective in motivating change and generating enhanced results. The most probable cause of this result was the reluctance on the part of senior managers to distribute the monthly results to branch managers due to a perceived risk that they might then share with competitors this potentially sensitive yet certainly extensive institutional data.<sup>12</sup>

## IV. RESULTS

The installation of the Performance System involves a detailed review of accounting and financial practices and policies. The following list represents an example of the technicalities involved and responses made by Partner institutions:

1. AMC:
  - a. The distribution of head office expenses to branch offices was totally revamped to dramatically simplify the monthly accounting process while making the distribution more transparently equitable to the branch managers. That is, all branch managers were to bear the exact same head office burden as a percentage of the branch revenues which they had generated;

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<sup>10</sup> Ref. the FUNDAMICRO accounting software.

<sup>11</sup> On multiple occasions, this same institution expressed positive interest in implementing initiatives in which the Project was willing to invest, only to prove unable to follow through, due possibly to other exigencies pulling time and focus from decision-makers.

<sup>12</sup> From conversations with managers this is also a reflection of the highly competitive nature of the NBF sector in El Salvador. It also may suggest the need for additional institution building within that organization.

- b. Policies governing the movement of non-performing loans from branches to a collection department and then back again to the branches were eliminated due to their detrimental impact on effective trend analysis on the part of branch managers as well as some questionable accounting procedures involved concerning the movement of the corresponding reserves;
- c. Accounting and operational reports did not pass validation tests. That is, reports were not providing consistent branch-level numbers. This particular finding resulted in AMC making the decision to invest \$70,000+ in a new accounting system appropriate for a regulated financial intermediary.
- d. Branch ranking was instituted based on the profit margin of each branch.
- e. The Executive Director publicly set 5 days as the target time for distributing the new reports to branch managers following the close of the previous month. This decision required the Accounting Department to increase its efficiency to be in full compliance to Superintendency norms.

## 2. FINCA

- a. Accounting and operational reports did not pass validation tests. Repeated, unsuccessful efforts to obtain clear numbers resulted in a major external audit and a Project-funded internal institutional assessment leading to subsequent Project technical assistance in the development of manuals covering the full set of accounting and finance policies and procedures.
- b. In December 2013 the Executive Director communicated to the Project its interest in making a new attempt to install the *Performance System* and committed to developing an updated database with six months of data.

## 3. ENLACE

- a. Policies governing the distribution of head office expenses were modified to ensure equity among branches.
- b. Municipal taxes were consolidated and distributed equally among all branches to eliminate any external advantage one branch may have over another simply because the Municipality in which it operates charges lower taxes.
- c. Branch ranking was instituted based on the profit margin of each branch.
- d. The system is operational and being shared with Branch Managers at monthly meetings held at the Head Office. This may actually inhibit acceptance and use of the *Performance System*, since branch managers have very limited opportunities to toggle through the branches, comparing their results with those of the other branches.

## 4. ASEI

- a. Major enhancements to internal accounting procedures have been instituted to allow for the individual trend analysis of branches; previously, only consolidated information was prepared.
- b. Staff orientation has been reinforced to ensure accurate understanding of indicators to be monitored and their importance for increasing institutional performance.

- c. Data validation continues. This process has such importance because executives and branch managers must be in control of accurate numbers in order to make good decisions regarding enhanced performance.
- d. Branch ranking based on the profit margin of each branch has been approved. Indeed, a new bonus system will depend on the branch's ranking.
- e. Ultimately, ASEI decided to invest more than \$100,000 in an updated accounting system in order to address continuing data validation issues and to bring ASEI into closer alignment with the requirements of the Superintendency of the Financial System.

## 5. INTEGRAL

- a. Data validation of this regulated financial intermediary was seamless, demonstrating an important benefit of being supervised by the Superintendency.
- b. Savings were incorporated into the monitoring indicators, bolstering parallel work by the Project to teach INTEGRAL strategies for aggressively increasing savings among the communities in which it operates;
- c. The distribution of head office expenses has been greatly simplified, lowering the costs of the Accounting Department while simultaneously making it easier for branch managers to see that they are sharing these indirect costs equitably.
- d. Branch ranking based on the profit margin of each branch was accepted.
- e. The distribution of third party loans has been revamped to take into consideration the cost of unproductive cash held at the branches as well as the level of lower-cost savings and fixed deposits held at the branches. These policy changes affect the cost of funds attributable to the branches and hence their profit margins. The expectation is that these changes will result in lower levels of cash and higher levels of savings, contributing directly to an explicit Project deliverable (which the Project expects to have to amend upward).

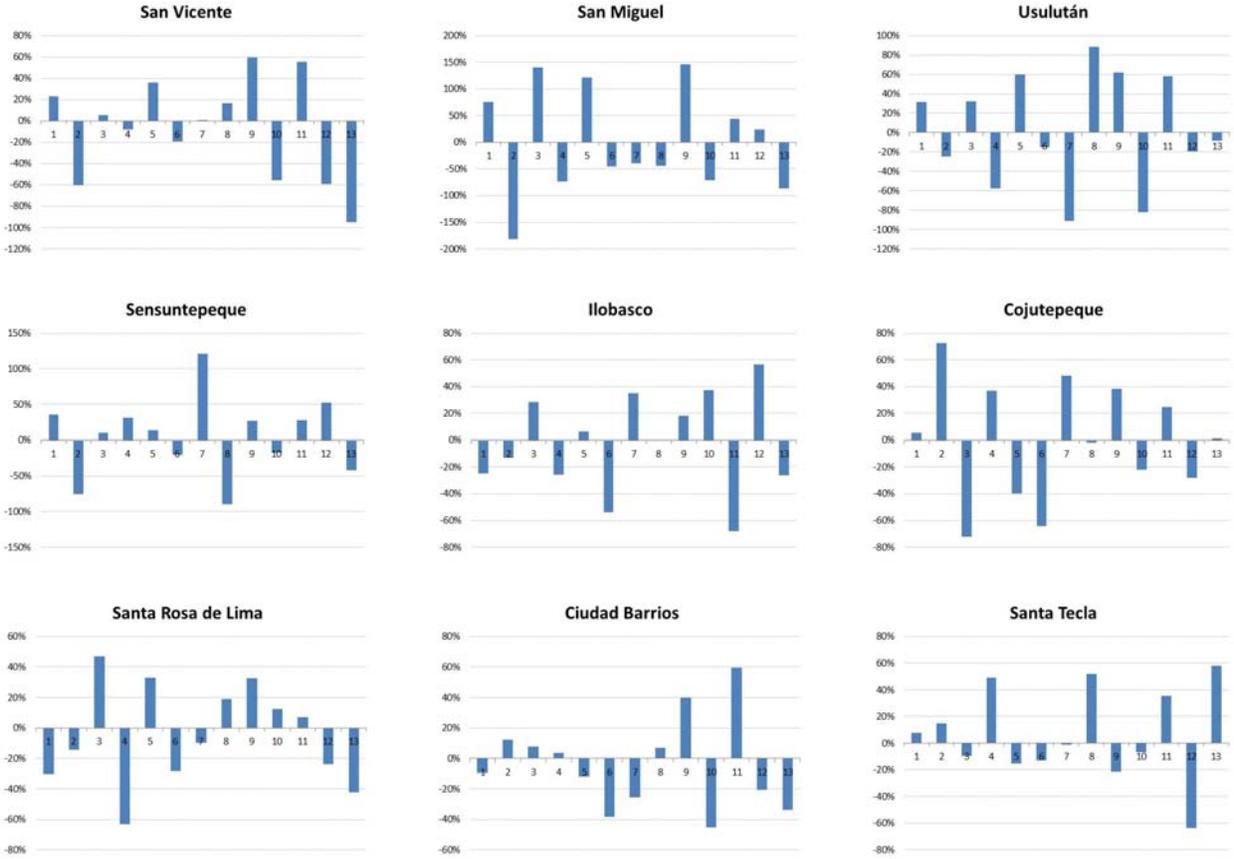
## 6. ACACU and ACACSEMERSA

- a. These credit unions have a long history using the PERLAS system, developed by the World Council of Credit Unions (WOCCU). With support from their federation FEDECACES, they have developed a series of training modules to teach this monitoring system to its democratically-elected and hence ever-rotating board members. The Project reviewed the credit unions' monitoring systems and decided to support their current system rather than push for the installation of the Performance System.

Additional results are summarized below:

- Two of the four institutions decided to invest approximately \$100,000 in the purchase of a new, more robust accounting system. The Project has assisted this migration in one partner.
- Two institutions came to the realization that significant change was required and with Project support, decided to change their legal situation to allow them to capture savings. To accomplish this, their accounting system will need to pass regulatory requirements.

- One institution instituted an external audit with an international firm to ensure that the data validation issues were not being caused by inappropriate field actions. Once the audit was completed satisfactorily, the Project then supported an in-depth institutional assessment of this institution, resulting in conclusions highlighting deficient policies and procedures involving multiple important activities, including accounting and internal audits. As a result, the Project focused on further capacity building of this partner by investing in a consultant tasked with developing and embedding within daily operations, updated policy and procedures manuals.
- After multiple attempts, one institution eventually succeeded in identifying the issues causing validation errors. An incentive system was then prepared for this partner using a highly participatory process during multiple meetings with senior executives. (See Annex III for a description of this incentive system.) Following the approval of the conceptual framework of the new incentive system, actual accounting data from the institution covering the most recent 12-month period was used to test the reasonableness of certain assumptions. The results of this analysis highlighted the serious finding presented in the graphs below:



The graphs above present the profit margins for each of nine different branch offices. An important design element of the proposed incentive system focused on achieving and then maintaining over a period of months, a certain level of profits in order to justify the new incentive. The serious issue portrayed in the graphs is the extreme month-to-month volatility of the profit margin in practically

every branch. This volatility cannot be the result of activities of the branch itself; what these graphs portray is the absence of consistency in accounting procedures during the monthly closing procedure. Perhaps due to the pressure to demonstrate compliance with regulatory requirements, what is happening in this institution is that not all transactions are being entered into the accounting system prior to close out. These transactions then end up in the figures for the following month, generating the wildly fluctuating results portrayed in the graphs. The result is an incentive system which does not work and indeed trend lines which do not portray accurate and timely results with which branch managers can make effective decisions. This institution still needs to strengthen its internal accounting procedures.

- All analyzed credit unions had deficient loan loss reserves when compared with SFS requirements. In one case, the deficit exceeded one million dollars. This prompted Project discussions with the credit union federation FEDECACES and the signing of a Letter of Understanding with FEDECACES to transfer the Project's analytical methodology to FEDECACES experts so that they could conduct similar analyses for all affiliated credit unions.
- Considering the recurring issue of data validation and antiquated accounting systems, the Project signed an agreement with FUNDAMICRO to update its accounting software designed specifically for microfinance institutions, so that it would be in full compliance with all SFS policies and reporting requirements. This software has been installed in Project partner AMC and ASEI has also selected this software to replace its existing system.

## V. CONCLUSIONS and RECOMMENDATIONS

Profits are important within microfinance institutions. Results from the review of MIX Market data indicate that more microfinance institutions should focus on lowering costs and generating higher profits. The intent of the *Performance System* is to contribute to this effort. It is the responsibility of staff – primarily branch office staff – to do all that is possible every single day to be as efficient as possible in order to achieve a perfect equilibrium between profits and price. It is then the responsibility of the governing body to assess institutional mission and risks and to then establish parameters for profitability targets. More governing bodies should dedicate more attention to this important strategic function. (Please see Annex 1 for more details on this point.)

The *Performance System* introduces into microfinance institutions orthodox financial ratios taken directly from accounting and financial textbooks. The common-size income statement is a standard analytic tool designed to facilitate comparative and trend analyses. Yet its use within microfinance in EL Salvador remains limited. The Federation of Credit Unions within El Salvador has trained its affiliates in the structure of the PEARLS financial monitoring system, developed by the World Council of Credit Unions. This monitoring system is both robust and effective. Given the need to continuously train rotating leaders within the framework of a democratically elected governing structure, extensive training materials exist and are used to good effect. As such, the possibility of introducing into participating credit unions a new set of financial indicators carried with it the risk of generating confusion. As such, the Program decided

not to implement the *Performance System* into the credit union institutional program partners. However, the Gap Analysis done by project consultants in counterpart institutions did expose the need to improve the loan loss reserve (LLR) systems in credit unions in order to bring them into compliance with SFS standards.<sup>13</sup>

As far as the microfinance institutions are concerned, a critical assumption pertaining to the effective functioning of the *Performance System* came to light: accounting systems, policies and procedures need to be well honed, in place and functioning seamlessly. This assumption was severely challenged in four of the six participating microfinance institutions. As a result, the Program redirected its efforts to provide solutions to this important deficiency by (i) investing in the development of a Superintendency-compliant accounting software designed specifically for microfinance institutions; (ii) offering orientation with respect to an external audit to ensure the validity of reported information; (iii) providing technical assistance for the creation and implementation of manuals which established effective rules for ensuring a disciplined accounting department; and (iv) providing training to governing bodies regarding the importance of proper procedures. The *Performance System* is a technically demanding monitoring system which inevitably uncovers virtually every accounting deficiency within an institution: anomalies are readily visible via the trend lines.

Although four of the six institutions proved incapable of meeting the technical demands of the *Performance System* vis-à-vis the accounting department, the Project was nonetheless able to strengthen the internal capacity of these institutions by providing them with technical assistance targeting their back-office needs.

A fifth institution invested considerable time supporting the developing of its *Performance System* design. Data validation exercises confirmed the accuracy of accounting information. Presentations to senior managers produced positive results and recommendations to proceed. And yet, perhaps due to day-to-day demands which may have superseded the longer-term, more operationally strategic decision to invest in the *Performance System*, the Program never received the definitive go-ahead to install the *System*.<sup>14</sup> This institution had recently experience a major restructuring of its operations as the result of recommendations from an international consulting firm hired prior to the start of this USAID Project. This had caused internal stresses contributing, perhaps, to the decrease of 4,185 borrowers during the period September 2012 – September 2013, representing a 13% decline in borrowers.<sup>15</sup> This is a serious decline in and of itself, but of far greater significance is the fact that this net decline of 4,185 borrowers involved 11,429 women no longer seeking loans from this microfinance institution, a figure which

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<sup>13</sup> The project is providing capacity building to the Federation of Credit Unions (FEDECACES) on assisting their members to implement these higher LLR standards.

<sup>14</sup> Although the Project was able to provide technical assistance to this partner for increasing its savings accounts, an activity which proved extremely successful, there were multiple times when this particular partner was unable or unwilling to communicate a final “green light” to proceed with opportunities which the partner itself had previously eagerly requested from the Project.

<sup>15</sup> One internal stress involved the firing of a significant number of credit agents. Months later, the institution realized that it had gone too far and started rehiring these credit agents, but damage had already been done to the enthusiasm of the credit agents and clients surely felt degrees of confusion as their link to the institution was changed, and then changed again in a short period of time.

represents a 42% decline.<sup>16</sup> Clearly, this institutional partner experienced severe transformations during the timeframe of this Project and this surely impacted its focus on instituting the *Performance System*.

The sixth and final institutional partner presents a different story. Data validation exercises confirmed the accuracy of the accounting information, the *Performance System* was installed and the accounting department was able to produce monthly updates for its branch managers. As of the end of the Project's second Fiscal Year, this institution had generated the greatest increase in new borrowers of all reporting institutions and its rate of growth was faster than the average of all institutional partners, which is normally the expected result when the *Performance System* is effectively installed and utilized. However, the perspective of the Project is that this institution did not experience the full benefit of the *Performance System* due to the concern that branch managers might share this information with competitors. Access to the data was controlled at the head office and did not allow branch managers to peruse the data in greater detail at their leisure.

The design of the USAID Improving Access to Financial Services project correctly emphasized the importance of microfinance institutions being supervised by bank regulators. The disciplines required by regulatory authorities strengthen the internal functioning microfinance institutions, thereby creating a far stronger foundation with which to support future growth. Furthermore, external supervision often carries with it the authorization to offer savings products in the same lower-income communities in which microfinance institutions offer loans. There is little question that a well-functioning accounting department is a crucial requirement for improving access to financial services. It is for this reason that the Project has dedicated so much effort to encourage institutions to become regulated, to facilitate their access to information to help guide them through the process of becoming regulated, and to encourage the Superintendency to fulfill its strategic plan goal of broadening the perimeter of its supervision to include more, smaller financial intermediaries. The *Performance System* is consistent with these goals.

Based on all of the above, the Project presents the following recommendations to orient further efforts directed at improving access to financial services within El Salvador:

1. Continue supporting the Superintendency of the Financial System with its strategic plan to broaden the perimeter of its supervisory authority. At present, El Salvador is tied with Nicaragua at the very bottom of the list of countries in Latin America and the Caribbean when it comes to having access to a formal bank account. Lower-income households in El Salvador often utilize the services of credit unions and Cajas if savings represent an element in their household finances. Together, the Cajas and credit unions of El Salvador manage savings in excess of one billion US dollars, yet these resources are not supervised by the SFS. Although it is true that the SFS supervises Fedecrédito, the federation of Cajas, this is insufficient in that Fedecrédito is a second-tier institution – that is, it does not capture savings from households – and the prudential supervision of the SFS does not yet reach the Cajas. Nobody at this point knows whether or not the Cajas are managing household savings in a prudent manner. Credit unions should also be supervised by the SFS: Project assessments have repeatedly shown that credit unions must increase the level of financial prudence to satisfy national norms.

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<sup>16</sup> This significant decline could have been the result of an explicit recommendation of the other international technical assistance to seek larger clients.

2. Provide technical assistance to Cajas if assessments determine that such support is required in order to comply with SFS policies and regulations. In like manner, provide technical assistance to credit unions independent of their affiliation with FEDECACES, to ensure that their internal policies and procedures satisfy prudential standards.
3. Provide technical assistance only to those microfinance institutions whose governing bodies have made a formal decision to become regulated intermediaries capable of capturing savings. This critical strategic decision strengthens internal disciplines as the institutions invest to meet the requirements of the SFS, and also opens the doors to a new product – savings – which is frequently demanded by more households than those interested in securing a loan for a productive endeavor. In 2012 and for the very first time, the *average* size of those microfinance institutions from around the world which were analyzed by the IAFS Project surpassed one hundred million dollars in assets. Project partner INTEGRAL is approaching this target, as are a number of credit unions assisted by the Project, but in most cases the microfinance institutions within El Salvador have not yet experienced the growth experienced by other microfinance institutions in other countries operating within markets of similar levels of market saturation and competitiveness. Support should be provided only to those institutions committed to growth.
4. Support efforts to provide credit information to lending institutions which will allow them to make informed decisions for loan proposals. The Project-supported EQUIFAX reports already contain a wealth of practical information and it is the expectation of the Project that an increasing number of microfinance institutions will learn to make profitable use of their contents. Yet opportunities still exist for enhancing current reports, especially when it comes to reporting borrowers who are delinquent thirty days or less. The current floor is sixty days.
5. If the legislature of El Salvador approves the Law of Financial Inclusion as currently designed – with extensive and strategic Project input – then a world of technical assistance opportunities will emerge to assist institutions embed this new service into their institutions, thereby extending access to financial services to all throughout El Salvador in a way never previously offered. This will necessitate institutional and systems strengthening to effectively manage significantly larger numbers of loan and savings accounts.

## Annex I – The Role of Profits in Microfinance

***CGAP: “Profit is a residual: the difference between income and expense.”***

Microcredit Interest Rates and Their Determinants, Rosenberg et al, CGAP, June 2013, page 18

Albeit misleading even in terms of double-entry bookkeeping, the quote above is simply wrong. From the perspective of any businessperson anywhere, profit is the furthest thing from being a residual. Profits are a cornerstone of the business: they define prices, in a competitive market like El Salvador they demand a relentless pursuit of ever-increasing efficiencies, they govern how fast a business can grow and they ruthlessly determine each and every month whether or not the business even deserves to survive. Profits should be the focal point for every employee of every microfinance institution interested in efficiently meeting market demand.

Although the CGAP document mentions (twice) that profits of microfinance institutions are controversial<sup>17</sup>, it makes no attempt to advance the industry’s thinking on this point<sup>18</sup>. Yet given the importance of profits to growth, operations, loan portfolio volumes and quality and interest rates, which many observers and some governments consider excessive, the industry deserves better and the *Performance System* requires more.

For many years, progressive thinkers promoted the “sustainability” of microfinance institutions as the clearest and best strategy for providing financial services to the world’s poor. “Sustainability”, of course, means profitability. To be “sustainable” means that an operation can continue in existence, even in the absence of outside funding.

So globally, the microfinance industry long ago pronounced itself in favor of profits and the subsequent growth of the industry has demonstrated just how correct this strategy has been. And indeed the CGAP document is correct in that profits unfortunately *do* remain controversial for many, due in part to the astonishingly profitable Initial Public Offering (IPO) of Compartamos in Mexico followed closely thereafter by the somewhat unsettling IPO of SKS in India. However, the use of averages in the

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<sup>17</sup> “Microcredit profits are so controversial that it can be easy to overestimate how much they affect the interest rates that borrowers pay.” And: “Of the various components of interest rates, profits are the most controversial.” Both quotes are from Microcredit Interest Rates and Their Determinants, Rosenberg et al, CGAP, June 2013, page 18.

<sup>18</sup> Annex I presents a number of reasons why the issue of profits within the field of microfinance has proven to be a sensitive one for many.

referenced CGAP document do little to shine much light on profits within the microfinance industry. Yet such an analysis remains a worthy one in order to analyze and discuss results transparently. The goal is to promote understanding and reduce controversy. Based on the numbers presented in Annex XXX, the following conclusions can be drawn about profits within the microfinance industry:

1. Most microfinance institutions need to increase their profit levels;
2. There is a small number of banks, non-bank financial institutions, credit unions and non-governmental organizations (NGOs) which are generating very high returns on institutional equity, yet these manage less than two percent of all microfinance assets;
3. Nineteen percent of reporting microfinance institutions manage sixty-four percent of assets and generate what can be argued as standard market returns;
4. Statistical evidence to support controversy vis-à-vis profits within microfinance is lacking. If an individual feels conflicted by the profits generated by one or another institution, perhaps the best policy would be to simply avoid associating or being associated with it.

In terms of profits, the *Performance System* is designed with one core goal: to generate more, every month. It is focused exclusively on operations and is installed at the branches since that is where microfinance profits are generated. The professional pride and take-home pay of branch employees is affected by the monthly results, and that is as it should be: everyone focused on squeezing the most efficiency out of every day to improve their profitability. That is their responsibility and every interaction with new and future clients affects the result.

The role of an institution's governing body is paramount in terms of defining how profitable they want their institution to be. Researchers would be better positioned to investigate and understand better the motivations of different boards, but for discussion purposes this document presents six different approaches which have been observed in the field. All, except perhaps for the first, can be considered legitimate business strategies deliberately selected by the boards of directors and contribute to the advancement of microfinance:

1. ***Profits are Not a Consideration***

This type of institution is not truly a business.

Efficiencies are not a major concern, prices are set

using subjective criteria, loan recovery may not be as high a priority as it should be, and sustainability is sought using alternate means (e.g. donations from like-minded individuals).

*Grupo ACP is a leading Latin American corporation with a Social Mission that defines poverty as a set of exclusions. Exclusion from knowledge, capital, insurance, decent housing, health and markets, from communications and technology.*

*For each of these exclusions, Grupo ACP creates a specialized company that provides access. And this set of companies gives entrepreneurs at the bottom of the pyramid, the tools they need to start making their dreams come true.*

*Luis Felipe Derteano Marie  
Chairman*

<http://www.grupoacp.com.pe/english/index.html>

## 2. *Profits are Wholly or Primarily Owned by the Clients*

A variety of ownership structures currently exist in microfinance in which the lower income households benefitting from the financial services being offered are simultaneously the majority owners of the institution. In such instances, neither the level of interest rates charged on loans nor the profitability of the institution itself should elicit any concern. But costs should be.

## 3. *Profitability is Deliberately Below Market*

The “PEARLS”<sup>19</sup> ratios of the World Council of Credit Unions (WOCCU) allow for a range of profit strategies, but many credit unions prioritize service to members over profits, a strategy which they often translate into lending interest rates which frequently generate lower profit margins<sup>20</sup> than those generated by commercial financial intermediaries of the same country. Similar policies can be found in many microfinance institutions as well: maximizing profit is not the reason these institutions were created and does not represent a target of their founders. Providing the lowest cost service in a sustainable manner is not an unreasonable institutional target.

## 4. *Profitability Matches that of Local Commercial Banks*

As will be shown in the analysis in a following section of this document, the majority of the governing bodies of microfinance institutions take this approach and this approach is also seen in microfinance institutions of El Salvador (e.g. ENLACE). Given the nature of the clients, these governing bodies have found what they consider to be a comfortable balance between competitive returns on investment within reasonable levels of political and reputational risk. With such an approach, a questioning of the institution’s profits would be tantamount to a questioning of the basic functioning of the entire private sector within the economy, a political tactic not to be employed carelessly.

## 5. *Profitability Considerably Exceeds that of Local Commercial Banks*

Hyper-efficient (operationally), rapidly-growing institutions may find themselves enjoying very high levels of return on equity, even with low levels of financial efficiency<sup>21</sup>. It is not easy to achieve this level of profitability, but once clients demonstrate their acceptance of the price of loans, it takes a very special governing body not to succumb to the very natural business desire to simply let the good times roll for as long as they will. (See text box at right.) Arguments from executives working in these institutions that their strategy is deliberately designed to attract competitors which will eventually drive prices

*In business, a cash cow is a product or a business unit that generates unusually high profit margins: so high that it is responsible for a large amount of a company's operating profit. This profit far exceeds the amount necessary to maintain the cash cow business ...*

*... every business longs for a cash cow product.*

[http://en.wikipedia.org/wiki/Cash\\_cow](http://en.wikipedia.org/wiki/Cash_cow)

<sup>19</sup> Protection; Effective Financial Structure; Asset Quality; Rates of Return and Costs; Liquidity; Signs of Growth  
<http://www.woccu.org/financialinclusion/bestpractices/pearls/pearlsratios>

<sup>20</sup> Net Profit ÷ Revenue

<sup>21</sup> Financial efficiency is discussed in a following section of this document.

down, as per standard market theory, are specious at best: whoever heard of a business person actively seeking competition? Political and reputational risks may be higher for these highly profitable companies, but this could well be a function of the economy in which they operate.

Of special note is the possibly unique policy of EQUIFAX in India. Its founder established a ceiling on the institution's return on equity<sup>22</sup> and was able to successfully sell his arguments to international investors who were unaccustomed to such limits.

**6. *Profitability is as High as the Market Will Provide***

The fact that so few microfinance institutions operate at this level may reflect both the difficulty in reaching it as well as the decisions of possibly more prudent governing bodies in response to perceived risks. Yet it is worth repeating that “individuals' efforts to maximize their own gains in a free market benefits society, even if the ambitious have no benevolent intentions.”<sup>23</sup>

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<sup>22</sup> Local bank return on equity  $\approx$  18% and the EQUIFAX ceiling was set at 25%. As evidenced by their subsequent investments in EQUIFAX, the investors concluded that a return of 25% was *still* a very attractive opportunity, especially considering that the EQUIFAX sales pitch cleverly addressed reputational risk.

<sup>23</sup> See previous footnote about the Invisible Hand.

## PROFITS AND MICROFINANCE: an Analysis

### The MIX Data

The CGAP document used data from the MIX Market to conduct its analysis. The authors of this document have done the same. However, the following set of rules governed which institutions were to be included in the data set to be used to conduct the subsequent analysis:

1. Only those institutions with annual data for 2012, 2011 and 2010;
2. From the resulting list of institutions, the following set of policies constituted grounds for removing additional institutions from consideration:
  - a. Total asset or total equity data missing for any of the three years under consideration;
  - b. Negative equity at any point;
  - c. Return on assets (ROA) or return on equity (ROE) data missing;
  - d. Excessive variance between reported ROA, ROE and the result generated by the formula  $ROA \times \text{Leverage}^{24} = ROE$ . Average discrepancy was 0.089%; if the variance exceeded 1%, the institution was removed from consideration;
  - e. Institutions reporting a gross loan portfolio in excess of its total assets during any of the three years<sup>25</sup>;
  - f. Institutions with a Diamond rating of less than 3.
3. Following the reasoning of the CGAP document, Harbin Bank was also removed from consideration.<sup>26</sup>

The result was the following set of information, representing 472 institutions out of the initial total of 2,460 reporting institutions:

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<sup>24</sup> Average Assets ÷ Average Equity as per Massachusetts Institute of Technology system of financial analysis

<sup>25</sup> This policy actually resulted in the elimination of dozens of institutions. There are dozens more, some of which capture savings, which report portfolio / assets in excess of 95%. The presence of so many institutions with such information implies the existence, unbeknownst to the author, of MIX technical adjustments to the data.

<sup>26</sup> Microcredit Interest Rates and Their Determinants, Rosenberg et al, CGAP, June 2013, page 24. The other institutions removed for the CGAP analysis had already been removed due to one or more of the policies applied to the analysis of this document.

## 472 MFIs

Total MFIs	Banks	Credit Union	NBFIs	NGOs	Rural Bank / Other	Non-Profit	For Profit*	For Profit
472	54	66	173	169	10	191	269	57%
	Assets	Gross Loan Portfolio	Equity	Deposits	Average Assets		Annual Growth Rate	
2012	51,498,235,656	38,734,627,378	9,461,484,417	26,059,535,989	100,582,492		20.9%	
2011	42,602,721,372	32,137,443,946	7,794,491,815	22,916,955,587	83,208,440		17.1%	
2010	36,370,549,934	26,527,814,349	6,621,895,270	19,990,748,212	71,036,230			

	Leverage	Loans / Assets	Equity / Assets	Deposits / Assets	ROA	ROE
2012	5.45	75.2%	18.3%	50.6%	2.36%	8.50%
2011	5.48	75.4%	18.3%	53.8%	2.13%	8.59%
2010		72.9%		55.0%	1.33%	4.45%

\* the data set for 12 institutions does not indicate the profit status.

Note: Leverage is most commonly known by the formula Debt-to-Equity (= Liabilities ÷ Equity). This document uses the formula Total Assets ÷ Equity. Both formulas are found in financial literature.

Several observations are readily apparent from the table above:

1. The MIX Market is a very important source of information about the field of microfinance: with financial data from approximately 20% of reporting institutions, more than \$51 *billion* dollars of assets are available for analysis. And this is *after* several very large reporting institutions were removed from consideration.
2. Assets are growing rapidly, expanding 17.1% during 2011 and 20.9% during 2012. This is the mark of a healthy industry. In 2012 the *average* size of the institutions included in this analysis exceeded US\$100 million for the first time in the history of microfinance. This is a remarkable accomplishment, worthy of celebration.
3. Equity as a percentage of assets is stable at approximately 18%. Given that the corresponding ratio for well-managed commercial banks is frequently below 10%, 18% represents both a very prudent level of equity and an opportunity in the future to increase leverage.
4. The ratio loans ÷ assets is stable at approximately 75%, which is normal for microfinance institutions and a bit high for risk-averse commercial banks, where this ratio generally hovers around 60-65%.
5. US\$20 billion dollars in savings are managed by the 472 microfinance institutions included in this analysis. As will be shown below, savings has fully embedded itself within the microfinance industry.
6. The average Return on Equity (ROE) for the reporting institutions is low and for the past two years has remained stable at approximately 8.5%. This figure is consistent with the trend

presented in the CGAP document. As the CGAP document notes, the average return on equity for commercial banks is 17.89%<sup>27</sup>, a number to keep in mind for subsequent discussions.

The totals and averages shown above do little to clarify why there might be concerns regarding profits in the field of microfinance. In order to shed more light on this issue, the 472 institutions selected for this analysis were separated into the following five groups, all based on their Return on Equity:

1. ROE < 5%: a quick and easy sustainability formula is ROE minus inflation. The 179 institutions in this category are perilously close to or are already below break-even in real terms and should focus on increasing their ROE.
2. 5% < ROE < 15%: these 151 institutions are comfortably profitable yet generate returns below those normally generated by commercial banks, which can legitimately be used as a benchmark. There may be deliberate reasons for a microfinance institution to target a range for ROE below that of commercial banks.
3. 15% < ROE < 25%: the 87 institutions in this category match the profitability of successful companies in banking and other industries. An ROE in excess of the commercial bank average ( $\approx$  18%) will accelerate growth and attract commercial investors yet profits slightly above average should not be cause for concern that clients are somehow being mistreated.<sup>28</sup>
4. 25% < ROE < 35%: in terms of a balance between institution gain and low-cost service to clients, the 35 institutions in this category are trending towards an approach weighted more towards institutional gain. This is not to say that clients are not also benefitting: they must be or these institutions would not continue to grow. Assuming reinvestment of profits, growth can accelerate due to the higher ROE but all else being equal interest rates *could* decline while still generating a very handsome ROE.
5. ROE > 35%: the 20 institutions in this category (including two credit unions and seven NGOs) portray financial results which may warrant an internal analysis of their mission statements simply to ensure that institutional deeds coincide with its words.

Separating the institutions in these five ROE categories presents a clear picture of the current state of the microfinance industry<sup>29</sup>. The following comments are taken from the graph below:

#### General Observations

- As ROE increases, the number of institutions in the data set decreases.

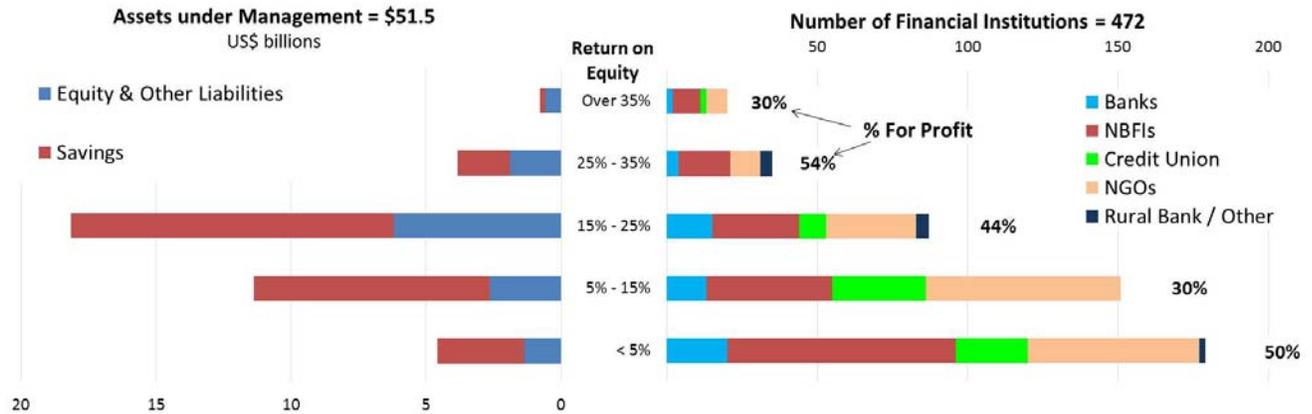
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<sup>27</sup> Microcredit Interest Rates and Their Determinants, Rosenberg et al, CGAP, June 2013, Figure 22, page 19.

<sup>28</sup> The Indian microfinance institution EQUIFAX has established an ROE limit of 25% and has succeeded in securing many millions of US dollars in investments from international concerns willing to accept his terms.

<sup>29</sup> An assumption is that the set of 472 institutions which met all selection criteria for the analysis reflects the broader microfinance industry.

- The participation of privately-owned, for-profit institutions is well-represented in all ROE categories. Note that in El Salvador, most micro-lending institutions are either cooperatively or mutually owned or are not-for-profit foundations. The Project represented a significant influence within El Salvador: four institutional partners have or are continuing with the process of changing their legal status.
- The greatest volume of assets under management is found within what could be considered a “sweet spot” for ROE: 15% - 25%.
- Savings have successfully embedded themselves within microfinance.



#### < 5%

This ROE category contains the largest number of institutions (179 of 472 = 37.9%), of which 50% of for-profit. This category has the largest number of non-bank financial intermediaries (“NBFIs” = 76) which may presage future growth as they reach standard (= higher) levels of profitability. This category manages 14% of total assets represented by the selected institutions and on average, each MFI manages approximately \$40 million in assets.

#### 5% < ROE < 15%

151 institutions with an average asset size of \$99 million contribute data to this category. They manage more assets than the previous category, of which savings represents a higher percentage. The figures below provide additional information about the institutions in this category:

## ROE: 5% - 15% ALL MFIs

Total MFIs	Banks	Credit Union	NBFIs	NGOs	Rural Bank / Other	Non-Profit	For Profit	For Profit
153	13	42	31	67		105	46	30%

Year	Assets	Gross Loan Portfolio	Equity	Deposits	Average Assets	Annual Growth Rate
2012	13,017,089,820	9,325,331,179	2,090,644,737	7,973,639,032	85,079,018	16.1%
2011	11,208,848,693	8,234,604,997	1,787,849,990	6,762,057,959	73,260,449	11.6%
2010	10,045,892,610	7,193,823,068	1,580,241,989	6,137,431,750	65,659,429	

	Leverage	Loans / Assets	Deposits / Assets	Equity / Assets	ROA	ROE
2012	6.25	71.6%	61.3%	16.1%	3.49%	9.92%
2011	6.31	73.5%	60.3%	16.0%	2.77%	8.54%
2010		71.6%	61.1%	15.7%	1.70%	4.21%

Taken together, this category is showing solid growth rates (11.6% and 16.1%) for the past two years. In terms of financial structure, the institutions are both stable and prudent (e.g. equity / assets of 16% and the proportion of loans / assets of approximately 72% which, although higher than that often found in commercial banks, is slightly lower than the current norm for this indicator in microfinance). Savings are growing well and as a percentage of total assets are stable at approximately 61%. Note that in commercial banks, savings normally exceed loans, so further development of the industry along these lines can be expected in coming years. As of 2012, the deposits of 15 of the institutions in this category already surpass its loan volume and a further 12 institutions are at 90% or higher. 78 institutions in this category (less than half) do not capture savings at all.

### 15% < ROE < 25%

87 reporting institutions generate an ROE within the indicated range. Average asset size at the end of 2012 exceeds \$265 million for these institutions and together they manage by far the greatest volume of assets. 44% of these institutions are for-profit and all five categories of institutions are represented (banks, NBFIs, credit unions, NGOs and rural banks/other). Latin American MFIs make up 57% of all institutions within this category. Any from ES?

## ROE: 15% - 25% ALL MFIs

Total MFIs	Banks	Credit Union	NBFIs	NGOs	Rural Bank / Other	Non-Profit	For Profit	For Profit
88	15	10	29	30	4	50	38	43%

	Assets	Gross Loan Portfolio	Equity	Deposits	Average Assets	Annual Growth Rate
2012	23,385,395,163	18,147,507,006	4,014,523,582	11,960,305,119	265,743,127	25.2%
2011	18,680,066,620	14,280,010,835	3,189,731,545	11,142,340,828	212,273,484	21.3%
2010	15,397,054,138	11,120,104,806	2,606,314,279	9,370,494,225	174,966,524	

	Leverage	Loans / Assets	Deposits / Assets	Equity / Assets	ROA	ROE
2012	5.84	77.6%	51.1%	17.2%	5.32%	18.29%
2011	5.88	76.4%	59.6%	17.1%	4.98%	17.40%
2010		72.2%	60.9%	16.9%	3.89%	11.62%

The reporting institutions within the three ROE categories above manage 88.4% of total reported assets. Hopefully this information will lessen concerns about the profitability of microfinance as an industry as a whole. The industry is doing fine and indeed it might be reasonable to expect the percentage of for-profit institutions to actually rise much further in the future.

### 25% < ROE < 35%

35 institutions in the evaluated data set generate returns within the indicated range. Average asset size is \$143 million and their loan portfolio, expressed as a percentage of total assets, remains fairly stable at approximately 76.5%. This group of institutions is growing rapidly: 29.9% and 31.6% respectively for 2011 and 2012. Leverage is the lowest of the categories of profitability presented thus far, something to keep in mind for the section below on financial efficiency.

## ROE: 25% - 35% ALL MFIs

Total MFIs	Banks	Credit Union	NBFIs	NGOs	Rural Bank / Other	Non-Profit	For Profit	For Profit
35	4	0	17	10	4	16	19	54%

	Assets	Gross Loan Portfolio	Equity	Deposits	Average Assets	Annual Growth Rate
2012	5,024,744,784	3,830,942,698	1,310,465,059	1,940,364,378	143,564,137	31.6%
2011	3,819,185,379	2,972,944,431	994,309,804	1,465,136,239	109,119,582	20.9%
2010	3,158,617,604	2,401,546,688	860,671,041	1,178,245,215	90,246,217	

	Leverage	Loans / Assets	Deposits / Assets	Equity / Assets	ROA	ROE
2012	3.84	76.2%	38.6%	26.1%	8.41%	29.01%
2011	3.76	77.8%	38.4%	26.0%	7.93%	28.46%
2010		76.0%	37.3%	27.2%	7.41%	25.68%

### ROE > 35%

Anyone who is familiar with investments will surely agree that a company which consistently generates a return on equity in excess of 35% is unquestionably a dream come true. For the investor, that is. And indeed possibly for the company's clients as well – more analysis can help

formulate a fairly objective conclusion regarding the extent to which these companies are truly looking after the very best interests of their clients or whether adjustments might best be made to their Corporate Mission Statements in order to more closely reflect their reality.

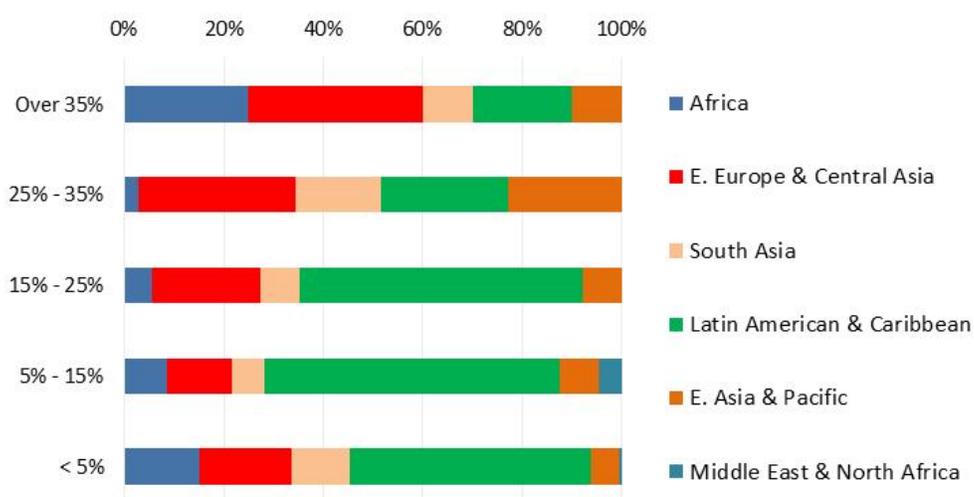
The 20 institutions in this category, of which two are credit unions and 70% are not-for-profit institutions, manage less than two percent of all assets of the reporting institutions. Their average size is only slightly larger than the MFIs generating an ROE of 5% or less. Less than half capture savings, which is about average for all reporting institutions. Leverage is low. 35% work in Eastern Europe and Central Asia.

### ROE: > 35% ALL MFIs

Total MFIs	Banks	Credit Union	NBFIs	NGOs	Rural Bank / Other	Non-Profit	For Profit	For Profit
20	2	2	9	7	0	14	6	30%
	Assets	Gross Loan Portfolio	Equity	Deposits	Average Assets		Annual Growth Rate	
2012	834,065,264	664,794,848	168,376,371	200,252,447	41,703,263		39.9%	
2011	596,183,355	474,022,513	104,054,859	142,480,716	29,809,168		33.8%	
2010	445,529,089	334,326,318	72,973,983	101,840,396	22,276,454			

	Leverage	Loans / Assets	Deposits / Assets	Equity / Assets	ROA	ROE
2012	5.25	79.7%	24.0%	19.0%	10.23%	75.11%
2011	5.88	79.5%	23.9%	17.0%	7.26%	52.72%
2010		75.0%	22.9%		5.33%	31.75%

The chart below presents the geographical distribution of the reporting institutions. The Africa and Eastern Europe & Central Asia regions include 12 of the 20 institutions generating annual ROEs in excess of 35%; Latin America represents approximately 57% of all institutions with annual ROEs within the 15%-25% range and almost 60% in the 5%-15% range. The returns for the 8 institutions reporting from the Middle East and North Africa have ROEs less than 15%.



Taking all categories together, it can be seen that the microfinance industry is becoming increasingly healthy in terms of growth and acceptable levels of profitability. A discussion of financial efficiency,

however, can shed more light on the inner workings of these 472 institutions, and particularly those 20 generating ROEs in excess of 35%.

### **The Role of Financial Efficiency**

The primary utility of the Total Assets ÷ Equity formula is that it provides a seamless link between Return on Assets and Return on Equity:

$$\text{ROA} * \text{Leverage} = \text{ROE}$$

Higher leverage equates to higher financial efficiency and allows commercial banks operating in hyper-competitive markets to generate the returns demanded by investors while charging competitive interest rates which consumers will accept. Higher leverage also means lower levels of institutional capital as a percentage of total assets, which also means increased institutional risk. And *that* is why regulators establish floors for institutional capital and monitor closely this indicator. The history of debates between central and commercial bankers over the evolving conditions stipulated in the various Basle accords basically comes down to commercial bankers presenting various strategies to justify increased levels of leverage and central bankers wanting to limit it at a level which they deem prudent. Although the definition of prudence is to an extent subjective, the link between higher leverage and financial efficiency is both technically clear and highly sought after by commercial bankers.

Given the microfinance industry's long focus on operational efficiencies<sup>30</sup>, a similar focus on financial efficiency within microfinance institutions is warranted. As will be seen below, such an analysis uncovers a demarcation point between the 96%+ of MFIs which are driving microfinance forward within successful social enterprises and those very few MFIs who, through the lens of objective technical analysis presented below, may actually be operating more for their own benefit than for the benefit of their clients.

The objective of the analysis below is to lessen the presumed and probably dissipating but certainly subjective controversy surrounding profits within microfinance and to replace it with a technical mechanism to discern objectively the true orientation of the governing bodies of all MFIs vis-à-vis their stated versus actual efforts on behalf of their clients.<sup>31</sup>

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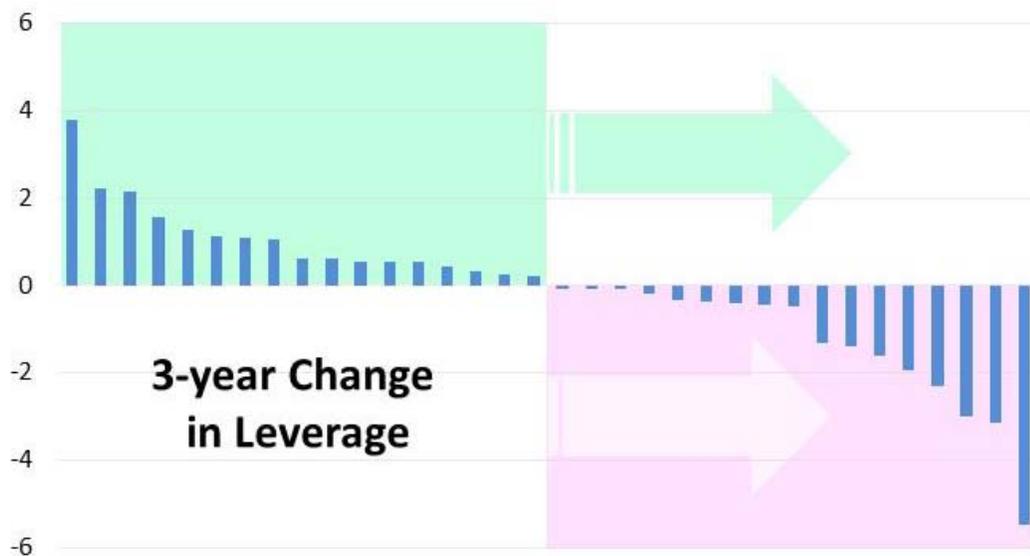
<sup>30</sup> The MIX data includes twelve indicators relating to operational efficiency: Operating expense / assets; operating expense / loan portfolio; cost per borrower; borrowers per staff member; Administrative expense / assets; Borrowers per loan officer; cost per loan; loans per loan officer; loans per staff member; operational self-sufficiency; personnel allocation ratio; personnel expense / assets. Commercial bankers tend to use operating expenses / revenue and assign a target of 25%.

<sup>31</sup> From the Executive Director downward, the operational orientation should always be to do all that can be done to maximize profits. From the Executive Director upward, a strategic obligation is to approve and monitor profitability targets. Legitimate reasons exist for governing bodies, if they so decide, to establish a ceiling for its institutional profitability; if efficient operations and an efficient financial structure push profits above the board-mandated ceiling, all else holding equal the institution can then lower the interest rates on its loans to bring itself back into compliance with Board desires. An assumption in this document is that the governing body approves annual budgets, which include annual profitability targets, and monitors results on at least a quarterly basis.

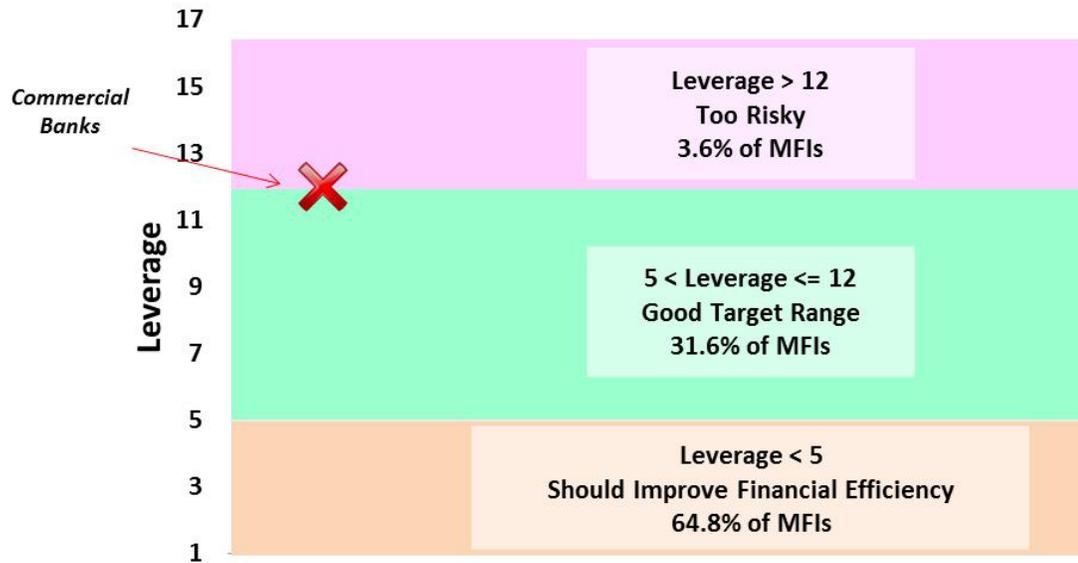
## Financial Efficiency Global Trends for Microfinance Institutions

The drawing on the following page presents part of the conceptual framework for this next discussion. The graph represents the actual change in leverage of microfinance institutions over the past three years (2010 – 2011 – 2012).

A positive change in leverage over this time period indicates that an MFI is working more efficiently (financially) than previously (the green portion of the graph). A negative change in leverage (the pink portion) means the opposite: the financial efficiency of the MFI during the period in question has declined. Graphs will be presented for all reporting institutions in the primary ROE categories presented above. Ideally, up to a point, all reporting MFIs should be increasing their leverage in order to balance most efficiently the profit interests of the institution and the profit interests of the client. Ideally, the green portion of the graph should extend out to the right, and the pink portion should also move to the right, representing fewer and fewer institutions with declining financial efficiency.



Leverage, however, should not increase indefinitely: the Basel Accords establish floors for capital expressed as a percentage of (risk-weighted) assets and hence ceilings for leverage (the inverse: assets expressed as a multiple of equity). The diagram below shows three somewhat although not wholly subjective categories of leverage within microfinance institutions and portrays as a point of reference an approximation for the leverage normally found in commercial banks operating in competitive markets:

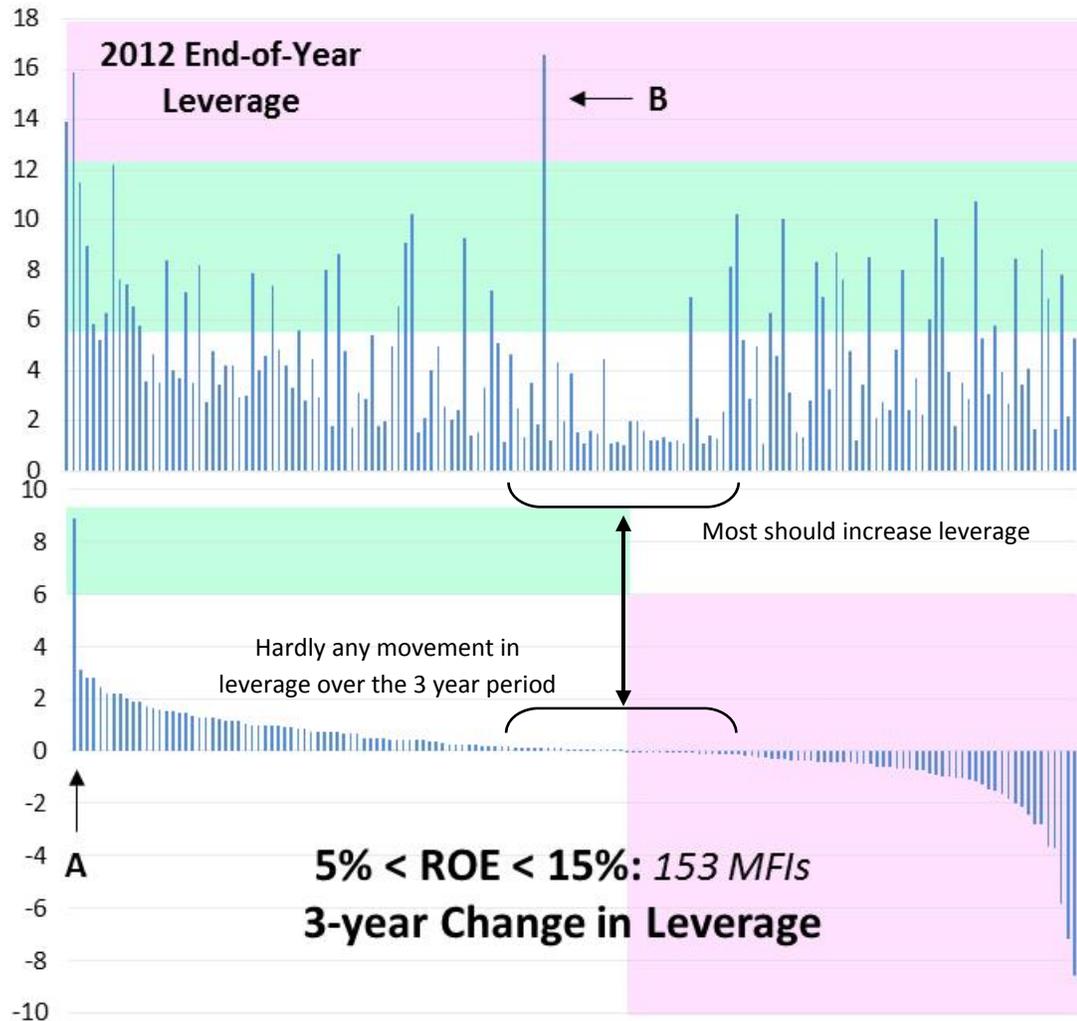


Almost two-thirds of the 472 MFIs in the data set manage low leverage of less than five whereas less than four percent are deemed too risky with leverages in excess of those commonly found in commercial banks. These institutions should actually decrease their leverage to align themselves more with financial structures generally considered prudent. 31.6% of reporting MFIs manage “green zone” levels of leverage: between 5 and 12. Over time, the entire microfinance industry will gradually move towards a leverage figure similar to that of the commercial banks.

With this prelude, the 3-year trends are analyzed for the following ROE categories:

- 5% < ROE < 15%
- 15% < ROE < 25%
- 25% < ROE < 35%
- ROE > 35%

- $5\% < ROE < 15\%$



#### Notes

The bars in both graphs are aligned with each other. That is, the first bar in the lower graph (“A”) is linked to the first bar in the upper graph.

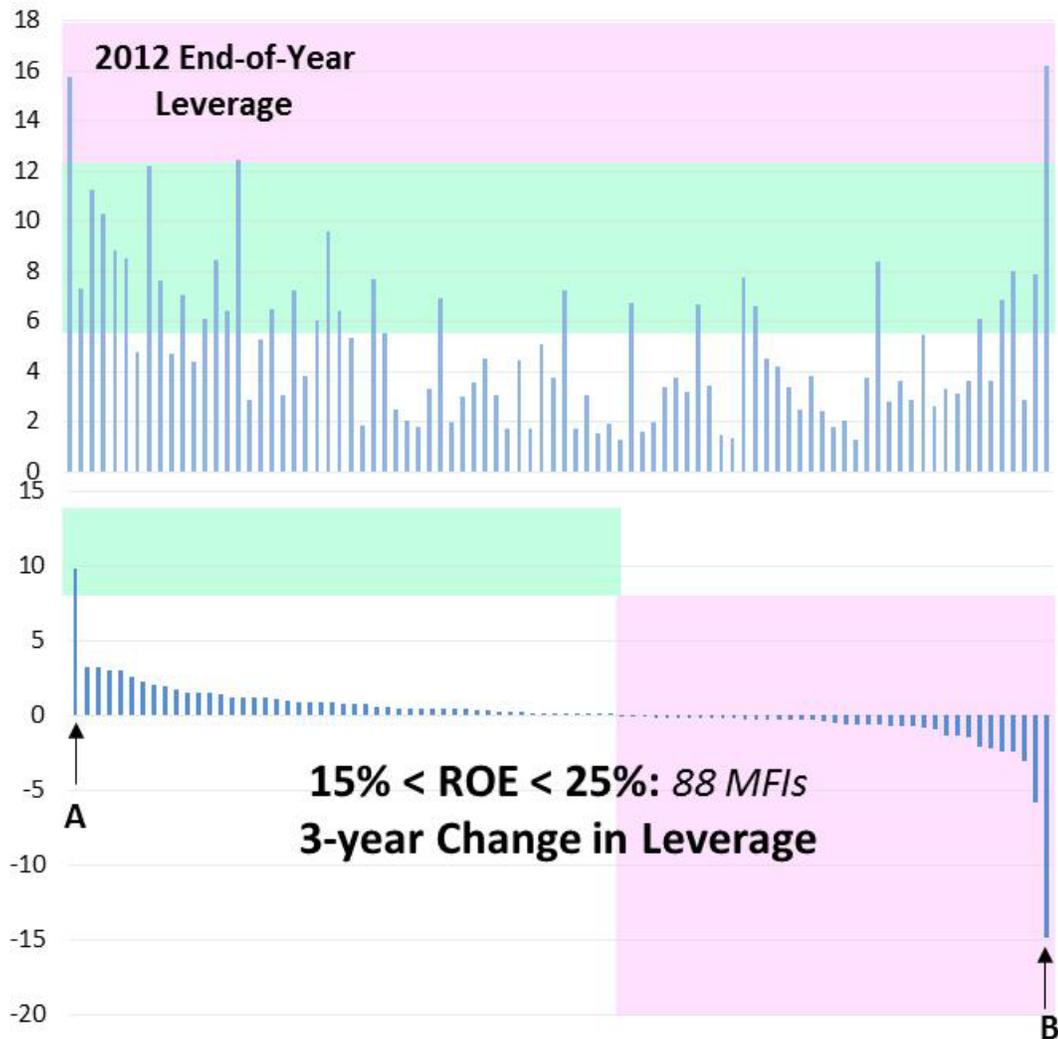
- A** *The first institution presents a major increase in leverage (lower graph), but to excessive levels (upper graph).*
- B** *Leverage should decrease for this institution.*

Focusing on the lower graph, more than half of these institutions show a three-year increasing trend in their leverage. This is positive. For every institution in the pink zone of this lower graph, the governing body should ask why this is happening and communicate its preferences to management. To reiterate: all else holding equal, increased leverage allows an MFI to generate

target ROEs with lower interest rates. Many legitimate arguments can be made about the benefits of decreasing leverage, but they all accrue to the institution and its owners.

From the upper graph in the set above, all MFIs should be inside the “green zone” at all times. It can be seen that a good number of MFIs are in the “green zone” yet apart from institution B, almost all of the institutions which have experienced hardly any movement whatsoever during the three-year period under review, remain below this “green zone”. In general, the governing bodies of all institutions interested primarily in the development of its clients should be demanding from its management team strategies and projections to enhance their leverage. Once leverage achieves the levels found in commercial banks, the governing bodies will have plenty to do carefully monitoring risk but with the knowledge that their institution is as financially efficient as it’s going to get.

- $15\% < \text{ROE} < 25\%$



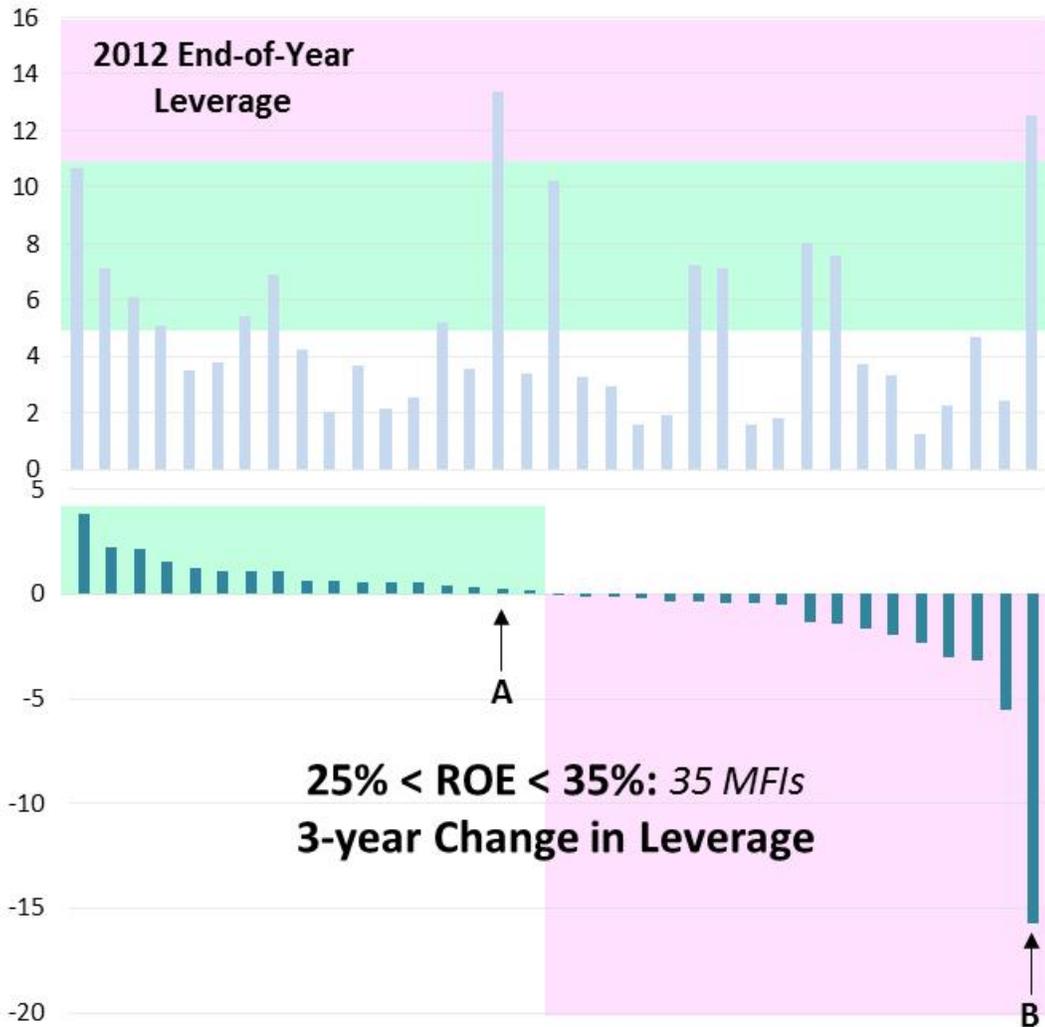
#### Notes

- A** An excessive increase in leverage in that the end of year leverage approaches an imprudent 16.
- B** Leverage should decrease even more for this institution.

This is the profit category where most MFI assets are found. Compared with the previous profit category, the green portion of the graph is moving towards the right and getting larger whereas the pink portion, also moving to the right, is getting smaller. That is, more institutions in this category are increasing leverage over the same time period, albeit barely for many of them. 59% of these institutions manage leverage below 5, which means that important opportunities exist to increase financial leverage throughout this group. That having been said, it should also be noted that leverage below 5 generates a very comfortable, lower-risk situation for the governing body in the sense that the institution's capital cushion is that much higher. Lower leverages mean greater

institutional comfort levels. All else holding equal, borrowers pay for this increased comfort for the governing body.

- **25% < ROE < 35%**



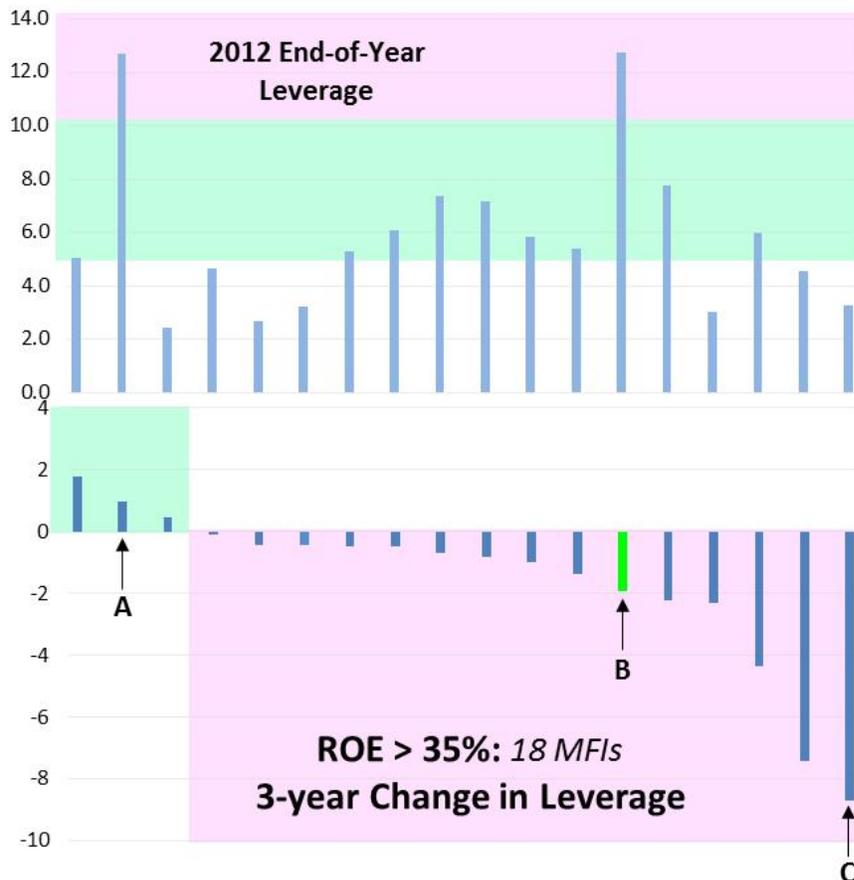
**Notes**

- A** Leverage may need to decrease in this institution.
- B** Leverage should decrease even more for this institution.

As with the previous ROE categories, approximately half of the institutions present increases in leverage and half portray decreases. Only a third of these very profitable institutions are managing leverage within the “green zone”, which reflects somewhat poorly on this entire category: only three or four of these institutions are increasing leverage in any meaningful way over the three-year period. Why is there so little interest among this grouping of MFIs in increasing financial efficiency? Of course, those institutions which portray a *decrease* in financial efficiency have an even greater opportunity to enhance their ability to benefit their clients.

It is important to emphasize that these observations do not imply that an MFI should modify its profitability targets. The point of financial efficiency is that the very same profitability targets can be achieved with lower interest rates if leverage increases. An institution which presents a trend of declining leverage objectively demonstrates disinterest in this opportunity. To reiterate, there are legitimate arguments for lower leverage, but they all benefit the institution. There are also many legitimate arguments for benefiting just the institution; the only adjustment which may be warranted would be to the institution's mission statement.

- **ROE > 35%**



**Notes**

- A** *Leverage may have increased by too much in this institution.*
- B** *Leverage should decrease even more for this institution.*
- C** *Leverage decreased dramatically and by too much.*

*The initial equity of 2 institutions was too small to generate meaningful 3-year trends and they were removed from this graph.*

The most profitable microfinance institutions of the data set simultaneously portray the worst performance over the past three years in terms of increasing financial efficiency. Most of these institutions are not-for-profit, at least is one linked to a church, and the one institution portraying the greatest increase in leverage over this three-year period is a for-profit MFI. So readers need not rush to any conclusions regarding these institutions. Governing bodies should be aware of these trends and decide whether they truly reflect institutional objectives.

### **Summary: Financial Efficiency for Microfinance Institutions**

Based on the analysis above, approximately half of all MFIs in the data set have an opportunity to increase their leverage, sometimes significantly. The industry can expect this trend over the next ten years and microentrepreneurs will benefit with lower interest rates. Those MFIs which are deliberately doing what they can to increase their capital base via high profitability levels should be recognized as simply one element, indeed a minor one within the microfinance industry in terms of assets under management, and one would hope that their mission statements would accurately reflect their orientation. Criticism of their actions is not warranted, *particularly* if they manage a very large number of clients vis-à-vis the average MFI.

## ANNEX II

### All Visual Basic Routines for the Performance System

#### THIS WORKBOOK

##### Private Sub Workbook\_Open()

Run\_SetUp

##### End Sub

#### MODULE 3

##### Definition of Variables:

Public new\_branch, new\_range, avg\_range, temp, title\_row, average\_row, graph\_name  
Public graph\_set, title, tbox, graph\_title, ax\_format, axis\_min, axis\_max, no\_branches, max\_agencias  
Public end\_col, beg\_col, temp1, temprange, meses

##### Public Sub Run\_SetUp()

' "Date\_Row" represents the cell where the first date is shown.

' Cada vez que se abre el archivo, se inicia automaticamente esta rutina. El comando se encuentra en el objeto llamado "ThisWorkbook".

Application.ScreenUpdating = False  
Application.ReferenceStyle = xlA1  
Worksheets("Base de Datos").Activate

' Define ending and beginning columns for all graphs

Range("Date\_Row").Activate  
temp1 = Selection.Column  
Selection.End(xlToRight).Select

' Determine if there is enough data to show the toggle switch for 6 or 12 months

If Selection.Column - temp1 >= 12 Then  
Worksheets("Graficas").Activate  
With ActiveSheet.Shapes.Range(Array("Button 12"))  
.Visible = True  
.Select  
Selection.Characters.Text = "12 meses"  
End With  
Worksheets("Base de Datos").Activate  
End If

meses = (Selection.Column - temp1) \* -1  
If Selection.Column - temp1 > 5 Then meses = -5

' Continue defining ending and beginning columns

temp = Range("Cartera").Row

```
end_col = Left(ActiveCell.Address, Len(ActiveCell.Address) - Len(temp) - 1)
beg_col = Left(ActiveCell.Offset(0, meses).Address, Len(ActiveCell.Offset(0, meses).Address) - Len(temp) - 1)
```

```
' Crear el periodo para las gráficas y presentarlo en el Rango("J3")
```

```
Date_Title
```

```
' Setear el valor máximo para las flechas ("spinner")
```

```
Worksheets("Graficas").Activate
max_agencias = Application.WorksheetFunction.CountA(Sheets("Variables").Range("Branch_Names")) - 1
ActiveSheet.Shapes.Range(Array("Spinner 1")).Visible = True
ActiveSheet.Shapes.Range(Array("Spinner 1")).Select
Selection.Max = max_agencias
Selection.Value = 0
Range("n2") = 0
Range("j1") = Sheets("Variables").Range("Branch_Name1")
temp = Range("n2") + 1
ActiveSheet.Shapes("Agencias").ControlFormat.Value = temp
```

```
' Crear el primer juego de gráficas
```

```
Graphs1
```

```
' Terminar la rutina
```

```
Worksheets("Graficas").Activate
Range("j1").Select
Application.ScreenUpdating = True
```

**End Sub**

**Public Sub Branch\_Selection()**

```
Application.ScreenUpdating = False

Range("j1").Select
new_branch = Range("n2")
Range("j1") = Range("Branch_Name1").Offset(new_branch, 0)
temp = Range("n2") + 1
Worksheets("Graficas").Shapes("Agencias").ControlFormat.Value = temp
```

```
Update_Graphs
```

```
Application.ScreenUpdating = True
```

**End Sub**

**Public Sub One\_Branch\_Selection()**

```
Application.ScreenUpdating = False
```

```
If ActiveSheet.Shapes("Agencias").ControlFormat.Value - 1 <= max_agencias Then
```

```
temp = ActiveSheet.Shapes("Agencias").ControlFormat.Value - 1
```

```
ActiveSheet.Shapes.Range(Array("Spinner 1")).Select
Selection.Value = temp
```

```
Range("j1").Select
new_branch = Range("n2")
Range("j1") = Range("Branch_Name1").Offset(new_branch, 0)
```

```
Update_Graphs
```

```
Else
```

```
Branch_Selection
```

```
End If
```

```
Application.ScreenUpdating = True
```

**End Sub**

### **Public Sub Update\_Graphs()**

```
no_branches = WorksheetFunction.CountA(Range("branch_names"))
```

```
Sheets("Graficas").Activate
```

```
For x = 1 To 10
```

```
Select Case graph_set
```

```
Case 1 'Primer Juego de Gráficas
```

```
ActiveSheet.Shapes("Agencias").Visible = True
ActiveSheet.Shapes.Range(Array("Spinner 1")).Visible = True
Range("j1") = Range("Branch_Name1").Offset(new_branch, 0)
```

```
title_row = Range(Choose(x, "cartera", "Riesgo30", "Riesgo90", "No_Creditos", "Saldo_Cred", "Clientes", "Riesgo60",
"RiesgoMasde90", "Monto_Cred", "Rend_Cartera")).Row 'The row numbers in the Base de Datos sheet representing the first
line of branch data for Branch #1
```

```
average_row = Range(Choose(x, "Cartera_Prom", "Riesgo30_Prom", "Riesgo90_Prom", "No_Creditos_Prom",
"Saldo_Cred_Prom", "Clientes_Prom", "Riesgo60_Prom", "RiesgoMasde90_Prom", "Monto_Cred_Prom",
"Rend_Cartera_Prom")).Row 'The row numbers in the Base de Datos sheet representing the first line of branch data for Branch
#1
```

```
ax_format = Choose(x, "###0", "0.0%", "0.0%", "###0", "###0", "###0", "0.0%", "0.0%", "###0", "0.0%")
```

```
Set_Average
```

```
Case 2 'Second set of graphs
```

```
ActiveSheet.Shapes("Agencias").Visible = True
ActiveSheet.Shapes.Range(Array("Spinner 1")).Visible = True
Range("j1") = Range("Branch_Name1").Offset(new_branch, 0)
```

```
title_row = Range(Choose(x, "Cost_Fin", "Cost_Op", "Cost_San", "Impuestos", "Of_Central", "Margen_Utilidad",
"Rank_Agencia", "Cart_Asesor", "Clientes_Asesor", "Mont_Asesor")).Row 'The row numbers in the Base de Datos sheet
representing the first line of branch data for Branch #1
```

```

    average_row = Range(Choose(x, "Cost_Fin_Prom", "Cost_Op_Prom", "Cost_San_Prom", "Cero", "Cero",
"Margen_Utilidad_Prom", "Rank_Agencia_Prom", "Cart_Asesor_Prom", "Clientes_Asesor_Prom", "Mont_Asesor_Prom")).Row
'The row numbers in the Base de Datos sheet representing the first line of branch data for Branch #1
    ax_format = Choose(x, "0.0%", "0.0%", "0.0%", "0.0%", "0.0%", "0.0%", "#,##0", "#,##0", "#,##0", "#,##0")

```

```
Set_Average
```

Case 3 'Third set of graphs

```

ActiveSheet.Shapes("Agencias").Visible = False
ActiveSheet.Shapes.Range(Array("Spinner 1")).Visible = False
Range("j1") = "ENLACE Totales"

```

```

    title_row = Range(Choose(x, "Tot_Carteras", "Clientes_Tot", "No_Des_Tot", "Tot_Ingreso", "Cost_Of_Central_Tot",
"Riesgo_Indice", "No_Asesores_Tot", "Monto_Des_Tot", "Cost_Impuesto_Tot", "Cero")).Row
'The row numbers in the Base de
Datos sheet representing the first line of branch data for Branch #1

```

```

    average_row = Range(Choose(x, "Cero", "Cero", "Cero", "Cero", "Cero", "Cero", "Cero", "Cero", "Cero", "Cero")).Row
'The row numbers in the Base de Datos sheet representing the first line of branch data for Branch #1
    ax_format = Choose(x, "#,##0", "#,##0", "#,##0", "#,##0", "#,##0", "0.0%", "#,##0", "#,##0", "#,##0", "#,##0")

```

```
Set_Average
```

Case 4 'Fourth set of graphs

```

ActiveSheet.Shapes("Agencias").Visible = True
ActiveSheet.Shapes.Range(Array("Spinner 1")).Visible = True
Range("j1") = Range("Branch_Name1").Offset(new_branch, 0)

```

```

    title_row = Choose(x, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1)
'The row numbers in the Base de Datos sheet representing the first line
of branch data for Branch #1

```

```

    average_row = Choose(x, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1)
'The row numbers in the Base de Datos sheet representing the first
line of branch data for Branch #1
    ax_format = Choose(x, "0%", "0%", "0%", "0%", "0%", "0%", "0%", "0%", "0%", "0%")

```

```
Set_Average
```

```
End Select
```

```
graph_name = "GR" & x
```

```
If graph_set = 2 And x = 4 Or graph_set = 2 And x = 5 Then
```

```
    new_range = "=SERIES(, 'Base de Datos!' & beg_col & "$" & title_row & ":" & end_col & "$" & title_row & ",1)"
```

```
Else
```

```
    new_range = "=SERIES(, 'Base de Datos!' & beg_col & "$" & title_row + new_branch & ":" & end_col & "$" & title_row +
new_branch & ",1)"
```

```
End If
```

```
avg_range = "=SERIES(, 'Base de Datos!' & beg_col & "$" & average_row & ":" & end_col & "$" & average_row & ",2)"
```

```
Sheets("Graficas").ChartObjects(graph_name).Activate
```

```
ActiveChart.SeriesCollection(1).Formula = new_range
```

```
ActiveChart.SeriesCollection(2).Formula = avg_range
```

```
ActiveChart.Axes(xlValue).TickLabels.NumberFormat = ax_format
```

```
If graph_set = 3 Then
```

```
    ActiveChart.Axes(xlValue).MinimumScaleIsAuto = True
```

```
    ActiveChart.Axes(xlValue).MaximumScaleIsAuto = True
```

```
Elseif graph_set = 2 And x = 4 Or graph_set = 2 And x = 5 Then
```

```

        ActiveChart.Axes(xlValue).MinimumScaleIsAuto = True
        ActiveChart.Axes(xlValue).MaximumScaleIsAuto = True
    Else
        ActiveChart.Axes(xlValue).MinimumScale = axis_min
        ActiveChart.Axes(xlValue).MaximumScale = axis_max
    End If

Next x

Range("j1").Select

End Sub

Public Sub Set_Average() 'Esta rutina define el axis vertical para estabilizar la línea del promedio

    If title_row = Range("cero").Row Or graph_set = 3 Then
        temp = beg_col & title_row & ":" & end_col & title_row

    ElseIf graph_set = 2 And x = 4 Or graph_set = 2 And x = 5 Then 'Se refieren a las gráficas de Impuestos y Costo Oficina
    Central
        temp = beg_col & title_row & ":" & end_col & title_row

    Else
        temp = beg_col & title_row & ":" & end_col & title_row + no_branches

    End If

    Sheets("Base de Datos").Activate

    axis_max = WorksheetFunction.Max(Range(temp))
    axis_min = WorksheetFunction.Min(Range(temp))

    Sheets("Graficas").Activate

End Sub

Sub Update_Titles()

    For title = 1 To 10

        tbox = "Title" & title
        graph_title = Sheets("Variables").Range("Gr_TitleSet" & graph_set).Offset(title - 1, 0)

        ActiveSheet.Shapes.Range(Array(tbox)).Select
        Selection.ShapeRange(1).TextFrame2.TextRange.Characters.Text = graph_title

    Next title

    Range("j1").Select

End Sub

Public Sub Clear_Buttons()

    For x = 7 To 10 'Make all text boxes look the same
        b_format = "Button " & x

```

```
With ActiveSheet.Shapes.Range(Array(b_format))
  If .Visible = True Then
    .Select
    With Selection.Font ' Not bold, grey, smaller font
      .FontStyle = "Regular"
      .Size = 9
      .ColorIndex = 16
    End With
  End If
End With
Next x
```

**End Sub**

#### **Public Sub Graphs1()**

```
Application.ScreenUpdating = False

graph_set = 1
new_branch = Range("n2")
Update_All

Application.ScreenUpdating = True
```

**End Sub**

#### **Public Sub Graphs2()**

```
Application.ScreenUpdating = False

graph_set = 2
new_branch = Range("n2")
Update_All

Application.ScreenUpdating = True
```

**End Sub**

#### **Public Sub Graphs3()**

```
Application.ScreenUpdating = False

graph_set = 3
new_branch = 0
Update_All

Application.ScreenUpdating = True
```

**End Sub**

#### **Public Sub Graphs4()**

```
Application.ScreenUpdating = False
```

```
graph_set = 4
new_branch = Range("n2")
Update_All
```

```
Application.ScreenUpdating = True
```

**End Sub**

**Public Sub Update\_All()**

```
Clear_Buttons
```

```
ActiveSheet.Shapes.Range(Array(Choose(graph_set, "Button 7", "Button 8", "Button 9", "Button 10"))).Select
With Selection.Font ' - Bold, Black, Larger Font
    .FontStyle = "Bold"
    .Size = 11
    .ColorIndex = 1
End With
```

```
Update_Titles
Update_Graphs
```

**End Sub**

**Public Sub Graph\_Length()**

```
Application.ScreenUpdating = False
```

```
ActiveSheet.Shapes.Range(Array("Button 12")).Select
If Selection.Characters.Text = "12 meses" Then
    Selection.Characters.Text = "6 meses"
    meses = -11
Elseif Selection.Characters.Text = "6 meses" Then
    Selection.Characters.Text = "12 meses"
    meses = -5
End If
```

```
temp = Range("Cartera").Row
Worksheets("Base de Datos").Activate
Range("Cartera").End(xlToRight).Select
beg_col = Left(ActiveCell.Offset(0, meses).Address, Len(ActiveCell.Offset(0, meses).Address) - Len(temp) - 1)
```

```
Date_Title
Update_Graphs
```

```
Application.ScreenUpdating = True
```

**End Sub**

**Public Sub Date\_Title()**

```
date1 = Range("Date_Row").Row
```

```
temp = beg_col & date1
temp1 = end_col & date1
```

```

temp2 = Range(temp)
temp = Range(temp1)

Worksheets("Graficas").Range("j3") = Format(temp2, "mmm yy") & " - " & Format(temp, "mmm yy")
Worksheets("Este Mes").Range("b6") = Format(temp, "mm yyyy")

```

**End Sub**

**Public Sub Este\_Mes()**

```

'Copiar Fórmulas
Worksheets("Base de Datos").Activate

'Establecer las columnas que tienen (i) los datos del mes = "end_col" y (ii) las fórmulas que hay que copiar = "copy_col"
Range("Cartera").Activate
temp = ActiveCell.Row
Selection.End(xlToRight).Select
end_col = Left(ActiveCell.Address, Len(ActiveCell.Address) - Len(temp) - 1)

ActiveCell.Offset(0, -1).Select
copy_col = Left(ActiveCell.Address, Len(ActiveCell.Address) - Len(temp) - 1)

'Definir la fila donde comienzan las fórmulas
Range("Cartera_Tot").Activate
temp = ActiveCell.Row

calc_col = copy_col & temp
Range(calc_col).Activate

If Sheets("Base de Datos").Range(end_col & Range("date_row").Row) <> Sheets("Este Mes").Range("b6") Then

'Copiar
copy_range = copy_col & temp & ":" & copy_col & 3000
Range(copy_range).Copy Destination:=ActiveCell.Offset(0, 1)

'Mover la información histórica hacia abajo para dejar espacio para la nueva información de este mes

Worksheets("Este Mes").Activate
Range("A1:AU1000").Copy Destination:=Range("a50")
Range("A50:AU99").ClearComments
Sheets("Base de Datos").Range(end_col & Range("date_row").Row).Copy
Sheets("Este Mes").Range("b6").PasteSpecial Paste:=xlPasteValues

End If

'Crear el Nuevo Reporte en la Hoja "Este Mes"
no_branches = WorksheetFunction.CountA(Range("branch_names"))

For x = 0 To no_branches

With Sheets("Este Mes")
.Range("EM_Agencias").Offset(0, x) = Sheets("Variables").Range("Branch_Name1").Offset(x, 0)
If .Range("Em_Agencias").Offset(0, x) <> "" Then
For y = 1 To 10

Select Case y

```

Case 1 'Llenando las celdas con 100%

```
.Range("EM_Ingresos").Offset(0, x) = "100%"
```

Case 2 To 4 'Costo Financiero, Gastos Operativos, Saneamiento y Castigos

```
temp = end_col & Range(Choose(y, , "Cost_Fin", "Cost_Op", "Cost_San")).Row
```

```
.Range(Choose(y, , "EM_Cost_Fin", "EM_Cost_Op", "Em_Cost_San")).Offset(0, x) = _  
Sheets("Base de Datos").Range(temp).Offset(x, 0)
```

Case 5 To 6 'Gastos Oficina Principal e Impuestos

```
temp = end_col & Range(Choose(y, , , , "Of_Central", "Impuestos")).Row
```

```
.Range(Choose(y, , , , "EM_Of_Central", "EM_Impuestos")).Offset(0, x) = Sheets("Base de Datos").Range(temp)
```

Case 7 'Ingresando el Costo Financiero Total en una sola celda

```
temp = end_col & Range("Cost_Fin_Tot").Row
```

```
.Range("EM_Monto_Cost_Fin") = Sheets("Base de Datos").Range(temp)
```

Case 8 To 10 'Ingresando tres cifras más por agencia: Caja, Cartera y Ingresos

```
temp = end_col & Range(Choose(y, , , , , , "Caja", "Cartera", "Ingreso")).Row
```

```
.Range(Choose(y, , , , , , "EM_Caja", "Em_Cartera", "EM_Monto_Ingreso")).Offset(0, x) = _  
Sheets("Base de Datos").Range(temp).Offset(x, 0)
```

End Select

Next y

End If

End With

Next

**End Sub**

## ANNEX III

### Proposal for AMC Incentives

- Staff Involved:** Branch Managers  
Branch Supervisors  
AMC Business Manager
- Source:** ≈ 30% of new net profits (after subtracting taxes and head office expenses)
- Distribution:** 80% Branch Managers  
20% Branch Supervisors
- The incentive for the Business Manager is based on total AMC profits.
- Frequency:** Monthly for the Branch Managers and Supervisors. More analysis is required to determine the frequency for the AMC Business Manager.
- Additional Policies:** The incentive should not exceed 30% of the individual's monthly salary.
- Once the maximum incentive of 30% is generated during four consecutive months, the branch manager's salary increases by 20% and a new "floor" is established for calculating new profits.
- Each time a branch manager earns a higher salary, his/her supervisor simultaneously receives an increase in his/her salary.
- Incentives are adjusted according to the ranking of the branches:

Ranking	Adjustment
1 – 5	0%
6 – 10	-10%
> 10	-20%

- Observation:** It is useful to establish a policy which does not limit the creativity and efforts of the branch managers, supervisors and Business Manager in terms of them generating new institutional profits.

**Hypothetical Example:**

## Financing the Monthly Incentives Fund

30% of new Monthly Profits

Current Monthly Profits = "The Floor"	% Growth in Profits	New Monthly Profits	Difference with the Floor	30% of the Difference for the Incentive Fund	20% for the Supervisors	80% for the Branch Managers
\$4,000	12.5%	\$4,500	\$500	\$150	\$30	\$120
\$4,000	25.0%	\$5,000	\$1,000	\$300	\$60	\$240
\$4,000	37.5%	\$5,500	\$1,500	\$450	\$90	\$360
\$4,000	50.0%	\$6,000	\$2,000	\$600	\$120	\$480
\$4,000	62.5%	\$6,500	\$2,500	\$750	\$150	\$600
\$4,000	75.0%	\$7,000	\$3,000	\$900	\$180	\$720
\$4,000	87.5%	\$7,500	\$3,500	\$1,050	\$210	\$840
\$4,000	100.0%	\$8,000	\$4,000	\$1,200	\$240	\$960

## Branch Manager Incentives

New Monthly Profits	Difference with the Floor	80% of the Incentive Fund is for the Branch Managers	Branch Manager Salary	Total Branch Manager Income	Incentive ÷ Salary Maximum = 30%
4,500	500	120	1,200	1,320	10.0%
5,000	1,000	240	1,200	1,440	20.0%
5,500	1,500	360	1,200	1,560	30.0%
6,000	2,000	480	1,200	1,680	40.0%
6,500	2,500	600	:	<b>Maximum Incentive =</b>	
7,000	3,000	720	:	<b>30%</b>	
7,500	3,500	840	:	<b>The incentive of \$1,560 is maintained.</b>	
8,000	4,000	960			

### Salary Policy

Once the maximum incentive (30% of salary) is achieved during four consecutive months, the Branch Manager's salary increases by 20% and a new floor is calculated for measuring new profits.

### Adjustment for Branch Ranking

In the first line of the table above, the incentive for the Branch Manager = \$120.

If the branch's ranking is among the top five, the final incentive = \$120 \* 100% = \$120

If the ranking is between 6-10, the final incentive = \$120 \* 90% = \$108

If the ranking is below 10, the final incentive = \$120 \* 80% = \$96

## Salary Adjustment - Branch Manager

New Monthly Profits	Difference with the Floor	80% of the Incentive Fund is for the Branch Managers	Salario del Jefe de Agencia	Ingreso Total Jefe de Agencia	Incentive ÷ Salary Maximum = 30%
4,500	500	120	1,200	1,320	10.0%
5,000	1,000	240	1,200	1,440	20.0%
5,500	1,500	360	1,200	1,560	30.0% <span style="color: red;">1</span>
6,000	2,000	360	1,200	1,560	30.0% <span style="color: red;">2</span>
6,500	2,500	360	1,200	1,560	30.0% <span style="color: red;">3</span>
7,000	3,000	360	1,200	1,560	30.0% <span style="color: red;">4</span>
7,500	500	120	1,440	1,560	8.3%

*The incentive declines and the salary increases. The total income of the Branch Manager does not change, but as of this moment forward he/she can start generating new profits and incentives until reaching the new maximum of 30% of the higher salary.*

*The difference with the "Floor" returns to \$500 in order to justify the new incentive of \$120.*

*The "Floor" for calculating incentives rises from \$4,500 to \$7,000 (= \$7,500 less \$500).*

## The Supervisors

When a Branch Manager's salary increases, his/her incentive declines. This also generates a decline in the Supervisor's incentive, which is not consistent with the concept of success at the level of the branch.

For this reason, the very same policy of increasing salaries is applied to the Supervisors as with the Branch Managers: when his/her incentive declines due to the success at one of the branches, the Supervisor's salary increases by an equal amount.

## The Supervisors

Current Monthly Profits = "The Floor"	Growth % in Profits	New Monthly Profits	Difference with the Floor	30% of the Difference for the Incentive Fund	20% for the Supervisors	80% for the Branch Managers
\$4,000	12.5%	\$4,500	\$500	\$150	\$30	\$120
\$4,000	25.0%	\$5,000	\$1,000	\$300	\$60	\$240
\$4,000	37.5%	\$5,500	\$1,500	\$450	\$90	\$360
\$4,000	50.0%	\$6,000	\$2,000	\$600	\$90	\$360
\$4,000	62.5%	\$6,500	\$2,500	\$750	\$90	\$360
\$4,000	75.0%	\$7,000	\$3,000	\$900	\$90	\$360
\$7,000	7.1%	\$7,500	\$500	\$150	\$30	\$120
\$7,000	10.0%	\$7,700	\$700	\$210	\$42	\$168

  
***The incentive for the Supervisors reflects the amount generated by their Branch managers.***

In the following hypothetical case, the Supervisor manages four branches. (See next sheet.)

### Incremento del Salario del Supervisor: Ejemplo Hipotético

In the table below, the results of all four branches are the same in terms of generating new profits. This generates equal incentives for each Branch manager and the Supervisor. In the first row of results, each branch generates an incentive of \$30 for the Supervisor, which generates a total incentive for the Supervisor of \$120. In the second row and assuming higher profits, each branch generates an incentive of \$60 for the Supervisor, increasing the total incentive to \$240.

By the third row, each branch manager is generating a maximum incentive of \$360 for him/herself and is contributing \$90 to the Supervisor’s incentive. This continues for the following four months. During the fifth month (next to last row in the table below), the salaries of the four branch managers are adjusted upwards and, consequently, their incentive drops back to \$120. This affects the Supervisor’s incentive, which declines from \$360 to \$120 as a result of the success of the four branches. To compensate, the Supervisor’s salary increases from \$1,500 to \$1,740 in order to maintain the Supervisor’s total income for that month. Branch managers and the Supervisor are now poised to increase their incentives through ever-increasing performance improvements.

Branch 1		Branch 2		Branch 3		Branch 4		Supervisor Totals		
20% for the Supervisor	80% Manager Branch 1	20% for the Supervisor	80% Manager Branch 2	20% for the Supervisor	80% Manager Branch 3	20% for the Supervisor	80% Manager Branch 4	Incentive (sum of all Branches)	Salary	Total Monthly Income
\$30	\$120	\$30	\$120	\$30	\$120	\$30	\$120	\$120	\$1,500	\$1,620
\$60	\$240	\$60	\$240	\$60	\$240	\$60	\$240	\$240	\$1,500	\$1,740
\$90	\$360	\$90	\$360	\$90	\$360	\$90	\$360	\$360	\$1,500	\$1,860
\$90	\$360	\$90	\$360	\$90	\$360	\$90	\$360	\$360	\$1,500	\$1,860
\$90	\$360	\$90	\$360	\$90	\$360	\$90	\$360	\$360	\$1,500	\$1,860
\$90	\$360	\$90	\$360	\$90	\$360	\$90	\$360	\$360	\$1,500	\$1,860
\$30	\$120	\$30	\$120	\$30	\$120	\$30	\$120	\$120	\$1,740	\$1,860
\$42	\$168	\$42	\$168	\$42	\$168	\$42	\$168	\$168	\$1,740	\$1,908

It is worth noting that with this automatic system of salary adjustments, the salary of a Supervisor may change frequently: each time that a branch manager under his/her supervision justifies a change in salary, the Supervisor’s salary will also change.

## The Business Manager

There are two sources of funds to pay for the Business Manager's incentive:

1. The (downward) adjustment in branch manager and supervisor incentives due to lower branch rankings; and
2. The increase in profits during the months in which the branch manager's incentives are limited to the maximum of 30% of his/her salary.

Initial simulations indicate a high probability of being able to completely fund an incentive for the Business Manager from these two sources. This keeps intact the policy of allocating a maximum of 30% of all new profits to the entire incentives pool. In fact, it is possible that these two funding sources could actually generate sums above and beyond what would be considered an appropriate incentive for the Business Manager.

It is difficult to project precisely the amounts which would be available to fund the Business Manager's incentive. For this reason, the following is proposed:

1. Approve up front the proposal to include the Business Manager in the new incentives system;
2. Monitor actual results over a period of time to determine actual amounts generated to fund the Business Manager's incentive;
3. On the basis of actual numbers, design with the participation of the Business Manager, the incentive to be applied moving forward;
4. Consider including additional institutional targets in the design for the Business Manager, allowing for the possibility of adjustments similar to those caused by lower branch rankings but in this case adjusted in terms of how well the additional institutional targets were achieved.

# ANNEX IV

## Applying the PEARLS Monitoring System

### ACACU

#### ACACU

#### P-E-A-R-L-S RATIOS

En Base a la Moneda Local

INDICADORES P-E-R-L-A-S	Metas	31-dic-09	31-dic-10	31-dic-11	31-dic-12	31-oct-13	Meta	
							Annual	% Cumplido
Número de Cooperativas en el Informe		1	1	1	1	1	1	1
<b>P PROTECCIÓN</b>								
1. Estimaciones / Morosidad > 12 Meses	100%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100%
2. Estim. Netas / Estim. Requeridas de 1-12 Meses	100% de la Meta	100.00%	100.00%	100.00%	110.26%	119.75%	124.44%	96%
3. Depuración Completa de Morosidad > 12 Meses	Si	No	No	Si	No	No	Si	NA
4. Depuraciones Anuales / Cartera Promedia	Minimizado	0.28%	2.91%	2.61%	2.31%	1.39%	2.71%	51%
5. Recuperación Cartera Dep. / Depuraciones Accum.	100%	61.28%	53.62%	54.29%	55.00%	57.30%	56.99%	101%
6. Solvencia	Mín 100%	105.51%	104.52%	105.46%	105.23%	106.12%	105.90%	100%
7. Estimaciones para Inversiones / Inversiones No Reguladas	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	NA
<b>E ESTRUCTURA FINANCIERA</b>								
1. Préstamos Netos / Activo Total	Entre 70 - 80%	80.47%	75.48%	78.36%	77.63%	77.87%	76.86%	101%
2. Inversiones Liquidas / Activo Total	Máx 20%	13.00%	18.25%	15.16%	15.14%	14.70%	12.68%	116%
3. Inversiones Financieras / Activo Total	Máx 10%	0.96%	0.92%	0.91%	0.88%	0.85%	1.08%	79%
4. Inversiones No Financieras / Activo Total	0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	NA
5. Depósitos de Ahorro / Activo Total	Entre 70 - 80%	69.65%	77.38%	78.03%	78.71%	77.39%	78.00%	99%
6. Crédito Externo / Activo Total	Máx 5%	11.49%	5.97%	4.84%	5.12%	6.73%	3.33%	202%
7. Aportaciones / Activo Total	Máx 20%	11.81%	10.83%	10.33%	9.64%	9.15%	9.01%	102%
8. Capital Institucional / Activo Total	Mínimo 10%	4.24%	3.68%	4.02%	4.13%	4.98%	3.85%	129%
9. Capital Institucional Neto / Activo	Mínimo 10%	4.24%	3.68%	4.02%	4.31%	5.27%	4.11%	128%
<b>R RENDIMIENTOS Y COSTOS (ANUALIZADOS)</b>								
1. Ingresos por Préstamos / Promedio Préstamos Netos	Tasa Empresarial	16.33%	18.35%	17.66%	15.68%	15.41%	9.33%	165%
2. Ingresos por Inv. Liquidas / Promedio Inv.	Tasa del Mercado	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	NA
3. Ingresos por Inversiones Fin. / Promedio Inversiones Fin.	Tasa del Mercado	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	NA
4. Ingresos por Inv. No Fin. / Promedio Inv. No Fin.	Mayor o Igual a R1	NA	NA	NA	NA	NA	NA	NA
5. Costos-Fin: Depósitos / Promedio Depósitos	Tasa del Mercado	5.73%	6.71%	5.12%	4.36%	4.76%	3.67%	130%
6. Costos-Fin: Crédito Externo / Promedio Créd.	Menor o Igual a R5	8.35%	8.57%	7.78%	7.12%	9.10%	6.30%	144%
7. Costos-Fin: Aportaciones / Promedio Aportaciones	Mayor o Igual a R5	2.74%	2.99%	3.07%	3.01%	3.04%	3.07%	99%
8. Margen Bruto / Promedio Activos	Lo Necesario para Cubrir R9, R10	8.09%	8.63%	9.20%	8.45%	8.17%	3.99%	205%
9. Gastos Operativos / Promedio Activos	3 - 10%	5.21%	5.36%	5.49%	5.27%	5.08%	4.81%	106%
10. Provisiones Activos de Riesgo / Promedio Activos	Suficiente para Pérdidas Estimadas	1.16%	1.23%	3.27%	1.03%	0.94%	0.45%	209%
11. Otros Ingresos o Gastos / Promedio Activos	Lo Necesario	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	NA
12. Excedente Neto / Promedio Activos	Suficiente para alcanzar la meta del	1.72%	2.05%	0.45%	2.15%	2.16%	-1.27%	-170%
<b>L LIQUIDEZ</b>								
1. Disponibilidades - CxP<=30 / Depósitos de	Mínimo 15%	18.47%	23.46%	19.66%	19.46%	19.22%	19.63%	98%
2. Reservas para Liquidez / Total Depósitos	10%	10.03%	10.16%	10.01%	10.10%	10.14%	10.00%	101%
3. Liquidez Ociosa / Activo Total	Menor a 1%	1.17%	0.99%	1.31%	1.36%	1.15%	4.43%	26%
<b>A ACTIVOS IMPRODUCTIVOS</b>								
1. Morosidad Total / Cartera Bruta	Menor o Igual a 5%	8.83%	7.17%	6.37%	6.32%	5.23%	3.89%	134%
2. Activo Improductivo / Activo Total	Menor o Igual a 5%	5.57%	5.35%	5.57%	6.35%	6.57%	9.37%	70%
3. Fondos Sin Costo Neto / Activo Improductivo	Mayor o Igual a 100%	126.60%	108.83%	122.19%	105.57%	106.87%	105.80%	101%
<b>S SEÑALES EXPANSIVAS (LO QUE VA DEL AÑO)</b>								
1. Cartera Neta de Préstamos	Suficiente para Alcanzar la Meta en	15.77%	16.36%	12.12%	12.87%	15.89%	10.13%	157%
2. Inversiones Liquidas	Suficiente para Alcanzar la Meta en	36.24%	74.08%	-10.31%	13.80%	12.22%	-6.79%	-180%
3. Inversiones Financieras	Suficiente para Alcanzar la Meta en	12.07%	19.14%	6.53%	10.40%	11.40%	36.43%	31%
4. Inversiones No Financieras	Suficiente para Alcanzar la Meta en	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	NA
5. Depósitos de Ahorro	Suficiente para Alcanzar la Meta en	28.79%	37.81%	8.90%	14.94%	13.59%	10.24%	133%
6. Crédito Externo	0%	-21.38%	-35.56%	-12.44%	20.65%	51.62%	-27.76%	-186%
7. Aportaciones	Suficiente para Alcanzar la Meta en	15.40%	13.76%	2.98%	6.37%	9.61%	4.01%	240%
8. Capital Institucional	Suficiente para alcanzar la meta en	18.90%	7.71%	17.82%	16.93%	39.51%	3.86%	1024%
9. Capital Institucional Neto	Suficiente para Alcanzar la Meta en	15.84%	7.71%	17.82%	22.03%	41.39%	6.25%	662%
10. Asociados	Mínimo 5%	8.89%	3.83%	3.88%	4.95%	11.35%	6.48%	175%
11. Total Activos	Más que la Inflación	17.14%	24.05%	8.00%	13.94%	15.53%	11.23%	138%
Tasa de Inflación (Anualizado)		-0.19%	2.13%	5.06%	0.80%	0.50%	0.90%	

Institución: ACACU  
 N° Plantilla: 18

Descripción	Código	Octubre 2008	Octubre 2009	Octubre 2010	Octubre 2011	Octubre 2012	Octubre 2013
Riesgo	EMP	41.00 R	53.00 A	44.00 R	75.00 A	75.00 A	90.00 V
Riesgo de Crédito	ACT FIN	41.00 R	34.00 R	32.00 R	53.00 A	59.00 A	90.00 V
Índice de Morosidad	INDMORA	8.14 A-	9.05 A-	9.20 A-	6.05 A+	6.11 A+	4.35 V-
Cobertura de Reserva de Saneamiento	COBERTURA	85.25 A+	71.76 R+	27.57 R-	71.00 R+	100.00 V+	143.98 V+
Recuperación Cartera Depurada	RECUPERAC	0.00 R-	0.00 R+	54.41 V+	54.29 V+	55.61 V+	57.30 V+
Concentración de Cartera de Créditos	CONCENTRAC				5.02 A+	4.37 V-	3.96 V-
Concentración de Cartera en Mora	CONCMORA				41.69 R-	37.13 R-	45.19 R-
Riesgo de Cartera	SICURIC1				0.00 V	0.13 V	1.25 V
Cobertura de Pérdidas Esperadas	SICURIC2				0.00 R	1590.92 V	174.99 V
Cobertura de Pérdidas Inesperadas	SICURIC3				0.00 R	255.25 V	100.19 V
Exposición al Riesgo	SICURIC4				0.00 R	282.24 V	105.76 V
Riesgo de Liquidez	LIQUI1	47.00 R	57.00 A	48.00 R	74.00 A	74.00 A	74.00 A
Índice de Liquidez	LI-008	16.22 V	21.46 V	25.65 A	17.90 V	21.56 V	20.48 V
Relación de Liquidez a 30 días	LI-009	0.00 R	0.00 R	5.25 V	5.68 V	7.79 V	4.95 V
Relación de Liquidez a 90 días	LI-010	0.00 R	0.00 R	0.39 R	3.81 V	5.50 V	4.02 V
Calce de Plazos	LI-011		0.49 V	0.96 A	0.30 V	0.10 V	0.24 V
Índice de Encaje	LI-012	9.98 A	9.99 A	10.17 V	10.01 V	10.01 V	10.14 V
Concentración de Cartera de Ahorros	LI-013	24.08 R	25.89 R	28.05 R	25.61 R	22.82 R	23.45 R
Riesgo de Solvencia	ESTRUCPAT	60.00 A	60.00 A	57.00 A	78.00 V	78.00 V	78.00 V
Índice de Basilea Ajustado	ESTRUC-01	3.79 A	3.94 A	3.34 A	3.36 A	3.28 A	3.34 A
Solvencia	ESTRUC-03	19.27 V	19.08 V	18.24 V	17.47 V	16.74 V	15.63 V
Riesgo Potencial	ESTRUC-04	1.49 V	1.29 V	0.82 A	1.45 V	1.58 V	2.18 V
Límite de Crédito por Deudor	ESTRUC-05	1.00 V					
Relación de Pasivos	ESTRUC-06				17.63 V	16.47 V	15.48 V
Índice de Inversión en Activo Fijo	ESTRUC-07				18.73 V	19.06 V	25.17 V
Riesgo Operativo	TAMA	20.00 R	78.00 V	54.00 A	100.00 V	100.00 V	83.00 V
Crecimiento de Activos Totales	TA-002	32.00 R	18.00 V	28.00 A	7.00 V	11.00 V	18.00 V
Crecimiento de Cartera Bruta	TA-001	44.00 R	13.00 V		15.00 V	6.00 V	20.00 A
Crecimiento Cartera Ahorros	TA-003			44.00 R	10.00 V	14.00 V	15.00 V
Evaluación de Control Interno	TA-04				8.37 V	8.37 V	8.89 V

The PEARLS design is an effective monitoring system which has been operating within El Salvadoran credit unions for many years. Training materials for governing bodies have been in use during this time and accounting systems have been automated to generate relevant reports. That having been said, the system monitors compliance with *internal* policies as opposed SFS requirements. In the case of loan loss reserves, the report above can be showing “green” representing adequacy of loan loss reserves as per credit union policies. Nevertheless, the Project’s “Gap Analysis” consistently demonstrated that once SFS policies were applied, virtually all credit unions were deficient in this important policy. The PEARLS system simplifies the calculation of loan loss reserves for credit unions: 30% reserves are required for all loans delinquent for more than 30 days, and 100% reserves are required for all loans delinquent for more than one year. At the time when this system was introduced by the World Council of Credit Unions, this policy represented a greater level of prudence in terms of higher loan loss reserves than policies in place at that time within the credit unions. As such, the PEARLS loan loss reserves policy represented a good step in the right direction. Today in El Salvador, when the PEARLS policy is compared with the requirements of the SFS, deficiencies appear as identified through the Project’s Gap Analysis.