

Panel III: Case Study Promising Practices in Credit Technology

Innovative Approaches to Rural Lending: Financiera Calpia in El Salvador

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DRAFT ONLY FOR COMMENTS

Table of Contents

1. Introduction	1
2. Why Rural Lending is Difficult?	2
3. El Salvador and Calpia: a Sinergy that Has Worked	3
3.1 The Clients of Calpia: Who Are They?, Where Are They? . Error! Bookmark not defined.	
3.1.1 The Rural Clients Error! Bookmark not defined.	
4. Financiera Calpia: A New Lender in El Salvador	8
5. The Lending Technology of Calpia: a Key Ingredient for its Success	10
6. The Rural Lending Technology of Calpia: a Careful Process of Adaptation	12
6.1 Loan Officers: The Human Cornerstone of Lending	13
6.1.1 The Entry Process	13
6.1.2 Profile of a Loan Officer	15
6.2 First Impression Matters: The Process of Screening and Signaling	16
6.2.1 Evaluate, Evaluate, Evaluate	18
6.2.2 The Evaluation Form: Summary of Findings and Recommendation	22
6.2.3 Approval and Disbursement	26
6.3 Monitoring in Calpiá: Supervising Repayment Capacity, not Production	27
6.3.1 Preventive Monitoring	28
6.3.2 Corrective Monitoring	29
6.4 Procedure Adjustments for Repeat Borrowers	30
6.4.1 A Note on Deviation in the Use of Funds	31
6.5 Contract Enforcement: When it Happens and How it Happens	31
6.6 Coordination of Lending Activities	32
6.6.1 A Week in the Life of a Loan Officer	32
6.7 The Loan Officer’s Output: A Few Indicators	34
6.8 The Carrots for Efficient Behavior: Performance-Based Wages	35
6.8.1 Monetary Incentives for Loan Officers Error! Bookmark not defined.	
7. Summary of Findings	36
References	39

1. Introduction

In the last decade or so, poor people around the globe have benefitted from a growing number of microfinance organizations (MFOs) that have emerged to offer them several financial services, with a heavy emphasis on short-term credit. In Latin America, this growth of the supply side of microfinance has not been uniformly distributed. In contrast to Asia, most of the successful MFOs in this part of the world have bloomed in urban areas. This has not been the result of a lack of public interest in an expansion of the supply of financial services to the rural population; instead, it has reflected the formidable challenges encountered in the development of appropriate financial technologies for the rural environment (Gonzalez-Vega, 1999). There are, indeed, some organizations that have devoted their effort and attention to the provision of financial services in rural areas, but there is no parallel between their limited success and the major outreach and sustainability already achieved by the best urban MFOs.

Given increased interest in this challenge, it is important to understand how a few financial organizations have been successful in reaching the rural areas. One of these organizations has been Financiera Calpiá in El Salvador.¹ Financiera Calpiá is a leader in Latin America, prominent for the innovations needed to further expand the frontier of finance (Von Pischke, 1991). Understanding the technology of a MFO such as Calpiá, the problems this technology has solved, and the challenges the organization still faces is key in drawing lessons about what can be done and what cannot be done in rural lending.

A better understanding of the mechanics and procedures of a given lending technology is not enough, however, to be able to replicate it. One must be extremely cautious in this effort and must take into account the particular environment where the technology already functions successfully: Is there a conducive regulatory framework? What does the target market look like? One must also consider the human resources needed for this venture: Is there enough of the required human capital? What training opportunities are available for the staff? Finally, the organization must tie these elements together: Is there an institutional design, with the appropriate set of incentives, for successful implementation of the technology? These issues cannot be resolved *a priori* by any organization; lengthy learning processes are needed to accumulate the necessary information capital (Gonzalez-Vega, 1998).

In addition to this introduction, the paper is organized in six parts. The first part briefly discusses the difficulties of rural lending. The second part describes the Salvadorean context, with emphasis on the target markets reached by Calpia. The third part presents a snapshot of the Financiera Calpia. The fourth one identifies the general principles followed by Calpia in designing and implementing its lending technology. The fifth part describes the rural lending technology of Calpiá in depth. This part examines actual procedures, as they are implemented, and, when possible, it

¹ In Nahuatl, Calpiá means a small box used to store savings, usually under the ground.

compares the procedures used in rural areas with those used in urban areas. This part also discusses, step-by-step, the problems that each procedure solves during the lending process. The last part summarizes lessons, presents conclusions, and explores future challenges.

2. Why Is Rural Lending Difficult?

Any lender faces risks each time a loan is disbursed. This occurs because lenders sell a product (loan contract) for which they do not receive the price (principal and interest) immediately. They only receive a promise of uncertain future repayment. This is why lenders care about the future behavior of their customers. Given imperfect information, incompatible incentives, and limited mechanisms for contract enforcement, the lenders' ability to correctly predict and encourage repayment is crucial for their success (Navajas, 1999).

The specific manner in which a lender resolves these problems is called a *lending technology*. Different lenders use different lending technologies to accomplish similar results. Moneylenders, for example, use informal mechanisms to guarantee repayment whereas, in contrast, commercial banks base their technology in establishing formal mechanisms (audited financial statements, collateral foreclosable in court, credit rating tools) to guarantee repayment. Several MFOs have been able to adopt many of the features of informal lending within an institutional framework. The success of these MFOs has been linked to their flexibility in adapting non-traditional lending technologies. Moreover, different lending technologies have created comparative advantages in particular market niches and have matched different types of potential clients.

Rural lenders have to solve the same problems of information, incentives, and uncertainty as any other lender, but the hurdles they have to overcome are even more formidable (Gonzalez-Vega, 1999; Zeller *et al.*, 1997). The additional challenges faced by rural lenders result from the following features:

- (a) A greater heterogeneity of the clientele. In contrast to urban firm-households, rural dwellers differ among themselves not only in their skills but also in a number of characteristics of their surroundings (soil quality, microclimate, access to irrigation, and location) and of their cultural background (language, customs).
- (b) A greater exposure to systemic risk. Drought, floods and sudden variations in commodity and input prices are examples of shocks that can easily wipe out all crops or all farmer profits in a region. These shocks are an inevitable part of rural life and are reflected in a high covariance of local incomes.
- (c) A greater dispersion and low density of the clientele. Geographic dispersion increases transaction costs for both borrowers and lenders while low density of the clientele makes it harder to dilute fixed costs of lending.

- (d) The seasonality of rural activities. Rural life, especially for farmers, centers about sowing-and-harvest-time, thereby creating periods of limited liquidity (when loans are needed) and periods of excess liquidity (when deposit facilities are needed). Seasonality also makes liquidity management (local intermediation) more difficult for specialized rural lenders.
- (e) The biological rigidity of agricultural cycles. Rural lenders cannot use very short terms and frequent payments as a monitoring device, in view of the lumpiness of borrower cash flows and, most of the time, only a one-lump-payment loan fits the demand. This rigidity limits the type of lending technologies that can be used in the rural areas.
- (f) The smaller size of the transactions. The levels of poverty that persist in rural areas reduce loan amounts. Loans are typically small and do not tend to grow over time (*e.g.*, the fertilizer requirements of a small farmer do not vary much with each agricultural cycle). When lending costs are independent of loan size, high interest rates are needed to cover average costs of lending. Average borrower transaction costs are also high because of the small size of loans.
- (g) The lack of borrower assets that may become useful collateral for lenders. In some countries (*e.g.*, Bolivia), legal constraints from agrarian reform rules limit the plots of land that may be used as collateral. In other cases, enforcing contracts is difficult or extremely costly.
- (h) The absence of standardized information. Standard lending tools such as financial statements or credit histories do not exist in rural areas. Their absence increases the cost of evaluating creditworthiness.

In short, in addition to the typical problems encountered in lending to the poor, rural lenders have to deal with problems due to the special characteristics of the rural setting. Lending technologies need to be adjusted, therefore, to address these special issues. Only a few MFOs in Latin America have been able to transfer their innovations in lending technologies from the urban to the rural areas. One of the most successful MFOs in undertaking this task has been Financiera Calpia in El Salvador.

3. El Salvador and Financiera Calpia: a Sinergy Works

To fully appreciate the challenges that Financiera Calpia has faced, it is useful to briefly illustrate some of the characteristics of the host country that are relevant in understanding the nature of the technology that has been appropriate for this environment (Gonzalez-Vega, 1997). These features have included:

- (a) El Salvador is the most densely populated country in the continental Western Hemisphere (250 inhabitants per square kilometer). The challenges of rural finance, therefore, are not

more formidable than in less densely populated countries, such as Bolivia. El Salvador is, however, a poor country. By 1997, the UNDP Human Development Index ranked El Salvador in the 107th position out of 174 countries (UNDP, 1999). This was only better than Bolivia, Haiti, Honduras, Guatemala, and Nicaragua. In the 1990s, nevertheless, the economy grew rapidly and per capita incomes increased, although the dynamism that followed the Peace Accords and structural adjustment programs was already declining towards the end of the decade (Edwards, 1999).

- (b) Poverty in El Salvador is not uniformly distributed. By 1997, about 62 percent of the rural population were considered poor vis-à-vis 48 percent of the urban population (Rivera Campos, 1999). Rapid growth in the 1990s resulted in a substantial reduction of poverty in the urban but not in the rural areas. This was due, in part, to the productivity of labor in agriculture and to an overvalued domestic currency (mostly resulting from massive remittances from abroad), which further reduced the profitability of agriculture. Furthermore, rural incomes have been extremely volatile, and the rural population has had recourse to few efficient mechanisms to manage risk (Beneke de Sanfelíu, 2000).
- (c) A war-damaged infrastructure increased transaction costs and reduced degrees of market integration. The civil war also hurt schooling rates, slowing down the process of human capital accumulation. Thus, transaction costs are high, despite the small size of the territory (Larde de Palomo and Arguello de Morera, 2000). Toward the end of the decade, however, the Government was investing heavily in rural roads and schools.
- (d) Weak institutions, outdated legal systems, and shortcomings of the state's organizational framework have further increased the transaction costs of financial contracts. Inadequate agrarian legislation has constrained both productive uses of land and the potential use of land as collateral (Martínez, 1999). In general, social capital has been shallow, and a culture of loan repayment has been undermined by frequent loan pardonings by the Legislature.

Beginning in 1979, a civil war sparked violence across the country. The war lasted 12 years, and it destroyed not only lives (the death toll was around 75,000) but also institutions and opportunities for economic growth. The rural areas suffered the most. Violence combined with inappropriate policies (import-substitution industrialization, inefficient agrarian reform, and state-owned banking) contributed to the country's impoverishment. During this period, average per capita GDP decreased 1.39 percent per year.

The 1992 Peace Accords opened a road for political and economic reforms, including privatization of the banking system, except the *Banco de Fomento Agropecuario* and *Banco Hipotecario*, and a reduction of protectionism (Boyce, 1995). Both war and peace attracted donors of all sorts, willing to ameliorate the consequences of the war. The provision of financial services to the poor was left to a patchwork of donor-funded programs and credit became mostly a palliative for the poor (Danby, 1995).

The credit program sponsored by the German Technical Assistance (GTZ) was the predecessor of Financiera Calpia. This program was established in an NGO called AMPES (*Asociación de la Mediana y Pequeña Empresa*), and it began operations in 1988, before the war was over, by offering loans to AMPES' associates. The *Servicio Crediticio* de AMPES was thus part of the inflow of donor funds, but from the very beginning there was a clear understanding that the program was not about subsidized credit and that the loans were not transfers, but that loans must be repaid. Having to start operations in an environment of not-so-rigorous financial NGO activities and of a missing repayment culture forced the organization to invest considerably in signalling its true intent: to create a sustainable source of quality financial services for a heretofore underserved market segment. This attitude was strengthened when it was decided that the *Servicio Crediticio* would make loans, based only on creditworthiness considerations, to both AMPES members and non-members. The steady growth of a healthy portfolio, despite the unfavorable environment, assisted by the technical assistance of Internationale Projekt Consult (IPC), led to the transformation of the *Servicio Crediticio* into Financiera Calpia, chartered as a regulated financial intermediary by the Central Bank in 1995.

4. The Clients

The market segments reached by Financiera Calpia are both in urban and rural areas. In the urban areas, most clients are microentrepreneurs, whereas in the rural areas the potential clientele ranges from traders to farmers to microentrepreneurs. Indeed, Calpia's potential clientele includes most of the productive rural households otherwise without access to financial services. Thus, the range of potential influence of Calpia in the rural areas is more diverse and heterogeneous than its urban counterpart.

First, the rural areas are poorer than the urban areas and poverty has not declined in the rural areas as fast as it has in the urban areas; as a result, urban-rural income differences have widened. By 1991-92, 54 percent of the urban and 66 percent of the rural population were considered poor. By 1997, the proportions of the poor had declined to 39 percent and 61 percent of the urban and the rural population, respectively (Ministerio de Economía, 1998). The UNDP Human Development Index for the rural population of El Salvador was comparable to the Index for Zimbabwe.²

Second, while, on average, in real terms GDP grew 4,7 percent in the 1990s, agricultural GDP grew only 1.4 percent per year. . Moreover, the behavior of the agricultural GDP has been more volatile. During the 1990s, negative rates of growth were registered four times, along with a peak of 8 percent annual growth in 1992.

² The Human Development Index for rural El Salvador was computed on the basis of a 1998 rural household survey conducted by The Ohio State University and FUSADES within BASIS.

Third, rural financial markets are shallow. Access to formal financial services, in general, and to loans, in particular, has been very limited. According to a BASIS survey of rural households, in 1997 only 7.9 percent of all households had had access to credit from a formal organization (Table 1).

The current situation of the Salvadorean rural financial markets is in part the result of a series of ill-designed policies (mostly inherited from the past), institutional shortcomings (*i.e.*, inappropriate lending technologies and absence of effective mechanisms for technological transfers), and the intrinsic difficulties of providing financial services to the rural sector.

Table 1 reports access to different types of sources of loans for rural households in El Salvador. All sources, from moneylenders to banks, are considered. Not counting informal sources of loans, only about one-fifth of the rural households had had access to formal and semiformal sources of credit, including merchants and input suppliers.

Formal financial organizations (banks and financieras) matter because they can offer a broader range of financial services to the rural population, ranging from deposit facilities to funds transfer instruments as well as varied loan products (short-term liquidity loans to long-term investment loans). In the classification used for this table, formal has been equated to regulated by the financial authorities. Semiformal organizations are usually established institutions according to some legal form, which rely on some combination of legal (formal) and social (informal) mechanisms to ensure repayment, but they are not supervised by the Superintendency of Financial Institutions. Cooperatives as well as NGOs have been classified in this group along with most sources of merchant and trade credit (input suppliers).

Table 1. Rural Household Access to Credit in El Salvador, 1997 ⁽¹⁾

		Percentage
Formal	Banks	1.4
	Non-Banks	6.4
	<i>Sub-Total</i>	7.9
Semiformal	Non Financial ⁽²⁾	6.4
	Cooperatives	2.2
	NGOs	3.5
	<i>Sub-Total</i>	12.2
Informal	Market ⁽³⁾	15.9
	Non-Market ⁽⁴⁾	6.4
	<i>Sub-Total</i>	22.3
With Access		42.4
Withouth Access		57.6

(1) Access to credit is defined as the number of households that either had a loan in 1997 or that in 1997 had outstanding debt from the 1994-1997 period. In this classification, household access is ranked according to the most demanding source (banks being the most demanding in acknowledging creditworthiness). If a household had access to loans from both a more and a less demanding source, it was classified only once, as belonging to the more demanding category. This avoids double counting.

(2) Non-financial are those organizations that provide relatively large loans for specific purposes as part of their non-financial business; for example, the *loteadoras* (developers), which sell plots of land on credit.

(3) Informal market intermediaries are all informal credit providers for whom credit is one of the main commercial activities that they undertake.

(4) This category groups all informal credit providers for whom credit is not a regular business activity (for example, relatives and friends).

Source: OSU/FUSADES BASIS 1998 Rural Household Survey and authors' calculation

The current structure of the formal financial sector in El Salvador is relatively new. At the end of the 1980s, the banking system was state-owned. By the turn of the century, most banks had been privatized, with three banks remaining under the government control (*Banco de Fomento Agropecuario*- BFA, *Banco Multilateral de Inversiones*-BMI, and Banco Hipotecario). Currently, Financiera Calpia is the only supervised non-bank financial intermediary, as the other financieras disappeared with the financial crisis of 1998 and as the Central Bank eliminated the charter of financiera.³ The semiformal sector includes another public entity: the *Federación de Cajas de Crédito* (FEDECREDITO), which functions as an apex for about 50 credit and savings associations and several workers' banks, while a number of credit unions operate under the second-tier of FEDECACES.

The presence of commercial banks in the rural areas is minimal. Together, the private commercial banks reach around 2,000 rural clients. In contrast, BFA has a clientele of about 40,000 clients, and it operates the largest network of branches in the countryside. The BFA, however, has suffered from frequent political intrusion, inadequate internal control, and high arrears rates.⁴ It is currently in a process of restructuring, another one in a series of failed attempts to deal with the problems emerging from the weak property rights and governance design of the organization. A number of small NGOs offer loans in the rural areas, using different lending technologies. CAM/FINCA is the largest of these NGOs. This is a USAID-sponsored organization that lends according to a village banking technology. By 1998, CAM/FINCA had more than 15,000 clients.

The main competition for Calpia in the rural areas therefore comes from a state-owned bank in the midst of redefining its mission (with suggestions that it will focus all of its activities toward microfinance) and of seeking for new lending technologies that would allow the organization to offer

³ The charter of *financiera* was recently (1999) eliminated. Thereby, Calpia is an exception and it has to become a bank in a few years.

⁴ Arrears at BFA, defined as portfolio at risk over total portfolio, reached 28 percent in 1999.

better service at cost-covering interest rates, and CAM/FINCA, a large NGO that focuses on lending to the very poor.

5. Financiera Calpia: A New Lender in El Salvador⁵

The origins of Financiera Calpia can be traced back to 1988, with the creation of the *Servicio Crediticio* at AMPES (*Asociación de la Mediana y Pequeña Empresa*). AMPES is a not-for-profit organization whose main mission has been to promote the interests of medium and small enterprises with representation and a number of services. By 1995, the *Servicio Crediticio de AMPES* became Financiera Calpia, a full-fledged regulated financial intermediary. In preparation for this step, Calpia had already been complying with all the regulations from the Superintendency of the Financial Sector, and it continues to show above-average indicators of solvency and profitability among the regulated financial intermediaries of El Salvador. After the elimination of the financiera charter by the new Banking Law, Calpia was given some time to transform into a commercial bank.

The main donor to support this venture from the beginning was the German Technical Assistance agency (GTZ). This assistance included, in particular, the technical support of the consulting firm IPC (*Internationale Projekt Consult*) from Frankfurt. This support ended in December 1999 but, during the whole period, IPC engaged in a close partnership with Calpia and it kept a resident technical advisor in San Salvador, who *de facto* became another member of the management team.

The emergence of Financiera Calpia as a regulated financial intermediary would have not been possible without the participation of the Inter-American Development Bank (MIF) and the Central American Bank for Economic Integration (CABEI) as well as of several local NGOs as shareholders in the new organization. Although Calpia was incorporated as a private financial intermediary, up to this date all shareholders have been not-for-profit domestic or international organizations. The implications of this structure of property rights are not discussed in this paper.

The performance of Financiera Calpia has been characterized by outstanding outreach and sustainability achievements, without parallel in El Salvador. One of the simplest indicators of outreach is the number of outstanding loans. Since all loans are approved and disbursed on an individual basis, this is also a good indicator of the number of clients being reached by Calpia. The data are reported in Table 2.

⁵ The information was gathered as part of the larger research agenda of the BASIS CRSP in El Salvador (Gonzalez-Vega, 1998; Schreiner *et al.*, 1998). The project is being implemented by the Rural Finance Program at The Ohio State University and the Departamento de Estudios Económicos y Sociales at the Fundación Salvadoreña para el Desarrollo Económico y Social (FUSADES).

Table 2. Financiera Calpia: Number of Outstanding Loans as of December, 1995-98

Year	Urban	Rural	Total
1995*	9,261	2,799	12,060
1996	14,707	3,344	18,051
1997	18,600	6,029	24,629
1998	22,565	6,156	28,721

* After only 6 months of operation.

Source: Pleitez (1999)

Two observations may be highlighted in Table 2. First, the number of clients grew 138 percent during the 1995-1998 period. This growth continued during 1999, and by December of this year the total number of outstanding loans had reached 34,390. Second, the relative importance of the rural clientele has remained around 20 percent of the total number of clients. This reflects the portfolio diversification and risk management strategy of the organization, although it may be expected that the rural portfolio will continue to grow in relative importance. With regard to loan sizes, as of December of 1998, the average urban loan was 6,019 Colones (US\$ 688) and the average rural loan was 6,876 Colones (US\$ 786). This had not changed by December of 1999, when the average size of outstanding loan was 6,747 colones overall. It is noteworthy that the average size of rural loans is slightly larger than the average size of urban loans. This reflects, mostly, the different composition of occupations in the two market segments.

Outreach, however, refers not only to the number of borrowers (Navajas et al., 2000). Among other dimensions, outreach also refers to the variety (range) of services. In particular, Financiera Calpia has undertaken serious efforts at deposit mobilization. This has permitted the organization to offer a wider menu of services to its clientele and has reduced its dependence on external funding. As shown in Table 3, the number of outstanding deposits rapidly grew to 24,272 by the end of 1998 and it further grew to 29,669 by the end of 1999, for a total mobilization of 66.6 million colones by December of this year.

Table 3. Financiera Calpia: Number and Amount of Deposit Accounts as of December, 1996-98

Year	Saving Accounts		Term Deposits		Total Deposits	
	Number	Amount (US\$)	Number	Amount (US\$)	Number	Amount (US\$)
1996*	312	33,406	37	307,394	349	340,800
1997	4,929	344,606	254	1,045,303	5,183	1,389,909
1998	18,254	752,228	725	2,021,726	24,272	2,773,954

* After only 4 months of operation.

Source: Pleitez (1999)

Calpia's sustainability achievements are equally impressive. The organization is solvent and it has generated increasing levels of profits ever since its creation. In 1999, profits were equivalent to over US\$ 1,000,000. The organization has been praised by the Superintendency of the Financial Sector for its financial management. It has been awarded the recognition as the best microfinance lender by the BMI and the award as the best MFO in Latin America by the IDB.

6. The Lending Technology: Key Ingredient for Success

An appropriate lending technology has been a key ingredient in Calpia's continuous growth and success.

A lending technology "covers the entire range of activities carried out by a loan-granting institution which have to do with selecting borrowers, determining the types of loans to be granted, the loan amounts and terms to maturity, and the way in which loans will be secured, as well as the monitoring and recovery of loans" (Schmidt and Zeitinger, 1996). The lending technology is used to solve the information, incentive, and contract enforcement problems that may appear when a loan transaction takes place. A successful lender is able to minimize the costs associated with solving such problems (Navajas, 1999). These costs include both operating risk-reducing costs as well as losses from arrears and default.

A complete description of a lending technology should also take into account the behavior of the borrowers (Schreiner *et al.*, 1998). The reactions and responses of the borrowers to the procedures, policies, and requirements of the MFO will ultimately determine a successful lending transaction. This is so because some costs are internalized by the borrowers (*e.g.*, transportation costs) and can greatly impact their borrowing and loan-repayment decisions. This is also this way because the borrowers interpret the signals from the organization and respond to the structure of incentives offered by the lender.

Next, the paper describes in some detail a number of elements that together embody the lending technology of Financiera Calpiá. No element is independent of the others, and they should all be seen as small parts of a big puzzle.

We start the analysis with the description of the principles originally developed, in partnership with IPC, by Calpia for its lending operations in the urban areas; these principles were later on adapted to the rural scenario. These principles show how Calpia looks at its clients (demand) and the types of services that it offers them (supply).

Financiera Calpiá understands that in its target market segment:

- (a) The household-firm (farm) is an indivisible economic unit of revenues and expenses (a joint portfolio of economic activities). Thus, repayment capacity and willingness to repay must be accordingly evaluated for the whole unit.
- (b) A larger number of alternative sources of repayment is always better. Diversification of the household's portfolio of activities facilitates risk control by the household and improves repayment capacity. This *delegated* diversification reduces the need for the MFO to diversify its own portfolio in order to keep risk at the desired levels. Alternative sources of funds for repayment also reduce problems of household cash flows in meeting amortization schemes. This allows the MFO to design contract terms that incorporate frequent payments as a monitoring tool.
- (c) A long-term relationship is more valuable for both borrower and lender than a one-time transaction. Both parties invest in the long-term relationship to take advantage of the accumulation of information and rely on sunk costs to reduce the costs of transacting (Gonzalez-Vega, 1997). Borrowers with few alternative sources of credit value permanency and reliability.
- (d) Poor households always have some assets that can be used as non-traditional collateral. Calpiá understands that collateral is useful if it serves as an incentive for repayment (because it decreases the expected gains from default for the borrower and because seizing collateral serves as a powerful signal to prospective borrowers of the seriousness of the organization), even though the assets pledged may have a very low retail value compared to loan size (*e.g.*, semiformal liens on household furniture or appliances).

In response to a well-understood demand for credit, Calpiá offers services with the following basic characteristics:

- (a) Loans are tailored to individual demand. Tailoring the loan terms and conditions to individual demand allows the clients to take advantage of a wider set of productive opportunities and offers the organization the opportunity to increase the earning power of each loan.
- (b) The product offered is the expectation of a long-term relationship, in which a stream of financial services at improving terms and conditions is being promised.
- (c) Loan officers (*analistas*) are the most important link (and most of the time the only link) between Calpiá and its borrowers. In order to take advantage of the structure of incentives embodied in this personal contact, loan officers are in charge of most lending activities (screening, monitoring, and enforcing loan contracts). This allows Calpiá to enjoy economies of scope at the loan officer level.

- (d) Since the loan officer's behavior determines the quality and productivity of the services provided by Calpiá, there is a process of careful selection and training of loan officers. In addition, a system of monetary incentives based on the performance of each loan officer's portfolio is expected to induce diligence and appropriate risk management.
- (e) Promptness in the loan granting decision is much valued by the clients. Calpiá evaluates potential borrowers in a timely fashion and acceptance as well as rejection of applications takes place very rapidly. Repeat borrowers experience no interruption in the continuity of their funding.
- (f) Calpia engages in an in-depth analysis and monitoring of the client's use of the funds. This is not done, however, because Calpiá is interested in specific uses of funds (loan targeting). Rather, Calpiá is concerned only with repayment capacity, and it monitors borrower activities only to detect changes in the risk profile of the borrower. As long as the risk profile remains unchanged, even if the originally proposed use of the funds has changed, the loan officers will not be concerned at all. Calpiá understands that the clients perceive changes in their productive opportunities better than anybody else and encourages them to adjust their decisions to these changes in the environment. This was instrumental, for example, in keeping arrears at very low levels even during El Nino.
- (g) Permanent monitoring that takes place at low cost from casual visits or greeting customers during the loan officer's daily routine plays a meaningful role in these market segments. This interaction reinforces the borrower-lender relationship and signals the seriousness of Calpiá.
- (h) An efficient management and information system (MIS) supports the loan officers' activities (*e.g.*, current arrears information is made available to loan officers on a daily basis).
- (i) Non-traditional assets (with high incentive value, but low resale value) and traditional assets (such as house mortgages) are accepted as collateral; and
- (f) Contracts are enforced to ensure repayment and to signal other clients the intent to collect no matter what (credibility).

7. The Rural Lending Technology of Calpia: a Careful Process of Adaptation

The process of adapting and transferring a lending technology to a different setting is not easy. Financiera Calpiá has slowly and carefully moved from the urban into the rural areas. This has been an arduous process of learning-by-doing and of taking baby-steps to ensure success (Buchenau, 1997; Navajas, 1999). A careful description of this process is presented below.

Any description of the lending technology of a MFO requires a significant amount of information on procedures, attitudes, and practices. The relevant information is not embedded in results (*e.g.*, low arrears or growing number of borrowers), manuals or end-of-the-year reports. The information is present in the day-to-day practice and behavior of loan officers, managers, and borrowers. It is always difficult to go beyond manuals and enter the world of actual behavior. Manuals consider only a limited range of options and possibilities. Lending is full of situations that cannot always be predicted in a manual. Therefore, this section uses not only information from manuals but also from extensive interviews and observation of Calpiá's lending practices.

Therefore, the inputs used in this section come from extensive interviews with loan officers and managers (what is being done?), information about the financial services offered (what is being produced?), and manuals (what are the rules and meta-rules?).

The most important input to uncover the black box of the lending technology were the interviews with the loan officers. For consistency during the interviews, a guide was prepared. The guide consisted of a series of questions and reminders for the interviewer. Since the objective was to uncover unknown processes and attitudes, by design the questionnaire was open, rather than being a strict set of questions to be filled with short answers. The interviewers were able, therefore, to ask in greater detail about whatever seemed more interesting, controversial or new. The guide, however, kept the conversation within common boundaries.

As of August 1998, Financiera Calpiá had a network of ten branches and one administrative office dispersed in the rural and urban areas of El Salvador. These branches were staffed with 68 loan officers. From this grand total, 15 loan officers were considered as *rural* loan officers.

With a population of 15 officers, interviews with the whole population of rural loan officers made more sense than taking a sample. To be able to draw comparative conclusions about rural loan officers and their urban peers, a sample of 8 urban loan officers (out of 53) was drawn.¹ Therefore, when reporting values about the rural loan officers, we will be talking about the actual values of the variables and parameters, not about estimates of the parameters. The analysis, however, is mostly qualitative rather than a precise account of times and numbers. Instead, it describes a number of elements that together embody the lending technology of Financiera Calpiá.

7.1 Loan Officers: The Human Cornerstone of Lending

7.1.1 The Entry Process

Calpiá is conscious of the importance of loan officers in the day-to-day activities of the organization. Its loan officers, who on average are 30 years old, must pass a rigorous and lengthy

¹ Four interviewers participated in this effort: Sergio Navajas, Claudio Gonzalez-Vega and Rafael Pleitez from The Ohio State University, and Anabella de Palomo from FUSADES.

selection process. The process, from the moment Calpiá puts an ad in the newspaper to the moment when the new officer actually develops a portfolio, can easily take up to four months.

The selection process starts with an ad in the local newspaper, looking for recent graduates or soon-to-be graduates from a university. The acceptable degrees range from Economics to Business Administration to Agriculture. Other important requirements include: residence close to the proposed branch location, driver's license, and availability to work in the field (away from the desk). Calpiá also stresses that banking or lending experience is **not** required. It is interesting to notice that, from the beginning, Calpiá is looking for people with established ties to the communities where the branch will be located. Lack of lending experience is preferred because then the training can start to build-up from zero (not acquired biases).

The response to these ads is usually massive. For example, in early 1998, about 700 applications were received in one round. From this total, about 30 people were offered a position in the organization. The organization uses several filters to get the crême-of-the top.

A typical entrance walk for a new loan officer is like this. The applicant sends his/her résumé to Calpiá. After a month or so, a selected number of applicants are called for an interview and a written exam. Given the different educational backgrounds, the written exam is designed to test for creativity rather than for college subject matters. In the next month, the exams are evaluated and the applicants who pass (50 percent passed in this round) are scheduled for a field exam.

The field exam has two main objectives: to test for the abilities of the prospective loan officer when facing the borrowers (away-from-the office) and the abilities of the candidate in front of the managers and peers (in-the-office). First, the applicant is given an address of a prospective borrower. The initial challenge is to locate the address. It can be in any place in the country where Calpiá is operating. Then, the applicant has to gather the information he thinks is necessary to evaluate a loan application. Calpiá is testing here for creativity and communication skills. The loan application is next presented to a loan committee formed by fellow applicants and managers of Calpiá. This stage also involves role-playing. A not so uncommon exercise is to have a manager play the role of a stubborn and unwilling-to-pay borrower. Again, communication skills are tested when the applicant has to present the loan application and defend it.

Depending on the availability and quality of the applicants, positions are offered in the next month or so. When the offer is accepted, the new loan officer will spend the next two months in training. The training is a two-fold process. The first part is a two-week course, where the loan officers are taught financial analysis, Calpiá's policies, and complementary ways to evaluate repayment and willingness to repay of new and repeat borrowers. At the same time, new loan officers are matched with experienced loan officers to learn in the field. For rural loan officers there is an additional day of instruction compared to urban loan officers.

The selected loan officers are also required to sign a legally binding contract that states that they will pay the organization if they leave before two years, to compensate for the training expenses.

After signing, new loan officers are also asked to carry market studies in new Calpiá's expansion areas. In addition to the information gathered for Calpiá, the new loan officers also get a first taste of how this new market will look like.

7.1.2 Profile of a Loan Officer

The loan officers constitute two distinct groups: rural and urban loan officers. The information we have about rural loan officers is rather complete, as all of them were interviewed. The information about urban officers comes from a sample.

Rural Loan Officers

The typical rural loan officer of Calpiá lives in the vicinity of the branch where she/he belongs. He usually holds or is about to get an undergraduate degree in agricultural sciences from the National School of Agriculture (ENA, *Escuela Nacional de Agricultura*). This strong academic background allows loan officers to have an understanding of what to expect in rural activities. In a few cases, they have studied abroad. As university graduates, they also have some exposure to accounting, computer sciences, and financial analysis.

The type of education received in the university does not allow them, however, to rapidly recognize an inefficient farm or to estimate the probable yield in a given region. Therefore, the most important part of Calpiá's training is the "hands-on" learning that occurs when an old loan officer is matched with a new one. At this stage, the new loan officer does not have a portfolio of his own but just follows and learns from the fellow co-worker. This can take from two to three months, and it has been regarded as the most important part of the training process.

The organization is able to train new loan officers rapidly because they have already acquired an extensive higher education (3-6 years). In other environments, where the scarcity of highly-educated people may drive wages up, the MFO will have to spend more resources in training or, alternatively in wages, to attract educated candidates.

Among them, rural loan officers have a similar educational background but possess a more diverse working experience. The first and largest group (about 30 percent of the rural loan officers) came from the BFA. They also belong to the first generation of rural loan officers. The rest of them had had some experience in rural credit-granting NGOs (*Fecoagro*, Plan International) or had worked in agriculture (*beneficios de café*, independent farms). The current tendency is to try to hire people without prior lending experience.

An important reason why Calpiá hired former rural loan officers was, in part, to benefit from their knowledge of the region (clients) and credit practices. After Calpiá adapted its own technology

to the Salvadorean rural areas, this additional knowledge was no longer crucial. Even more, once the new technology was conceived and implemented, it has been shown that teaching new techniques and attitudes to newcomers is more effective than trying to change old habits.

Rural loan officers spend only one extra day of specific training compared to the required training for urban loan officers. Indeed, Calpiá adheres to the same lending principles in the two environments. This does not mean that rural lending is the same as urban lending. It certainly requires different skills but these skills cannot be taught in a few extra theoretical classes. This is why Calpiá seems to be hiring more and more people with degrees in agriculture and with some experience in the countryside rather than hiring loan officers from the BFA.

Urban Loan Officers

Loan officers working in the urban areas are also around 30-years old. They have, however, a more diverse educational background than rural loan officers. In their majority, they hold an undergraduate degree in business administration, economics or accounting, but it is also possible to find loan officers with high-school diplomas only. For urban loan officers, educational background does not appear to be as crucial as the in rural areas. Urban loan officers also possess a wide variety of working experiences. It is possible to find from former teachers to administrative assistants and microentrepreneurs. Thus, the background (work experience and education) of the urban loan officers is diverse. This has various implications. To begin with, it seems that the urban lending technology can be learned and used effectively by rather different people. This has strong cost implications. If there is a boom of rural lending in El Salvador, at some point the scarcity of agricultural engineers may drive costs up. In contrast, if the same happened in the urban areas, the MFOs would have a larger pool of potential loan officers to choose from. They can draw personnel from the business school, from the accounting school, or even from the agricultural school. The cost advantages depend on the relative prices of the different university graduates.

7.2 First Impression Matters: The Process of Screening and Signaling

The first set of actions and procedures in a lending organization are related to screening and signaling. In the process of screening, the organization evaluates the repayment capacity and willingness to repay of the potential borrowers. The organization wants to be able to distinguish the riskiness of the borrowers and offer a contract according to this riskiness.

This first contact is extremely important, since both parties (lender and borrowers) send signals to each other about their intentions. How these signals are designed and interpreted will greatly influence the future performance of both lender and borrowers. This section describes this process for Calpiá.

A common feature of some new borrowers of Calpiá is that they have had some experience with other lenders. The rural loan officers reported that some of their clients had already had a loan

from another organization (a bank, cooperative or NGO). In the rural areas, the proportion of clients with former borrowing experience ranged from 10 to 60 percent of the clients of a given loan officer. The main lender, by far, had been the BFA, followed by *Cajas de Crédito* and NGOs. The first contact with the client can occur in three different ways:

One, the potential client walks into the offices of Calpiá looking for information. The most common referral comes from a current client. The potential client has heard of Calpiá from a friend, a relative or a neighbor who is already a current client of Calpiá.

Two, a repeat borrower recommends a person. This person will be visited by a loan officer, who will then offer the services of Calpiá.

Three, when the rural loan officers visit a region, they have a meeting point. This meeting point serves as a link to old borrowers and also gives new potential clients an opportunity to talk to the loan officers. An urban loan officer may be approached by a prospective borrower when walking in his designated areas (in a market, for example).

When the initial contact took place away from the office, potential applicants may be scheduled for a talk at the branch (*charla*). When demand is high, this talk is held for groups of 20-30 persons. When demand is low, the new client is able to talk with a loan officer alone. In both cases, the message is similar. In new branches and when Calpiá is still unknown in the region, the *charla* can take place at a cooperative or other local organization. Although important, the talk does not have the same central role that it appears to have in some Bolivian MFOs (Gonzalez-Vega *et al.*, 1997).

Calpiá uses this first *charla* for various purposes:

First, the talk serves as a showcase of services. The conversation emphasizes the wide array of services offered by the organization and the lack of red tape (*agilidad*) in the process. The benefits of long-term relationship (*permanencia*) are emphasized as well as the capacity to tailor terms and conditions to individual demand (*flexibilidad*). Loan officers want to clearly differentiate Calpiá from organizations characterized by red tape (such as the BFA) and by their temporary existence (NGOs).

Second, the presentation also discusses the responsibilities of a borrower and how stringent an organization Calpiá is. In order to get the promised benefits, new borrowers must comply with a number of requisites. The borrowers have to be able to show that they have a productive opportunity, that alternative ways of repayment exist (collateral and other sources of income), that they do not have a delinquent loan anywhere else, and that they can be trusted. The talk also underscores that Calpiá is a profit-making center and not a give-away organization. For example, in the case of late payments, Calpiá will remove any collateral pledged by the borrower. As further proof of its seriousness, Calpiá keeps collateral seized from delinquent clients (TV sets, sewing machines) in sight during the meeting.

Calpiá expects that the *charla* will serve as a self-selection mechanism. Self-selection is the process by which not-creditworthy borrowers select themselves out and do not apply for a loan. When a borrower is not expecting to repay and does not foresee any punishment for such behavior, then he will apply for a loan. If, in contrast, the punishment is perceived as certain, the expected benefits of defaulting will be reduced.

An efficient self-selection mechanism will serve to separate borrowers who expect to repay from those who expect to default. Borrowers are informed that, in case of default, all agreed penalties would be enforced. Ideally, the pool of applicants will be reduced to only those individuals who expect to repay (they are willing and they expect to have the means to do so). If the process is efficient, the organization will only invest in a detailed individual evaluation for a reduced number of applicants. An inefficient mechanism will eliminate few or none of the applicants, and the organization will have to invest more resources in the next step of individual evaluation.

The *charla* at Calpiá is a very powerful tool; the loan officers estimate that around 30 percent of those attending leave after the *charla* is over. Even though the *charla* has a similar message at all the branches, its effectiveness depends on the charisma of each speaker.

7.2.1 Evaluate, Evaluate, Evaluate

After the *charla*, potential clients still interested in a loan are invited to fill out an application and to talk to a loan officer. This one-on-one interview takes place immediately after the *charla* is over, except when demand is high. The loan officer must now evaluate the creditworthiness and riskiness of this newcomer. Depending on the results of the evaluation, terms and conditions of a loan will be determined or the borrower will be rejected. Rejection always occurs in a subtle way. The loan officer will set unattainable prerequisites, so the rejection will not be taken personally.

The complete evaluation process is arduous. It involves gathering information from three major sources: the client, referrals (other clients and financial organizations), and visits to the client's business (farm) and home. Since each step is costly, loan officers start with the in-office tasks first and only after the client qualifies, field visits are scheduled. Each filter is increasingly more costly to implement. It makes sense, then, to start with the least costly tasks and engage in the most costly tasks later on. Because his activity will influence his salary bonus, the loan officer has incentives to economize. But, what specific information is gathered in each step? This is discussed in the next three sections.

Step 1: Information from the Clients

The first interview of the client with the loan officer is extremely important. It is the first opportunity the officer has to evaluate the character of the client. It is a short but very effective interview. The main points discussed are:

- (a) The loan officer wants to know how this person knows about Calpiá. Did it learn about it from a current borrower?
- (b) The purpose of the loan is then discussed. What is the loan going to be used for? How it is going to be repaid? Here, the agricultural background of the rural loan officers plays an important role. A loan officer cannot be fooled about yields, cattle production or product prices. Loan officers know yield and price averages in the region and they have a pretty good idea about what is needed to obtain a given yield. Then, it is explicitly stated that in case of a problem with the major source of repayment, alternative sources of payment must exist. In reality, loan officers are not interested in the specific use of the funds as long as the loan is repaid. Calpiá also recognizes that in the evaluation of repayment capacity, the whole household-business unit must be analyzed.
- (c) The guarantee is the next issued to be discussed. The loan officer explains the kind of guarantees that are accepted and the advantages and disadvantages for each kind.

Once a general agreement is reached, the loan officer gives the client a form to fill out. The form may be filled out on the spot or the clients may bring it later. The form summarizes the information already requested in the interview plus some documents that will serve to back it up.

Rural loan officers work with two basic application forms: one for farm credit and another one for microenterprises. Each loan officer has a region to attend. In each region it is possible to find people engaged in farm and non-farm activities (called microenterprises). The microentrepreneurs are mostly merchants or artisans. Other than their rural location, these microenterprise activities differ little from the activity of a typical client of an urban loan officer.

Rural loan officers are authorized to negotiate loans for non-farm purposes if the client belongs to their region. In fact, rural loan officers are able to diversify their portfolios by granting loans for alternative purposes. Consumer loans are not explicitly offered but loan officers recognize that through the fungibility of funds and the lack of supervision, loan funds are used for consumption. As long as loans are repaid, no one is concerned with this apparent loan diversion.

For farm loans (crops and livestock) the form requests information about:

- (a) Personal information: name, address, name of spouse if applicable.
- (b) Information about the business: type of activity, experience, address and size (number of employees).
- (c) Information about current and past loans.

- (d) A brief description of the loan requested: size, term to maturity, sources of repayment and guarantees.
- (e) References from at least two people (relatives are not accepted).

For microenterprise loans, the form is simpler and it only requires information about the applicant and spouse, the business, and the loan.

With this information in hand, the loan officer will program a visit to the client in the following days. In the meantime and before visiting the client, the loan officer will try to get information from other sources.

Step 2: Information from other Sources

The most important pieces of information are the references. For all borrowers, rural loan officers check with the BFA and *Cajas de Crédito*, since both of them constitute the largest lenders in rural El Salvador. The BFA and Calpiá, in particular, exchange information constantly. Since both financial organizations derive benefits from it, the exchange occurs fast. Sometimes, a fax or a phone call will be enough to know the status of a borrower in the other organization. If the loan is large, other sources such as *Pro-Crédito* (a private rating agency) and the Superintendency of Banks may be consulted.

If a borrower is found to have a delinquent loan outstanding, the loan process is terminated immediately. If the client has a current loan, depending on her remaining repayment capacity, a loan from Calpiá is still possible. Calpiá does not require that the Financiera be the unique source of funding for the client.

Urban loan officers use the same credit rating agencies, the Superintendency of Banks and *Pro-Crédito*. In addition, though, they may consult some other major lender such as a wholeseller. Wholeseller credit seems to be more important for urban than for rural clients. This may happen because the proportion of merchants is higher in the urban than in the rural areas.

The most important referral for Calpiá's borrowers comes from established borrowers in the region. This, in the words of the loan officers, is the most important reference. If the rejection of the loan application is foreseen because of bad references (or any other reason), loan officers have different strategies to bring the news to the applicant. The rejection will always be done rapidly and in an impersonal way. In the majority of cases, the loan officer will propose the client terms and conditions so tight that the client will automatically remove the application. The loan officer may also blame a credit committee for these tighter conditions. This is done in order to avoid any personal confrontation (this behavior is understandable in a country where violence still persists), but it is also done in order to leave the doors opened for future business. We should emphasize here that a speedy

rejection is as important as a speedy disbursement because, in both cases, the transaction costs for the borrowers are diminished.

In general, the initial interview, application form and information collection before the visit to a rural client is more complex and detailed than what an urban loan officer would require. This happens because the most expensive part in the evaluation process for a rural loan officer is the actual visit, while in the urban setting loan officers will usually be able to walk to their client's business. A visit in the rural areas is expensive, so it is only done when the loan officer has enough confidence that the applicant is a legitimate potential client.

Step 3: Information from Visits to the Client

An integral part of Calpiá's lending technology is an on-site visit to the borrower. The visit has three major components: a visit to the home and to the site where the business takes place as well as to the community, in search of references.

In the visit to the home, the loan officer is looking for signals that will help to evaluate the applicant better. These signals include: state of the intra-households relationships, quality of life of the household, condition of guarantees, accessibility to the guarantee, and documentation.

At this stage, any documents that may backup the application are requested. These documents include paid bills (utilities), receipts from payments on current obligations (BFA, NGOs or appliance retailers), title to the house and land, receipts of remittances, and documents about the business.

Then the loan officer visits the plot or the barn where the loan is going to be invested. The loan officer observes the techniques and practices used by the client. He observes and personally evaluates inventories, stocks, machinery, sales, if applicable, and the like.

Even though this detailed information gathering may appear demanding and cumbersome, it is not enough. Personal references are still necessary. The loan officer talks to neighbors, established clients in the region and/or merchants in the region.

The conversations with community members allow the loan officers to corroborate their information. Simple questions are about character: Is this person a respected member of the community? Is this person a hard-working farmer? Merchants are asked if they provide credit to the borrower. In some cases, rural loan officers find out that the plot of land does not even belong to the client. However, the lack of ownership *per se* does not preclude a farmer from getting a loan, but a finding like this will erode the trust between borrower and lender. The loss of trust determines the termination of the relationship.

The lending technology requires that both urban and rural loan officers visit both the home and the business of the borrower. The emphasis placed on each visit is different, though. Rural loan officers pay particular attention to conditions of the household, while urban loan officers are more interested in visiting the business than the residence.

7.2.2 The Evaluation Form: Summary of Findings and Recommendation

The evaluation report summarizes all the findings and recommendations made by the loan officer. In this section we will only analyze the forms required for farm credit (crops and livestock).

Household and Business Data

The information to be collected includes observations about the composition of the family (number of members, employment status, and age), status of the property (owned, rented, with title), and an estimate of the value of the house and other fixed assets. A brief assessment of the farm is also required: size of plot, location, type of irrigation, type of crops, status of property and estimates of its worth.

Historic and Projected Financial Statements

A detailed cash flow is prepared. The cash flow is important because it reflects the perceived repayment capacity of the client with and without the loan. The estimation has three interesting features:

- (a) It includes revenues and expenses for the whole economic unit, from all sources. On the revenue side, items such as remittances, proceeds from sales and wages are included; on the expenses side, everyday household expenses such as food and clothing are included.
- (b) Production parameters (crop yields or cattle production) are calculated as a weighted average of three components: the maximum yield (one-fourth of the total weight), the last yield (one-fourth of the total weight), and the worst yield (one-half of the total weight). It is recommended that in the estimate of the value of output, minimum expected market prices should be used.
- (c) The relative contribution to revenue flows of each activity of the farm-household unit is relevant. When the main source of income is not agriculture, the loan officer is required to present a detailed analysis of the alternative activity. Diversification is so important to reduce risk that the loan officers have the tendency to reject specialized applicants with single activities.

The loan officer must also construct a balance sheet. This balance sheet has to be prepared even if the client already has one, which is very rare. The numbers presented in the balance sheet are

mainly estimates by the loan officer from the visit to the client. Particular attention is paid to inventories (machinery, cattle) and debt. At this point, the loan officer has already verified outstanding obligations with the typical rural lenders (BFA, *Cajas de Crédito*) and for larger loans from the two available credit rating agencies (*Pro-Crédito* and the Superintendency of Banks).

References

In the application form, the borrower is required to provide names of people who may be able to recommend the applicant. Most of this information seems to be useless, because rural loan officers understand that these are friends or business partners. This information is valuable, however, when the names correspond to current borrowers with a good repayment record. In any other case, loan officers look for their own references. Some of them trust some contact person in the town (an established borrower), merchants or neighbors.

Guarantees

A borrower's repayment behavior is influenced by several factors. One of these factors is the potential loss of an asset pledged as collateral. The loss of this asset is the first consequence of lack of repayment. At Calpiá, the typical loan contract does not explicitly consider any exception to this rule. It is clearly established that the contract will be enforced, independently of the state of nature (loss of a crop, drought, a sudden drop in prices). Such contract enforcement can only occur if the legal system allows it. Where the legal system is inefficient and cumbersome, the lender has to find other means to enforce the contract.

At Calpiá, guarantees play three important roles. First, pledging collateral decreases the expected gains from default for the borrower. Second, collateral requirements serve as a signal to prospective borrowers of the seriousness of the organization. Finally, collateral decreases the losses for Calpiá when default occurs. The three objectives are not necessarily always present. A household appliance, a refrigerator for example, may have a low retail value (even compared to the loan) but it may have a very high consumption value for the client, thus strengthening the incentives to repay. Also, there are high-retail-value items that, due to legal constraints (slow judicial system), are of little value for Calpiá.

In practice, the number of guarantors and the value of the guarantees requested exceed the minimum required by the manual of the organization. Loan officers along with branch managers have the power to increase these requirements as they feel convenient. The types of guarantees that are usually accepted by Calpiá's rural loan officers are described next.

In the visit to the client, the loan officer always tries to talk to the spouse. Her inclusion as a guarantor has become a rule in Calpiá. It shows the commitment and agreement of the whole household towards the new obligation.

A number of items are accepted as collateral. Household appliances and furniture constitute the most frequently accepted assets. Items such as TVs, VCRs, refrigerators, stoves, and tables are common collateral. Loan officers try to include as many appliances and furniture as possible for each household. The advantages of this choice are several:

- (a) in case of default, the small size of these assets makes it easier to move the collateral to Calpiá's branches;
- (b) it is easier to sell small items than large ones;
- (c) some of these items have a high consumption value; thus, loss of the item may influence behavior, and
- (d) the legal constraints to remove these items from the household are fewer.

In order of importance, machinery and cattle follow household appliances as the best collateral. Machinery is very valuable, but to use it as collateral, it needs to be legally registered. Registration is not too troublesome but it adds costs (in time and monetary terms) to the transaction. Machinery may have a high value at sale (*remate*) but it is more difficult to sell, since it is a much more specialized asset. Livestock is accepted through a document (*carta de compra*) that establishes that if the cattle is sold, Calpiá has a right to the proceedings. Due to its mobility and the risks associated with it, livestock is always accepted as complementary collateral only.

The fourth and least used form of collateral is a mortgage on the house. This collateral is used only when the loan amount is large enough to justify collateralization costs. The legal process of setting up a mortgage is long and expensive. The formalization of this collateral can take up to a month. A month in agricultural activities is a long time, where opportunities for cultivating or harvesting can be easily lost. As a partial substitute, rural loan officers accept land titles in deposit. They understand that, in case of default, they cannot foreclose on the house or the plot of land. However, the mere threat of legal problems works with some clients.

This approach is not always well understood by new clients. Sometimes they walk into the branch thinking that, as it is common in traditional banks, to offer a mortgage will automatically imply approval of the loan. Later on they find that having a stock of small but highly valued and movable items is better for collateral.

A combination of movable collateral (household appliances and/or cattle) and the signature of the spouse are enough guarantee when the family owns the house and/or the plot of land. If they do not own property, additional guarantors are needed. The best additional guarantor is a current client of Calpiá in good standing. If this is not possible, a guarantor who owns a house is preferable. If the guarantor is considered as the main backup for the loan, he is visited by the loan officer. If the guarantor is used only as an additional guarantee or the guarantor is known, the visit will not necessarily take place. Still, documentation from the guarantor is also requested.

Sometimes, a member of the household is a wage earner. When this is the case, an irrevocable payment order is used (OIP, *orden irrevocable de pago*). This document establishes that, in case of default, a portion of the wages will be retained by the employer to pay the loan.

The valuation of the guarantee is also important. Due to the size of the transactions and the great variety of goods that are accepted, it would be unthinkable to have an independent valuator. Therefore, the loan officer is in charge of valuing the TV or the cow. There are guidelines of minimum accepted ratios of the guarantee to the size of the loan (around 1.5). The valuation depends, however, on the assumptions of each loan officer. Some loan officers are more conservative than others.

The established ratio (1.5 to 1) is designed to cover all liquidation costs. Loan officers estimate that they rarely recover enough to pay for the principal, interest and other cost associated with default. Frequently, moreover, the delinquent borrowers pay their loans just a few days after the collateral has been seized by Calpiá. This shows that the borrowers did not expect this extremely stringent behavior and that they pay their dues when they realize Calpiá's intent to collect. Even when the borrowers recover their guarantees, the demonstration effect on other borrowers is powerful and it goes beyond any verbal threat.

Calpiá does not require farmers to be the owners of their plots of land. Its technology allows the borrower to secure loans through alternative ways. This innovation is important in a country like El Salvador, where an important proportion of the farmers rent land (Buchenau, 1997).

7.2.3 Approval and Disbursement

Any loan application, regardless of size, cannot be approved solely by the loan officer. A credit committee is in charge of approving, modifying or rejecting any loan application, using the information provided by the loan officer. The credit committee is, in a way, the second most important filter in the loan application process.

Depending on the size of the loan, the credit committee is conformed, on the one hand, by the loan officer, and on the other, by a branch credit coordinator, the branch manager, or Calpiá's Credit Manager. For the largest loans, the committee is formed by two members of the board plus two managers of Calpiá. Not all branches have credit coordinators, in which case the branch manager takes over these functions.

When the loan is rather small (up to 45,000 Colones or around US\$ 5,000), the approval process is fast and simple. Early morning, the rural loan officer delivers the application and evaluation forms along with any relevant documentation to the branch manager. In the same morning and after the loan officer has presented the case in person, the manager (or the credit coordinator) makes a recommendation.

When the loan has to be approved by a committee where the members are not at the branch, the process takes a few days. The majority of loans in Calpiá, however, fall under the branch manager's control.

The next question is how good a filter is the committee? According to the loan officers, an overwhelming majority (70 to 90 percent) of the cases are approved without modifications. The rest are approved with minor modifications, and a very slim proportion (no more than 5 percent) of the applications are rejected by the credit committee despite the recommendation of the loan officer. The percentage of approved loans without modifications increases for old borrowers (*cliente recurrente*) and when the rural loan officer is more experienced.

When modifications occur, not all terms and conditions of the transaction are changed. The size of the loan is the most common revision, followed by the term to maturity. It is also usual to maintain the size of the monthly obligation but to modify the size and the term to maturity of the loan so that total risk can be decreased.

Despite its role, the credit committee is not, by far, the main screen. This responsibility rests, predominantly, with the loan officer. This is why the loan officer's incentives, constraints, and attitudes are so important.

The decision of the credit committee is transmitted to the client through the loan officer. Even with modifications, most of the clients accept the offer. The whole process, from the application to actual disbursement, takes from three to five days. The waiting period depends on the loan officer being able to visit the region and putting together all the documentation.

A rural loan officer will not ordinarily make a long trip to visit only one client; the visit will be put on hold until additional tasks (monitoring or recruiting new clients) can be added to the trip. If the loan officer is able to visit the client on the spot, the whole process will take no more than three days.

7.3 Monitoring in Calpiá: Supervising Repayment Capacity, not Production

The goal of the in-depth evaluation of the main sources of income of the client is to estimate repayment capacity. If the main activity of the applicant is the production of corn, the loan officer will analyze, project and evaluate corn production. The terms of conditions of the loan will be adjusted to the cycle of corn production. The ultimate objective of Calpiá, however, is not to ensure the production of corn, but to ensure repayment. As a further safety feature, a loan officer will always request an alternative source of income, which, in case of failure of the main activity, will make repayment possible.

In the rural areas, consumption loans are not explicitly offered, not because Calpiá cares about the specific use of the funds, but because it has not yet developed a lending technology for this sort of loans. The loan officers recognize, however, that an important portion of the funds may be diverted to consumption or activities different from those of the agreed project. This will not trouble any loan officer, unless it increases the risk of the loan.

The precise nature of the monitoring activities depends on the loan product. The three main loan products offered in the rural areas are:

- (a) seasonal credit, very short-term loans used to finance working capital during peak periods;
- (b) microenterprise credit, consisting of short-to-medium term loans destined to finance working capital or investment in microenterprises (not for crops or cattle production); and
- (c) agricultural credit, short-and medium-term loans used to finance working and investment capital in agricultural activities.

The portfolio of the rural loan officers is composed, in order of importance, of credit for crops, credit for livestock production, and microenterprise credit.

After disbursement, the borrower may be visited by a loan officer. This visit does not necessarily take place for all new borrowers and for all loans. The heavy workload of each rural loan officer does not allow it. Even more, a follow-up visit is not an explicit part of the loan contract. Loan officers have found that their mere presence in the region is a good monitoring tool. A casual, non-programmed visit works well.

The visit is not a long and detailed analysis of the use of the funds; it is only a short, friendly encounter. The rural loan officer merely talks about family, events in the region, and the welfare of the household. Sometimes, a simple greeting when passing by works well (random monitoring). What is important is that the clients feel the presence of the loan officer in the region. Loan officers report that some increases in their individual portfolio's arrears are exclusively due to their temporary absence (vacation, sick days).

7.3.1 Preventive Monitoring

Some circumstances precipitate a visit before a loan is overdue; these include:

- (a) A negative shock. A drought, for example, is not under the control of the client, but it can significantly change the borrower's capacity to repay. The loan officer will try to ensure that the client is engaging in risk-coping activities to deal with the shock (looking for extra income by working at a factory, for example). The possibility of a shock always exists, and its consequences are reduced *ex ante* with the requirement that the households have alternative sources of income. This is why a well-diversified borrower is always a better client than a specialized borrower.
- (b) Casual information from neighbors. The loan officer sometimes learns that a borrower has abandoned the region or the country, is sick, has some family problems, or has been a victim of violence. Even in the cases of death, loan officers have been successful in recovering the loan from surviving relatives.

- (c) Change in the project. The visit helps to verify if the alternative choice still fits the payment schedule. The loan officer knows that the client perceives better than outsiders the whole range of alternative opportunities that may appear after disbursement. Therefore, the loan officers do not worry about changes of crops; they just want to ensure that repayment capacity is not jeopardized.
- (d) A large loan with a lump-sum payment. In order to provide the farmers with relief during liquidity crunches, Calpiá uses seasonal credit. The main characteristic of these loans is that the principal and interest are paid in a single balloon payment. If, in addition, the loan is relatively large, the loan officer visits the client to see what is happening. A lump-sum payment does not provide the continuous rich flow of information that frequency of payments provides.
- (e) The end of the month. A key component of the evaluation of the performance of the loan officer is the level of arrears at the end on the month. Although loan officers are always worried about arrears, when the end of the month approaches, they pay particular attention. This is an understandable behavior, since wages are calculated, in part, by arrears at the end of the month.

7.3.2 Corrective Monitoring

If default occurs, the first action taken by the loan officer is a visit. The information system of Calpiá allows the loan officer to know the very next day if a borrower has a late payment. Loan officers do not panic the first day. If because of other activities they are visiting the region, they talk to the client, but the first day of arrears is not a cause for worry. Usually, if the arrears continue after 3 to 5 days, the loan officer visits the client.

There may be understandable reasons why a client has not paid yet. The client may have simply forgotten the payment date. This is common, so loan officers, at least at this point, just make a friendly suggestion. This first time the loan officer will not talk about seizing collateral or other radical measures. He will, nonetheless, warn about the damage to the client's rating (*la nota*).

Calpia's rating system has two components. The first one is an automatic grade based on promptness of payments. The second one is a loan officer's grade based on his evaluation of the borrower. The automatic system uses the average number of days a payment is late cumulative during the sequence of loans of the borrower. Clients who, on average, pay before three days after the due date, get a grade (*nota*) of *one*; if the payments are received late, from three to four days, the grade is *two*; if they are late from five to six days, the grade is *three*; and if they are late from seven to nine days, the grade is *four*. The worst grade is *five*, for clients with late payments that average 10 or more days. The grading is adjusted for special circumstances.

The loan officer uses the same scale, from one to five, to grade clients. The grade reflects the loan officer's personal evaluation and not the number of days the client has been in arrears. In most cases, the loan officer's grade is the same as the automatic grade. Calpiá disqualifies all clients with grade *five*, and it places restrictions on clients with grades *three* and *four*. When there is a difference between the loan officer's grade and the automatic grade, the loan officer must explain the causes for the differences and the branch manager decides on the final grade.

7.4 Procedure Adjustments for Repeat Borrowers

A borrower who requests a second, third, or fourth loan from Calpiá has an additional advantage: reputation. This is an implicit asset for a client who has acquired a good reputation with the organization. This element gives the loan officer additional information by revealing the client's actual performance. Any loan is still risky, but experience with the client allows consideration of a wider set of risk types among the borrowers. Accordingly, the terms and conditions of the loans can be adjusted to individual circumstances and to repayment performance.

For a repeat borrower, a loan officer is required to make a new evaluation. The forms are simpler, but still require some work. To update financial statements and guarantees constitutes the core of the analysis. A visit for each renewal is highly recommended. In practice, though, the actions taken by the loan officer for a repeat borrower depend on a number of circumstances.

The first element is the grade (nota). The second element is the nature of the changes in the loan contract. If there is a significant change in the terms and conditions of the loan, then a visit by the loan officer is explicitly required on instructions by the branch manager. The most common changes are increases in loan size and/or the guarantee. Changes in term to maturity are rare since agricultural cycles are given.

The third element is any previous visits. All clients, most likely, have already been visited as part of preventive or corrective monitoring activities of the loan officer. These visits have already contributed to the stock of information needed for granting a subsequent loan. The fourth element is a change in the activity to be funded. Regardless of the grade, if the loan officer learns that the client is going to engage in a different activity, then a new evaluation is needed.

A fifth element relates to references. Information about the use of the funds or waste by the client may come from other clients in the region. A client may tell the loan officer that another client is having problems with the crops or is about to leave the country. Under these conditions, even for a client with a perfect record, a visit will be programmed.

The final decision of whom to visit belongs to the loan officer. For a very well-known client, the visit may be only a friendly greeting, and the information presented to the credit committee just a repetition of the previous report. In other cases, a visit may take longer, and the loan officer would be genuinely interested in observing production performance or the guarantees.

7.4.1 A Note on Deviation in the Use of Funds

The process of corrective monitoring or a visit before granting a second loan offers a great opportunity to learn about how the funds have been used. Was the proposed project a good project or not? How were the funds allocated?

Loan officers are not concerned about the specific use of the funds. Rather, they are concerned about a change in the risk profile of the borrower. The project was only a means to an end, not an end in itself. The project is relevant only as it changes the probability of repayment. Sometimes, loan officers are worried because the client has invested in crop x instead of crop y , not because Calpiá is interested in promoting the production of x , but because the crop cycles may be different. If the cycles are different and the current schedule of payments does not fit the new cycle, arrears may increase. By the same token, if the alternative activity improves the probability of repayment (*e.g.*, the establishment of a store which is showing good prospects), then the loan officers will not be concerned at all.

Calpiá's loan officers estimate that deviation of funds occurs in few cases (5 to 20 percent of all borrowers). They claim that deviation shows that the clients are diversifying their activities and that this is positive. Concern only arises when repayment is negatively affected by the changes.

76.5 Contract Enforcement: When and How it Happens

The first response to a late payment is a visit (corrective monitoring). The visit takes place after about 5 days of the due date. If the client still does not pay, the loan officer will continue to visit in an attempt to put some pressure on the borrower. Some loan officers will visit a client twice per week and others twice per month (which is the minimum recommended by Calpiá).

In the first attempts to collect, the loan officer just talks about the consequences of being late, from the loss of a good credit history to the probable seizing of collateral. At the same time, the officer evaluates the causes of the arrears. He wants to know if the lack of payment is a result of a temporary cash flow bump or of lack of willingness to pay.

When the loan officer estimates that the problem is just temporary, a late payment agreement (*moratoria*) can be reached. The late payment agreement gives the client some extra days to pay the delayed quota and avoid late fees. From the next quota onwards, however, the original payment scheduled prevails. During training loan officers are instructed that this should not happen very often. This modified payment plan (*moratoria*) is only used with very good and well-known clients. It is, then, the exception and not the rule at Calpiá.

In all other cases, if the late payments persist for 30 days, collateral is seized. Collateral is seized by the loan officer himself, accompanied by the branch manager, the credit coordinator or

another loan officer. Loan officers report that, in a few cases, they have had problems in seizing collateral. The collateral seized is then stored at the branch.

At this stage, payment is still possible. At least half of the clients in arrears pay their dues in order to recover the collateral seized within the next 15-20 days. After that, the loan officers believe that the loan will not be repaid. The loan officers are in charge of selling the seized assets. In most cases, another client buys the goods. Loan officers claim that they do not have time or the expertise to be selling TVs and sewing machines, but that they have to do it, since overdue loans affect their income (monetary incentives).

When collateral is finally sold, the proceeds do not usually cover the amount due to Calpiá. In some cases this happens because late fees and interest have accumulated or because the goods have depreciated much. If the residual debt is small, it will be written-off. If not, it will stay in the loan officer's portfolio. In the past, after one year any residual debt was written-off from the loan officer's portfolio. Nowadays, this practice is under scrutiny by management, and in the last year no loan has been written-off. It is also interesting to note Calpiá's practice of calculating accrued interest. In order not to grossly overestimate accrued income, after 90 days no more accrued interest is calculated. Calpiá builds provisions (reserves) to account for accrued interest not received.

7.6 Coordination of Lending Activities

There are at least two ways lending activities can be organized. The organization may assign each lending activity to different employees: a group of people are in charge of screening clients, other group are credit analysts, and another group are collectors. This scheme exploits the advantages of specialization, but it forgoes other benefits that come from the concentration of information and activities in a single person (economies of scope). The second way to organize lending activities rests, precisely, on these economies of scope at the loan officer level. This is the case for Calpiá. At Calpiá, most lending activities are concentrated in the loan officer.

7.6.1 A Week in the Life of a Loan Officer

Loan officers at Calpiá have a work schedule with extended hours. A usual day for a loan officer starts early in the morning to finish after nine hours. During peak season times (planting and harvesting), for the rural loan officers, and during holidays such as Christmas, for urban loan officers, some of them have reported to work more than 14 hours per day. They work most of the time at the branch or in the field, but in the evening they take two-to-three hours at home to catch up. On Saturdays, they work in the office in the mornings and most of them add a couple of hours at home Saturday evenings and, if needed, a couple of more hours on Sundays.

The day of a loan officer invariably starts with identification of the defaulters. Loan officers spend from 20 minutes to an hour reviewing the daily report of defaulters, planning strategies to collect, and talking about some initial actions for collection. The daily report lists all clients with late

payments. Most urban loan officers will be able to call the defaulters by phone right away. For the minority of clients who do not have a phone, the evaluation will serve to plan ahead for visits. They may review installments that are due to determine if any preventive monitoring is necessary (given the size of the loan and the history of the client). The decision, especially of undertaking preventive monitoring, is left to the loan officer's discretion.

Next, the loan officer will talk to the credit committee of the branch manager or credit coordinator (depending on loan size). Rural loan officers present from three to six loan proposals, depending on the season. The range for urban loan officers is slightly broader, from four to seven loan proposals. Rural loan officers must prepare a proposal for all clients (new or repeat). If a rural loan officer presents a loan proposal for an established good client, approval will be rapid and almost automatic. Urban loan officers, in contrast, concentrate more on new clients, since some of their old clients may be enjoying a line of credit (*crédito automático*) and no evaluation report is needed. In the cases of new clients and of old clients with late payment problems, there will be more of explaining to do.

Overall, the meeting lasts no more than half an hour. At this moment, general meetings are also held. These are meetings in which the manager speaks about the actual and expected branch performance and coordinates actions to control for arrears, portfolio expansion, and other issues of general concern.

Later in the morning, loan officers are divided into two groups. The majority will leave the office until late in the afternoon. The second group, no more than a couple of loan officers, will stay in the office to offer the informative talks (*charlas*). Depending on the attendance, one or two talks will be programmed. Each talk will take no more than 30 minutes. Loan officers take turns to stay in the office to give the talks. Some branches will require the loan officers to stay in the office two times per week. Others will require them to stay back three times per week. If the workload is light, even these loan officers will leave the office in the early afternoon.

The work space of a loan officer is not a desk; it is the field (the country-side for rural loan officers and the streets for the urban ones). Loan officers spend most of their time out of the office visiting potential clients, re-visiting some new clients or just taking a look at the region in search of new opportunities. In a normal day, they will be out around seven hours. Rural loan officers will use up to two hours for transportation purposes only, while urban loan officers may come and go from the office when the market location is close by.

Rural loan officers will see from three to seven clients in each field visit. A third of these are new clients, a third are old clients being visited for new loans, and the rest are spotted on the road just passing by. Given the density of population in the urban area, an urban loan officer will see from ten to eleven clients during each field visit.

A rural loan officer will take up to an hour to visit a new client, while an urban loan officer takes no more than forty minutes. In both cases, the time spent with an old client for a new loan is less than half the time spent in the first visit.

When the loan officers go back to the office in the late afternoon, they spend an hour to organize the information and to coordinate the workload for the next day. A common practice among Calpiá's loan officers is to use Saturday morning (four hours) to organize their files. They also spend a couple of hours on Saturday afternoons and Sundays to prepare credit evaluations for the coming week. During a peak season, loan officers customarily work a few more hours on Sundays.

Other activities that happen no more than once per month are: the seizing of collateral from a defaulter, a visit to the central office to present a large loan, and following up on the formalization of a mortgage loan.

7.7 The Loan Officer's Output: A Few Indicators

Measures of productivity are numerous but require detailed data. A few simple indicators, nonetheless, can illustrate the workload of the loan officers of Calpiá. Table 4 shows such information classified by type of loan officer (rural versus urban) based on sample data. These numbers are a result of the loan officer's efforts and the constraints faced in each location (*e.g.*, market saturation differs with branch location).

There are important differences between the portfolio of the two groups of loan officers. To begin with, the number of clients reached by a Calpiá loan officer is large. A typical rural loan officer works with almost 400 people, and the urban counterpart with close to 300. At the same time, a typical rural loan is also larger than a typical urban loan. These comparisons are biased, however, because rural loan officers never lose their portfolio of repeat clients. This happens nevertheless, as urban loan officers lose their best clients each month to the category of preferred clients. Once a client graduates to the preferred category, he is out of the portfolio of the urban loan officer.

Another interesting feature is the relative importance of women in the portfolio of urban loan officers. This just reflects that the market niche for urban loan officers is composed in its majority of women. The reverse is true for rural loan officers. This is not a result of any explicit targeting, but only of differences in the environment.

Table 4. Financiera Calpia: Indicators of Portfolio per Loan Officer

		Rural Loan Officers	Urban Loan Officers
Median number of clients		390	283
Median Portfolio		US\$ 281,429	US\$ 136,000
Loan size(median of averages)		US\$ 721	US\$ 548
Percentage of women in the portfolio		30 percent	63 percent
Last month processing of	New Clients	35 percent	17 percent
	Repeat Clients	65 percent	83 percent

Source: Authors' calculation

It is important to know if these averages change over time and, if so, why. The loan officers cited three main reasons why people leave Calpiá:

- (a) They have accumulated too many days in arrears; thus, they have become automatically disqualified for any new loan,
- (b) The borrower does not need a new loan,
- (c) Some good clients leave Calpiá because they feel the organization is too stringent in its requirements.

7.8 The Carrots for Efficient Behavior: Performance-Based Wages

The measures of productivity discussed above show a good performance of Calpiá's loan officers. This is good performance in two senses: improved performance over time and good performance with respect to comparable peer organizations. This section explores the structure of incentives in place at Calpiá, which contributes to this performance record.

Calpiá has two systems of pecuniary rewards: a fixed salary per month and a variable portion of the remuneration depending on performance. The second component prevails in the lending department. Loan officers and credit coordinators earn a variable remuneration that depends on performance. Furthermore, Calpiá's system is based on individual performance.

The monetary incentives do not tell, however, the whole story. Non-monetary incentives also play an important role in influencing their behavior but are more difficult to characterize. Status and identification with the mission of the organization are good examples of non-monetary incentives.

An understanding of the structure of incentives is relevant since any change in this structure has implications for loan officer behavior and the quality of the services supplied. In turn, the quality of services may attract a particular demand and ultimately change final outcomes (for example, changes in outreach and sustainability).

Since most of the lending activities of Calpiá are carried out by the loan officers, the analysis focuses on the monetary incentives offered to them. The monetary rewards for loan officers at Calpiá have two basic components: the fixed and the variable portion of the monthly remuneration. The fixed portion for new loan officers (urban and rural) amounts to 3.000 colones (around US\$344). The second component is a result of a formula. One formula is applied for urban loan officers and a different one is used for rural loan officers.

The formula combines the results of different and competing lending activities. All loan officers have time constraints and, therefore, there is always the possibility of investing less time in one activity and emphasizing others. The formula is a combination of stock indicators (portfolio size, number of borrowers) and flow indicators (numbers of new borrowers and new preferred borrowers).

The marginal contribution to the loan officer's income of spending more time in one lending activity over another depends on the pre-established goals and on the current value of the parameters for a loan officer. Some circumstances (branch and clientele location, degree of market saturation or established goals) have a different effect on the behavior of a loan officer with a large portfolio versus one who is just starting. By the same token, the marginal effects on income are different if the circumstances vary (for example, with the entry of a new NGO in the region), for the same loan officer. It is difficult to design a fair system where effort is always rewarded equally. Even at the branch level, where loan officers are assigned similar and exclusive zones, it is impossible to guarantee that business opportunities will be the same. Some loan officer will find easier to reach certain goals than other even putting equal effort. The effects, thus, are complex and inter-linked.

7. Summary of Findings

Financiera Calpiá is one of the few examples of a Latin American MFO being able to transfer and adapt its lending technology to the rural areas. The process has not been easy. It takes time to learn about the characteristics of the new environment. In this new environment, Calpiá has used different strategies to overcome problems of risk, information, and incentives.

Although the learning process has not stopped, there are already important lessons that can be learned from Calpiá's approach to rural lending:

- (a) The stock of knowledge needed to understand agricultural activities is considerably more complex than what is needed in urban environments. To address this challenge, Calpiá tends to hire only rural loan officers with formal training in agriculture and, if possible, with some practical experience in agriculture.
- (b) The process of entering each new market (opening a new rural branch) follows a market study. Loan officers of Calpiá conduct these market studies. These loan officers are, in most cases, new to the organization and the ones who will be in charge of the new branch. The objective of the market study is two-fold. First, it facilitates a better design of

- products (getting to know the demand) and, second, it gives loan officers a first taste of their market.
- (c) Lack of diversification associated with systemic risk is an acute problem in the rural areas. This problem is tackled at three levels. First, at the household level, Calpiá emphasizes diversification of the household's portfolio of activities. This requirement does not appear to be a problem for the small farmer, who is diversified anyway, but it is a limitation for medium and more specialized farmers. Second, at the rural portfolio level, Calpiá responds to a global demand of credit. All rural activities (not only agricultural) are potentially fundable. Finally, at the level of total the portfolio, the urban-rural nexus allows Calpiá to decrease overall risk. This happens not because one activity is necessarily less risky than the other, but because correlation between rural and urban activities tends to be low.
 - (d) The type of assets accepted by Calpiá as collateral is diverse. In order of importance, these assets are: household appliances and furniture, machinery, cattle and mortgages (on the house, the plot or both). Household appliances and furniture are preferred because they are easier to move and sell (in case of default) than larger and more specialized items (such as machinery). These requirements do not preclude renters from getting a loan. Calpiá has shown that lending to farmers who do not own land is possible. Consequently, it has extended the universe of rural borrowers..
 - (e) Another innovation is the responsiveness of Calpiá to the rural conditions. Seasonal credit is offered in peak seasons and terms and conditions of the loan contracts consider agricultural cycles.
 - (f) Accessibility to the household is a key component of the technology. It permits a continuous contact between loan officers and borrowers (allowing monitoring) and seizing collateral assets if necessary (so contract enforcement is credible). Thus, creditworthy farmers living in remote areas with difficult access are not considered potential clients.
 - (g) The differentiation of Calpiá vis-à-vis the competition. Calpiá tries to differentiate itself from the competition by offering a service with little red tape (in contrast to the BFA) and by having a vocation for permanency (in contrast to NGOs).
 - (h) The process of expansion has been followed cautiously. Loan officers evaluate all loans, no matter how well a borrower has behaved in the past. In urban areas this is no longer necessary, since preferred clients are granted a credit line after they accumulate a good repayment record. Routine evaluations in rural areas obviously increase costs, but these evaluations allow Calpiá to learn more about this new market niche.

From these general lessons, we could highlight five features that stand out in Calpia's strategy of expansion.

- (a) First, a tested lending technology had already been developed for the urban areas.
- (b) Second, Calpia undertakes portfolio diversification at three levels (at the household level, at the rural portfolio level, and at the total portfolio level, by relying on the rural-urban nexus).
- (c) Third, Calpia monitors changes in the risk profile of its clients without targeting any specific activity.
- (d) Fourth, emphasis on assets that the poor have as acceptable collateral, without excluding renters, increases the depth of outreach.
- (e) Fifth, the selection and training of its loan officers receives substantial and competent attention.

There are, however, still problems to be addressed by Financiera Calpia. The lending technology of Calpia is not designed to deal with more specialized (single crop) farmers. By the same token, specialized rural lenders without an urban nexus find it more difficult to deal with systemic risk.

Also, a great deal of Calpia's success is due to its human capital, where most of its loan officers have an undergraduate degree in agricultural sciences. In countries where human capital is scarce, wages could pressure cost toward unsustainable levels. Rural lending is expensive; a MFO with a vocation for sustainability must price its products accordingly. In some settings, to charge high prices (interest rates and others) may be politically infeasible.

The most important challenge for the sustainability of Financiera Calpia will emerge, however, from the implicit weaknesses of its property rights and governance structure. Investors who will take risks with their own funds will be needed to prevent suboptimal internal control and strategic decisions.

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