

SECTION TWO
CASE STUDIES: PROMISING RURAL FINANCE
ORGANIZATIONS AND PRODUCTS

RURAL FINANCE ORGANIZATIONS

CRITECNIA, PERU: THE PRIVATE SECTOR-BANK- SMALL FARMER LINKING APPROACH

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INTRODUCTION

Critecnia's linking approach is a novel way of financing small-scale producers, managed by commercial banks through a nonfinancial private company. It offers farmers comprehensive services, including credit management, making it possible to reap benefits throughout the production cycle and allowing increased profitability. Critecnia's efficient management, its broad-based experience in the sectors where it operates, and its good contract design have enabled the company to expand its outreach significantly, as well as posting solid financial results. The interest this experience brings to bear to rural finances motivated its inclusion as a case study in this Chapter.

After the introduction, which includes a brief description of Critecnia, details on how the approach studied works will be presented (Section 2), followed by a summary analysis of its performance in terms of outreach and sustainability (Section 3) and the conclusions drawn, as well as reflections on the challenges ahead for the model and its replicability (Section 4).

Brief Description of Critecnia

Critecnia Sociedad Anónima (S.A.) is a company which provides general advice services. It was created in June 1996 and assists works with agricultural producers in the valleys of the provinces of Cañete and Chincha, 100 and 200 km south of Lima, respectively. The company was founded by a family-owned group from the area who had close ties to cotton production and trading. The goal was to make trading more efficient

by organizing supply.¹ This business proposal arose from a survey that demonstrated that one of the most efficient instruments to organize cotton supply was to ensure financing and to develop economies of scale to cut costs and obtain better prices from cotton harvests.

The areas where Critecnia operates are farmed by small-scale producers who own on average 5 hectares of irrigated land. These producers are former members of cooperatives created by the Land Reform of the seventies, which based on the expropriation of Peru's large farms (*haciendas*). In the eighties, following the financial and economic collapse of the cooperatives, former members divide the land into plots.

One of the characteristics of Critecnia is the high education level of its directors, who hold university degrees and have undertaken graduate studies. Critecnia's staff is composed of 32 members, distributed as follows: four executives, three engineers, one accountant, six agricultural technicians, six area coordinators, two administrators, two accounting assistants, two clerks in charge of current accounts and six other employees.

During the process of implementing its services, Critecnia had to overcome four main problems:

- (i) Farmers unwillingness to organize. This reluctance stemmed from the negative experience of agricultural cooperatives, where corruption and poor management by directors and managers were common. Critecnia's proposal had to be clearly set apart from this kind of organization and allow farmers to maintain their autonomy in production decisions.
- (ii) The prevalence of a culture of non-compliance with contracts. This deficiency was generated partly from the fact that the state owned Agricultural Development Bank, which had granted credits to nearly all the farmers in the area, often wrote off or refinanced debts. The model proposed by Critecnia places particular emphasis on providing incentives not only for farmers to meet their contractual obligations, but also to establish long-term relationships with the company.
- (iii) Farmers' lack of education. Most have only been to primary school, which made it difficult to explain the Critecnia model and its benefits. That process depended on coordinators' ability to persuade producers of the advantages offered by the organization and, above all, on demonstrating the solid results posted by the first farmers who took part.

1 The founders and directors of Critecnia are two brothers whose parents once owned the cotton-producing Hacienda San José plantation in Chincha. The plantation underwent the Land Reform launched by the military government in the seventies. Nevertheless, Critecnia's founders have remained closely linked to agriculture in the area, particularly in cotton combing and trading.

- (iv) Commercial banks' limited experience in financing small-scale agriculture. It proved a difficult task to convince commercial banks that farmers could indeed meet their credit obligations if they were organized according to a model that provided the right incentives for them to honor their contracts. Commercial banks regard this sector as high-risk, even more so when dealing with small-scale farmers whose sole experience with bank loans had been with the Agricultural Development Bank.

PRODUCT DESCRIPTION AND OPERATION

Critecnia offers a product that financially links small-scale farmers to the commercial banking sector. However, the product is not exclusively financial, as it includes comprehensive services providing general advice as well as technical advice and trading techniques. The project involved three agents: Critecnia, small producers from the valleys of Cañete and Chincha, and the Banex Bank.²

- (i) Critecnia is the company in charge of providing comprehensive management advice, involving promotion of the service, its delivery, and contacts with the Bank for financing farmers and product sale and marketing.
- (ii) The small-scale farmers involved are based in the valleys of Cañete and Chincha and own 5 hectares each on average. They mainly grow cotton and, to a lesser degree, corn. Farmers who joined the project are successful, experienced and own titled property.
- (iii) Banex Bank is in charge of financing the companies formed by farmers and recovering the loans.

The linking approach operates as follows (see Figure 7.1):

- (i) Critecnia identifies leading farmers in the area.³ These farmers are well acquainted with other farmers and have a solid reputation; some of them have even been leaders in farmers' associations. Farmers identified as leaders are therefore appointed as "Area Coordinators" and are taken on as Critecnia employees for the duration of the season (seven months). They are paid an average of US\$ 85 a month.
- (ii) Area Coordinators explain to fellow farmers the requirements with which they must comply to have access to credit from a commercial bank. To do so, they use several different means, such as meetings with farmers, visits and informal conversations. The requisites are listed below:

2 Banex was liquidated in late 1999; but the project's approach remains valid above and beyond the bank involvement, as long as another stable source of financing is available.

3 The process of identifying leading farmers relied on the prior working experience of company directors and officials in the area.

- a) To produce a good cotton harvest;
- b) To own at least 4 hectares of land with property titles and no mortgage;
- c) To have no outstanding debts in the financial system;
- d) To get a group to form a limited liability company (S.A.), controlling up to at least 100 hectares of cotton growing land, and
- e) To sign a management contract with Critecnia.

Farmers may commit part or all of their cotton growing land to the company they form, as set out in the Critecnia agreements. For example, a cotton producer who owns 10 hectares may only commit 4 hectares of land to the company.

- (iii) Area Coordinators evaluate producers' requests based on the requisites mentioned above. If these requisites are met, the applicant joins one of the six companies already set up, using a geographic location criterion. For the time being, Critecnia is not thinking of creating more companies according to criterion d) of item ii), due to the fact that, considering operating capacity they would be very expensive to start up.
- (iv) Once selected, applicants sign a management contract previously established between the agricultural company and Critecnia. This one-year contract, grants Critecnia the power to take on the management of the company as well as the obligation to provide services relating to market evaluation studies, product marketing, advice and financing, loan applications and dealings with the Bank. At the same time, Critecnia offers logistics, administration and accounting services for which it charges a flat rate of US\$ 50 per hectare.
- (v) The companies sign a production-on-account contract with each of their shareholders, the farmers, who thereby commit to handing over their production, at going market rates, in exchange for receiving all the services that Critecnia provides. Regarding production, Critecnia offers producers the option to choose whether to sign futures contracts (setting prices) for the sale of their products or contracts in which prices are set by the market.⁴

4 Critecnia's main competitor, the Valle Grande Rural Institute, does not benefit from this advantage, due to the fact it has more rigid and homogeneous contracts for all group members.

Farmers have the option of not selling to their company the proportion of their harvest grown on land they did not commit to production in the contract, and may market it through other channels.

- (vi) The company managed by Critecnia, with the land of each farmer as collateral, presents an application for a loan to Banex Bank to obtain working capital for growing cotton. Critecnia has previously established the respective contacts with the Bank in order to be granted a line of credit.⁵ The documents needed to obtain credit must include a letter requesting personal credit and a promissory note made out to the Bank. Hence, each producer answers individually for their portion of the money received and provides as collateral the mortgage on their rural property, as well as the agricultural forward guarantee of his harvest, bearing in mind the value of the collateral. The value set per hectare of land in Cañete is US\$ 6,500, and US\$ 4,500 in Chincha. The value per hectare of harvested cotton is US\$ 1,900.
- (vii) Farmers grant "powers of attorney" so the Bank may issue the full loan to the company that has been created. Critecnia manages the money under the terms of the agreed management contract, buying agricultural supplies in bulk, thereby reducing purchase prices and benefiting both Critecnia and the producers. The delivery of supplies to farmers forms part of the loan; the other portion is handed in cash to finance other expenses, such as labor.
- (viii) During the production process, farmers receive technical advice from Critecnia technicians. At the same time, Coordinators play an important role by acting as agents in loan monitoring and recovery. They design harvest plans for growers and, together with Critecnia technicians, visit farmers days ahead to ensure that the proportion of the harvest committed in the contract is not sold to other buyers (so-called "pirating").⁶ In exchange, following harvest, Coordinators receive an additional commission on top of their monthly wage, which depends on the yield and delivery of harvests at the end of the season. If Coordinators do a good job recovering loans, they may receive a commission ranging from US\$ 1,150 to US\$ 1,430.

5 At the time the fieldwork for this case study was carried out, in early 1999, Critecnia had a credit line with just one commercial bank, Banex. However, by November 1999 the Bank was liquidated and shut down. In 2000, Critecnia was negotiating to include two or three institutions to obtain further financing and reduce the risk involved in depending on a single institution. One of these institutions is the Peru-Canada Fund.

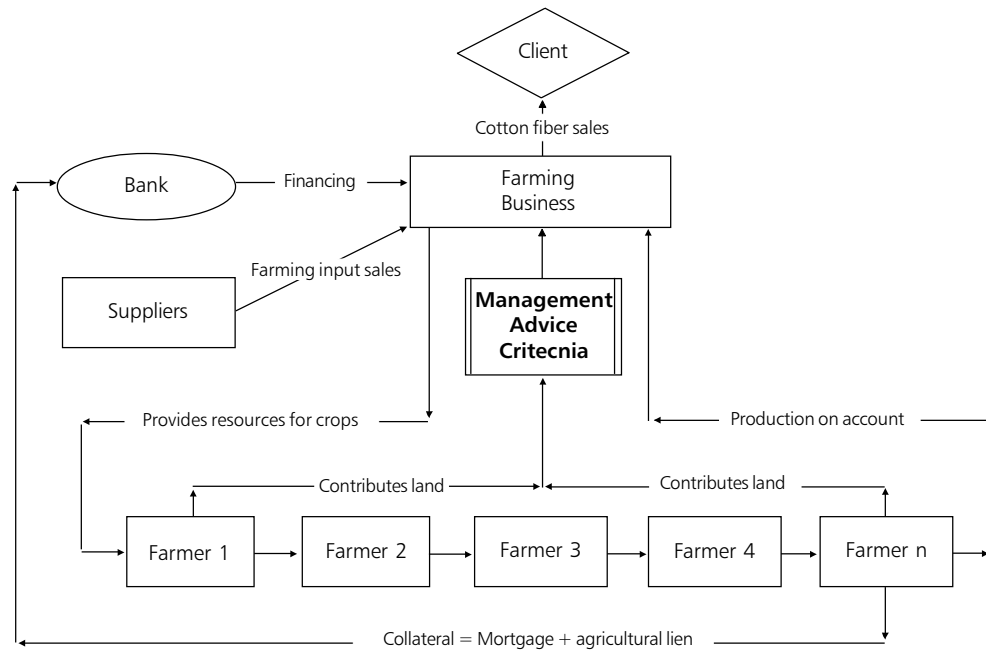
6 The practice of offering a higher price for a cotton harvest than the price offered by the lender who financed the harvest is common in the valleys of Cañete, Chincha and Huaral. As the loan is to be paid with the harvest itself, this practice creates a major problem for lenders, because their clients are tempted by cotton traders' offers to pay higher prices.

- (ix) After the harvest is collected and has been sold, Critecnia adds up the earnings depending on the amounts of the loans granted, and issues each farmer the net profit received after paying off the loan and commissions for management and technical advice. Prior to the harvest, Critecnia establishes agreements for the sale of the product and generally negotiates a higher price than the farmers would have obtained if they negotiated on their own.
- (x) The earnings posted as a result of lower prices paid for supplies and higher prices for the sale of the harvest are divided evenly between Critecnia and the farmers.
- (xi) In cases where farmers fail to make their payments, the individual responsibility of the borrower, as established in the contract, enables the Bank to declare the promissory note in default and seize collateral, without affecting the company that was created or Critecnia.⁷ The idea is to share earnings and individualize the risk of losses. This mechanism eliminates the problems that would arise if the debts of members of the group who did not comply had to be taken on by the group or the company.
- (xii) In the case where farmers fail to meet their obligations due to external problems, Critecnia applies for loan refinancing at the Bank.

The terms of the loan contract are established by the banking institution providing the financing. During the 1998-99 season, the interest rate ran at 24 percent per annum, exclusively in US \$, with a single installment paid after the harvest. This rate, added to the cost of technical, financial and logistical assistance (US\$ 50/ hectare), represented an effective cost per farmer of 30 percent a year. The contract with the Bank included a clause allowing for a penalty-free prepayment (interests were only calculated during the period up to the payment) and the term of the loan lasted until on harvest (six or nine months, depending the crop).

⁷ Toward the end of 1999, Critecnia only registered a single case of collateral seizure. As stated earlier, recovery in case of failure to comply is the Bank's responsibility. Following consultation with Critecnia to identify the farmer who did not comply with his payment obligations, the Bank undertakes legal proceedings against the defaulting borrower.

Figure 7.1. Critecnia-Bank-Small Farmer Linking Approach



After the Superintendency of Banks and Insurance Companies (Superintendencia de Banca y Seguros, SBS) shut down Banex, as mentioned above, Critecnia held talks with other possible sources of financing, including banks, to ensure continuity. In the short term, for the 1999-2000 season, it had managed to sign agreements with raw material suppliers to issue credit in the form of supplies to companies created as described earlier. Cash requirements were covered with Critecnia's own resources.

Perspectives for Product Development

To extend its outreach, Critecnia aims to develop a growth program to penetrate other geographic areas, since the market segment where it currently operates is approaching the optimal potential previously identified. Expanding outreach on the same market would imply increasing the risk of erroneous selection. Thus, Critecnia has identified new operating areas where it would be profitable to invest.

In the short term, the company had planned operations in the Upper Piura Valley, in northern Peru, with producers gathered in agricultural companies who have accumulated around 1,000 hectares of land. The main problem for this group of producers is water, shortage, Critecnia will provide comprehensive management advice services, with a priority on building an absorption irrigation system for company members. However, these expansion plans are contingent on finding another source

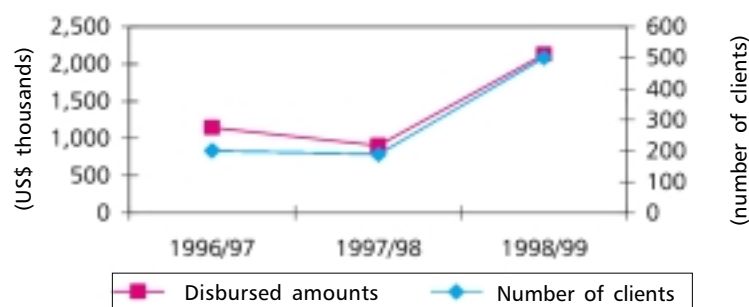
of stable financing, in order for the main efforts to focus on seeking bank financing for existing agricultural businesses.

PERFORMANCE ANALYSIS

Increasing outreach

Critecnia has managed to significantly increase its outreach since it launched operations. Loans increased by 86 percent from 1996 to 1998 (see Figure 7.2) despite a drop in 1997 due to the withdrawal of two companies.⁸ In 1996, Critecnia lent a total amount of US\$ 1,147,050 to eight companies, which had 201 members and 869 hectares of land. In 1998, with only six companies, the number of members increased to 500 and the amount financed totaled US\$ 2,127,776. That year, the land area financed added up to 2,478 hectares, a 200 percent increase over the previous season.

Figure 7.2. Evolution of Disbursed Loans and Clients

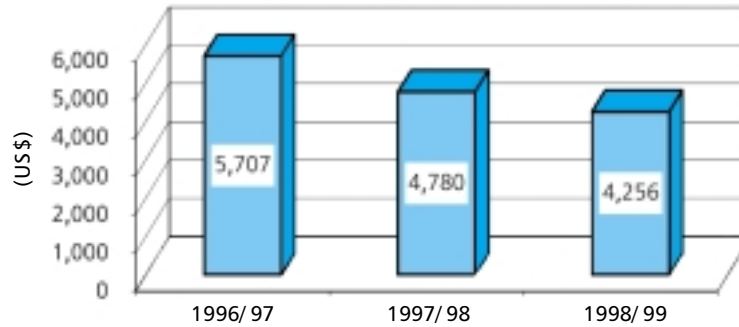


Source: Critecnia.

Depth of Outreach

The average size of the loans disbursed in 1998 exceeded US\$ 4,000 despite showing a downward trend since 1996 (see Figure 7.3). The average amount lent fell 22 percent since then. There was no major change in the type of producer financed, but rather a major rise in the number of farmers involved, which exceeded the amount lent out. The average loan granted confirms the fact that clients are small-scale producers with a certain amount of accumulated capital, which was to be expected, given that the requisites to take part in the venture include owning at least 4 unmortgaged hectares, as stated earlier.

⁸ This withdrawal was due to the fact that some farmers and Banex Bank officials established a relation without Critecnia's participation and took on independent technical advisors.

Figure 7.3. Evolution of Average Loan Amount

Source: Critecnia.

Financial Results

Critecnia's financial results evolved positively in 1998 with respect to the previous year. In terms of operating efficiency, Table 7.1 shows that operating costs were more than double the company's total assets during the period under analysis. This data, which would be of concern for a finance company, is basically explained by the business nature of Critecnia. As the company provides managerial advice, it is only natural that its assets be accounts receivable and inventory (55 percent of total assets). What is important, in this case, is that operating income from technical, commercial and logistic advice are much higher than the operating costs incurred by providing these services. This indicator demonstrates that, in 1997 and 1998, the company achieved high levels of self-sufficiency and posted 30 percent more operating income than operating costs in 1998. That year, operating income also easily covered financial and operating costs.

Table 7.1. Sustainability Indicators, at Year End

Indicator	1997	1998
Operating Efficiency (%)		
Operating costs/ Total assets	221.8	203.3
Operating income/ Total assets	275.2	267.9
Operating self-sufficiency (%)		
Operating income/ Operating costs	124.1	131.8
Operating income/ (Operating + financial costs)	115.4	120.1
Profitability (%)		
Net profits/ Equity (ROE)	68.8	56.5
Net profits/ Total assets (ROA)	21.9	27.3

Source: Critecnia.

Thus, its balanced management of income and expenses allowed Critecnia to reap significant returns on equity (56 percent) and total assets (27 percent) in 1998. This indicates that the linking approach studied here is highly profitable for Critecnia, which, in turn, shows that the provision of comprehensive advice services to small producers with a certain level of assets can be sustainable.

The main factors that appear to have enabled Critecnia to achieve these results are: the use of economies of scale in buying agricultural supplies for farmers; obtaining better prices for the sale of products; and the experience and reputation of the directors of Critecnia. These factors have allowed the company to work with clients who are well-known in their area and have a great deal of experience in agriculture. The risk of default was thereby reduced. Evidence of this is the fact that delinquency during the first two years of operations was practically nil. In 1998, due to the El Niño phenomenon, some farmers could not make their payments, but Critecnia was able to refinance their debts by negotiating with the Bank.

CONCLUSIONS

The means of access to financing and other advice and technical assistance services developed by Critecnia represents an interesting innovation, applied in two valleys along the Peruvian coast, Cañete and Chíncha, and benefiting mostly small farmers whose main crop is cotton. Through to this system, producers are linked to commercial banks to obtain loans that are tailored to their needs.

The value that farmers place on this system of access to credit can be appreciated from the increasing area of land financed and the amounts lent out, which in just three years of operations have now reached over US\$ 4 million, financing production on over 4,000 hectares in the valleys of Cañete and Chíncha.

This innovative lending approach, used by Critecnia with commercial banks, provides the right incentives for each individual member to repay their loans. In this sense, while farmers must join together to form a company or affiliate themselves to an existing firm, this does not imply that the company puts up a joint guarantee. On the contrary, responsibility for payment is entirely individual, which eliminates the possibility of the entire company having its credit rating degraded when faced with default by a single members.⁹ In the case of a group with many members, this innovation can produce better results than group technology with a joint commitment, because it reduces the risk of collusion, which is found in all kinds of group technologies, as pointed out by authors such as Schmidt and Zeitinger (1994), Besley and Coate (1995), and Huppi and Feder (1990). At the same time, the existence of real guarantees protects banks from the risk of strategic default by any of the company's affiliates and reduces moral hazard.

9 The companies formed by Critecnia in the valleys of Chíncha and Cañete have on average 25 members.

An important part of this system is the relationship that Critecnia's owners have with their financing sources, whether banks or suppliers, as it provides established backing for stable access to credit to the companies created. At the same time, the owners are well acquainted with the area and agriculture, in general; they also enjoy a solid reputation among farmers, a decisive factor in the program's success.

Challenges to the Model

The approach of linking small-scale producers with commercial banks described in this Chapter offers good perspectives for its use on a massive scale. The applied technology has proven to be quite efficient in attracting farmers, organizing their production supply, and achieving profits for the company, farmers and the bank. However, there are some obstacles or deficiencies that should be looked into, in order to be able to apply this model on a massive scale. They include the following issues:

- (i) It would be advisable to diversify financing sources to lower the risk of suspending agricultural credit due to risk perception or other considerations on the part of the bank which finances the producers or, in the worst-case scenario, if the bank is shut down, as occurred to Banex. In order for farmers to remain in the program, they need to know that their relationship with Critecnia will be a long-term one. Greater efforts are required in this area.
- (ii) The success of the model is largely based on the experience of that Critecnia's directors in the area, which enabled them to identify leading farmers. Thanks to that experience and the influence they have on other farmers, they were able to successfully promote and carry out proper screening and monitoring of farmers. Critecnia's expansion into other areas will face serious limitations in that the valuable asset of local knowledge will be diluted. The possibility of choosing coordinators who do not have the right profile may increase, as the number of members in the companies created increases.
- (iii) At the same time, expansion would generate problems regarding the management of companies that would have to be delegated to other officials. Directors would therefore lose a certain degree of control over the actions carried out by company officials. Expansion will require the development of a system of incentives and controls that would at least partly solve management problems.
- (iv) A major difficulty stems from the emergence of dishonest companies which, in some areas, have gathered farmers to apply for financing and manage the funding received, using farmers' land as collateral. Moreover, if these companies divert a large percentage of the loans obtained to other, unsuccessful investments, the result is that farmers have to assume debts

for amounts much higher than the loans they effectively received. This has heightened farmers' apprehension toward putting up their land as collateral.

- (v) Finally, land titling is an important aspect of the model, as it represents basic collateral for bank financing. Most farmers in the valleys where Critecnia works are owners of titled land. However, in other areas, the situation is different. Without major efforts to issue titles to farmers, the model's expansion possibilities are limited.

Replicating the Experience

The model features positive factors which could contribute to the success of its replicating else where. First, as stated above, a key factor has been the presence of successful businesspeople, promoters who are familiar with the area where they operate and with the agricultural sector, who have made it possible to efficiently provide nonfinancial services (administration, marketing, etc) and who also act as a crucial link with organizations that provide financing, with which they purchase the financed products. Without this, it would be impossible to implement the system. The existence of this leadership is also important as an indicator of how solid the proposal is.

Second, the contract design allows Critecnia to take advantage of tax breaks generated from buying supplies (fiscal credit) as well as economies of scales, while providing comprehensive services to farmers. Hence, the system has managed to draw income at every stage of the agricultural cycle. For farmers, the relationship with Critecnia has meant access to cheaper supplies, better prices for their harvests and indispensable technical assistance to increase productivity.

The presence of Coordinators (leading figures in their respective areas) has become an important mechanism for selecting farmers, as well as for loan monitoring and recovery. It has also made it possible to lower operating costs for Critecnia, thereby benefiting the farmers themselves.

However, the possibility of replicating the model on a large scale will depend on a series of actions to overcome the challenges and weaknesses that currently exist. Some of these actions lie within the sphere of action of Critecnia's and of the companies that wish to recreate the model, but several other factors cannot be controlled, which is why the intervention of other agents is necessary. Among the actions we consider the most important to launch a repeat model on a massive scale are:

- (i) Increasing the participation of financial institutions. Critecnia is looking for other institutions that could finance its system. However, the situation in late 1999 was difficult. The agricultural sector was still struggling with the aftereffects of the El Niño phenomenon, when the economy entered into recession in 1998, which negatively altered the portfolios of all the financial

institutions operating in Peru. In view of this situation, banks have become more cautious about granting loans to the agricultural sector. Thus, the development of incentives to encourage banks to sign agreements with companies such as Critecnia could prove very positive in contributing to the replication of the model.

- (ii) Reducing risk. Evidently, such schemes need to take into account the lessons from models, such as guarantee funds, that did not produce the expected results. In our opinion, these schemes should be based on two main guidelines: (1) lower the banks' risk perception and (2) be temporary (similar to financing the start-up cost of a financial institution to be promoted). Considering that the main and only asset of agricultural companies is land, land titling policies currently underway need to continue and be improved in order to reduce transaction costs.
- (iii) Clarifying property rights. Improving regulatory and registration aspects which currently make it difficult for property to be used as collateral in the agricultural sector. Given that the amounts lent are not particularly high and that many farmers still lack property titles, the alternative of putting up their machinery, harvest or other guarantees could be appropriate for farmers as well as banks. This will require regulations and improvements in registration aspects, in order for property to be considered as acceptable collateral by banks.
- (iv) Reducing portfolio concentration. Critecnia has focused its model on a single crop, cotton. This is understandable given the degree of experience that the directors have in cotton trading. However, dependence on a single product creates high risks. Steps should be taken for companies that implement this kind of model to manage a portfolio with several different products, so as to reduce risks and help replicate the linking approach. Evidently, due to the nature of the model, the portfolio of products should not be too broad-based, in order for the necessary trade information to be properly managed.
- (v) Training coordinators. As observed, the success of the Critecnia approach is largely based on the proper screening and enrolling of leading farmers, thanks to the directors' and executives' knowledge of the area. When replicating the model, it will be difficult to find companies with similar experience. Thus, programs that seek to identify and train leaders in rural areas could assist companies in the task of properly selecting farmers or agents to act as Coordinators.
- (vi) Reducing the probability of fraud. The appearance of some companies using similar schemes and leaving farmers in debt with commercial banks for higher amounts than what they originally received in loans effectively damages the

credit rating of producers involved in models such as Critecnia's, and limits the chances replication. Setting certain requisites for companies to implement these models could reduce the probability of fraud. These requisites need to establish, above all, what kind of information companies must disclose to producers. However, care has to be taken for these restrictions not to become obstacles to a replication of the model on a massive scale.

INNOVATIVE RURAL FINANCIAL PRODUCTS

FINANCIERA TRISÁN, COSTA RICA: INNOVATIVE AGRICULTURAL CREDIT CARDS¹

Mark D. Wenner and Rodolfo Quirós

INTRODUCTION

The purpose of this chapter is to analyze a program that provides credit cards to agricultural input suppliers and rural producers in Costa Rica, and to determine whether this program is financially viable and potentially replicable in other rural areas of Latin America.

A credit card program is very innovative and unusual in a rural setting. Normally, credit cards have been promoted in urban areas with businesses and wage-earning employees who have steady cash flows. Credit cards in rural areas are not as common because potential clients, especially agricultural producers, have more seasonal and uncertain monthly cash flows. This chapter seeks specifically: (1) to recount the genesis of an agricultural credit card program; (2) to describe the product, its typical client and service delivery methodology; (3) to analyze the financial performance of the product; and (4) to conclude with the challenges facing the expansion and replication of the product.

1 This chapter was originally published under the Best Practices Series n.º MIC-107. Washington, D. C.: Inter-American Development Bank, Sustainable Development Bank, December 2000.

In August 2003, the Trisan Group announced that it will close its finance company in July 2004 for strategic reasons but continue with its credit and smart card programs separately. Factors that contributed to the decision were uncomfotableness in meeting supervisory requirements and ratios designed for large scale, urban based financial entitites as well as coping with the aftermath of a government sponsored rural debt forgiveness program. The institution is well capitalized and has a normal risk rating. Close out operations are reported to going forward smoothly

THE GENESIS OF THE AGRICULTURAL CREDIT CARD

The agricultural credit card offered by Financiera Trisán S.A. grew out of a confluence of factors: a company tradition of product innovation, changes in capital control laws in the country, the desire to lower administrative costs, and compliance with a ruling of the Superintendencia General de Entidades Financieras, SUGEF (General Superintendency of Financial Institutions).

Tradition of Innovation

Financiera Trisán S.A. is a registered and regulated finance company that operates in Costa Rica and is part of a conglomerate that has a long-established record of innovation. It is a member of the Trisán Group, a family-owned holding company, consisting of three related agricultural business undertakings (Trisán S.A., TransAgro S.A. and Agro Ágil S.A.). Trisán S.A., the parent company and core business, specializes in imports and wholesale distribution of agricultural and industrial chemicals. TransAgro S.A. specializes in providing farm management consulting services to commercial farmers. Agro Ágil S.A. specializes in the retail sale of agricultural and industrial chemicals.

The creation of the parent company dates back to 1961 when Fritz Trinler van der Water, a Swiss immigrant, arrived in the country and started selling veterinary medicines and agricultural chemicals on a small scale. His company, Trisán S.A., grew over time to become one of the three largest agricultural input wholesalers in Costa Rica with approximately US\$ 10 million in sales, as of December 1998.

Since its beginnings, the Trisán Group has developed a reputation for pioneering and innovating. It was the first agricultural input wholesaler in Costa Rica to use radio phones to place and receive orders, cold rooms to store veterinary products, a fleet of trucks to deliver products to retailers, and elaborate showrooms to promote particular product lines. Trisán, S.A. was also the first to hold demonstration seminars on retailers' premises. At present, it leads the promotion of the use of bioengineered agricultural inputs and environmentally friendly technologies for textile dyeing and food preparation. The idea to set up a financial subsidiary and to introduce a credit card therefore fits its pattern of visionary leadership and corporate development.

Changes in Capital Account Controls

Up until 1992, Costa Rica had capital account controls in place. Foreign exchange, was rationed, and applications were required to access hard currencies. Financiera Trisán was formed in 1985 to handle foreign exchange transactions, accounts receivable and factoring for all companies within the Group. At the time, it made administrative and economic sense for the company to consolidate all financial aspects of import transactions into one company. As financial markets were gradually liberalized and capital account controls finally eliminated in February 1992, the chief activity of the Financiera became factoring or the discounting of accounts receivable.

Administrative Convenience and Superintendency Ruling

In the early nineties, the push to introduce a credit card came from two sources. First, the management of Trisán Group started to think of ways to improve the financial management of accounts receivable. The administrative costs of making personal visits to collect on overdue accounts were rising rapidly. Second, the Auditoría General de Entidades Financieras, AGEF, now known as the SUGEF, believed that Financiera Trisán was engaging in excessive related-party financial dealings, since one hundred percent of its factoring was with the Trisán Group.

Financiera Trisán disagreed and argued that it was purchasing accounts receivable from the various retail distributors affiliated to the Trisán Group and, thus, had more than one client. The consensus solution that emerged out of a series of discussions was to introduce a credit card for retailers affiliated to Trisán S.A. The credit card would serve as a substitute for a traditional 30-day line of supplier credit. As a consequence, this innovation would lower transaction costs, increase credit sale volumes and resolve the conflict with the Superintendency, because there would clearly be distinct individual accounts in the portfolio.

DESCRIPTION OF THE CREDIT CARD PRODUCT AND SERVICE DELIVERY

Products

Financiera Trisán, S.A. has developed two credit card products aimed at agricultural input suppliers and rural producers in Costa Rica: (1) a credit card Agrimax; and (2) a value-added enhancement to Agrimax called *Maxicuenta*.²

Agrimax

There are two types of Agrimax cards: the green card, which is aimed at retail distributors of agricultural chemical products, and the silver card, which is intended for individuals who wish to purchase agricultural inputs and services from merchants accepting the card. The same terms apply to affiliated retailers as to individual users. The only differences are that the typical maximum limits are much higher for businesses than for individuals and the guarantees required from businesses are, accordingly, more substantial. The absolute maximum limit is ₡ 30 million (₡ = colón, the Costa Rican currency), that is US\$ 117,187,³ in accordance with the SUGEF ruling that no more than 20 percent of paid-in capital may be lent to a single party. In practice, each applicant's limit is set according to repayment ability and both cards carry a market-adjusted interest rate. In 1998, the interest rate, in local currency was 45 percent per annum. Both cards have a billing cycle of 30 days

² The finance company also offers other financial services to the broader public, namely, loans to individuals and corporations, factoring, investment management services (Invermax) and deposit certificates.

³ Exchange rate as of June 1998, US\$ 1 = ₡256.

and the typical guarantees used are co-signers who must have assets that can be pledged in the case of individual accounts, and real property in the case of business accounts. If the balance is not paid in full, clients must pay a minimum of 33 percent of the outstanding balance the first month. From then on, interests accumulate on the unpaid balance. As of December 1998, Agrimax credit card accounts represented approximately half of the outstanding credit balances. Approximately, 250 were green cards (distributor accounts) and 1950 were silver cards (individual accounts).

The green card, which was introduced in August 1992, predates the introduction of the silver card introduced in 1993. Initial positive results with the green card led Financiera Trisán managers to believe that end-users would use the Agrimax card to charge other types of products purchased and that not restricting purchasing to products exclusively distributed by Trisán, the widespread use of the individual card would contribute to increased consolidated profits for the Trisán Group. Preferred customers may receive cash advances on the silver card. These, however, are only disbursed at Financiera Trisán's two offices.

Maxicuenta

Maxicuenta is an enhanced service available to preferred Agrimax individual clients that takes into account the seasonal nature of rural households' cash flows. It is intended to be used to help finance short-term agricultural and livestock production and marketing. Instead of having to make regular payments within 25 days of billing, clients may make their first payment in a lump sum once they have had the opportunity to harvest and market their product. This is granted to current Agrimax cardholders with good repayment records (a minimum of three months standing). The maximum limit is negotiable and depends on the type of agricultural/livestock activity and the ability to repay of the individual.

Financiera Trisán sales agent must visit the farm, check the viability of the farming business and review bank statements and sales receipts of previous crops. Another visit is scheduled 15 days prior to the due date of the first payment to check if there will be problems with repayment. *Maxicuenta*, has the same interest rate as Agrimax and the same conditions apply. As of December 30th, 1998, Financiera Trisán reported 273 *Maxicuenta* holders with an outstanding balance of ¢ 151 million (US\$ 556,333), representing 26 percent of the Financiera's portfolio. The logic behind this additional service is that rural clients want more flexibility in managing finances. *Maxicuenta* is essentially a product enhancement that serves to increase average outstanding balance and keep clients satisfied and loyal.

Service Delivery

Product Marketing

At the start of the credit card program, Financiera Trisán depended on indirect marketing; it later switched to more direct marketing campaigns. In 1992 and 1993, Financiera Trisán asked distributors affiliated with the Trisán Group to use the credit card as opposed to the traditional supplier credit financing arrangements. The advantage for Trisán S.A. was that the management of accounts receivable was essentially transferred to Financiera Trisán with two attractive financial benefits: lower administrative costs and improved cash flow. The advantage for retailers was the promise of improved service in the future, due to cost savings for, and greater efficiency of, Trisán S.A. The marketing campaign sometimes relied on aggressive tactics such as threatening cancellation of distribution rights if the credit card was not accepted. Once the retailers responded, Financiera Trisán followed three distinct stages of product promotion at individual client level.

In the first stage, Financiera Trisán strongly encouraged distributors affiliated with the Trisán Group to promote the use of Agrimax among individual clients who had existing credit accounts. The credit card was presented as a substitute for traditional supplier credit provided by the retailer to end-users (farmers). The advantage for the retailer was that the management of accounts receivable was essentially transferred to Financiera Trisán with three interesting financial benefits: lower administrative costs, improved cash flow and the elimination of default risk. The retailer received immediate payment for charges made on the Trisán credit card within 24 hours of presenting a claim.

In the second stage, Financiera Trisán requested lists of clients from the retailers affiliated with the Trisán Group. It issued cards to individuals on these lists with little or no further screening. The goal was rapid growth in the number of clients in order to lower unit operating costs.

In the third and current stage, the promotion process is more direct and selective. Growth in client number is slower, due largely to the fact that the strategy of contacting clients from affiliated retailers proved to contain risk related to inherent moral hazard.⁴ Financiera Trisán now promotes the product with prospective clients through talks, or *charlas*, held at the facilities of various agricultural input vendors, many of whom are not affiliated to the Trisán Group. The advantages of affiliation to the Trisán Group and of the card are explained, as well as the mechanics of the program. In addition to these direct presentations, sales representatives ask retailers to identify preferred clients with excellent credit histories and reputations for technical

4 Retailers had vested interests in promoting the widespread acceptance of their clients regardless of creditworthiness, since the possession of a credit card is bound to increase sales without default risk for the retailer.

and managerial capacity. These preferred clients are then visited at home or at their place of business.

Evaluation, Approval, Issuance and Billing Processes

The evaluation and approval procedures for obtaining credit cards are rigorous in the first instance, but simpler and more automatic at the time of increasing the maximum credit availability. The steps are briefly described below.

First, a six-page application form is filled out and analyzed. Most often a representative of Financiera Trisán completes the application at the home or business of the prospective client and makes whatever additional visits to third parties that may be necessary. The form collects information on socioeconomic and business/household income data. The analysis focuses on determining the repayment ability of the business/household, the willingness to repay and the quality of the collateral that can be offered. To determine repayment ability, current debt servicing burdens are compared to projected income flows. To assess to repay, credit bureau reports are used. To establish the quality of guarantees, points are assigned for the four commonly accepted forms of guarantees: (1) personal guarantee, which carries the most risk and, therefore, the least points; (2) lien, some risk, a few points; (3) titled property, less risk, more points; and (4) a certificate of deposit, least risk and a high number of points. One of three risk categories may be assigned to an application, based on its total number of points: A (acceptable), B (marginal) and C (poor). If the category is C, the application is automatically refused.

Second, once the application is evaluated, a recommendation is made whether or not to issue a card with corresponding limits. The higher the limit, the more people are involved in the decision (Table 8.1).

Table 8.1. Credits Limits and Composition of Credit Approval Committee

Credit limits ^a	People involved in approval
¢ 0.5 to ¢ 1.5 million (US\$ 1,953 to US\$ 5,859)	Loan officer and Credit Manager
¢ 1.5 to ¢ 7 million (US\$ 5,859 to US\$ 27,343)	Loan officer, Credit Manager, Operations Manager and Assistant Manager
¢ 7 to ¢ 20 million (US\$ 27,343 to US\$ 73,529)	Loan officer, Credit Manager, Operations Manager, Assistant Manager and Manager
¢ 20 to ¢ 30 million (US\$ 78,125 to US\$ 117,187)	Board of Directors

^a Exchange rate as of June 1998, US\$ 1 = ¢ 256.

Third, once the application has been approved, legal contracts are drawn and signed by the cardholder and guarantors. A card is printed and delivered to the residence of the client. Financiera Trisán usually assumes the most of the transaction costs involved.

Fourth, once the card is activated, monthly statements are sent by mail no later than four days after the close of the billing cycle.⁵ Clients have 25 days to pay from the end of the billing cycle, thus resulting in a maximum 55-day credit term. Payments may be made in one of four ways. These are, in order of decreasing frequency: (1) deposit in a Financiera account in one of the state-owned banks conveniently located throughout the country (very reliable); (2) payment to Financiera Trisán sales agent on routine visits (very reliable); (3) in person at the Financiera's regional or head offices (most reliable); or (4) by mail (least reliable and rarely used).

Collection Processing

Normally, Financiera Trisán staff monitor Agrimax clients periodically, once or twice during the growing season, and occasionally when Trisán representatives run into its clients at the agricultural products store, gas station or on the road. Monitoring of *Maxicuenta* holders may be more frequent. Billing statements are mailed after the close of one of the five billing cycles in the month (the 5th, 10th, 15th, 20th and 25th of each month). If payment is not received within 2 days of the official due date, the following steps are taken:

- (1) a phone call is made;
- (2) a telegram is sent after the 5th overdue day and co-signers are contacted by phone;
- (3) a letter is sent after 10 overdue days;
- (4) a letter from a attorney is sent after 15 overdue days;
- (5) a marketing and sales agent from Financiera Trisán visits the client in person after 30 days;
- (6) if a mutually satisfactory agreement cannot be reached, legal measures are taken.

At each of the above steps, additional charges are added to the outstanding balance: each phone call is ¢ 500 (US\$ 1.84); telegram, ¢ 1,000 (US\$ 3.68); letter from the Financiera, ¢ 2,000 (US\$ 7.37); letter from a retained attorney ¢ 2,500 (US\$ 9.21); and each visit by a marketing and sales agent ¢ 3,000 (US\$ 11.04). Late penalty interest charges are also added to the balance. Financiera Trisán has a

⁵ From 1992-97, there were several problems with the postal service, but since 1998, service quality has improved and the number of lost and returned-to-sender statements has diminished considerably. In earlier years, because of poor postal services, marketing and sales agents either delivered the statements personally or made arrangements for pick-up at a central location, normally a dry goods store or agricultural input supply store.

total staff of 27, most of whom are located at the head offices, in the capital. A small number (four) are located in a branch office in Muelle, in the northern region. It is difficult for the company to maintain an aggressive collection presence in the countryside due to distances. Approximately 9 sales and marketing executives make visits to clients according to a pre-established circuit.

Client Profiles

The typical credit card client of Financiera Trisán is a primary school educated, middle-aged, male, medium-sized farmer, with about 15 ha of land and a substantial asset base and relatively high yearly income. The cardholders tend to be more commercially oriented and specialized than the typical farmer in the countryside. For example, Financiera Trisán's clients tend to generate close to 79 percent of their income from one activity. The most common agricultural activity is fruit and vegetable production (Table 8.2). In comparison, the typical farmer in Costa Rica has a farm of less than 10 ha and depends on a mix of field crops and livestock to generate income and subsistence for the family. Whereas 26 percent of Trisán's clients have completed high school, only 16 percent of the general population has done so (Dirección General de Estadística y Censos, 1999). Lastly, household income levels (US\$ 10,850) are above the norm for rural areas (World Bank, 1998e, and Dirección General de Estadística y Censos). They roughly equal 4.1 times the national average rural income, which, in turn, is equal to the national income *per capita* (US\$ 2,640 in 1997).

Table 8.2. Client Profile: Individual End-Users^a

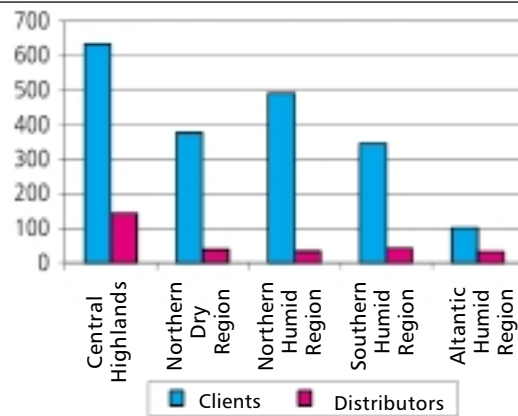
Variable	Value	
Number surveyed	100	
Average age	39.9 years	
Education (% with completed level)	Primary	58.0
	High School	25.7
	University	3.0
Gender (%)	Male	97.0
	female	3.0
Average farm size (owned land)	15.5 ha	
Total assets	US\$ 26,517	
Average gross income	US\$ 23,197	
Average yearly household net income	US\$ 10,850	
Value of main crop	US\$ 18,424	
Main agricultural activities (%)	Fruits and vegetables	39.0
	Coffee/Tobacco	10.0
	Livestock	7.0
	Dairy	3.0
	Grains	28.0

^a Sample excludes retail distributors.

Source: Financiera Trisán, June 1998.

As shown in Figure 8.1, the largest number of clients and distributors is concentrated in the central highlands, the area of the country with the highest population density and the most developed infrastructure. In the central highlands, average farm size is smaller and the predominant cash crop is coffee, but other main crops include sugarcane, vegetables and basic grains. The second largest concentration of clients is in the northern humid region that runs from the northern central mountains, northeast of the border with Nicaragua. It is an area characterized by lower population density, more rudimentary infrastructure and larger farms dedicated to dairy, beef cattle and the growing export tree crops (citrus, African palm and heart of palm). Average farm sizes are larger in this region compared to the central highlands.

Figure 8.1. Geographic Distribution of Clients and Distributors



Source: Financiera Trisán, July 1998.

PERFORMANCE ANALYSIS

Outreach and Growth Indicators

Financiera Trisán has exhibited a significant increase in the number of clients and nominal outstanding balances, but a slight drop in average outstanding balance. The nominal dollar portfolio in the same period increased from US\$ 1.58 million in December of 1995 to US\$ 2.32 million in December of 1998, that is, 47 percent. The number of clients increased in the same period from 1,658 to 2,467, or 49 percent. Over the same period, the average outstanding balance declined from US\$ 953 to US\$ 940 (Table 8.3). Furthermore, the average number of new cards issued monthly has fallen over time, from 69 in 1996 to 14 in 1998 (Table 8.4). Similarly, the number of cards cancelled or revoked made up a sizeable percentage of the total number issued up to May 1999 (715 out of 2,289 or 31 percent) (Table 8.5). These trends reflect a switch from a “massification” strategy toward a more deliberate selection process and greater concern about delinquency management.

Table 8.3. Growth of Outreach, Financiera Trisán 1995-1998, at Year End

Year	Total credit card portfolio		Number of active clients		Average balances	
	Total portfolio (US\$ million)	Growth percentage	Total #	Growth percentage	Average outstanding balance (US\$)	Growth percentage
1995	1.58		1,658		952.95	
1996	2.09	32	2,375	43.2	880.74	-7.5
1997	2.25	7.6	2,746	15.6	819.37	-6.8
1998 ^b	2.32	3.1	2,467	-10	940.41	14.7
Total Change		46.8		48.8		-1.3

^a Up to June 1998.

Source: Financiera Trisán.

Table 8.4. Number of Cards Issued

Month	Jan	Feb	Mar	Abr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Average
1996	33	46	72	35	109	69	70	92	87	88	74	51	826	69
1997	53	67	59	65	86	65	58	45	19	16	21	15	569	47
1998	19	18	11	9	8	13	9	24	12	11	18	14	166	14

Source: Financiera Trisán.

Table 8.5. Agrimax: Closure Rates from November 1997 to May 1999

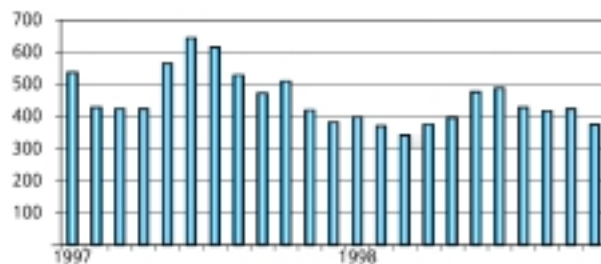
Reason for closing credit card account	Number of closed accounts	Percentage
At client's request	366	51
Poor repayment performance	283	39
Other	66	9
Total	715	100

Source: Financiera Trisán.

Despite the growth in the credit card portfolio over time (Table 8.3), the number of cards with transaction activity has been on a downward trend for the last two years, on a monthly basis (Figure 8.2). In January 1997, slightly over 500 accounts had transaction activity, while in November 1998, the number of accounts with transaction activity fell below 400. Account activity peaks according to agricultural cycles. There are two agricultural seasons in Costa Rica. One starts in May-June and the other in October-November. During these months, the volume of monthly transactions increases as producers purchase agricultural input products. During harvest periods and the dry season, from January to March, the number of

transactions falls as clients tend to pay off balances. At the end of 1998, 64 percent or 1,240 accounts had transaction activity at some time during the year, with transactions totaling ₡ 1,180 million (US\$ 4.3 million). A fifth of these transactions were cash advances.

Figure 8.2. Agrimax: Number of Credit Cards with Transactions
(January 1997 to November 1998)



Source: Financiera Trisán.

Financial Analysis

Both credit card products constitute nearly 75 percent of Financiera Trisán’s assets; the performance of these products therefore largely shapes and determines the performance of the entire finance company (Table 8.6). On the liability side, Financiera Trisán accesses funds strictly on commercial terms; it receives no concessionary loans or grants.

Table 8.6. Main Assets and Liabilities on December 31st, 1998

Type	Balance (millions of US\$)	Percentage share
Credit	2.17	100.0
Agrimax	1.03	47.5
Maxicuenta	0.556	25.6
Loans in domestic currency	0.438	20.1
Loans in dollars	0.138	6.4
Factoring	0.008	0.4
Deposits from the public^a	2.14	100.0
Deposit certificates - stock exchange	1.55	72.3
Deposits certificates - walk-in	0.59	27.7

^a Financiera Trisán issues deposit certificates in the national securities exchange and to walk-in clients.

Source: Financiera Trisán.

Structure of Assets, Liabilities, Capital and Portfolio

As shown in Table 8.7, Financiera Trisán had, on average, 67 percent of its assets in the credit card and loan portfolio. However, a sizeable proportion was in liquid assets, on average, 25 percent, between 1992 and June 1998. Over time the ratio of capital to assets has declined. The ratio of overdue loans to net loans tended to be high in the mid-nineties, but has gone down. The loan loss reserve to net loan ratio has mirrored the previously mentioned indicator, reflecting a prudential response on the part of management.

Table 8.7. Financial Indicators: Structure of Assets, Liabilities, and Capital

Indicator	1992 ^a	1993	1994	1995	1996	1997	1998 ^b	Avg.
Asset structure (%)								
Cash/Total assets	15.2	19.6	13.3	14.3	15.1	14.0	15.1	15.2
Temporary investments/ Total assets	10.9	15.9	11.1	2.3	10.8	7.6	8.9	9.6
Net revolving credit/ Total assets	68.6	60.0	61.3	69.5	65.2	71.7	71.1	66.8
Fixed and other assets/ Total assets	4.0	3.6	14.9	14.5	9.0	7.0	6.2	8.5
Liability structure (%)								
Deposits/Total assets	52.7	44.6	60.0	60.5	63.8	68.2	68.8	59.8
Other liabilities/Total assets	4.5	1.7	1.0	1.1	9.7	1.4	1.5	3.0
Capital structure (%)								
Paid in capital/Total assets	35.3	41.9	28.9	25.7	16.1	24.2	21.7	27.7
Reserves/Total assets	1.5	1.5	1.2	1.2	0.9	1.0	0.9	1.2
Portfolio structure (%)								
Gross portfolio/Net loans	103.9	103.9	104.6	106.3	102.6	102.9	103.4	104.0
Delinquent loans/ Net loans	18.2	25.0	46.4	40.8	45.7	33.2	21.9	27.0
Loan loss reserve/ Net loans	3.9	3.9	4.6	6.3	2.6	2.9	3.4	4.0
Total assets (US\$ millions)	1.51	1.61	2.14	2.03	2.86	2.83	3.00	2.28

^a Change in accounting calendar.

^b Up to June 1998.

Source: Financiera Trisán.

Profitability and Sustainability

Financiera Trisán has consistently posted profits and respectable returns on assets (Tables 8.8 and 8.9). The return on equity has not been as high due to the relatively strong equity position, that is, a high proportion of paid-in capital compared to total assets. However, between 1995 and 1997, Financiera Trisán reported high levels of extraordinary income that made substantial contributions to net earnings. The average share of extraordinary income in net income before taxes and distributions for the three years was 39 percent. This income was generated by the sale of property. As a result of this high dependence on extraordinary income combined with a large bad debt write-off, Financiera Trisán did not achieve financial self-sufficiency in 1997, because extraordinary income does not enter in the numerator. Due to sustained profitability though, Financiera Trisán has been able to attain operating self-sufficiency every year for which data is available.

The yield on portfolio compares favorably with medium-scale microfinance institutions in Latin America that target a broad set of clients. For example, a peer group of institutions conducting similar operations, including EDPYME ProEmpresa (Peru); Fundación para el Apoyo a la Microempresa-FAMA (Nicaragua); Fundación Nacional para el Desarrollo de Honduras, FUNADEH; Fundación Ecuatoriana de Desarrollo, FED (Ecuador); Corporación Nicaragüense Financiera S. A.-CONFÍA (ex Fundación CHISPA); Corporación Acción por el Tolima-ACTUAR Famiempresas (Colombia); and others for which portfolio size ranges from US\$ 1 to US\$ 8 million, reported a group average portfolio yield (interest income/average loan portfolio) of 62.6 percent compared to Financiera Trisán's average of 68 percent (Micro Banking Bulletin, 1999).

As shown in Table 8.8, Financiera Trisán's two main sources of income are interest paid on credit cards and loan products (financial margin) and commissions received from affiliated vendors and merchants who accept Trisán's cards (net operating income). These two sources of income generate a clear surplus over administrative costs, yielding a positive profit margin or positive rate of return every year.

Table 8.8. Financial Margins and Costs in Financiera Trisán
(Percentages)

Indicator	1992 ^a	1993	1994	1995	1996	1997	1998 ^b
a. Financial margin/ Average assets	16.07	11.85	22.97	21.06	20.18	15.69	7.86
b. Write-offs/ Average assets			1.39	1.70	2.41	5.13	0.31
c. Net operating income/ Average assets	4.05	11.91	1.34	1.23	0.79	7.06	3.31
d. Administrative costs/ Average assets	12.63	18.01	20.09	20.46	16.34	16.77	8.38
e. Other income/ Average assets				3.54	1.49	2.95	
f. Rate of return on assets ^c	7.49	5.75	2.84	3.67	3.71	3.79	2.49

^a Accounting calendar change.

^b As of June 1998.

^c a-b+c-d+e = f.

Sources: Profit and Loss Financial Statements of Financiera Trisán.

Asset Quality

Financiera Trisán's portfolio at risk has been consistently high (Table 8.9). However, the finance company has improved its collection efficiency over time. The aging structure of arrears shows a divergent pattern. Whereas the portfolio with payments overdue more than 90 days has consistently remained over five percent during the 1994-97 period, the portfolio with overdue payments less than 30 days and between 30 and 90 days has improved dramatically. One would expect higher rates of delinquency with a credit card product compared to a normal loan product, but delinquency tends to be pronounced in the short term rather than the long term. This is a weak area for Financiera Trisán and a number of factors explain the less than ideal delinquency control performance: (1) difficult economic times, for example: 2.4 percent GDP growth rate in 1995 and -0.6 percent in 1996; (2) difficulties in screening and monitoring clients; (3) a pervasive culture of late payment or no repayment; and (4) weakness in the legal framework of enforced contract compliance and the distribution of creditor and debtor rights.

Liquidity and Leverage

In the mid-nineties, Costa Rica experienced macroeconomic and financial fragility. This was reflected in weak economic growth in 1991 and 1995, a slight economic recession in 1996, some bank failures in 1996 and 1998 and consecutive years of high public budget deficits. Against this background, Financiera Trisán decided to maintain a fairly liquid position, largely to satisfy the potential demand of savers who may not have renewed deposit certificates and to avoid extending credit in

weak economic times. Many other financial institutions in the country followed the same course. Nonetheless, the leverage ratio has increased slowly over time indicating that Financiera Trisán is not totally risk adverse and has acquired more confidence in managing its credit card program.

Operating Efficiency and Staff Productivity

Financiera Trisán reports average operating efficiency (operating expenses/average total assets) of 19 percent and average operating income as a percent of average total assets of 40 percent for the period 1993-98 (Table 8.9). These figures compare well with other microfinance institutions in Latin America.⁶ On the otherhand, Financiera Trisán is weak in staff productivity. It has a total staff of 27 and, as of March 1999, had 2,289 active cardholders, yielding a productivity ratio of 84. The mostly favorable efficiency ratios are explained by large average balances and a high degree of automation. In short, its streamlined operating processes and cost structure of costs compensate for its small-scale portfolio and low staff productivity.

6 See MicroBanking Bulletin Issue N° 3, July 1999 (Medium Latin American (broad targeting) and Small Latin American (low-end targeting) peer groups). Note that Financiera Trisán is not a typical microfinance organization (MFO). It is a deposit-taking, regulated entity that is self-sustaining. In contrast, most MFOs are not regulated and depend on donations. Financiera Trisán has a great deal in common with American Express Corp. and banks that issue VISA cards. These include high delinquency rates and a high dependence on computer automation. However, its small scale, low average outstanding balances, high operating costs and focus on a clientele difficult to serve make it similar to MFOs.

Table 8.9. Selected Financial Indicators

Indicator	1992 ^a	1993	1994	1995	1996	1997	1998 ^b	Avg.
Profitability								
Net Income (US\$)	113,242	89,683	53,252	76,560	90,752	107,874	72,585	86,278
Return on assets (%)	7.49	5.58	2.49	3.77	3.17	3.81	2.42	4
Return on equity (%)	12.69	10.41	7.00	9.82	10.86	12.50	11.19	11
Yield on portfolio (%)	48.65	36.33	82.95	104.10	99.70	75.28	28.77	68
Asset quality (%)								
Portfolio at risk	18	26	43	38	44	32	21	31.71
Portfolio < 30 days past due/Total Portfolio	16.88	24.91	26.56	19.00	20.76	13.28	5.90	18.18
Portfolio > 31 < 90 days past due/Total portfolio	0.04	0.66	8.07	6.13	8.17	7.88	7.19	5.44
Portfolio > 91 < 180 days past due/Total portfolio	0.58	0.17	5.38	5.29	6.60	5.46	2.68	3.73
Liquidity (%)								
Liquid assets/Total assets	26.10	35.46	24.43	16.60	25.87	21.60	24.02	25
Capital adequacy (%)								
Total equity/Total assets	59.05	53.55	35.55	38.40	29.19	30.45	21.59	38.26
Assets at risk (%)								
Total equity/Total assets less cash equivalents	79.92	82.97	47.05	46.05	39.38	38.84	28.41	51.80
Leverage								
Total assets/Equity	1.69	1.87	2.81	2.60	3.43	3.28	4.63	3
Operating efficiency (%)								
Operating costs/Average total assets	12.70 ^c	18.40	20.30	20.64	18.46	19.02	18.52 ^d	19.22
Total operating income/Average total assets	37.49 ^c	35.25	39.06	41.33	41.73	41.17	38.54 ^d	39.51
Overall performance (%)								
Operational self-sufficiency	124.98	119.49	107.85	100.32	105.6	102.08	114.82	
Financial self-sufficiency	1.21	113.73	104.63	97.92	103.5	100.28	110.97	

^a Change in accounting calendar.

^b Figures up to June

^c Not annualized, not included in average.

^d Annualized. Included in average.

Source: Financiera Trisán.

Interest Rate Structure

Financiera Trisán historically has charged high rates of interest to compete for deposits with large state-owned banks, and in order to cover the higher costs associated with operating in rural areas (Table 8.10)

Table 8.10. Agrimax: Structure of Interest Rates
(December 1998)

Rates of interest (%)	Lending Rate Interest	Cost of Funds	Margin of Intermediation
Nominal	45.0	26.5	18.5
Effective	38.1	30.5	7.6

Fuente: Financiera Trisán.

The effective interest rate paid for raising funds, by issuing deposit certificates, has increased due to legal reserve requirements. Similarly, on the lending side, the effective lending interest rate charged to clients is lower than the nominal lending rate since clients may pay in full at the end of the billing cycle, and many do.⁷ Thus, the difference between the effective lending and cost of funds rates is 7.6 percent. In comparison, the average margin for the banking system is 9 points. Financiera Trisán's lower margin is due to two factors. First, as mentioned above, it has to compete for public deposits with strong state-owned banks, which dominate the financial market and enjoy implicit deposit insurance, by offering higher rates on deposit certificates.⁸ Second, it has largely agricultural clients with marked seasonal income flows, which implies that there are limits to the interest rates that agricultural projects can bear.

CHALLENGES FACING THE EXPANSION AND DEEPENING OF THE PRODUCT

Financiera Trisán faces a number of challenges in expanding and perfecting its credit card products. These challenges belong to three broad areas: (1) marketing; (2) legal, institutional and technological constraints; and (3) competition.

7 Thirty-eight percent is the minimum possible effective interest rate, an estimate that is based in the assumption that the client pays the total outstanding balance, at the latest, on the official due date.

8 When a number of private finance companies failed in the late 1980s, depositors were not reimbursed. By contrast, the Government of Costa Rica paid all depositors in full when a state-owned bank, Banco Anglo Costarricense, failed in the mid-1990s. These circumstances probably strengthen the belief of depositors that similar actions will be taken in the event of the collapse of one of the three remaining large deposit-taking, state-owned financial institutions: Banco Nacional de Costa Rica (BNCR), Banco de Costa Rica (BCR), and Banco Crédito Agrícola de Cartago (BCAC). Therefore, depositors are more attracted to state-owned institutions despite lower rates of interest.

Marketing Challenges

Financiera Trisán has three marketing options: (1) to maintain current individual clientele but increase average outstanding card balances and add services and enhancements; (2) to focus on expanding the distributor clientele and rural small retail business clientele; or (3) to target more “down market” clients, those with less total household income, smaller asset bases and more seasonal cash flows. Each option has profound implications and could be mutually exclusive.

The first possible marketing strategy, maintaining its current individual clientele base but increasing card transaction activity and outstanding balance, would imply getting more vendors to accept the card and aggressively promoting its use through mailings and special discounts for selected products purchased on the card. In addition to the credit card, Financiera Trisán could entice its clientele to invest or purchase other products, such as deposit certificates, offer a multifunctional smart card (for debit and credit) as well as provide instant access to account balance and payment history information, thereby further reducing transaction costs, and/or offer financial investment advice. The focus would likely have to be on high worth, “up market” individuals with very predictable cash flows. The strategy would be to build long-term relationships and develop brand loyalty.

The second possible marketing strategy would be to target small nonagricultural, retail businesses located in rural areas and convince them that it would be advantageous to use the credit card to finance inventory. Just as Financiera Trisán convinced agricultural input suppliers that there were administrative cost savings involved in using the card as opposed to the traditional 30-day supplier credit arrangements, it can do the same with dry good stores (*pulperías*), gas stations, restaurants, gift shops and a number of other retail establishments. Wholesalers extending more generous supplier credit terms (60 and 90-day terms), as opposed to 30 days, could however counter this strategy. Nonetheless, the credit card should be theoretically superior to traditional supplier credit and its financing term could effectively be extended beyond 60 to 90 days, increasing its attractiveness. In certain subsectors, such as handicraft retailing, consignment arrangements may remain superior to a credit card arrangement and thus demand may not be high for a credit card product.

The third possible marketing strategy would be to go “down market” and attempt to increase the volume of cards, with the knowledge that the outstanding balances on each card would be smaller due to the more limited economy of this clientele. The challenge of a “mass market strategy” is that new investments in technology and changes in operating procedures will be needed to keep the transactions costs down and to quickly evaluate and maintain collection discipline. The required investments in product design, technology and staff training will be high in order to achieve a high level of productivity and efficiency in control systems. The focus would be on “standardizing” the process as much as possible.

In order to determine the correct strategy to pursue, it is important to understand five factors: (1) size of the potential market segment; (2) patterns of card use among existing clients; (3) number and type of merchants accepting the card; (4) delivery features of the card; and (5) general market conditions. First, the company estimates that the total potential agricultural credit card market is made up of 20,000 users. Thus, Financiera Trisán, with its approximately 3,000 clients has a sufficient market to grow. Second, utilization rate, as measured by the ratio of actual charges to total amount of credit approved, ranges from 27 percent to 37 percent (Table 8.11). Existing clients are not using the card to the fullest extent, but the rate is on an upward trend. Third, the number of merchants accepting the card has increased markedly in the last three years (Table 8.12). Acceptance of the card in the marketplace therefore does not seem to be a major factor explaining slow growth or the low utilization ratio.

Cuadro 8.11. Credit Card Utilization Rate

Year end	(A) Total value of approved lines of credit (US\$)	(B) Total outstanding balances (US\$)	Utilization rate (%) (B/A)
1997	5,622,193	1,537,396	27
1998	5,343,141	1,613,773	30
1999	4,496,922	1,664,705	37

Fuente: Financiera Trisán.

Table 8.12. Number and Type of Merchants Accepting Agrimax

Type of merchant	1997	1998	1999
Trisán affiliated agrochemical distributors	4	4	4
Non-affiliated agrochemical distributors	168	184	207
Hardware stores	12	13	15
Gas stations	0	1	2
Oil change and lubrication shops	1	2	3
Vehicle and equipment repair shops	1	2	3
Total number of merchants	186	206	234

Source: Financiera Trisán.

By process of elimination, the two major constraining factors on more rapid portfolio and clientele growth seem to be (1) a poor business environment (negative or low positive economic growth rates in 1996-99); and (2) unattractive delivery features, such as the need to authorize charges by a phone connection limited to head office working hours, inability to quickly handle problems at the point of sale, strong interest rate competition from traditional suppliers of lines of credit and, most importantly, the condition that 33 percent of outstanding balance must be paid within a first month of charge on the Agrimax card. Given the poor business environment, management is extremely concerned about controlling delinquency and has become increasingly selective and cautious in its approval policies. The challenge, in short, is to relax the unattractive features of the Agrimax card, especially the requirement to pay 33 percent of each new charge, without compromising asset quality.

Legal, Institutional and Technological Challenges

Regardless of the marketing strategy chosen, Financiera Trisán faces a series of legal, institutional, and technological challenges that will have to be overcome. The choice of marketing strategy will depend on how binding these constraints are. The specific challenges can be identified as having to do with credit bureaus, the postal service, computer technology, and connectivity and delinquency control.

Credit Bureaus: Only three credit bureaus are currently functioning in Costa Rica. These credit bureaus have limited databases due to a banking secret law that protects consumers from having data on their repayment performance reported without prior permission. This legal restriction tends to limit the reach of credit bureaus. Those clients that appear in the databases tend to be high worth individuals and well-established businesses that clearly see it in their interest to grant permission. Many moderate and lower-income individuals tend not to apply, because they have no formal credit history or refuse to grant permission for releasing data in the event they do have credit.

The information in the credit bureau helps mostly in determining if prospective clients have “negative marks,” such as liens and collection actions, and not positive indicators such as consistent on-time payment patterns. Accordingly, the absence of “negative marks” on a credit report has limited predictive power. The current system helps to identify who should not be approved and less so the likelihood of someone with a certain set of characteristics repaying on time. The lack of fuller and more complete information on clients delays efforts to develop credit-scoring models appropriate for developing countries, which could represent a significant cost-reducing innovation in credit analysis.

Postal Service: The quality of postal service has improved over the past two years, especially successful mail delivery, but it can be a limiting factor for an aggressive campaign to increase outreach. The average time for mail to be delivered from one point to another may still vary significantly, from 3 to 10 days. This variability in the time needed to successfully deliver the mail forces the Financiera to use a very long

effective billing cycle, which has significant cost implications. A reduction in mail delivery time could contribute to the capacity to lower interest rates and thus, increase the demand for credit card services. When the postal service fails and alternative arrangements have to be made, such as leaving the bill at a centrally located store to be picked up by the client, transaction costs rise and this creates unreliability.

Computer Technology and Connectivity: Financiera Trisán invested a significant amount of its own resources in developing a management information system to handle credit card operations.⁹ Furthermore, it has acquired real-time connectivity between its branch office in Muelle and the company's head offices, as well as with a number of vendors. Future growth and expansion will hinge on the ability to handle more types of individual client subaccounts and a greater absolute number of clients. The ability to recruit more vendors to accept the Trisán credit card will hinge on the reliability and cost of communicating and transmitting data. To date, data transmission is largely over fixed land-lines and the cost of the service is high. For example, the monthly cost for telecommunications averaged US\$ 3,932 in 1999.

Delinquency Control and Contract Enforcement: In Costa Rica, borrowers' rights outweigh those of creditors.¹⁰ Coupled with poorly functioning property registries and a backlogged judiciary system, this implies that financial institutions operate at a disadvantage and, subsequently, face higher intermediation costs and risk than would be the case if the environment were more favorable. The solution lies in improving the overall legal framework as well as refining the delivery and collection technology. Financiera Trisán has little ability to effect changes at the national level. However, more can be done to improve screening and collection systems within the organization. This includes experimenting with the notion of dedicating personnel to focus on accounts with peculiar risk factors, building rudimentary credit scoring models and offering staff performance incentives based on a composite measure of the number of clients served and the volume, as well as portfolio quality.

Competition

Currently, Financiera Trisán has no major competitors for credit cards in rural areas. Several private commercial banks offer VISA and MASTERCARD products, but their clientele consists mostly of urban wage earners. The Banco Nacional de Costa Rica (BNCR), a state-owned bank, which accounts for 32 percent of the total assets of the country's formal financial sector and has the most extensive network of branches in the country (135 branches), is experimenting with a similar product. In conjunction with the Banco Centroamericano de Integración Económica, BCIE (Central American Bank for Economic Integration), BNCR is introducing a smart debit card (Futura

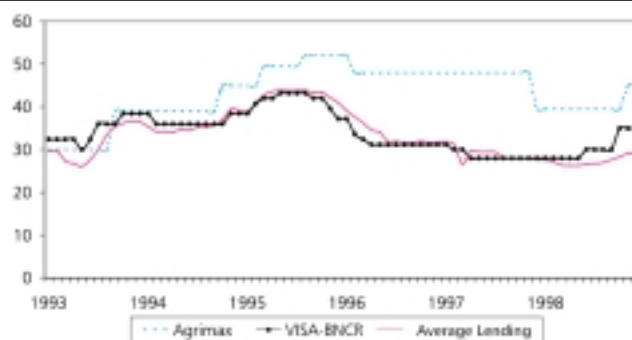
9 According to the company's managing director, Financiera Trisán spent US\$ 250,000 starting in the late eighties to develop software to manage the credit card program. This amount has been fully depreciated.

10 This represents a serious problem also in Peru. As reported in Chapter 3, in the case of judiciary enforcement of guarantees, debtors have many ways to delay the legal actions, and several steps for doing it.

3000) in rural areas. To date, Futura 3000 is a prepaid debit card with very low limits (US\$ 105 for individuals and US\$ 3,500 for businesses). The card pays no interest for mandatory deposits and charges a 4 percent user fee.

In addition to this rural-focused product, BNCR has a VISA product that is well-accepted in urban areas. BNCR charges an interest rate that is considerably lower than that of Agrimax, close to the average lending rate in the entire banking system (Figure 8.3). BNCR can charge a low lending rate because it enjoys comparative advantages in receiving savings. The general public prefers to save with BNCR despite considerably lower deposit interest rates, because of an implicit deposit insurance scheme. Given its size, reputation and branch network, BNCR could quickly emerge as a strong competitor in rural areas. If state-owned banks were to enter the rural areas with a credit card product, Financiera Trisán would most likely have to compete on service quality (timeliness in processing applications, billing accuracy and on-time payment to vendors), its reputation as an innovator, and the promise of product enhancements (insurance services, financial consulting, smart card).

Figure 8.3. Nominal Interest Rates Charged for Agrimax and VISA-BNCR Compared to the Average Lending rate in the Financial System
(September 1992 - December 1998)



Sources: Financiera Trisán, Banco Nacional de Costa Rica, BNCR (National Bank of Costa Rica) and SUGEF.

CONCLUSIONS

Financiera Trisán has pioneered the introduction of an entirely rural credit card. The card has been generally well accepted by the target population, demonstrating the viability of a new financial service that helps to better manage risk and liquidity. More importantly, the product has been profitable and the entire firm is operationally self-sufficient. While outreach has been limited, this is driven by attempts to better contain delinquency in a less than favorable economic environment. This section discusses the main findings concerning replicability, lessons learned that may help others contemplating the introduction of a similar product, and short- to medium-term institutional needs.

Replicability of the Product

The credit card product that Financiera Trisán has pioneered could be established in other areas of Latin America if certain conditions hold; namely: (1) a density of rural clients with variable but predictable cash flows; (2) a minimum level of functioning physical infrastructure (telecommunications, electricity, postal services, roads); (3) an appropriate legal and financial regulatory framework that would allow profitable intermediation; and (4) a profit-oriented, client-driven service provider with a history of active participation in the rural sector.

Most of Financiera Trisán's clients are located in the densely populated central highlands and in the northern region, both of which have high agricultural potential and are characterized by high-value agricultural production. Costa Rica has high rates of teledensity and rural electrification. For example, it has 155 main telephone lines per 1,000 people compared to the average for low and middle income Latin American and Caribbean countries of 102 per 1,000 in 1996. Furthermore, Costa Rica's consumption *per capita* of electrical power exceeds the regional average; the country consumes 1,348 kilowatts per hour (kwh) per person versus 1,298 kwh (World Bank, 1998e). The lack of a large manufacturing base suggests that consumption is evenly distributed across the country. Similarly, the financial regulatory framework does not hinder profitable intermediation, but the legal framework does increase the cost and risk of intermediation. Lastly, the parent company enjoys a strong reputation for quality service and innovation, built up over nearly four decades of operations in rural areas. Its staff is also extremely knowledgeable about local conditions and skilled in agricultural credit analysis.

Lessons Learned

The key lessons to be drawn from the Financiera Trisán experience are:

- (i) Incremental product innovation is a safe and proven route to sustainability. Financiera Trisán essentially promoted the credit card as a substitute to factoring and traditional 30 day-supplier credit provided by the parent agricultural input wholesale company to a "captive clientele" of agricultural input retailers. Once enough experience was gained, the card was introduced to individual end-users. A more massive intervention would have required a substantial investment of resources, resulting in a larger volume of clients but possibly greater delinquency. In short, Financiera Trisán is moving from a context of enhanced agricultural supplier credit toward a widely accepted credit card.
- (ii) The typical first wave of clients who will adopt the service will be, most likely, higher income rural residents with large and predictable cash flows. An agricultural credit card is not best suited for low-income subsistence producers. Nonagricultural business may be an even more attractive clientele than farmers.

- (iii) Infrastructure deficiencies, such as slow postal service, a high percentage of unpaved roads and the limited usefulness of credit bureaus can be overcome by means of creative solutions such as leaving bills at centrally located stores and having sales agents visiting clients deliver bills to other clients along their route. These steps, nonetheless, increase operating costs and may reach a threshold that will render the credit card product nonviable. Fortunately, the infrastructure weaknesses in Costa Rica are not severe.
- (iv) A clear and well-developed plan for product testing, expansion and enhancement is crucial. Financiera Trisán constantly seeks feedback from clients and staff to fine-tune its product, pricing, and processing procedures. The company is also actively seeking to increase its scale of operations.

Institutional Needs

While Financiera Trisán is an interesting example of how to engage in financial product innovation in a rural setting, it still faces some challenges and has short- and medium-term institutional needs to answer, as detailed below:

- (i) Financiera Trisán needs to undertake cost accounting exercises, marketing studies and product testing in order to determine how best to expand and refine its product(s). At present, the company is serving two distinct segments, retailers and individual farmers, and little is known about the costs of serving these two niches. Moreover, the company needs to research and test products suitable for new market segments such as nonagricultural business.
- (ii) Financiera Trisán needs the services of experts in credit card operations to learn about best management practices in developed countries and adapt them to its own setting.
- (iii) Financiera Trisán needs access to additional financing (deposits, borrowing, equity or a combination thereof) to ensure its growth.

INNOVATIVE RURAL FINANCIAL PRODUCTS

THE PARTNER SAVINGS PLAN OF THE WORKERS BANK, JAMAICA: LESSONS ON MICROSAVINGS FROM ROSCAs

John Owens

INTRODUCTION

For a long time, financial institutions have largely overlooked providing savings services to small savers. This is especially true in rural areas where common wisdom holds that people are too poor to save and the costs associated with mobilizing numerous small accounts are prohibitive. Based on existing empirical evidence, this statement has been proven wrong. This case study shows that offering small-scale savings services to low-income rural people is financially viable.

This chapter analyzes the approach that was used by the Workers Bank of Jamaica to provide savings services for lower-income individuals on a large-scale basis. This case study examines how the Workers Bank has designed a product by mimicking informal savings schemes (Rotating Savings and Credit Associations, ROSCAs), how this instrument operates and the costs of managing this type of small-scale savings product. Following a general overview on the economic framework and some key features of the Jamaican financial system, a brief note on the origin of the Workers Bank is presented (Section 2). The characteristics of the Partner Savings Plan product are analyzed in Section 3. Section 4 explores the product's performance, putting particular emphasis on the structure of costs to clients. Finally, Section 5 presents some conclusions and recommendations on how other financial service providers in Latin American and Caribbean can use the Workers Bank's innovative experiences to offer cost-effective savings services to small savers in their countries.

Jamaican Macroeconomic Environment

The macroeconomic situation in Jamaica has been fragile throughout most of the nineties. Although the total economic output rose by an average of 1.7 percent per year between 1980 and 1989, average economic growth was only 0.1 percent in the nineties and has been declining for the past three years, shrinking 1.7 percent in 1996, 2.4 percent in 1997 and 0.7 percent in 1998 (Table 9.1). This decline continues to be caused by developments at the macro and micro economic levels (Frontier Finance, 1998). Fiscal accounts dropped from a surplus of nearly 3 percent of GDP in 1995-96 to a deficit of 8 percent in 1998. The deterioration of the fiscal accounts continues to reflect the overall economic slump the country has faced in the past few years. The government of Jamaica has maintained a tight fiscal monetary policy, which has succeeded in reducing inflation from 25.6 percent in 1995 to 7.9 percent in 1998. However, high reserve requirements and a collapsing financial sector have contributed to high nominal and real interest rates. Wage adjustments are over-shooting inflation in the absence of any gains in overall productivity (The World Bank, 1998a). Surprisingly, gross national savings as a percentage of GDP increased from an average rate of 13.3 percent in the eighties to an average of 25.3 percent in the nineties (USAID, 1998).

Table 9.1. Financial Indicators, 1994-1998

Indicator	1994	1995	1996	1997	1998
Real GDP growth	1.1	0.5	-1.7	-2.4	-0.7
Inflation	26.8	25.6	15.8	9.2	7.9
Budget balance (% GDP)	-4.0	-2.0	-7.4	-9.0	-8.0
Current account (% GDP)	-0.5	-4.6	-5.9	-9.1	-7.5
Treasury bill rates (six months)	29.4	42.5	28.8	28.1	23.5
Nominal lending rate	46.0	49.0	42.0	35.0	34.0
Real lending rate	19.0	23.0	26.0	26.0	26.1
Commercial bank deposit rate (weighted average)	27.9	26.2	20.8	14.1	15.5

Sources: The World Bank, Planning Institute of Jamaica, Bank of Jamaica, Inter-American Development Bank.

Characteristics of the Financial Services Sector in Jamaica

Jamaica's financial system was modeled on the British system, which required strict separation between commercial banks and other financial institutions. In Jamaica, this specialization eroded over the years and was accelerated by the fact that it was possible to circumvent the rigorous provisions of the Banking Act by founding nonbank financial intermediaries (Frontier Finance, 1998). The situation has changed, due to regulations tightening up the differences between commercial banks and other nonbank financial institutions.

Jamaica has a large formal and informal financial services sector. As of December 2001, the formal sector included nine commercial banks (the Workers Bank was temporarily under the control of the Ministry of Finance), more than ten merchant banks (investment banks), around sixty credit unions, many building societies, several insurance companies and people's cooperative banks. There are also several semiformal and informal financial service institutions including finance companies, pawnbrokers, and financial NGOs. In 1999, commercial banks operated out of 150 branches island-wide, mostly in urban areas and towns. Financial services are also provided through 247 of the Jamaica's post office branches, which are located in mostly rural areas.

Commercial banks operate under the Banking Act and are allowed to conduct all types of banking services. Merchant banks operate under the Financial Institutions Act and are allowed to provide certain restricted banking services. Their lower minimum reserve requirements, capital requirements and liquidity requirements have encouraged the rapid growth in the number of institutions in the eighties and early nineties. Thus, while the number of commercial banks remained the same between 1996 and 1998, merchant banks grew in number (Table 9.2). These institutions are now coming under closer scrutiny from the Central Bank and have similar regulatory requirements to commercial banks. Building societies, regulated by the Building Societies Act, came under the control of the Bank of Jamaica in 1995 when most of them were on the verge of collapse. On the other hand, credit unions, regulated by their own Act, provide financial services in rural as well as urban areas and are not subject to banking supervision. They operate under the control of the Department of Cooperatives and Friendly Societies. Although they provide financial services to a large number of Jamaicans, their overall market share at the end of the nineties was around 6 percent of the banking sector's total assets.

Table 9.2. Supervised Financial Institutions

Financial Institution	December 1996	December 1997	December 1998	Projected Dec. 1999
Commercial banks	9	9	9	6
Merchant banks	28	27	18	14
Building societies	14	10	10	7
Totals	51	46	35	27

Source: Bank of Jamaica.

Due to the problems affecting the financial sector, the Government of Jamaica established the Financial Sector Adjustment Company (FINSAC) in January 1997, which injected capital into insolvent banks, strengthened asset portfolios by replacing non-performing loans with securities and managed mergers between nonbanks and commercial banks.¹ Four commercial banks, including the Workers Bank, and three merchant banks were merged into a single commercial bank, Union Bank, which is controlled by FINSAC.²

FINSAC kept the Workers Bank portfolio separated within the Union Bank. The Workers' microfinance portfolio was sold to the Jamaica National Building Society (JNBS), now consisting of a group of companies with an extensive network of branches operating across the entire country. The microfinance portfolio of the Partner Savings Plan has been managed by Jamaica National (JN) Micro Credit Company Limited, a subsidiary of JNBS, since October 2001. However, Partner Savings Plan was retained by Union Bank, now called Royal Bank of Trinidad & Tobago (RBTT). JN Microcredit continues expanding its rural coverage and working with the post office network on the basis of the Workers Bank's portfolio. Yet, JN Micro credit discontinued the use of the original brand name "Partner Plan."

When the Workers Bank's microfinance portfolio was purchased, there were nine field officers operating out of twelve locations. At present, Jamaica National Micro Credit Company has 21 field officers operating from 18 locations. As of March 2002, the outstanding portfolio of JN Micro Credit was around US\$ 1,387,775, with a total of 3,416 loans. Arrears rate over seven days was 5.5 percent and portfolio at risk (over seven days late) was 8.9 percent.³

From the beginning, it was planned that the Union Bank would be subsequently sold off to private interests.⁴ Despite the problems afflicting the sector over the past few years, commercial banks have actually recorded growth in their assets (Table 9.3); however, this was mainly due to public sector holdings, which accounted for 34 percent of the asset portfolio, that is, US\$ 1,470 million by December 1998. Private sector loans, as a percentage of total assets, declined to 23 percent of the asset base, mainly as a result of the exchange of FINSAC securities for non-performing loans (Bank of Jamaica, 1998).

1 FINSAC was founded with the purpose of restoring some stability in Jamaica's financial institutions at a time when several banks and insurance companies were experiencing liquidity and solvency problems, as well as a reduction in client confidence. FINSAC is an office belonging to the Ministry of Finance and Planning, which was originally intended to be in operation for a period of seven years.

2 The Union Bank was the third most important bank in Jamaica as of December 2000, with assets amounting to US\$ 752.2 million and an outstanding portfolio of US\$ 28.2 million.

3 Information provided by Mr. Frank Whyllie, General Manager of JN Micro Credit Company Limited.

4 In March 2001, the Royal Bank of Trinidad & Tobago (RBTT) International Limited, member of the RBTT Financial Corporation, bought FINSAC's shares in Union Bank (99 percent), thus acquiring control over the bank. Union Bank is now the Royal Bank of Trinidad & Tobago.

Table 9.3. Market Share of Financial Institutions 1996-1998
(Assets)

Financial Institution	December 1996		December 1997		December 1998	
	Million US\$	% Market	Million US\$	% Market	Million US\$	% Market
Commercial banks	3,960	70	3,920	73	4,330	74
Building societies	1,050	19	1,040	19	1,190	20
Merchant banks	600	11	440	8	320	6
Total	5,610	100	5,400	100	5,840	100

Source: Bank of Jamaica.

Regulations and Supervision

As mentioned above, the regulation of commercial banks, merchant banks and building societies is governed by three acts: the Banking Act, the Financial Institutions Act and the Building Societies Act. Pursuant to the Bank of Jamaica Act, the Financial Institutions Supervisory Division (FISD) of the Bank of Jamaica, Jamaica's Central Bank, is in charge of supervising all three types of institutions. These responsibilities include regular on-site and off-site examination of the institutions in order to ensure sound and prudent enforcement of all banking regulations.

The Banking Act of 1992 sets forth the licensing procedures and prudential requirements for commercial banks. Minimum reserve requirements are established and modified by the Bank of Jamaica from time to time. During the mid-nineties, minimum reserve requirements for commercial banks were very high, by international standards. Under the Financial Institutions Act, minimum reserve requirements and minimum capital requirements for merchant banks were much lower.⁵ This created an incentive to set up merchant banks in order to avoid higher reserve requirements and potentially engage in riskier ventures. This difference in reserve requirements is now being modified and it is expected that merchant banks and commercial banks will operate under similar regulations. With regard to financial supervision, the principles applying to all financial institutions are essentially the same.

5 Until the end of 2001, there were still important differences in minimum capital requirements between commercial and merchant banks. While the former were required a paid-in capital of US\$ 1.3 million and a subscribed capital of US\$ 1.8 million, the latter needed to put up US\$ 444,400 and US\$ 555,600, respectively.

In 1998, the Deposit Insurance Act was passed and the Jamaica Deposit Insurance Corporation (JDIC) started operating in August of that year. The deposit insurance scheme was created with three objectives in mind:

- (i) To provide protection to the small uninformed depositor who is not in a position to assess the risks of financial institutions;
- (ii) To assist in the restoration of confidence and the overall stability of deposit-taking institutions;
- (iii) To provide the Government with a more formal mechanism for protecting depositors.

Under the Act, all institutions that receive deposits (policyholders) are required to be members of the deposit insurance scheme managed by the JDIC and to pay an annual premium of 0.1 percent of insurable deposits. If a policyholder's license were revoked, the insurance cancelled or in the event that a winding-up order were issued by the court or the Ministry of Finance, payments would be made out of the fund to every qualifying depositor. The maximum coverage was J\$ 300,000 (US\$ 6,667) per depositor by the end of 2001. At this level of coverage, more than 90 percent of depositors would be covered. The limited coverage is intended to instill market discipline and ensure that depositors would discriminate between safe and unsafe banks.

Banking Crisis

The rapid expansion of credit between 1990 and 1995 saw increases in private sector loans averaging 42.6 percent a year and 489.6 percent over the period. However, high reserve requirements, high interest rate policies and overall declining economic growth rates, combined with cases of widespread mismanagement, a lending boom in the early to mid-nineties and extensive lending to related parties, all led to the collapse of the banking sector during the late nineties. Various factors were to blame for the collapse, including the regulatory environment and various institutional problems:

Regulatory Issues

- (i) **Legal Ambiguities:** The legal framework was not as clear as it should have been, leaving bank regulatory requirements open to interpretation.
- (ii) **Regulatory Forbearance:** By the mid-nineties, there were signs that the banking sector was having problems. Nonetheless, the authorities did not take firm action for fear of precipitating a run on the banks. In addition, bank regulators had to seek approval from the Ministry of Finance before stepping in and sanctioning banks, which further delayed action.

Institutional Problems

- (i) Poor Credit Practices: The lending bubble of the early nineties was stretched to its limit by higher valuations in the real estate market. Credit decisions were based on collateral rather than on cash flow analyses.
- (ii) Poor Management Practices: There were large discrepancies between assets and liabilities due to deficient management practices. Banks owned by financial conglomerates increased the tendency to lend to related parties (Frontier Finance, 1998).

BACKGROUND ON THE INSTITUTION: HISTORY OF THE WORKERS BANK

The Workers Savings and Loan Bank (Workers Bank) emerged from the Government Savings Bank (Postal Savings Bank), which was first established in 1,870 and operated out of the post office network, making the Bank the second oldest bank in Jamaica. An Act of Parliament founded the Workers Bank in 1973, with the Government of Jamaica (GOJ) and several trade unions as the major shareholders. Having been created by trade unions and growing out of the Postal Savings Bank, the new bank was seen as the people's bank. This image of the Bank did in fact attract thousands of small savers, which built its base.

After several years of operating at a loss, the Bank was divested by the GOJ and sold off to private investors in the Corporate Group of Companies, which included a merchant bank, an insurance company, a building society, a hotel division and other businesses. The Bank experienced dramatic growth and made a profit in 1994; however, it declined sharply in 1996-97, along with most national commercial banks. High interest rates, the country's continued economic decline, mismanagement and lending to related parties led to the collapse of the Workers Bank. In early 1998, FINSAC took over the management and ownership of the Bank along with three other national commercial banks that were merged into Union Bank.⁶

Since the launch of the Government Savings Bank in 1,870, rural Jamaicans have been encouraged to open up savings accounts in their local post offices. This tradition of post office banking dates back to the British colonial days when small savings accounts set up in post offices were invested in government securities. In most rural and many smaller urban areas, the post office provided important services to lower and middle-income groups. Apart from providing mail services, the post office was the center of communication, as it provided telegraph services, which

⁶ That year, 12 institutions were assisted by FINSAC through at least one of the following means: facilitating deposit transfers to other financial entities, purchasing assets (defaulted loans or fixed assets) or injecting capital.

were the most important means of communication with those in rural areas up until the late nineties. Post office banking was seen as a safe form of saving for most people in rural areas. In some rural communities, farmers and their families were the most important savers with large net inflows observed during harvest and large outflows during the planting season. The post office was also active in promoting savings in schools, with teachers assisting students in opening their first savings accounts.

When the Workers Bank was created in 1973, it took over the Government Savings Bank under an agreement with the GOJ Post Office Service. Under this agreement, the Workers Bank paid a fee (3 percent) on the net transaction volume collected through the post office network. In 1998, postmasters and clerks received deposits and withdrawals from approximately 77,000 savers in two plans: Gold Stamp Savings and Partner Savings Plan (Table 9.4). The Bank also launched a new microcredit product in some post offices on a pilot basis in 1996. In 1999, the Union Bank continued to provide savings services through 247 post offices and lending services through 10 pilot post office branches.

Table 9.4. Postal Savings Accounts 1995-1998

Postal Savings Products	1995		1996		1997		1998		May 1999	
	US\$ 000	Num.	US\$ 000	Num.	US\$ 000	Num.	US\$ 000	Num.	US\$ 000	Num.
Gold stamp savings	8,070	91,036	8,406	83,223	9,424	81,777	9,114	74,118	8,625	74,469
Partner savings plan ^a					264	2,606	425	2,451	630	2,932
Total	8,070	91,036	8,406	83,223	9,688	84,383	9,539	76,569	9,255	77,401

^a Partner Savings Plan introduced in Post Offices in 1997.
Source: Workers Bank.

PRODUCT/SERVICE DELIVERY DESCRIPTION

The Workers bank offered a large variety of savings instruments to its customers including current accounts, time deposit facilities, regular savings accounts and an innovative contractual savings account that was especially attractive to small savers. The Bank followed many of the best practices in designing the savings products they offered their clients:

- (i) The Bank provided a range of different savings products that responded to the characteristics and needs of various market segments. These products offered an array of liquidity and returns. The Bank offered higher interest

on fixed deposit accounts with higher balances and lower interest on semi-liquid and liquid savings products.

- (ii) Simple-designed products existed alongside more complex market-oriented savings products. Products were often created with the interest of appealing to those who were both familiar with traditional bank products, such as checking, passbook savings and certificates of deposit, and for those more familiar with informal products, such as ROSCAs.
- (iii) Low minimum opening balances were available on several Bank products, making it easier for lower-income groups to save.
- (iv) The Bank also focused on creating unique trademarks and product labels that proved to be very attractive to different market segments. These trademarks helped distinguish the Bank's products from their competitors and helped draw new customers.
- (v) Market studies were seen as an important tool to develop, test and introduce new savings products.
- (vi) Marketing strategies for savings products were seen as key to the Bank's success in attracting new borrowers. Investments were made in developing a culture of savings by developing savings instruments for students and marketing products through schools.

Gold Stamp Savings

The gold stamp savings were offered as an alternative to the passbook savings in the post office network. The only difference between the early passbook savings and the new gold stamp savings product was a life insurance policy that matched the total outstanding savings balance of a depositor in the event of death, up to a maximum of US\$ 1,320. This addition to the traditional passbook savings product was added after an informal study by the Bank discovered that insurance coverage in rural areas was generally not available.⁷ The Bank therefore added this feature to the passbook savings product. The insurance was automatic for all primary account holders up to the age of 65 and required no forms to be filled out. This served to provide a small amount of insurance coverage and acted as an incentive for savers to maintain higher savings balances.

The account is easily opened with a minimum deposit of J\$ 50 (US\$ 1.32) and a photo identification card. The interest bearing account provides depositors with a secure savings account and a nominal interest rate that is generally slightly less than the national average rate on deposits (Table 9.5).

⁷ Insurance companies were unable to provide basic health insurance for two related reasons: the rural poor's earnings were not consistent, which made it difficult to collect regular premiums.

Table 9.5. Gold Stamp Savings Interest Rate, Commercial Deposit Rate, Inflation

Indicator	1994	1995	1996	1997	1998	May 1999
Gold stamp savings rate	15.00	15.00	15.00	15.00	13.00	12.50
Average savings deposit rate - commercial banks	18.75	17.82	17.96	13.02	12.13	12.33
Inflation	26.80	25.60	15.80	9.20	7.90	6.00

Sources: Union Bank, Bank of Jamaica.

Investment income tax (15 percent) is automatically withheld when interest is paid. Interest is paid only twice a year and is calculated on the monthly minimum balance, which reduces the effective rate paid on deposits. This system makes it easier to manage numerous small-scale savings accounts.⁸ However, for this incentive to work, clients would need to be aware of the policy of paying on the minimum monthly balance and understand how this worked, which was not normally the case (Frontier Finance, 1998).

Overall, Gold Stamp Savings amounted to only about eight to nine percent of the overall deposit base of Workers Bank between 1996-1998 but accounted for roughly 33 to 36 percent of the outstanding number of accounts. This form of passbook savings instrument was seen as an important service in areas where other formal financial institutions did not operate branches. This was especially important for those living in rural communities and in high crime inner-city communities where no other bank branches were operating.

Partner Savings Plan

In 1993, Workers Bank was looking at ways to encourage and boost savings deposits in its banking network. Competition at the high end of the marketplace drove the bank to introduce new and innovative ways to mobilize savings. The bank had always been viewed as the little man's Bank and it was looking at a new product that was geared toward that niche. The Bank wanted a product that could motivate small savers to deposit increasingly larger amounts at the Bank. The new product, the Partner Savings Plan, was inspired by research from the University of the West Indies and one of the bank managers who were analyzing the Jamaican ROSCA, called "The Partner," and the reasons why it was such an attractive form of saving for most low-income Jamaicans.

⁸ First, it is fairly easy to calculate. Second, it reduces administrative and interest expenses. Third, it could be seen as a way of motivating depositors to increase the size of the deposits and maintain larger balances.

Market Research

The study by the University of the West Indies identified The Partner (ROSCA) as the most important source of cash savings and credit for low-income individuals. The typical Partner is organized by a partner "banker" who manages a pool of funds. The contribution to the Partner pool is termed a "hand." Members in a Partner pool contribute on a periodic basis, generally weekly, and the banker disburses the pool at the end of each period to one of the members. This disbursement is called a "draw." Each period, a different member receives his or her draw and the process repeats itself until every member has had his or her turn (Kirton, 1996).

The study found that 65.2 percent of all households in the areas surveyed were involved in a Partner. 75.1 percent of those involved in the partner were women and 69.1 percent of the Partner groups were between the ages of 25 and 44. The average time of involvement in Partner arrangements was nine years, ranging from one to fifty-eight years. According to the study, the primary reason for involvement in Partner arrangements was savings (59.3 percent of the respondents in the study); 10.8 percent stated that they were involved for the "convenience/ease of involvement," and 7.2 percent stated that the main reason was to "purchase a household item," another actual form of savings (Kirton, 1996).

This study was supplemented by research conducted by the Bank with the participation of summer interns. The students, under the direction of the marketing department of the Bank, traveled to several communities to ask people about their use of the Partner as a form of saving. They also asked about whether people were in fact interested in saving with a bank if they could save using the Partner approach. The study revealed that a number of people had problems with their informal Partner arrangements and were interested in the sense of security a bank could offer in providing the same type of contracted savings service.

Based on those studies, Workers Bank speculated that micro and small business as well as regular wage workers could provide a fertile ground for mobilizing vast amounts of savings. The bank was faced with one central question, relating to the comparative advantages of the ROSCA in an environment of vast proliferation of banks and other financial service institutions: What accounted for the continued survival of informal savings and credit schemes, namely the Partner, outside the formal banking sector? The Bank investigated this question and found that the Partner continued to be used because of various advantages that the formal sector did not offer. These were:

- (i) Easy access for conducting both savings and credit transactions
- (ii) Informality in business transactions (no taxes, no complicated forms)
- (iii) Flexibility of informal savings arrangements
- (iv) Geographical convenience

- (v) Low transaction costs
- (vi) Familiarity with people involved in the Partner

Designing the Partner Savings Plan Product

Once the advantages of the informal savings techniques of the Partner were identified, the Bank was faced with another question: What kind of mobilization strategy could the Bank use to attract savings generally held within the informal sector?

It was obvious that this could only be achieved through “copying” the key features of the Partner. In order to mimic the partner scheme as a means to mobilize savings, the Bank came up with an innovative strategy. It designed a contracted savings product that built on the practices of the Partner by using its terminology. The contracted savings product was called the Partner Savings Plan and regular contributions to the Bank were termed hands with a draw being arranged at a set point in time. The Bank called itself the banker for the Partner arrangement and marketed itself as more secure than the traditional Partner. It also added interest, which was called a bonus, and offered the chance to win big prizes. The contractual arrangements were set at 16, 24, 36 and 48 weeks with minimum contributions of J\$ 200 (slightly over US\$ 5).

The market study also revealed that most people did not like the fact that withholding tax was automatically deducted from the interest payments on their normal passbook savings accounts. The Bank therefore promoted the Partner Savings Plan as a tax-free account, even though it was not tax-free. The Bank simply paid the required withholding tax on the account and did not include it on the partner passbook. So the bonus actually consisted in net interest after withholding taxes had been already paid.

This form of contracted savings was seen as advantageous to the Bank and the customer. From customers’ standpoint, the following advantages may be highlighted:

- (i) *Instilling discipline.* Depositors were strongly attracted to the regular savings discipline that the Partner instilled. The Bank so successfully built on the Partner (ROSCA) concept that the clients felt the incentive to regularly build up their savings as if they were participating in an informal Partner.
- (ii) *Security.* The Bank was seen as a more secure banker than the traditional Partner banker, since the Bank would not “run away” with funds, as had happened in some cases with the Partner banker in the informal sector, and draws would always be paid in a timely fashion.
- (iii) *Bonuses.* Partner savers in the Bank received a bonus (interest) if all payments were made as agreed upon and the chance to participate in a draw for cash

prizes. The bonus was seen as an important difference between the Bank and the informal Partner, since none of the informal Partner arrangements paid interest and most required a contribution to the Partner banker, usually in the form of one weekly contribution or hand.

- (iv) *Better cash management.* Partner clients were also better able to plan the withdrawal of their funds at the point when they most needed it. One of the disadvantages of the Partner in the informal sector was that there was not perfect synchronization between the reception of funds by the members and their spending plans. By contrast, with the Partner Savings Plan, clients could choose among four options: 16, 24, 36 or 48 weeks. Contributions or "throws" could be made to suit the needs of the client since the Bank allowed weekly, biweekly and monthly contributions.

For Workers Bank, the Partner Savings Plan offered certain advantages in comparison to regular passbook savings, such as:

- (i) *Better treasury cash management.* Predictable deposits and withdrawals should make money management easier and, hence, reduce administrative costs in comparison with regular savings accounts.
- (ii) *Larger savings balances.* Contracted regular savings deposits, using the ROSCA concept, encouraged savers to save larger amounts and maintain larger outstanding savings balances.
- (iii) *Screening.* The Partner Savings Plan was used a way to screen potential borrowers. Clients who demonstrated their ability to pay regular sums to a contracted savings account would presumably be better credit risks, since they could demonstrate their ability and willingness to make regular payments at set times.

The Partner Savings Plan demonstrates that savings products can be designed using informal methods of savings mobilization that are more familiar to clients who would normally participate only in ROSCAs or other informal savings instruments.

Establishing Procedures

Establishing operating procedures for the Partner savings account was initially somewhat difficult for the Bank since the product was not really a traditional savings instrument and was really designed with clients in mind. From their viewpoint, it was an easy product to understand. It sounded and performed like the informal product they were used to, with a simple bonus that was a straightforward percentage of one hand. The predetermined bonuses for each type of plan are: 20 percent of one throw for a 16 week period; 50 percent of one throw for a 24 week period; 100 percent of one throw for a 36 week period; and 200 percent of one throw for a 48 week period.

For the Bank, this method of setting interest rates caused problems. Instead of setting interest rates and adjusting them slightly due to changes in the market place, the interest rate could not be so easily adjusted and was not that consistent among different payment methods. Hence, a 16-week product with 16 weekly throws of US\$ 5, or 8 biweekly contributions of US\$ 10, or 4 monthly contributions of US\$ 20, all paid the same bonus at the end: one US dollar (or 20 percent of one weekly throw). This, however, resulted in slightly different annual percentage rates (See below "Financial costs of the Partner account").

The other difference between a normal savings account and the Partner account was that in qualifying for the bonus; clients had to make all payments as scheduled. Late payments were allowed as long as they did not exceed a predetermined number of missed throws. Clients were allowed:

- (i) 1 late throw for a 16-week account
- (ii) 2 late throws for a 24-week account
- (iii) 3 late throws for a 36-week account
- (iv) 4 late throws for a 48-week account

If the number of late contributions exceeded these parameters, the customers were penalized. For example, no bonus was paid on the 16-week account if the client was late more than once. However, if a client decided to close a longer-scheduled account before the agreed period, then a bonus was paid for each completed period. The 16-week bonus was paid for 24-week accounts, only if the 16-week period elapsed and payments were on time and the allowable late payments were not exceeded. The same was true for 36 and 48-week partner accounts.

This caused countless difficulties, especially for the management information system (MIS) staff that had to spend quite some time making adjustments to the database system used by the Bank, since this type of contracted savings product had never been used. It was found that, by making adjustments to the program that managed interest-bearing checking accounts, the system could be adapted to count the number of misses in a way similar to the one that already tracked minimum balances in order to allow interest to be paid. According to Bank staff, this required a great deal of time in order before it operated properly.

Product Launch and Marketing Strategy

It is normally recommended that financial institutions conduct a series of pilot tests at one or two branches when offering new savings products. This allows a financial institution to fully analyze the demand and costs for the new products. After initial pilot tests, priority is given to making necessary price and product adjustments, focusing on staff training, planning logistics and making changes to the management information systems. When the product, pricing, logistics,

information system and staff training are completed, the new product is ready to be gradually expanded throughout the branches of the institution. Only after the product has been successfully expanded to all branches should the emphasis be switched from one of expansion to one of market penetration. This involves the development of a systematic approach to the identification of potential depositors; implementation of a staff incentive system based on performance; the development of effective methods of intra-bank communication; more extensive market research; a major public relations effort; and massive staff training (Robinson, 1995).

Instead of following the approach outlined above, Workers Bank launched the product through all of its 12 branches and six sub-branches in May of 1994. The marketing campaign that served to introduce the Partner Savings Plan was actually quite unique for a bank product in Jamaica. Even before the launch of the Partner Savings Plan, the Bank placed several teaser ads in the press, stating that "the Partner is coming!" No one knew what the "Partner" was at the time, but the campaign was one that created a lot of interest in the product well before it was offered in Bank branches.⁹ Promotional material and advertisement in the press used cartoon characters depicting relevant family or business situations, using Jamaican dialect. The Marketing Department learned from the client group what they wanted and then incorporated this information into both the product and their advertising campaign. The Bank also built on two important distinctions between their product and the informal partner, security and return. The bonus and chance to win cash prizes were also promoted in all materials. The promotional material and advertisement campaign all began with the slogan "A Partner you can count on."

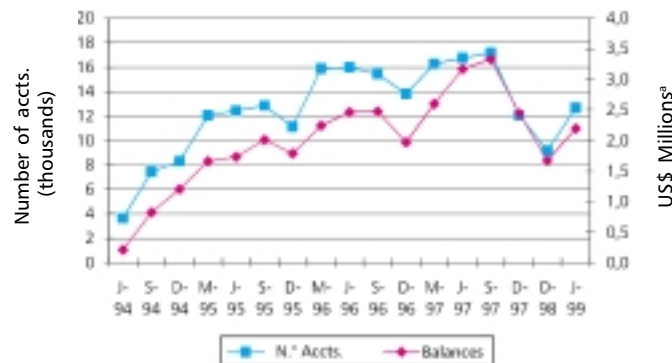
Interestingly, to note that the account was attractive to those who saved for particular purposes. According to Bank officials, those in rural areas generally timed their draws to coincide with planting cycles and those in urban areas timed their accounts to generally coincide with the Christmas season, thus the noticeable decline in the value and number of accounts every year in the last quarter, as will be shown in the next section.

PERFORMANCE ANALYSIS

Outreach Indicators

The publicity campaign and the introduction of the new Partner Savings Plan were seen as successful. Between May 1994 and September 1997, the number of accounts increased to 17,292 and the dollar value of deposits increased to US\$ 3.36 million (Figure 9.1).

⁹ The bank also hired a local reggae artist to sing a catchy jingle that played on both radio and television. Having a reggae star introduce a new product was considered a culturally friendly approach to marketing that used the every-day language of Jamaicans.

Figure 9.1. Number of Partner Accounts and Outstanding Balances, 1994-1999

^a Bank of Jamaica average annual exchange rates were used to calculate balances in US dollars.

Source: Workers Bank.

However, after September 1997, there were reports on the Bank's mounting losses and growing problems in the financial sector. As one would expect, Workers Bank suffered from these reports and the number and amounts of its depositor base declined. By December 1997, the number of Partner savings accounts decreased to 12,184 with an outstanding balance of US\$ 2.47 million. By December 1998, the total number of outstanding accounts had decreased further to 9,298 and the balance stood at US\$ 1.7 million. Surprisingly, the number and amount of Partner savings accounts rose to 12,800 with an outstanding balance of US\$ 2.22 million by June 16, 1999.

It is interesting to observe that, in May 1997, at the height of the banking crisis, Workers Bank introduced the Partner Savings Plan in 65 of the post office branches. The number of deposits increased to 2,932 accounts with an outstanding balance of around US\$ 640,000 within two years. This amounted to approximately four percent of the number of accounts in the post office network, but seven percent of the total US dollar value.

A random sample analysis of Partner Savings Plan accounts in the post office network taken at the end of May 1998 and May 1999 showed that the number of accounts grew rapidly in the first twelve months and that average balances were more than 65 percent higher than the regular Gold Stamp Savings accounts held by the same client group.¹⁰ Average balances in May 1998 were US\$ 198 compared to US\$ 119 for Gold Stamp Savings and by May 1999, Partner Savings Plan account balances were US\$ 215 compared to US\$ 116 for Gold Stamp Savings. Although 20 to 28 percent of all Partner Savings Plan accounts in the post office network

¹⁰ Due to the transfer of Workers Bank to the Union Bank, The Partner Savings Plan was temporarily suspended from the post office network in May, 1999.

were held in rural areas, the rural deposits accounted for less than 2 percent of the outstanding balances (Table 9.6).

Table 9.6. Analysis of Partner Accounts - Post Office Network

Area	May 1998 ^a		May 1999 ^b	
	Accts.	US\$	Accts.	US\$
Rural	20%	1.16%	28%	1.83%
Urban	80%	98.84%	72%	98.17%

^a Random sample of 290 accounts out of 2,782.

^b Sample of 294 accounts out of 2,932.

Source: Workers Bank Postal Division.

This random sample of Partner Savings accounts revealed that smaller deposits (below US\$ 300) accounted for between 78 and 80 percent of the number of accounts, but amounted to less than 45 percent of the US dollar value of such deposits (Table 9.7).

**Table 9.7. Partner Savings Plan - Post Office Accounts
(Outstanding balances)**

Balances (US\$)	May 1998 ^a			May 1999 ^b				
	Num.	%	Balance	%	Num.	%	Balance	%
Under 100	136	46.9	194,140	10.7	118	40.1	133,950	6.4
101 to 200	63	21.7	301,500	16.6	67	22.8	374,330	17.8
201 to 300	34	11.7	301,920	16.6	45	15.3	433,500	20.5
301 to 400	17	5.9	198,150	10.9	27	9.2	351,300	16.7
401 to 500	17	5.9	271,500	14.9	16	5.4	276,400	13.1
Over 500	23	7.9	552,200	30.3	21	7.1	539,500	25.6
Total	290	100.0	1,819,410	100.0	294	100.0	2,108,980	100.0

^a Random sample of 290 accounts out of 2,782.

^b Sample of 294 accounts out of 2,932.

Source: Workers Bank Postal Division.

Cost Analysis

All financial institutions, especially those providing microfinancial services, should undertake periodic cost studies to enable the institution to adjust both the product and the delivery system in order to improve overall cost efficiency. Workers Bank analyzed their Partner Savings Plan product in 1996 and quickly realized that the initial interest rates along with administrative costs were too high and that the Bank was losing money on the product. As a result, the interest or bonus on the Partner Savings Plan was reduced to cut costs and make the product more profitable. In 1999, the Bank analyzed the possibility of increasing the minimum contribution to an amount in J\$ equivalent to US\$ 13.15, up from the minimum amount of J\$ equivalent to US\$ 5.26.

Bringing modifications to the basic design of a savings product, such as changing liquidity or reducing returns, needs to be done carefully by balancing cost savings with the potential impacts on client behavior (Christen, 1997). A detailed cost analysis of savings products can be conducted in a variety of ways. One approach is to look at five major cost elements: (1) financial costs; (2) variable operating costs; (3) fixed operating costs; (4) indirect costs (general overhead); and (5) organizational costs (such as set-up expenses) (Christen, 1997). This type of study can be very useful although it is often difficult to conduct, unless the institution sets up a system that allows it to track expenses on different types of accounts more easily.

For financial institutions planning to introduce microsavings products, numerous small transactions can significantly increase the costs of maintaining and offering such products and making them unprofitable. One of the great advantages to a contracted savings product, like the Partner Savings Plan, is that the costs associated with numerous transactions can be easily tracked and analyzed. This also allows a better analysis of the costs of this type of product at an early stage and enables a bank to make adjustments that would promote higher balances, something that is normally more difficult to attempt with regular passbook savings. The size and number of each deposit can be determined and analyzed in advance so as to provide the financial institution a unique opportunity to determine the minimum amounts needed in order to make a product cost effective.

Financial Costs of the Partner Account

The Partner Savings Plan was designed in such a way as to make the product easier to understand for clients, who could then calculate returns in advance. The interest paid on the account, or bonus as it was referred to by the Bank, was a percentage of the weekly contribution or hand. Bonus rates are shown in Table 9.8. For instance, someone contributing J\$ 1,000 weekly for 16 weeks would receive J\$ 16,000 plus a bonus of J\$ 200 at the end of the plan for a total of J\$ 16,200 (an annual percentage rate of 9.88 percent, 10.6 percent or 11.43 percent, depending on whether the client paid weekly, biweekly, or monthly).

Table 9.8. Financial Costs for Different Partner Products

Partner products	Bonus as a % of weekly contribution	Effective annual rate ^a		
		Weekly payment	Biweekly payment	Monthly payment
16 week	20	9.88	10.59	11.43
24 week	50	10.67	11.16	11.36
36 week	100	9.30	9.58	9.41
48 week	200	10.28	10.51	10.16

^a Effective interest rates include an additional 15 percent paid by the Bank on withholding tax.

Sources: Workers Bank and author's calculations.

Variable Operating Cost

Variable operating costs are actually the transaction costs associated with the savings account. These would include the transaction time associated with the teller, materials, opening and closing costs. Since it would be difficult to analyze the Partner Savings Plan as it was offered through the post office network, this chapter will instead analyze the transaction costs of the Partner Savings Plan in the branch network. The number of total accounts held by all Workers Bank branches as of September 1997 was used to estimate the number of monthly transactions. Although the product was designed to allow weekly, biweekly and monthly contributions, most accounts were based on weekly deposits. The exact number of accounts broken down by frequency of contribution could not be determined and the estimates below (Table 9.9) were made based on estimates derived from discussions with Workers Bank staff.

Table 9.9. Number of Partner Accounts, 1997

Partner products	Number of partner accounts	Contributions			Average # of transactions per month
		Weekly %	Biweekly %	Monthly %	
16 week	7,250	70 %	20 %	10 %	3.30
24 week	5,837	70 %	20 %	10 %	3.30
36 week	1,905	70 %	20 %	10 %	3.30
48 week	2,300	70 %	20 %	10 %	3.30

Author's estimates.

Determining average balances for each different type of account proved to be more difficult, since the bank had not kept historical information by Partner product. The estimates below (Table 9.10) are made based on an average contribution of approximately J\$ 708 (US\$ 18.62). It should be noted that minimum contributions for biweekly and monthly contributions were actually J\$ 400 (US\$ 10.52) and J\$ 800 (US\$ 21.04), respectively.

Table 9.10. Average Outstanding Balances

Partner product	Contributions (US\$)			Average outstanding balance per account (US\$)
	Weekly	Biweekly	Monthly	
16 week	18.62	18.62	18.62	122.90
24 week	18.62	18.62	18.62	184.36
36 week	18.62	18.62	18.62	275.60
48 week	18.62	18.62	18.62	367.78
Average	18.62	18.62	18.62	193.04 ^a

^a Weighted average balance (by the number of accounts).

Author's estimates.

In order to estimate the transaction costs associated with making deposits, the Bank analyzed the costs of opening and closing accounts and accepting regular deposits (Workers Bank, 1996). Below are tables associated with some of the findings of that study converted into US dollars (Tables 9.11 and 9.12).

Table 9.11. Transactions Costs

Minutes for each deposit - Teller	3.75
Minutes for each deposit - Proof	0.50
Minutes for each deposit - Current accounts clerk	0.25
Wage per minute - Teller	US\$ 0.04
Wage per minute - Proof	US\$ 0.04
Wage per minute - Current accounts clerk	US\$ 0.04
Average wage cost per transaction	US\$ 0.18
Cost of materials	US\$ 0.01
Total cost per transaction	US\$ 0.19

Source: Workers Bank.

Table 9.12. Account Opening and Closing Costs

Activity	Cost
Staff costs	
Customer service representative	13 min
CSR supervisor	1 min
Teller	3 min
Current accounts clerk	0.25 min
Proof clerk	0.5 min
Total time to open a Partner Savings Account	18 min
Per minute salary cost - CRS Rep.	US\$ 0.03
Per minute salary cost - CRS supervisor	US\$ 0.05
Per minute salary cost - Teller	US\$ 0.04
Per minute salary cost - Current accounts clerk	US\$ 0.04
Per minute wage cost - Proof clerk	US\$ 0.04
Stationery costs (US\$)	
Signature card	0.03
Deposit slip	0.01
Copier - application form	0.27
Copier - picture ID	0.27
Partner booklet	0.21
Black light	0.08
Booklet plastic cover	0.15
Withdrawal slip	0.01

(cont.)

Table 9.12. (cont.)

Cost to open and close accounts (US\$)	
Salary Costs to open a Partner Savings Account	0.59
Costs of material to open an account	1.02
Costs to close an account	0.47
Total costs to open and close a Partner account	2.08
Prorated opening and closing cost 16-week	0.52
Prorated opening and closing cost 24-week	0.35
Prorated opening and closing cost 36-week	0.23
Prorated opening and closing cost 48 week	0.19

Source: Workers Bank.

The above analysis shows that the cost of opening and closing accounts is much more expensive for the shorter-term Partner accounts than for the longer-term accounts. Since the account is of a revolving kind, with many customers closing their accounts at the end of the contracted period only to open a new account the following week, the Bank could save on opening costs by simply providing a new booklet rather than entering all the data again. Certain expenses are not duplicated once a new account is opened, such as signature cards kept on file, identification cards only needing to be copied once, etc.

Fixed Operating Costs

Although it was not possible to obtain operating cost details, except for estimating advertisement and promotion costs, it is an important feature that needs to be analyzed. Fixed operating costs do not change with the volume of transactions; nevertheless, branches that manage small accounts, such as the Partner, spend a significant portion of their time, infrastructure and other operating costs to provide this service (Table 9.13). Below is only an estimate of a normal year of advertisement and promotion costs. It should be noted that Workers Bank originally spent large sums on TV, radio and newspaper advertisement that were reduced to almost nothing after the product was operational. The lottery and prize figure were estimated at just over J\$ 200,000 or US\$ 50,000 for annual prizes awarded around Christmas time.

Table 9.13. Cost of Advertisement and Promotion

Activity	Monthly costs
Lottery & prizes	US\$ 5,400
Brochures	US\$ 1,100
Radio, TV, newspaper	US\$ 2,700
Total advertisement	US\$ 9,200
Number of monthly transactions	57,064
Prorated costs of advertisement and promotion per transaction	US\$ 0.16

Author's estimates.

Total Costs of the Partner Savings Plan Account

This preliminary analysis shows that running a contracted savings account like the Partner is expensive. Weighted average costs including interest expense, variable costs and estimates for fixed annual expenses, which, in this case, were limited to estimated costs of promotion and advertisement, were running at 18.24 percent of the average balance of Partner accounts (Table 9.14). This is at the higher end of the 15 to 18.75 percent range of interest rates that were paid on the larger, long-term fixed deposit accounts of commercial banks in April 1999.

Table 9.14. Direct, Fixed and Variable Costs of the Partner

Partner Product	Cost per transaction including fixed and variable costs (US\$)	Number of transactions per month	Fixed and variable costs per month (US\$)	Account opening and closing costs (US\$)	Total operating costs per account (US\$)	Average balance (US\$)	Operating costs as a percentage of the annual balance	Average annual interest expenses (%)	Total costs as a percentage of the average annual balance
16 week	0.203	3.30	0.67	0.519	1,190	122.89	11.62	10.18	21.80
24 week	0.203	3.30	0.67	0.346	1,017	184.34	6.62	10.84	17.46
36 week	0.203	3.30	0.67	0.231	0,902	275.58	3.93	9.37	13.29
48 week	0.203	3.30	0.67	0.189	0,860	367.75	2.81	10.31	13.12
Promedio	0.203	3.30	0.67	0.321	0,992	193.02	7.91	10.33	18.24

Author's estimates.

As a general rule of thumb, the combined operating and interest costs of savings should be below the average fixed deposit rates paid by the financial institution. Comparing Workers Bank to two other types of financial institutions that operate in Asia, the Lembaga Perkreditan Desa in Kuta, Indonesia, and the Small Farmers Cooperative of Chhatre Deurali of Nepal, it turns out that the Partner Savings Plan, as operated by the Bank, had higher costs compared to what the Bank paid on fixed deposits (Table 9.15).

Table 9.15. Comparative Savings Costs

Description	Workers Bank of Jamaica	SFDP Chhatre Deurali of Nepal	LPD Kuta of Indonesia
Average amount of savings (in US\$)	180	29	141
GNP <i>per capita</i> in 1997 (in US\$)	1,560	220	1,110
Average operating expense - Savings	7.9%	7.3%	4.4%
Average interest expense - Savings	10.3%	9.0%	12.0%
Total expense - Savings	18.2%	16.3%	16.4%
Total interest expense - Time deposits	16.0%	16.4%	18.0%

Source: Microsavings (1999).

The results of this analysis show that, unless the Bank makes changes to this innovative product, the costs of mobilizing small-scale savings using this approach will be higher than attempting to mobilize larger fixed-term deposits. In order to minimize costs, the Bank needs to require larger minimum contributions, such as increasing the minimum weekly contribution to the J\$ equivalent of US\$ 12.90, up from the 1999 contribution of US\$ 5.17. This step alone would decrease the number of smaller savings transactions.

In order not to discourage smaller savers, the Bank could look at encouraging people to open joint accounts with a friend, relative or colleague. As in informal Partners, some clients could save with another person with each throwing half a hand. The Bank could also look at reducing interest paid on 16- and 24-week Partners by lowering their bonus. Even though the bonus rate was reduced significantly in 1996, the number of accounts actually increased rather than decreased, showing the relative attractiveness of this product and the lack of interest rate sensitivity. The accounts with longer terms (36 to 48 weeks) had much lower administrative costs averaging between 3.93 percent and 2.81 percent instead of the average 11.62 percent to 6.62 percent costs of 16- to 24-week plans.

LESSONS LEARNED FROM WORKERS BANK AND THE PARTNER SAVINGS PLAN

There are many lessons to be learned from the Workers Bank case study and the Partner Savings Plan. Formal financial institutions looking to provide small-scale savings accounts should realize that the mobilization of these types of accounts is costly; however, these costs can be reduced to manageable levels. The keys to successful savings mobilization efforts are outlined below:

- (i) *Infrastructure:* Workers Bank's close physical proximity to customers was seen as a key factor in its ability to offer savings services to lower-income clients, especially in rural areas. Their strategic alliance with the post office network enabled the Bank to reach deep into areas that would have been too costly to serve if the Bank had to set up its own offices. Formal financial institutions seeking to provide financial services in rural areas should seek strategic alliances and possibly use existing infrastructure to minimize costs. These might be post office branches or supermarket chains.
- (ii) *Market Analysis:* Market analysis is seen as an important tool in designing and introducing savings instruments. Studies on informal savings instruments, especially ROSCAs, provide an insight into what are considered by people to be the most important priorities for why and how they save, thereby allowing the Bank to more appropriately design a demand-oriented savings product. The example of the Workers Bank demonstrates how studies can be used to design products that build on the discipline associated with contractual savings arrangements widely used in informal ROSCAs. Since ROSCAs are widely used in most developing countries, they are commonly understood and,

hence, may be mimicked to attract those who normally do not regularly save in banks.

ROSCAs also have several shortcomings, such as more rigidity in the sense that savers cannot always plan when they will receive their money, and problems associated with the product security, as group organizers have at times run away with funds. These can be avoided by Banks and there are clear advantages in taking part in a similar type of product with a formal bank. In the Workers Bank, this included the prospect of saving for a particular date for an amount determined by the client alone and not the group and building on the added security that a bank could offer. Proper market studies examining how and why people save is essential in designing market-driven savings services for rural areas.

- (iii) *Designing the Savings Product:* Workers Bank's Partner Savings Plan provides a good example of a microsavings instrument patterned after the practices of informal savings groups. It is a simple savings product that coexists with more complex savings products oriented to specific market segments. Low minimum opening balances reduce the barriers for lower-income individuals to access savings products. Contractual savings schemes have the additional advantage of encouraging the practice of regularly contributing to a savings account, hence, allowing clients to hold larger balances than might otherwise be kept in regular passbook savings accounts. This helps the Bank attract larger outstanding balances than would normally exist in regular passbook savings accounts from the same target population. The unique trademark of both the bank and the product was also seen as important in attracting customers and in distinguishing the products from competing institutions.
- (iv) *Better Treasury Management:* Predictable deposits and withdrawals associated with contractual savings schemes may make money management easier and, hence, lower administrative costs and liquid reserves normally associated with regular savings accounts.
- (v) *Potential Credit Customers Screening:* The use of contractual savings schemes can also be viewed as a way to screen potential borrowers. Clients who demonstrated their ability to pay regular sums to a contracted savings account would presumably represent less credit risks since they could demonstrate their ability and willingness to make regular payments at fixed times.
- (vi) *Establishing Procedures:* The Partner Savings Plan demonstrated the importance of establishing procedures that are transparent and easy for clients to understand. Products that sound and perform like informal products may be more attractive than more traditional bank products, such

as passbook or time deposit accounts. However, this case study also demonstrates the difficulty banks face when designing products that deviate from normal savings instruments. Banks seeking to design products that deviate from regular savings instruments should be aware that establishing internal procedures for these "new" type of savings services will often be more time consuming and difficult to formulate initially; thus, banks should allow adequate time to develop and test such procedures.

- (vii) *Launching the Product:* It is normally recommended that financial institutions offering new savings service should conduct a series of pilot tests at a few branches over a period of a year or more before formally launching the product. This enables a financial institution to fully analyze the demand for and costs of the new products. After initial pilot tests, priority should be given to making necessary price and product adjustments, focusing on staff training, planning logistics and making modifications to management information systems. When the product, pricing, logistics, information system and staff training are completed, the new product will be ready to be gradually expanded throughout the branches of the institution. Only after the product has been successfully spread to all branches, should the emphasis be switched from expansion to market penetration. Although fairly successful in launching the Partner Savings Plan, the Workers Bank case study demonstrates the difficulties associated with introducing an untested savings product that differs from more traditional savings instruments.
- (viii) *Marketing Strategy:* The Partner Savings Plan demonstrates the importance of a properly designed marketing campaign. The importance of posters, brochures, television and radio ads in local dialect that were culturally friendly was key to the successful introduction of the product. Through the use of marketing studies, the Bank was able to learn from the client group what they wanted and then incorporated this information into both the product and their advertising campaign.
- (ix) *Cost Analysis:* Banks planning to introduce new microsavings products should do so with a monitoring plan in place that will allow for periodic cost studies to enable the institution to adjust both the product and the delivery system in order to improve overall cost efficiency. One approach to carrying out cost studies is to look at five major cost elements: (1) financial costs, (2) variable operating costs, (3) fixed operating costs, (4) indirect costs (general overhead) and (5) organizational costs, such as start-up expenses. It is important to note that making changes to the basic design of a savings product, such as changing liquidity or reducing returns, needs to be done carefully by balancing cost savings with the potential impacts on client behavior.

Lastly, for financial institutions planning to introduce microsavings products, numerous small transactions can significantly increase the costs of maintaining and offering such products. There is thus a significant advantage in introducing contracted savings schemes, like the Partner Savings Plan, as the costs associated with numerous transactions may be easily tracked and analyzed. This type of product also allows for better-cost analysis during the design phase, enabling a bank to make adjustments that would promote higher balances and analyze the number of transactions associated with such types of accounts.

INNOVATIVE RURAL FINANCIAL PRODUCTS

ANED, BOLIVIA: PIONEERING RURAL MICROLEASING

Javier Alvarado and Francisco Galarza

INTRODUCTION

The Financial Leasing Program of the National Ecumenical Development Association (Asociación Nacional EcuMénica de Desarrollo, ANED) is an innovative mechanism for the small producers of Bolivia's rural areas to finance investment capital (fixed assets). By financing the acquisition of fixed assets, this alternative to credit circumvents one of the most important bottlenecks small producers face in expanding their production and productivity possibilities. Furthermore, financial leasing enables producers to address the problem of lack of collateral and lowers portfolio risks for ANED.

This chapter is divided in five sections. Following the introduction, which includes a brief description of ANED, an explanation of the financial leasing mechanism is presented (Section 2). In Section 3, the results of the Program are analyzed from the perspective of its outreach and financial performance. The fourth section details the challenges facing the expansion of this model. Finally, conclusions are drawn in Section 5.

Brief Description of ANED

ANED was founded as an NGO on June 13th, 1978, for the exclusive purpose of providing credit to low-income, urban and rural sectors, who were traditionally ignored by the banking system. As such, it became the first institution of its type in Bolivia, offering specialized financial services to this segment of the population. The creation of ANED responded to the need of the 11 founding NGOs to have a financial component to complement their nonfinancial activities (training and

technical assistance).¹ ANED is currently made up of 23 NGOs, more than double its original number, which shows that the financial services it offers are attracting an increasing number of member organizations. In other words, members institutions appear to consider that providing financial services through ANED is turning out to be more efficient than offering such services themselves.

As displayed in Table 10.1, ANED offers six financial products, of which five are designed for producers and one for institutions (Associative). Since 1995, a lot of activity has been observed in the creation of new financial products. In fact, four of the products currently on offer have been set up in the meantime.

Table 10.1. Credit Facilities Offered by ANED, 1998

Facilities	Characteristics
Associative	First product created, designed for financing working and investment capital. In December 1998, this was the main financial product, as it represented 63.3 percent of the portfolio balance.
Financial leasing	Created in 1997, it finances investment capital. Represents 3.7 percent of the portfolio.
Individual	Implemented in 1996, it finances working capital and investment capital. Represents 1.1 percent of the portfolio, the smallest share of all the products.
Village banks	Started operating in 1996. They finance working capital (short-term loan). Represent 3.5 percent of the portfolio.
Solidarity	Created in 1995, it finances working capital. Represents 23.2 percent of the portfolio.
Line of credit	Designed to finance other credit programs or organizations. Represents 5.2 percent of the portfolio.

Source: ANED.

The area of action of the financial services offered by ANED is spread over eight of Bolivia's nine Departments, all except Pando, among four regional offices and 12 rural offices, which make up the Loan Department.² In total, at the end of 1998, ANED had 17 offices staffed with 26 loan officers. The average wage per loan officer amounted to US\$ 450 and there were no bonuses for productivity. The portfolio balance was concentrated in the Departments of La Paz (28.3 percent), Potosí (18.9 percent) and Santa Cruz (17.3 percent).

1 Among them, the Ecuadorian Ecotourism Association (Asociación Ecuatoriana de Ecoturismo, ASEC), the Cooperative Development Department (Departamento de Fomento Cooperativo, DEFOCOOP), the Social and Economic Development Center (Centro para el Desarrollo Social y Económico, DESEC), Community Radio Education (Educación Comunitaria Radial, ECORA), Equipo Chapare, Mennonite Economic Development Associates (MEDA, Bolivia) and the National Union for Social Action Work (Unión Nacional de Instituciones para el Trabajo de Acción Social, UNITAS).

2 In 1997, two regional offices (in Tarija and Oruro) and five rural offices (two in Potosí, one in Tarija, one in Chuquisaca and one in Santa Cruz) were opened and the staff then rose from 32 to 44.

ANED's Financial Leasing Program emerged in 1997 as a response to the needs of many rural producers to have fixed assets to enable them to increase their productivity and income in a significant manner. ANED had already attempted to satisfy that demand through associative credit, but the Program was not successful because of many lost loans. This experience demonstrated that incentives to pay back significant amounts remained very weak when they involved no real guarantee. On the other hand, ANED's solidarity loan programs could not satisfy that demand either, due to the fact that the loans were small and very short-term. The challenge was therefore to design a financial product that would facilitate the acquisition of fixed assets and, at the same time, supply guarantees that would motivate a sector of producers without real guarantees to pay back their loans.

The Program started off as a pilot project, with a donation from the Inter-American Development Foundation (IAF) in the Departments of La Paz and Oruro. In these areas, ANED's surveys had shown that the conditions were conducive to launch the implementation of a financial leasing program. In Oruro, an important segment of small farmers were growing garden vegetables, for which the demand is high in urban areas, and they were in a position to significantly increase their production as long as better irrigation systems were available, particularly the use of motorized pumps. Simultaneously, in La Paz, several dairy organizations were in need of tractors to improve their forage production.

In its beginnings, the Program had to overcome several difficulties. First, a great deal of work had to be done to develop a methodology through which the programs could be explained in a simple manner to the users, considering most of them only had basic education levels. Another difficulty was operations management, since the software the organization was using did not take into account the taxes imposed on financial leasing operations in Bolivia. In addition, hard work had to be carried out to identify suppliers who could provide the appropriate machinery to answer the needs of the target-clientele, as well as to train clients in handling the machines and equipment. Finally, the Program had to strive for greater independence, although this has remained a challenge, since loan officers must split their time between their activities in the Financial Leasing Program and other responsibilities.

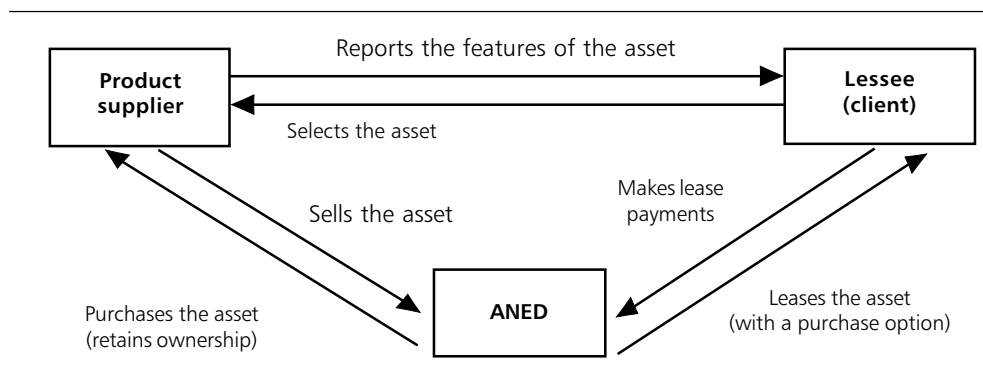
DESCRIPTION OF THE PRODUCT: FINANCIAL LEASING

Based on the definition of a demand for the above-mentioned agricultural products, ANED established relationships with companies that had the most adequate supply of them. Such a relationship is of great importance because it ensures that a large part of the promotion, including instructions and training in equipment use, is taken on by companies, which considerably lowers promotion costs. In addition, the fact that ANED purchases assets wholesale ensures that the prices paid are

below what any producer would be charged individually and guarantees a stock of replacement parts for the financed.³

Through financial leasing, an operation that involves small amounts, ANED acquires a specific piece of equipment at the express request of a previously selected client. The equipment is delivered to the client for use over a specified period of time in return for regular lease payments. The equipment, however, remains the property of ANED (see Outline 10.1). Upon completion of the agreed term, the client has the option to purchase the asset, after paying an amount called surrender value. As ANED points out, the fundamental aspect of the contract is the fact that the legal property of the asset is separate from its economic use. This operation does not require any type of guarantee, as the equipment per se constitutes collateral for the operation.

Outline 10.1. Financial Leasing Operation



In order for this type of operation to be successful, the use of the equipment must generate sufficient income to cover both the lease payments and the cost of operating the equipment. This is the reason why, as will be seen further, ANED is very cautious not only in analyzing the cash flow of equipment use, but also in assessing the client's ability to operate the machinery.

The design of financial leasing contracts is extremely important. In fact, it is not enough for contracts to be signed by producers, they must also provide the necessary incentives for users to purchase the equipment on completion of the lease contract, since this is the ultimate goal of the program. The contract design must therefore contemplate the following points:

- (i) A first payment ranging from 15 percent to 25 percent of the value of the equipment, constituting an incentive for the appropriate use and maintenance of the equipment.

³ Until the end of 1999, ANED was the largest buyer of motorized pumps in all of Bolivia.

- (ii) A contract term not exceeding two thirds of the economic value or shelf life of the equipment (including depreciation) or five years, to prevent clients from losing interest in purchasing when faced with obsolete or depreciated machinery or equipment.
- (iii) A relatively low residual value or final lease payment to motivate producers to become owners of the equipment. The goal is for the value of the equipment, minus depreciation, to be significantly higher than the amount of the residual payment.

Other conditions included in lease contracts are as follows: The leasing facility finances amounts ranging from US\$ 500 to US\$ 40,000; contract terms must not exceed five years; and the effective annual cost is 16 percent to 17 percent in dollars. In addition, payments are flexible and scheduled according to clients' cash flow. Furthermore, lease contracts set prepayment facilities, which means that clients may make payments in advance and thereby reduce the amount of interest paid and future payments. As emerges from the above, an important element in the design of ANED's financial leasing contracts is personalized service; contracts are "tailor-made" for each client. This is an important factor in improving service quality.

Finally, most of the equipment purchased and delivered in financial leasing is not insured, except in the case of very costly equipment such as trucks. Moreover, the maintenance of the leased machinery or equipment is directly assumed by the client. An important characteristic of the financed assets and equipment is that there is a secondary market for them, so that, when lessees do not buy them, that is, when they decide not to use their option to purchase, ANED may sell the assets or equipment without incurring excessive costs or losses. This ensures the Program a minimum degree of profitability.

Typical Clients

Typical clients of ANED's Financial Leasing Program are *campesinos* who, in general, have three to four months' experience with financed equipment. The level of education of these producers is quite basic: 55 percent have completed elementary school and only 5 percent have finished high school. In the case of complex equipment such as farm tractors, clients must prove they have at least two years of experience using such equipment. Finally, those who use motorized pumps, which are the most frequently leased item, are *campesinos* who grow from 0.2 to two hectares of vegetables.

Screening and Recovery Criteria

Since financial leasing is used in places where ANED has worked for quite a long time, the institution has accumulated prior knowledge of the area. Some producers are even past clients of ANED's, having used others of its financial

products. This obviously provides a first information base for the institution to carefully screen clients who wish to acquire equipment or machinery through a financial leasing product.

Requisites for clients seeking financial leasing with ANED include: not having outstanding debts with the institution and demonstrating from six months to two years of experience in the activity for which the piece of equipment or machinery is to be used. As mentioned above, experience in equipment use is very important in order to lower the probabilities of misuse and default on lease payments.

Officially, for clients to take part in a financial leasing operation, the steps outlined below must be followed:

- (i) Clients visit an ANED office and express their interest in acquiring a specific type of equipment.
- (ii) Assisted by loan officers, clients obtain the cost estimate on the equipment and attach it to the financial leasing application form, which is filled with the help of the officers.
- (iii) Clients receive a visit from an ANED loan officer, who sets up a cash flow outline taking the household as unit for the analysis, based on the income expected from the acquisition of the new piece of equipment minus, evidently, the lease payments and other expenses resulting from equipment use. At this stage, the lease payments that will enter into the contract are planned out.
- (iv) The probable impact of the equipment on the community environment and the risks associated with its operation and maintenance are examined.
- (v) If the result of the analysis of the above-mentioned factors is positive, the loan officer recommends approval of the application.
- (vi) The application is then passed on to the Lease Committee to be approved or rejected.
- (vii) If the application is approved, ANED purchases the equipment.
- (viii) ANED and the supplier deliver the equipment and the lessee makes the first payment, which usually ranges from 15 percent to 25 percent of the equipment's value.

The procedure followed by ANED when dealing with machinery or equipment suppliers is as follows:

- (i) ANED finds the equipment supplier that best fits the client's needs.

- (ii) ANED asks the supplier for a confirmation of prices, warranties and services.
- (iii) ANED agrees with the supplier on the method and form of payment and makes the purchase.
- (iv) ANED requests the equipment to be sent to a specific community, following coordination with its regional office.
- (v) The supplier issues and delivers the bill of sale to ANED.

Since the equipment is generally new and under warranty, there is no further monitoring of its use. Usually, suppliers offer courses on the use and maintenance of their equipment and answer any questions that may come up when operating it. The financial leasing contract concludes when clients make the final payment and use their option of purchase.

In case of default on a payment, ANED sends a written reminder about the payment and warns that measures will be taken if the current behavior persists. Once 15 days have passed, a late fee is charged. If non-compliance persists up to 60 days, ANED proceeds to recover the equipment, which may be leased again or sold.

RESULTS

Outreach of the Financial Leasing Program

Until October 1999, equipment had been financed for over US\$ 623,000, of which 94.6 percent was agricultural machinery and the remainder, to traditional handicrafts, which has a great impact on nonfarm rural employment. As shown in Table 10.2, in over two years of operation, the Program has financed a relatively wide variety of equipment, despite of an important focus on two pieces of equipment: motorized pumps and tractors. On one hand, 82.8 percent of financed assets resulted in the purchase of motorized pumps to improve irrigation systems, followed far behind by farm tractors, with 5.4 percent. On the other hand, 53.2 percent of the total value of the contracts signed was for tractors and 28.7 percent for motorized pumps.

The average contract was for an amount of US\$ 1,895, which leads to the conclusion that the financed machinery is meant for small rural producers. In addition, 86 percent of borrowers were men, since generally the head of the household, who also operates the equipment, signs contracts.

Table 10.2. Financial Leasing: Financed Equipment
(Up-dated as of October 1999)

Type of equipment	Contract value (US\$)	%	Number of assets	%
Farm plow	15,689	2.5	10	2.8
Electrical pumps	1,800	0.3	5	1.4
Farm truck	17,800	2.9	1	0.3
Cultivator	971	0.2	1	0.3
Metalworking equipment	10,254	1.6	2	0.6
Electrical ovens	3,000	0.5	1	0.3
Measuring tape	1,424	0.2	1	0.3
Real estate	8,000	1.3	1	0.3
Shoemaking equipment	950	0.2	1	0.3
Motorized pumps	178,880	28.7	294	82.8
Grader	2,392	0.4	1	0.3
Farm roller	11,036	1.8	5	1.4
Harvester	12,000	1.9	1	0.3
Additional services	9,749	1.6	7	2.0
Flat loom	12,800	2.1	4	1.1
Farm tractor	331,846	53.2	19	5.4
4 x 4 Pickups	5,000	0.8	1	0.3
Total	623,591	100.0	355	

Source: ANED.

With respect to the geographic outreach of the Program, in October 1999, ANED ran financial leasing operations in six Departments (Table 10.3); the two main regions were La Paz (45 percent of the contract value up to October 1999) and Oruro (27 percent), which were both pioneers at the Program's onset. Nevertheless, and important rise in these operations has been observed in the Department of Tarija (18 percent).

Table 10.3. Financial Leasing: Outreach According to Department
(Up-dated as of October 1999)

Department	Contract value (US\$)	%	Number of contracts	Number of clients
Chuquisaca	6,555	1.1	10	20
La Paz	281,214	45.1	25	37
Oruro	168,530	27.0	283	283
Potosí	11,950	1.9	2	2
Santa Cruz	45,210	7.2	2	13
Tarija	110,132	17.7	7	52
Total	623,591	100.0	329	407

Source: ANED.

An important characteristic of the Financial Leasing Program is the high level of growth it has registered and, hence, its perspectives for the future seem very promising. In fact, on December 31st, 1997, the leasing facility only had 143 clients (0.4 percent of ANED's total clientele) and a portfolio balance of US\$ 126,058 (2.2 percent of ANED's total portfolio). On December 31st, 1998, there 251 registered operations or outstanding contracts, for 322 clients,⁴ with a balance of US\$ 239,005 (3.7 percent of ANED's portfolio); that is, a growth of 125 percent in the number of clients and 90 percent in portfolio balance (see Table 10.4).⁵ This data demonstrates the great success this financial product has had.

Table 10.4. ANED: Portfolio Distribution According to Facility, 1998

Facility	Balance		Loans		Average balance (US\$)	Borrowers			Over due (%)
	(US\$)	%	Number	%		Number	%	% Women	
Village banks	226,472	3.5	265	1.4	855	3,440	8.2	100.0	0.1
Associated loan	4,084,159	63.3	1,145	6.0	3,567	18,757	44.9	10.3	5.3
Individual loan	71,004	1.1	207	1.1	343	237	0.6	23.6	6.0
Financial leasing	239,005	3.7	251	1.3	952	322	0.8	7.8	0.0
Lines of credit	335,195	5.2	89	0.5	3,766	1,974	4.7	47.9	7.0
Solidarity loan	1,496,105	23.2	17,072	89.7	88	17,073	40.8	39.4	5.8
Total	6,451,941	100.0	19,029	100.0	339	41,803	100.0	31.4	5.2

Source: ANED.

Table 10.5 shows that 35.9 percent of the payment terms of financial leasing operations to finance agricultural activities has been established according to a payment plan "tailor-made" for each activity. In addition, there are very few operations for which payments are made monthly or bimonthly. Rather, in most cases, payments are two or three times a year. Such a payment schedule demands from the employees in charge that they manage their liquidity quite skillfully in order to be able to cover their monthly operating costs. The requisite that payment terms "fit" one after another is of great importance for the Program, especially if, as employees wish, it is to operate independently from ANED's other programs.

4 As part of this type of leasing is by group, more than one client may take part in one operation.

5 The difference between the accumulated figures and the portfolio balance is not only explained by the distinct dates on the information, but also by the fact that the payments made are not considered in the portfolio balance, only payments owed are.

Table 10.5. Financing of Financial Leasing According to Terms and Activities
(Updated as of October 31st, 1999)

Payment Schedule	Agricultural	%	Micro business	%	Total
Monthly	8,000	1.4			8,000
Bimonthly	20,170	3.4	5,000	15.0	25,170
Trimonthly	18,750	3.2	19,478	58.3	38,228
Quarterly	172,470	29.2	950	2.8	173,420
Six months	158,908	26.9			158,908
According to payment plan	211,865	35.9	8,000	23.9	219,865
Total	590,163	100.0	33,428	100.0	623,591

Source: ANED.

Financial Performance

The financial information obtained on ANED's Financial Leasing Program only refers to income and costs. However, since this facility represents barely four percent of ANED's total portfolio, its performance is in no way representative of the NGO's entire portfolio.⁶

In 1998, the portfolio of all of ANED's credit programs amounted to US\$ 6.45 million, included 41,803 clients and had grown 11 percent with respect to 1997. On the financial performance side, return on equity (ROE) has been relatively important in recent years, despite a drop of 2 percent in 1998 (from 12 to 10 percent); while return on assets (ROA) was very modest (around one percent), which prevented ANED from reaching levels of financial self-sufficiency. In addition, despite its low ROA, profits from granted loans in 1998 were higher than the opportunity cost of capital. Finally, the delinquency rate remained at acceptable levels with respect to the risk associated to the client segment, at only 5.1 percent (see Appendix 10.1 for a more detailed description of ANED's performance as an organization).

The Financial Performance of the Financial Leasing Program

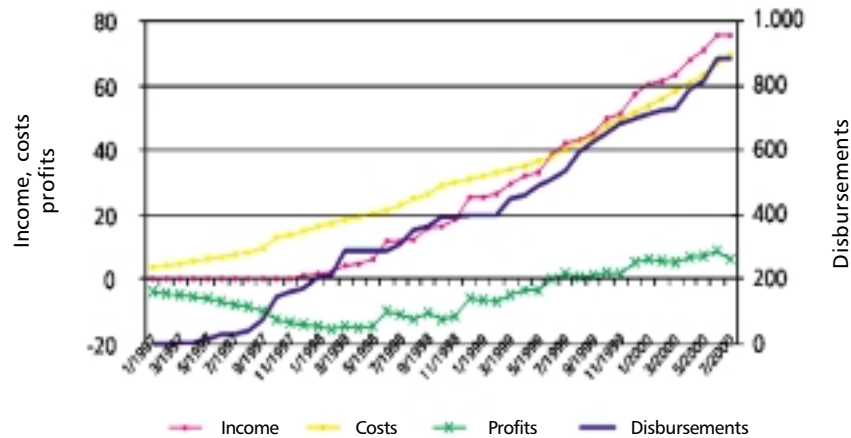
Although it has been impossible to obtain data on this Program's profitability and sustainability, information was available on the income, costs, disbursements and profits generated by the Program. As shown in Table 10.6, in its first year in operation, no positive net profits were registered, due to the fact that financing by means of financial leasing is long-term, five years on average, and it is natural that the first months turned out greater costs than

⁶ The difficulty in separating the financial results of ANED's different programs is due not only to the way in which the information is produced, but also to the fact that, in general, ANED offices and loans officers handle several of the financial products offered by the institution.

income; only as early as 1998 did positive net profits began to show and there are clear signs that profit growth will increase, in 1999, profits were 30 percent greater than in 1998.

Furthermore, as displayed in Figure 10.1, the accumulated profits of the Financial Leasing Program started to be positive in June 1999, which is why accumulated profits began to show positive results and a growing trend as recently as 1999 (Table 10.6). However, the expenses incurred in the purchase of leased out machinery and equipment are not included in the operating costs. If they had been, profits would continue to appear negative until the year 2000.⁷

Figure 10.1. Financial Leasing Income, Cost and Profit Progression: 1997-2000
(Thousands of US\$)



Source: ANED.

As Program disbursements include the purchase of machinery and equipment as part of the financial leasing scheme, the total amount could be a proxy indicator of the Program’s equity. In this sense, the “return on accumulated equity” could be estimated by dividing accumulated profits by accumulated disbursements. This Program indicator has been rising and has moved from 0.6 percent in 1997, 6.3 percent in 1998 and 8.2 percent in 1999 to 8.5 percent in July 2000, which may be a good profitability indicator.

⁷ These negative profits amount to US\$ 185,000. Nonetheless, given the nature of the equipment that is financed, it would be difficult for ANED’s Financial Leasing Program to register positive profits if costs such as those incurred when buying the assets that are to be leased were included. This is why the inclusion of such costs would distort the results of the Program.

Table 10.6. Financial Leasing: Financial Indicators at the End of the Fiscal Year

Indicator (US\$)	1997	1998	1999	2000 ^a
Income	989	24,236	31,914	18,239
Accumulated income	989	25,225	57,139	75,378
Expenditures	15,100	15,852	20,978	17,238
Wages	6,636	9,504	12,924	11,434
Other operating expenditures	8,464	6,348	8,054	5,804
Accumulated expenditures	15,100	30,952	51,930	69,168
Profits	-14,111	8,384	10,936	1,001
Accumulated profits	-14,111	-5,727	5,209	6,210
Disbursements	172,454	225,081	299,194	186,846
Accumulated disbursements	172,454	397,535	696,729	883,575
Accumulated income/ Accumulated disbursements	0.6%	6.3%	8.2%	8.5%

^a Accumulated up to July.

Source: ANED.

On the other hand, although no data on the Program's financial returns are available, going through the simple exercise of assuming that the funds used for the portfolio in 1998, US\$ 239,000 were obtained in Bolivia's financial system at an effective lending rate of 15.6 percent and that financial income came from the interest rate charged 17 percent on the portfolio balance, the result would be a financial margin of US\$ 3,346, equivalent to 1.4 percent of the portfolio balance. Although obtained jointly by all of ANED's programs, this return indicates that the Financial Leasing Program can generate net positive profits while operating in market conditions.

The Program's delinquency rate was nil in December 1998 (see Table 10.4) and under eight percent in October 1999 for payments five days overdue and more. Finally, in terms of loan officer productivity, out of 19 of ANED's officers, seven are working in the Program, albeit not exclusively and only the Head of the Program is full time. Assuming that the seven officers dedicate half their time to the Financial Leasing Program, their average productivity as of October 1999 was around US\$ 180,000, which is quite a considerable level.

CHALLENGES TO THE FINANCIAL LEASING PROGRAM

The Program has filled a very significant void by making the financing of fixed assets possible for small rural producers in Bolivia. Nonetheless, it is our understanding that the Program must still face challenges before addressing the issue of its expansion on a massive scale. The first challenge has to do with financing *per se*. The Program has operated with funds from international cooperation, but these are reduced compared to what is required to acquire fixed assets. In addition, it is extremely

important that the financing obtained be in accordance with the terms of the operations; that is, it must be long- and medium-term financing with interests allowing the conduction of operations at moderate interest rates, as has been the case up until now. Financing offered on the market is either very expensive or demands mortgage as collateral, in the case of banking institutions. With respect to guarantees, ANED is currently assessing the possibility of the portfolio itself serving as collateral through mechanisms such as contract securitization, since the property titles of goods are in ANED's hands.

A very significant related aspect is portfolio diversification. Although ANED has broadened its Financial Leasing Program to other Departments in recent years, its portfolio remains highly concentrated in two Departments and two types of machinery, farm tractors and motorized pumps, which together add up to 81.9 percent of the amount financed, and expose the institution to a high risk of default in the case of an external event, such as a flood or a pest infestation that would affect the repayment of clients having leased the equipment.

The lack of an insurance market is another element that affects the Program's exposure to risk. Due to this, the risk of equipment loss remains and would also affect farmers' ability to pay as well as the payment of the financial leasing installments to ANED. The institution has currently only insured the equipment with high operation risks, such as trucks being used in rugged geographic areas. However, most of the equipment financed is not insured. In that sense, the development of an insurance system would undoubtedly contribute to the massive expansion of the Program and reduce its exposure to risk.

Another challenge ANED faces is the need to consolidate and widen the relationships established to date with the commercial suppliers of the leased goods. This implies working on two aspects. First, maintaining and strengthening the relationships that have allowed suppliers to take part in the promotion of products at accessible prices, training in equipment operation and availability of a stock of spare parts, with the aim of increasing the number of suppliers, the type of machinery and the areas where the service is currently provided.⁸ Second, searching for suppliers who offer products suitable to answer the needs of small producers, since, in general, the fixed assets offered to small farmers are quite limited, given that most companies import farm equipment more suitable for medium- and large-scale agriculture. An alternative is for ANED to become a direct importer of such equipment.

One of ANED's requirements to Financial Leasing Program applicants is proof of experience in the use of the equipment to be financed. This is understandable in order to minimize the risks associated with the incorrect use of the machinery.

⁸ ANED works closely with six suppliers: two for motorized pumps, two for farm machinery and two for solar-energy equipment. It also has more sporadic contact with eleven other suppliers, who periodically inform ANED on the equipment they sell.

Nevertheless, as the Program grows, it will obviously become increasingly difficult to find applicants with this characteristic. Furthermore, those who most need to use fixed assets may precisely be people who have never handled such equipment beforehand. For this reason, an aspect to be addressed in the Program's expansion is how to train users without significantly raising the products' operation costs and the interest rate charged to users.

In other respects, ANED's Financial Leasing Program operates in a legal limbo. The Banking Law is not clear, as it states that financial leasing companies in which financial companies own part of the equity are subject to regulation by the Superintendencia de Bancos (Superintendency of Banks). Hence, ANED's Financial Leasing Program could be interpreted as not requiring supervision, since no financial institution holds part of its equity. However, it must be taken into account that ANED owns equity shares in a financial institution, Ecofuturo Private Financial Fund (Fondo Financiero Privado, FFP), which could be interpreted as grounds for the regulation of its financial leasing operations. According to some interpretations, such operations are even limited to regulated financial institutions authorized to conduct them. Be as it may, the expansion of ANED's Financial Leasing Program will have to undergo a legal framework definition.

Evidently, this legal limbo would disappear if the Program was adopted by the Ecofuturo FFP, but ANED has rethought its ownership of the FFP and is in the process of selling its shares in the institution. Furthermore, ANED considers that if the Program were offered within a financial institution, a great deal of the product's potential would be affected, as loan officers would only consider financial leasing as an option among others and would not give the Program the same promotion and drive as a specialized firm.

This is why ANED aspires to build an institution specialized in financial leasing, apart from the other programs and products it offers. A related issue is that producing systematic information on the Program to assess its profitability and sustainability remains difficult. Such information is fundamental not only in decision making by directors and managers, but also if external funds are expected to be obtained for the Program.

In addition, ANED's Financial Leasing Program faces the challenge of technically training its loan officers in order to increase their efficiency in guiding applicants in their search for the equipment most suitable for their economic and production situation. Clients often do not have a clear idea of the most appropriate equipment to answer their needs and much less of what is available on the market. Officers should therefore be constantly updated to offer users the best possible guidance.

Finally, an issue that is out of ANED's hands, is taxes. Three taxes apply to financial leasing operations the value added tax (*impuesto al valor agregado*, IVA) (13 percent of the purchase value), the transaction tax (*impuesto a las transacciones*) (three percent)

and the tax on profits (*impuesto a las utilidades*). All of this generates a cost of approximately two percent of the interest rate ANED charges to clients on such operations. Reducing the tax burden involves developing public awareness and creating a lobby to approach legislators and change the tax framework. This task has yet to be taken on.

CONCLUSIONS

ANED has succeeded in creating a financial product very well received by Bolivia's small producers, as it enables them to have access to machinery and equipment that they could not afford to acquire through ANED's other financial products, as well as through other financial institutions. Despite its short time in operation, the Financial Leasing Program appears to have great perspectives for future consolidation as an alternative for a large sector of small rural producers.

Nonetheless, as seen above, great challenges must be faced in order to achieve massive expansion of the product. A feature of these challenges is that, although conditions external to ANED are involved in several of them, such as the machinery present on the market and financing available for the Program, most of them come under the responsibility of the institution *per se*, as explained below.

A crucial aspect of the Program is its funding, because of both its important impact on the area in which small producers operate as well as its role in achieving self-financing and in the creation of a company specialized in microleasing operations with small rural producers. While obtaining financing for machinery is difficult for farmers, international cooperation does not offer a great deal of financing either for a program such as this one.

Furthermore, although the resources offered on the financial market may be abundant, the requirements that accompany them are impossible for an institution such as ANED to satisfy. The massive expansion of the Program will therefore require a great deal of product promotion work, not so much among producers and suppliers, aspects also important to consider, but among fund providers. In this sense, efforts must be made to demonstrate the Program's impact on producers, as well as to generate positive financial results and good perspectives for the future. This must start by working to produce financial information on the Program that shows profitability and sustainability in a clear and straightforward manner.

In the same perspective of massive expansion, it is indispensable to explore markets, consolidate and broaden relationships with suppliers of machinery and equipment suitable for the market demand, that is, demand by small rural producers. These tasks could in a sense divert the funds and efforts of those in charge of ANED's Program, which is why it is important for the institution to carry out specific projects aiming at achieving these objectives.

With the expansion of the Program, new possibilities open up such as responding to the demand of applicants without any experience in equipment use, a problem that could be addressed either through agreements with machinery suppliers or by specific training programs, to ensure that neither the costs of the Program nor the interest rate charged would be significantly affected.

It will also be important to clear up the confusion still existing in the legal framework that regulates this promising financial product. If this is not done, attracting funding sources and investors willing to grant the resources needed to expand the outreach of the Program will become increasingly difficult.

In terms of guarantees, although financial leasing presents advantages that ANED's other financial products do not have, the fact that most of the operations are guaranteed by equipment ownership which, in turn, are not protected by insurance mechanisms, increases ANED's risk exposure. At the same time, the difficulties in promoting an insurance market for equipment financed through ANED's financial leasing operations are great and are beyond its means; however, they constitute elements that must be considered among the measures to expand the product.

Appendix 10.1

Financial performance of ANED

In 1998, ANED globally managed to reach a level of activity that enabled it to achieve operating self-sufficiency, measured as the percentage of operating income required to cover operating costs, but this surplus was relatively modest. As can be seen below ANED has yet to achieve financial self-sufficiency (Table 10.7).⁹

In terms of profitability, in 1998 the return on equity was of 10 percent. This was due relatively small amount at equity, the position of the equity, that year, ANED had US\$ 8.6 million in liabilities and only US\$ 820,000 in equity. Nonetheless, the net profits obtained were not enough to generate important returns on assets and on the portfolio, barely one percent and 1.2 percent of net profits, respectively. In spite of this, ANED managed to obtain a negative capital return subsidy, which meant that the profits made by granting loans were greater than the opportunity cost of capital.

On the other hand, although the delinquency rate rose in 1998, it still remained at only 5.1 percent, an acceptable level considering the risk associated to this client segment.

The productivity of ANED's loan officers remains relatively high when considering the portfolio amount and, especially, when taking into account the number of borrowers. On average, a loan officer worked with 1,608 borrowers, which is by far the highest number registered among all the organizations studied. This may be explained by the fact that ANED also has one of the lowest average loan size (portfolio balance/number of borrowers), since it works with a large number of clients whose loans are small, particularly in the case of village banks.

Finally, 1997 and 1998 cost indicators reached acceptable levels, especially in view of the fact that a large number of clients had received financing in small amounts.

9 The data on sustainability has not been adjusted for subsidies.

Table 10.7. ANED: Financial Indicators at the End of the Fiscal Year

Indicator	1997	1998
Operating efficiency (%)		
Operating costs/ Total assets	10.3	13.0
Operating costs/ Portfolio balance	14.8	19.0
Operating self-sufficiency (%)		
Operating income/ Operating costs	99.1	105.3
Financial self-sufficiency (%)		
Financial income/ (Operating + financial costs)	67.5	76.4
Profitability (%)		
Net profits/ Equity (ROE)	11.7	9.6
Net profits/ Total assets (ROA)	1.0	0.8
Net profits/ Portfolio balance (ROC)	2.7	1.2
Capital adequacy (Equity/ Assets)	8.8	8.7
Delinquency (%)		
Overdue portfolio / Total portfolio	4.8	5.1
Subsidy Dependence Index (SDI) (%)	N. A.	N. A.
Financial subsidy		N. A.
Capital return subsidy		-2.7
Direct subsidies		1.9
Productivity		
Active portfolio per loan officer (US\$)	232,341	248,152
Active portfolio per office (US\$)	341,677	379,526
Number of borrowers per loan officer	1,389	1,608
Number of borrowers per office	2,043	2,459
Costs (%)		
Average portfolio cost	14.8	19.1
Average portfolio financial cost	3.3	3.7

N. A.: Not available.

Source: ANED.