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The FENACRE System of Credit Unions: A Survey

Final Report

for

USAID/Bolivia

by

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on

A & A Project

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NOTE: Time did not permit the more detailed discussion of the structure of the databases planned for this Appendix. What is presented here is the print-out resulting from the use of the "Display Structure" command in dBase III on each of the three databases created by the Survey.

This Appendix analyzes the institutional data from a variety of perspectives, and presents, in Part II., the raw data upon which the analysis is based.

This section presents totals and indices of a general nature such as the size of the sample, total amount of credit approved as a percentage of credit applied for, average waiting time, in days between loan application and loan disbursement, and so forth

This table, which, with its companion, XIIb, are among the most interesting to emerge from the Survey, analyses the loan data from the point of view of waiting time between the original loan application and the disbursement of funds. This table shows that more than half of the dollar denominated loans made by Bolivian credit unions are disbursed within two weeks of the original loan application--a stunning achievement when measured against the performance of Bolivian commercial banks.

This and the the following Table support one of the most important findings of the survey, namely that credit unions approach the quality of service available in the informal financial sector, with which they appear to compete.

Table XIVa shows very clearly the decline in the monthly rate of interest between the end of 1986 and the time of the Survey, when the weighted average of the monthly rate of interest fell from 8.7?% to 2.35%.

Once again, the credit u ons seem to be emulating the informal sector. This table presents a powerful argument for non-interference in financial markets. When market forces are allowed to function, well run firms prosper, and the cost of service to the public declines.

This declining trend also appears to signal the growing confidence in the Bolivian national currency, as the figures for Dollar Loans (Table XIVb) show a less steeply declining trend.

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CHAPTER ONE: EXECUTIVE SUMMARY

On November 19, 1987, field work was completed on a survey of institutions belonging to FENACRE, the Bolivian National Federation of Credit Unions, long important as client and counterpart institution to USAID/Bolivia. The principal objectives of the survey were to quantify the major activities and tendencies of Bolivian credit unions in the post-inflationary environment and to assess the development potential of the system in order to provide the Mission with a firm empirical foundation on which to base interventions under the Strengthening Financial Markets Project. A secondary objective was to strengthen a potentially important counterpart institution, the Instituto de Capacitacion y Asesoramiento, Departamento de Estudios Cooperativos, or INCA - DEC, a self-financing service arm of The Catholic University of Bolivia. By involving the INCA - DEC in the survey, it was hoped to strengthen this Department to the point that the Mission's dependence on ex-patriot consultants for future interventions in the credit unions system could be reduced.

The survey was guided by the findings of preliminary work funded by the World Bank in the Fall of 1986 and by the Mission in the Spring of 1987. According to these preliminary studies, the FENACRE system of credit unions stood at an important cross roads as it emerged from the debacle of hyperinflation, particularly susceptible, because of its weakened, decapitalized state, to external influences, most notably to the influence of the powerful incentive structure created by the financial markets and cooperative sector interventions planned by the various international donor organizations. The Bolivian AID Mission, as the principal donor organization involved with FENACRE during this period of unusual vulnerability, could not avoid having a tremendous impact, for better or for worse, on the Bolivian credit union movement.

While the preliminary studies focused on the Federation, the focus of the present investigation--particularly from the point of view of the field work--are the credit unions affiliated with FENACRE. A three man team from INCA - DEC collected data on 4,750 credit union members from original documents on file in 19 credit unions located in five distinct geographic regions of Bolivia. This data was entered into three computerized databases and analyzed by the consultant with the help of tables generated from these databases by programs written in dBase III. The results of this analysis generally confirm the findings of the preliminary investigations concerning both the rapid growth and enormous potential of these cooperative entities reasserting themselves as financial institutions in the relative stability of the post-hyperinflationary environment.

Although the principal focus of the field work were the primary institutions affiliated with FENACRE, the principal recommendations emerging from this work relate to the umbrella organization. While the Bolivian credit unions are judged to have enormous potential as mobilizers of domestic resources and as providers of a wide variety of financial services, including production credit, the umbrella organization has embarked on a development strategy that could lead to the disintegration of the credit union system. Rather than working with its affiliates, as a second level institution, FENACRE is following a confused development strategy that places the Federation on the same operational level as its primary institutions when it acts as a domestic financial intermediary, while largely by-passing them when it acts as a second level institution, as intermediary between international donors and domestic borrowers.

In following this confused development strategy, the Federation is responding to an unfortunate but powerful incentive structure created by international donor organizations, most notably by USAID/Bolivia and the US PL-480 Program. As the Federation follows up on the success of its domestic resources mobilization project, two things will happen: FENACRE will come to resemble a commercial bank with dwindling ties to its affiliated credit unions, 2) the ability of USAID to affect the development this potentially very important alternative financial institution will diminish.

The final chapter to this report contains a series of recommendations for USAID/Bolivia which would permit the Agency, at a very low marginal cost, to reverse the negative impact that its policies are having on the development of the Bolivian credit union system. These recommendations call upon USAID to reassess its relationship to the Bolivian National Federation of Credit Unions, giving up the short-sighted approach which views FENACRE as an agent for the distribution of external resources or assistance in favor of a long-range plan which acknowledges the far greater potential the Federation possesses as an independent, broad-based, privately owned financial institution capable of providing the services demanded by Agency's traditional target population.

Origin and Objectives of the Intervention:

Background:

FENACRE, the Bolivian National Federation of Credit Unions, has been an important client of USAID/Bolivia since its founding twenty five years ago. The relative importance of the USAID involvement increased dramatically in the middle of the present decade as a result of the severe drought of 1983/84 and the subsequent run-away inflation of 1985. During this period, the Federation's network of credit unions became an important part of the Agency's disaster relief efforts. At the same time, the income FENACRE earned as an agent for the distribution of fertilizer under the disaster relief program became crucial for its own institutional survival. As the disaster relief effort drew to a close, FENACRE's role as an administrator of external lines of production credit, principally from the US PL-480 Program, increased both in relative and in absolute importance as a source of income for the Federation. By the end of 1986, net operating income from credit operations narrowly exceeded net income from the non-financial, disaster relief activities,* bearing witness to the systems' re-emergence--after the twin traumas of drought and hyper-inflation--as a financial institution.

A series of preliminary reports on FENACRE written by the consultant in the Spring of 1987** called attention to the fact that the Federation, as it reasserted itself as a financial institution, stood at an important cross-roads, and that the Agency, because of FENACRE's weakened, decapitalized state, was going to have a large say--for better or for worse--in which of several development courses the Federation would take. The present study was undertaken to given the Agency a better empirical foundation on which to base its future interventions in the FENACRE system of credit unions.

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* Reported net income from credit operations exceeded reported net income from other operations in 1985, as well. However, if FENACRE had used the same method in 1985 for allocating expenses between financial and non-financial operations that it used in 1986, it would have reported a loss from its credit operations in 1985. In 1985 FENACRE reported "Diferencia de Cambio" as an expense under "Costo de Servicios," whereas in 1986 it was more appropriately expensed under "Gastos Financieros."

** "Savings Mobilization in the Strengthening Financial Markets Project: A Working Paper for USAID-Bolivia," La Paz, March, 1987.

"Some Observations on Production Credit and the Use of PL-480 Funds: A Background Report for USAID-Bolivia," La Paz, April 10, 1987.

"The FENACRE System of Credit Unions: A Strategy for Donor Assistance," La Paz, April 13, 1987.

Objectives:

Two principal objectives were defined for the present intervention in the FENACRE system of credit unions. On the one hand, the survey of a sample of credit unions would provide USAID with a firmer empirical basis for interventions in a system, which, by numerous reports, has tremendous potential for promoting the economic development of Bolivia. Secondly, by involving the Cooperative Studies Department of the Catholic University of Bolivia--a self-financing service arm of the University dedicated to providing technical assistance to the cooperative sector of Bolivia--it was hoped to strengthen a potentially important counterpart institution, thereby reducing USAID/Bolivia's costly dependence on outside consultants for its future interventions in the credit union system.

Timing, Scope and Methodology:

The data analyzed in this study was collected by a three man team from the Cooperative Studies Department of The Catholic University of Bolivia between August 7, 1987 and November 19, from 19 credit unions located in five geographical regions of Bolivia. This data-collection team, composed of Lic. Luis Ocampo, Director of the Department, Jose Argandonia, and Ramon Garcia, was supplemented in most locations, by a student assistant from the Cooperative Studies Department, and, on occasion, by personnel from the cooperatives surveyed. Data collection forms developed by the consultant and field-tested in two cooperatives prior to the actual survey were used to capture a wide range of data on more than 4500 credit union members. This data was introduced into a computerized database and analyzed by the consultant with the help of dBase III programs written by programming consultant Ms. Maria de Los Angeles Perez, of La Paz.

The names of the 19 credit unions included in this survey, as well as the dates they were visited by the Catholic University team, are presented in the table on the following page.

SCHEDULE OF DATA COLLECTION VISITS TO THE COOPERATIVES SURVEYED

Date(s) of Visit (1987)	Name of Cooperative	Region
August 7, Sept. 22	Huayna, Ltda.	La Paz
September 18, 19	Santisima Trinidad	La Paz
August 31, Sept. 2	Santiago de Munaypata	La Paz
September 9, 10	El Alto, Ltda.	La Paz
September 15, 17	San Gerardo Ltda.	Oruro
September 16	Via y Obras, Ltda.	Oruro
September 17	Paulo VI, Ltda.	Oruro
September 18	Eucaliptus, Ltda.	Oruro
September 28, 29	San Roque, Ltda.	Sucre
Sept. 30, Oct. 1	Magisterio Rural	Sucre
October 1, 2	San Miguel	Sucre
October 13, 14	Santa Ana de Cala Cala	Cochabamba
October 15, 16	Hospicio, Ltda.	Cochabamba
October 19, 20	San Jose de Punata	Cochabamba
October 21, 22	Cristo Rey, Ltda.	Cochabamba
November 9 - 11	Jesus Nazareno Ltda.	Santa Cruz
November 12, 13	San Luis Ltda.	Santa Cruz
November 16, 17	Inmaculada Concepcion	Santa Cruz
November 18, 19	San Martin de Porres	Santa Cruz

Note: This schedule of visits includes actual data-collecting by the full Catholic University team. It does not include reconnaissance visits made during July by Luis Ocampo to approximately 30 cooperatives in La Paz, Oruro, Cochabamba, Sucre and Santa Cruz, as part of the selection process.

The Structure of the Data Base

Form 1: The Individual Ledger Cards

The most important source of data for this study were the 3,563 randomly selected individual ledger cards surveyed by the team in the field. The information that may be found on these cards typically includes sex, date of birth, occupation, date of entry into the cooperative, as well as a complete record of all the individual's financial transactions with the credit union, such as payment of shares, deposits and withdrawals, dates and amounts of loans, with notations for rate of interest and term, loan payments, with principal and interest payments noted separately, fines for late payments, as well as interest and dividend credits on savings and shares. Data Collection Form I, shown in Appendix A to this report, was used to capture up to 23 separate pieces of information from each card. In those instances where the ledger cards did not contain all the desired information, the team attempted to supplement what was available from this source by consulting other documents available in the crédit union, such as the member's original membership application form.

In addition to the maximum of 23 separate pieces of information that could be collected from each ledger card on Form 1, another 20 constructed variables were defined and calculated. For example, age was calculated by the computer by subtracting the member's date of birth from the date of the team's visit to the cooperative; the loan payment was calculated by dividing the amount of the loan by term; leverage was defined to be the amount of the loan divided by the sum of the member's savings plus shares <u>at the time of the loan</u>, and so forth.

The twenty three primary or data variables together with the twenty constructed variables define the structure of the data base derived from Form 1. The definitions of all constructed variables, and the formulas used to construct them, are shown in Appendix B.

Form 2: Current Loan Files

Another important source of data was a random sample of current loan files from the 20 credit unions surveyed. Such files typically include both the original loan application form as well as a record of the loan committee's decision and subsequent transactions. These files thus provide a wealth of biographical information on the borrower, such as date of birth, occupation, income, stated use of loan, types of guarantee offered, number and status of previous loans with the cooperative, and so forth, as well as a record of his performance in repaying his loan. Form 2, also shown in Appendix A, was used to capture up to a maximum of 22 separate pieces of information from this source. Where necessary, the team cross referred to the borrowers individual ledger cards for information that was not available in his loan file.

As with Form 1, a number of constructed variables were also defined and calculated. For example, the waiting time, in days, between the the original loan application and loan disbursement, refereed to as "Espera" in the database, was calculated by subtracting the date of disbursement from date of the loan application. This variable was used to construct one of the most interesting of the many tables used to analyze the data collected in this survey. (See the tables on pages 39 and 40, below.) Other constructed variables based on Form 2 include: "Pesadez," defined as the ratio of the monthly loan payment to stated monthly income; "Aprobacion," defined as the ratio of the loan amount applied for and the loan amount approved; and "Demora," defined as the waiting time between the date of the last payment on a previous loan and the date of the current loan disbursement. This last variable was designed to help detect patterns of loan refinancing among the credit unions.

Complete definitions of all the constructed variables defined on the primary variables of Form 2 are given in Appendix B. to this report.

Data Collection Forms 3 & 4:

Whereas Forms 1 and 2 were used to collect data on individual credit union members, Forms 3 and 4 were designed to capture institutional data from monthly, quarterly and annual reports. Forms 3 and 4 are also shown in Appendix A, while a summary of the data collected on these forms is given in Appendix C.

Methodological Difficulties and Limitations of the Study

Ideally, a survey is based on a randomly selected sample of the population under investigation. The randomness of the selection process is required to increase the probability that the sample is representative of the whole, as well as to permit the use of the powerful tools of statistical inference. It is important to note, therefore, that a degree of non-randomness was introduced into both the selection of the cooperatives included in this survey as well as into the drawing of the samples from pre-selected populations of credit union members.

Non-Randomness in the Selection of Institutions

As a result of the hyper-inflation of 1985, many credit unions were completely decapitalized and ceased to function at a meaningful level. A decision was made, therefore, at the outset of this study, to not waste Project resources visiting moribund credit unions, but rather to survey only institutions that were operating at a reasonable level. The rationale behind this decision resides in the fact that a major goal of the study was to discover the potential of the credit union system in Bolivia. It was felt that the potential of the movement could be better assessed by studying more or less healthy institutions rather than moribund ones.

A preliminary selection of approximately 40 reasonably healthy institutions was made in June with the help of FENACRE personnel. An effort was made to include both large and small, as well as urban and rural credit unions from five major geographic regions of Bolivia. In July, as a result of field trips that took him to some thirty institutions, Lic. Luis Ocampo reduced the list of forty to twenty five, nineteen of which were ultimately included in the present study.

Non-Randomness in the Selection of Ledger Cards

Even the relatively healthy credit unions that were selected for inclusion in this survey are, by and large, mere remnants of their former selves. A well-run credit union, such as Santisima Trinidad, of La Paz, that before the period of hyper-inflation counted some 13,000 individuals among its membership, might be working with approximately 2,000 more or less active members at the present time. Recognizing the decimation of their membership, most institutions have taken the initiative of physically separating the individual ledger cards of their inactive members from those members judged, by various criteria, to be active. Furthermore, approximately one third of the cooperatives, notably in Santa Cruz, which were among the last visited by the Catholic University team, have gone the additional step of separating the ledger cards of members with loans from the sub-population of active members..

This organizing of the population into distinct, physically separate sub-populations made the task of selecting a random sample somewhat difficult. In the usual case, where the active minority have been separated from the inactive majority, the standard method of selecting the sample on the basis of a random number list proved very time-consuming, because of the fact that most of the random numbers within the boundaries of the population size correspond to numbers of members on the inactive list. A search in the population of active members for a membership number corresponding to the random number would lead to an active member only once in approximately eight to ten tries.

Because of the costliness of selecting a truly random sample of active credit union members, an alternative method of drawing the sample was used. This alternative method, while it does not produce a truly random sample, does produce a sample with the characteristics of a randomly selected sample. Using a formula from inferential statistics, the size of a randomly drawn sample needed to insure a 95% confidence level was computed. The number of active members was then divided by this number to yield the number n. Finally, beginning with a ledger card selected at random from the first n cards, every nth card was selected.*

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In several cooperatives, where the working conditions were favorable, or where the personnel were particularly helpful, the team in the field opted to collect samples larger than the minimum sample size given by this formula.

A statement by Lic. Luis Ocampo, giving the methodology used to select the sample for Form I is presented as Appendix F to this report.

This procedure provides an acceptable method of solving the sample selection problem presented by the separation of the ledger cards into two classes according to various criteria of activity, but it does not solve the problem encountered in those cooperatives where further subdivision of the population led to the separation of the ledger cards of members with loans from the sub-population of active members. In such cases it is necessary to select every nth ledger card from the sub-population of members with loans as well, and add these cards to the sample to be examined.

Unfortunately, although the case had been discussed at length by the consultant in the abstract, no instances of the ledger cards of members with loans being separated from the ledger cards of the general population of active credit union members were encountered until the study was well underway, and the team from Catholic University was working on its own. When the team did encounter this case, notably in three large cooperatives in Santa Cruz, and in two in La Paz, it neglected to follow the indicated procedure for sample selection, collecting instead a sample from the population of active members without loans.

The rational offered by the team for this departure from accepted procedure, which came to the consultant's attention only after data collection was complete, was that they felt they were already collecting ample data on loans from a separate sample of active loan files, on Form 2. The fact remains, however, that the database based on Form 1, which seeks information about the membership of credit unions in general, is strongly biased in the direction of active members without loans, due to the fact that individual ledger cards of members with loans were systematically excluded from the sample in five of the nineteen credit unions surveyed. For this reason, many of the statistics presented in the Tables in Appendix D to this report must be interpreted with caution.

It should be pointed out that this unintended introduction of a systematic bias into one of the three databases created by this survey does not render the database useless. In fact, certain important conclusions supported by this study can be stated a fortiori because of this bias. Furthermore, it is important to rote that the other two databases, based on Forms 2, 3 and 4, are not affected by the bias present in the sample selection for Form 1.

Other Constraints on the Conduct of this Study:

The Lack of Anticipated Computing Power:

The present study was designed around the low cost computing power of the newest personal computers. It was determined during the design phase of this study that two PC's would be needed to insure an even work flow, at least one of which, because of the size of the database being created, would need an internal disk. The plan was to place the two PC's in the Cooperative Studies Department of the Catholic University, as part of the institution building component of the study, where they would be available for any follow-up studies undertaken by the Strengthening Financial Markets Project. However, for reasons that the consultant did not foresee or understand, these computers were not made available. Instead, work progressed, albeit somewhat haltingly, on a computer belonging to the Bolivian programming consultant hired by the project, on a laptop computer provided by the consultant, and, after August 17, on a personal computer rented locally.

This make-shift arrangement was not ideal. On the one hand, the two computers provided by the consultants were not always available. They were, in fact, never left at the Cooperative Studies Department, at the disposal of the people actually conducting the study. Secondly, limitations of two of the machines caused time-consuming logistics problems. The computer belonging to the Bolivian programming consultant, located at her place of business, was used by her secretary for data entry, but, because it did not have a drive with sufficient capacity for the data generated by this study, it could not be used to run programs. The rented computer, on the other hand, while it did have a drive that could contain all the data and the programs, did not have a central processing unit powerful enough to run the programs in a reasonable amount of time. Running the program for just one of the scores of tables planed for this study on the rented machine, for example, took more than three hours. Because of the slowness of the rented machine, the programming consultant requested that she be allowed to move it to her home, where it could run programs at night. Given the time constraints under which the team was working, it was impossible to deny this request, despite the fact that such an arrangement made the team unhealthily dependent on an outside contractor originally apportioned a relatively minor role in the study.

Of more import, perhaps, than the physical handicap placed on the study by the lack of the computers around which it was designed was the impact this lack had on the morale of the members of the Catholic University team. As more and more responsibility shifted to the outside person who controlled the computers, the Catholic University team members felt themselves reduced to the status of hired data collectors with dwindling interest in the final product of the research effort.

This displacement of responsibility away from the Catholic University team toward private consultants caused by the lack of the personal computers also severely compromised the second objective of this intervention--an objective that otherwise was easily within reach.

Confusion on Availability of Funding for this Study:

A further constraint on the smooth development of this study was presented by the persistent confusion as to the availability of funds to carry it out. At several points scheduled field work was interrupted because of lack of funds. One week of field work was actually financed by the Catholic University team out of the proceeds of their first honorarium, on the assurances given them by the consultant that the funding difficulties were being resolved. This confusion caused the director of the Cooperative Studies Department to make other commitments for the Fall, further constraining the team's ability to adhere to the original time table of field work once the funding difficulties were resolved.

As a result of the delays stemming both directly and indirectly from the confusion surrounding funding, the final field work was not completed until Friday, November 20, the day before the consultant, because of prior commitments of his own, had to leave the country. Responsibility for final data entry and the running of the programs to generate the tables designed by the consultant thus devolved to the Bolivian computing consultant, who, in turn, was dependent on the Catholic University team for support and input. The Tables shown in Appendices D and E, on which the consultant planned to base the major portion of his appraisal of the FENACRE system, did not arrive at his office in Illinois until the afternoon of Wednesday, December 16, that is, not until the beginning of the holiday season.

CHAPTER THREE: THE CONCEPTUAL FRAMEWORK:

The Supply of and Demand for Financial Services:

The Demand for Deposit Facilities

An important fact that continues to be ignored by the majority of development practitioners, who only in recent years have begun to appreciate the importance of financial market development in overall development strategy, is that the financial service most in demand on the part of the marginalized populations that make up the bulk of an underdeveloped economy, is not credit, but rather savings facilities. Recent studies in several African contexts have demonstrated that marginalized groups are willing to pay a high price to individuals or institutions that provide reliable deposit facilities, and that many are willing to hold financial assets, in the form of claims on informal financial institutions, with term structures far in excess of the term structure of the assets of formal financial institutions. Villagers in Zaire, for example, were found willing to accept negative real rates of interest on their savings deposits in credit unions on the order of 40% per annum, while coffee and cacao farmers in Cameroon were found holding financial claims on informal institutions with an average term of more than five years.

A recent study of informal financial arrangements financed by the same Project that commissioned this study has uncovered a similar pattern in Bolivia. According to a study of the ubiquitous rotating savings and credit societies in this country conducted by Dale Adams and Marie L. Canavesi de Sahonero, less than one percent of the interviewed participants responded that they considered the Pasanaku to be a source of credit. (Adams and Canavesi de Sahonero, p. 32) These societies, far from being credit oriented, are, rather, a social invention for providing the participants with a motivation for saving out of current income, as well as a means for holding their accumulating savings. Participation in these societies is wide spread, even though there may be a charge for managing the fund which, according to case studies reported by Adams and Canavesi de Sahonero, may reach twenty to thirty percent within the short life of the institution. (See Adams and Canavesi de Sahonero, pp. 41-42.)

It should be pointed out that the demand for savings facilities and savings instruments with desirable characteristics is not limited to marginalized populations: After nine TDY's in Bolivia the consultant is beginning to believe that there are no middle class Bolivian families without a checking or savings account outside the country. Middle class Bolivians use the deposit facilities provided by foreign financial institutions, not because the yield on these instruments is higher, nor because the facilities located beyond their national boundaries are inherently more convenient, but rather because the deposit facilities provided locally do not have certain characteristics demanded by Bolivian savers.

As research findings accumulate, it is becoming increasingly clear that if developing countries were able to provide adequate deposit facilities for their populations, providing the other financial service would be much less of a problem.

The Demand for Credit

While development practitioners, over the years, have given much more attention to to the alleged credit <u>needs</u> of the marginalized populations of economically less developed countries, there has been remarkably little attention paid to the types of credit actually <u>demanded</u> by these populations. Recent investigations into informal financial markets in developing countries have shown that Third World consumers of financial services have just as marked preferences in their demand for credit as they do in their demand for deposit facilities. While, other things being equal, savers prefer a high rate of interest on savings to a low rate, and borrowers prefer a low rate of interest on loans to a high rate, it is becoming clear that the çateris paribus assumption rarely holds. Just as savers may be observed preferring low yielding foreign financial instruments to high yielding domestic ones, borrowers may be observed preferring the high interest rate loans available in the informal sector to the low interest rate credit available through formal channels.

In neither case is it legitimate to conclude that the consumers of these financial services are irrational. In the case of observed saver preference for low-yielding foreign financial instruments, it is clear that other considerations, such as safety and liquidity, overwhelm the yield advantage of local instruments. A similar explanation lies behind the observed vigor of informal credit markets in developing countries: These markets thrive, despite sharply higher loan rates,*) because the financial service they offer has desirable characteristics that overwhelm, in many situations, the price advantage of formal credit.

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* It is interesting to note that in the older development literature, the high loan rates in informal credit markets were attributed to the monopoly power of the local money lender. Recent field work in the area or informal credit markets has revealed this view to be unfounded armchair theorizing. Informal credit markets appear to be very competitive. If monopoly power exists, it is surely on the part of the commercial banks, where it is used to hold loan and deposit rates <u>down.</u> for the benefit of preferred borrowers.

The outstanding characteristic that distinguishes informal credit from credit available through formal financial institutions is the remarkable speed of the service in the informal sector. The speed of service available in this sector reflects two fundamental economic realities, one on the demand side of the transaction, and one on the supply side. On the demand side, borrowers simply insist on good service for the price they are offering to pay.*

On the supply side, the agent of the informal credit market is able to respond quickly to a loan applicant because of his independent status. He has full discretion in the use of the funds at his disposal, and may decide on the spot whether to make the loan or not.

The implications these observations hold for the development of financial institutions and systems capable of supplying the services actually demanded by borrowers are clear: **Only independent institutions, whose independence is guaranteed by the fact that they control their own resources, are able to respond to the real-world credit demands of potential borrowers.** For formal financial institutions, independence is guaranteed by their ability to mobilize deposits from the public. For formal financial institutions, the ability to provide a high level of service on the credit side is thus linked, by a very short chain, to their ability to provide a high level of deposit service.

The Development of Financial Systems:

While financial institutions and financial systems are very complex social organisms, involving coherent contractual relationships with large numbers of individuals, supported, over time, by the carefully nurtured implicit conviction that, on the whole, these contracts will be honored and enforced, it is possible to outline the main characteristics of successful financial systems and financial institutions in a few simple sentences.

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This fact became very clear to the consultant while conducting studies of informal financial arrangements in Bolivia in the Fall of 1986 and again in the summer of 1987. On both occasions he impersonated a "capitalista" with dollars to lend in the local market. The impersonation was difficult to keep up, however, because of the drive on the part of the borrowers to close the deal. They had their papers in order, and typically offered security in the form of developed real estate with appraised values on the order of three to five times the loan amount. They wanted their loan now, or at the latest, tomorrow.

Successful Financial Institutions are Demand Driven:

Financial institutions are in the business of providing services for which there is an effective demand, that is, services for which people are willing to pay. The man in the street is not accustomed to thinking that he pays the bank to manage his savings, but in fact, he does. Successful financial institutions charge for all their services, including the service of managing their depositors money. In general, the fee or commission they charge for managing financial savings is the difference, or spread, between what they remit to the saver in the form of interest payments, and what they earn on investments made with these savings.

Efficient financial institutions working in a competitive environment, reduce the charge to savers for the service of managing their money to the minimum, so that the spread needed to cover their operating expenses and return to capital is less than the real return on their investments--that is, savers receive a positive real return on their savings invested in the financial institution--which creates the illusion that there is no charge for the service of managing savings. Less efficient institutions, or institutions working in a less competitive environment, charge more for their services, even to the point that savers are offered a negative real return on their deposits. This is the situation that is observed in many less developed countries, where the true nature of the relationship between the suppliers and consumers of financial services is more transparent.

Successful Institutions Serve More Savers than Borrowers:

The relative preponderance of savers over borrowers among the clientele of successful financial institutions is a direct consequence of the fact, on the one hand, that successful financial institutions are demand-driven, and, on the other, of the fact that, at any given time when prices are set to reflect the real cost of providing financial services, there are many more individuals demanding deposit facilities than individuals demanding credit. If this were not so, the strategy upon which successful financial institutions are built--the pooling of resources and the term-transformation of deposits to permit the extending of a relatively small number of longer-term credits--would not work.

If a financial institution were to attempt to develop using a different strategy, say the strategy of providing a relatively large number of short term loans to the general population, it would soon find that, because of the spread required to cover operating expenses, it could not compete with institutions using the proven strategy in the pricing of its savings management service: That is to say, an institution attempting to develop using the alternative strategy would not be very successful at capturing funds from the public

An institution following such a development strategy could, of course, attempt to compete in the pricing of its savings-management service by accepting a negative rate of return on its capital, that is, by decapitalizing itself, perhaps while attempting to find large depositors not overly sensitive to the liquidity or long-term security of their savings. This, of course, is the strategy adopted by many development banks. The main draw-back to this strategy, from a development point of view, is that the dependency created by the existence of the large depositors prevents such an institution from offering the type or quality of service actually demanded by the population it was designed to serve.

Successful Financial Systems Are Vertically Integrated:

The vertical structure of successful financial systems, erected on a broad base of smaller, deposit-managing, retail outlets, is conditioned by the underlying pattern of demand for financial services that corresponds to the relative prices at which these services can be provided. This structure is analogous to the elaborate mathematical structures described by fractual geometry in the sense that it may be observed repeated at all levels within the system, even at the level of individual institutions which have grown beyond a certain size. The local bank or credit union which opens agencies and drive-up facilities in the suburbs or near a market or shopping center, provides an example of the relentlessness of this tendency toward vertical integration and the ubiquitousness of this structure built on a deposit-accepting base.

Within such a structure there tends to be a net flow of resources from the smaller, retail outlets for financial services, toward the central office or institution. Although this observed tendency for resources to flow vertically through a well functioning financial system from smaller surplus units to larger, centralized institutions has been a cause of concern for some development practitioners, who fear that the financial system works to the detriment of rural areas, which become net exporters of savings, there can be little doubt that under this arrangement--which obtains in all developed market economies--the smaller, retail outlets in an integrated system are able to provide a higher level and broader range of financial services to their clientele than they would under conditions of complete autarky.

The central entities in an integrated system, in turn, are clearly better off because of their relationship with the smaller outlets, because of the fact that the lower level institutions represent an important source of loanable funds. For this reason, the central organizations are willing to make long-term capital investments in the retail outlets, and concern themselves in general with their efficiency, health and well-being.

The reciprocal relationship between the individual units in an integrated financial system describes the dynamics whereby the system grows. The smaller, deposit accepting units provide the principal source of funds for the higher level institutions. The higher level institutions, in turn, provide the primary institutions with the services they need to survive as managers of voluntary savings. In a development context, these services include technical assistance as well as the more traditional services such as deposit facilities, correspondent services, and lines of credit.

The Role of Credit Unions and Credit Union Systems:

Credit unions, once the darlings of development practitioners, have lost much of their luster since the heyday of their founding by Peace Corps Volunteers and Missionaries in the mid-sixties and early seventies. Because, in the Third World context, there is typically no overseeing body with the authority and/or resources to intervene and liquidate bankrupt credit unions, the financial landscape of many developing countries is now littered with the moribund remnants of once promising organizations, institutionalized microcosms of the under-development syndrome that afflicts much of the Third World. Credit unions with negative net worth continue to limp along at a very low level of activity, compromising the all-important image of these alternative financial institutions, and obscuring the enormous potential that continues to reside in the model.

The importance of credit unions to economic development lies in their manifest ability--observable in a great many historico-development contexts--to supply financial services to the broad segment of the population without access to more traditional formal financial institutions, and the potential they have to grow in this under-exploited environment to powerful institutions. Some of the largest financial institutions in the world, including the Banque de Credit Agricole, in France, and the Raabe Bank of the Netherlands, began as federations of credit unions. These world class organizations, which now lend billions of dollars to governments and blue-chip companies, owe their spectacular success to their strategy of offering deposit facilities to individuals too poor or too insignificant to attract the attention of more established institutions. The visionary organizers of these institutions saw in the conservatism of the French peasantry, and the legendary thriftiness of the Dutch journeymen, the solid foundations on which huge financial institutions could be built.

Other huge institutions, such as the Bank of America, owe their success to an essentially similar development strategy. Bank of America grew by opening its doors to people who did not feel very comfortable in formal financial institutions. The important point to note here is that when these people came through Bank of America's doors, it was, by and large, with money in their pockets, to open savings accounts.

Given the potential that federations of credit unions have demonstrated in some contexts to grow into powerful financial institutions, it is important to examine the conditions that may prevent them from reaching their potential.

Limitations of the Original Credit Union Model

As the name implies, credit unions were formed for the purpose of extending credit to its members. The originators of the credit union movement in 19th Century Germany, who were very much interested in the economic development of their--at that time--relatively underdeveloped country, saw their social invention as a means of extending low cost credit to a segment of the population that was generally excluded from formal financial institutions.

The beauty of the original credit union model lies in the fact that it allows tiny financial institutions, staffed by volunteers with little or no experience in the management of money, to extend credit to its members at no risk to the institution. Credit unions which adhere to the original model have no bad loans on their books, and never experience liquidity problems. This remarkable achievement is made possible by the fact that credit unions, which, according to the original model, work only with share capital paid in by their members, make loans that are 100% guaranteed by the shares of other members who co-sign the loan. If a member can not find co-signers willing to pledge their shares as collateral for his loan, the loan is not granted. In the case of default on the part of borrower, the loan is written off against that portion of the credit union's capital belonging to the co-signers. The capital of the institution as a whole is never compromised. The only way a credit union member can loose money invested in a credit union run strictly according to the original model is by co-signing for a loan that goes bad. Furthermore, since co-signers, themselves, are not eligible for credit until the loan for which they have co-signed has been repaid, and since shares can not be withdrawn from the credit union without timely notice, the institution can not experience liquidity problems.

While the original credit union model is a remarkable invention, it has severe limitations as a financial institution. On the one hand, since shares in a credit union, because of their poor liquidity and low yield, are not very attractive savings instruments, these institutions tend to attract people who are looking for loans, rather than people who are simply looking for deposit facilities for their savings. Thus, while the institution, itself, does not experience liquidity problems, there tends to be an unsatisfied or excess demand for credit on the part of members of credit unions run according to the original model. For this reason, as a means of capturing more resources to permit an expanded credit operation, credit unions that grow beyond a certain size typically offer a range of deposit services that are more attractive to net savers, such as pass book savings accounts and time deposits. Once they take this step, however, credit unions abandon the safeguards built into the original model. An institution that is engaged in lending funds borrowed from its members or from the public at large, places the capital of the institution as a whole at risk, and opens the door to a host of liquidity management problems unknown to the original model. Credit unions that offer deposit facilities, as distinct from share deposits, become, in essence, unit banks, susceptible to the same problems and recurring crises that characterized unit banks in the days prior to regulation and deposit insurance.

External Constraints and Obstacles

Perhaps more important as an explanation of the disappointing performance of credit unions in the developing world are external constraints and obstacles that have nothing to do with the sufficiency or adequacy of the model. Since credit unions that explode the original, share-based lending model by offering savings deposit facilities are essentially following a line of development pioneered by commercial banks in the nineteenth and early twentieth centuries, the mechanisms and the strategy needed to insure their safety are rather well understood. Deposit accepting institutions, because of the crucial importance of maintaining depositor confidence in the institutions, must apply more stringent guidelines in the making and collecting of loans than share or capital based lending institutions. Deposit accepting institutions must also make provisions for handling swings in liquidity that are unknown to capital based lending institutions. In general, deposit accepting institutions must be more fully integrated into the financial system than share based credit unions, which can be operated effectively as stand-alone institutions.

In response to the needs of their affiliates for assistance with liquidity management, federations of credit unions in many historical contexts have evolved into second level financial institutions, accepting deposits from the primary institutions, while providing them with guaranteed lines of credit and other services the retail outlets need to be able to manage deposits effectively. This process has led, as was noted above, to the creation of some of the largest financial institutions in the world.

A major obstacle to the parallel development of analogous financial institutions in the Third World is presented by the international donor organizations, which, in their quest for institutions capable of managing their credit programs, have sought out federations of credit unions in the early stages of transition into successful financial institutions. Federations of credit unions, which, if left to their own, would have evolved into strong financial institutions serving large numbers of savers and smaller numbers of borrowers, have been seduced, by the availability of inexpensive foreign savings, into becoming weak institutions poorly serving relatively large numbers of borrowers and a relatively small numbers of savers. By this process, in the place of strong institutions capable of meeting the real-world credit needs of their constituents, weak, top heavy, bureaucratic institutions dedicated to the management of subsidies have been created. By this process, at the national level, in the place of the independence guaranteed by domestic resource mobilization, dependency on foreign resources and foreign savings has been fostered.

The significance of this brief historical digression for the present study is that, once again, history appears poised to repeat itself. The data gathered by the survey of 19 credit unions affiliated with FENACRE shows a system undergoing explosive growth, based on deposit mobilization at the grass roots level. The data suggests, furthermore, that FENACRE has the potential to become one of the largest and most powerful financial institution in Bolivia, benefiting hundreds of thousands of families currently without access to the services provided by formal financial institutions. If this potential is to be reached, the Federation must come to view its future as closely bound up with the growth and viability of its primary affiliates, particularly with their ability to mobilize voluntary savings from the public. The Federation must come to view its affiliates as its primary source of loanable funds, for only then will it provide them with the services they need to prosper and grow as the deposit accepting institutions they have all become. Interviews with representatives of FENACRE, however, suggest that the Federation has been confused by the availability of low cost funds from international donors, notably the US PL 480 Program, into perceiving its role <u>not</u> as a provider of services to its primary affiliates, but rather as a provider of services to international donor organizations. Because of the incentive structure created by international donors, most notably by the United States Agency for International Development and the PL 480 Program, FENACRE is opting for a short sighted development strategy contrary to the proven one adopted by successful financial institutions. Rather than basing its development on the proven, demand driven, market oriented strategy of providing services, through its affiliates, to large numbers of savers, the Federation is preparing to manage a subsidy for a large number of borrowers. Instead of focusing its attention on the legitimate needs of its affiliates for technical assistance and for assistance with liquidity management, FENACRE is squandering its scarce resources providing services to production cooperatives targeted by international donors for assistance. Instead of adopting the long-range strategy that would transform it into a strong institution capable of providing all the financial services demanded by such production cooperatives in the future, The Federation is opting for the short sighted strategy of weakness and dependence.

It is a sad if familiar story: The incentive structure created by the international organization will leave the domestic financial institution weaker and less able to provide services to the target population than it would have been in the total absence of the intervention.

CHAPTER FOUR: FENACRE

The Rebirth of a Financial Institution: An Overview

As was pointed out in CHAPTER TWO, as a result of the national crisis initiated by the severe drought of 1983/84, FENACRE, by the end of 1985, had become totally dependent on the income it earned from the distribution of fertilizer under USAID's disaster relief efforts for its institutional survival. Although FENACRE is a federation of financial institutions, it found itself heavily involved during this period of national turmoil in non-financial activities. In this respect, the Federation paralleled a course taken by the majority of its affiliated credit unions, which, through rapid expansion of their dry goods departments, became important suppliers of basic commodities to their members By the end of 1986, however, the Federation had begun to reassert itself as a financial institution--again paralleling the course taken by its affiliates that survived the hyperinflation. According to the Federation's Annual Report for that year, net income from financial services narrowly exceeded net income from non-financial services--81,505 million old Bolivian Pesos as opposed to 75,715 million for non-financial services.

By the end of the third quarter of 1987, the last date for which data on the Federation was available, FENACRE's re-emergence as a financial institution would appear to be complete. According to the Consolidated Balance of September 30, 1987, 69.45% of the Federations income (Bs.1,365,716.94 of a total of Bs. 1,966,615.56) was derived from financial services. Of even more significance than the gross figures, however, are those for net income. According to the consolidated balance for the Federation's Financial Services Department (Operaciones) for October 31, this department had total income for the first ten months of 1987 equal to 160% of total expenses. (Total income of Bs.1,517,563.93 and total expenses of Bs. 948,007.69, for a surplus of Bs. 569,556.24.

The significance of the emergence of the Financial Services Division as an important source of net revenue is underlined by the fact that the Federation as a whole will probably close its books for 1987 with a deficit. The Consolidated Balance for the Federation as a whole as of September 30, 1987, shows expenses exceeding income by 7.52%. (Income of Bs. 1,966,615.56 versus expenses of Bs. 2,114,562.99.)

The strong showing of the Financial Services Department is due largely to the success of the Savings Mobilization Project (The PMA), begun in late 1985 with a small amount of technical assistance supplied by USAID/Bolivia. Although this program, until recently, has been operated at only one location, the FENACRE headquarters in Cochabamba, and still accounts for less than 15% of the Federations loan portfolio, it accounts for slightly more than one half of the gross income generated by the Financial Services Department, and slightly less than one half of

Table 4-1: Financial Income and Financial Expenses
As of October 31, 1987
(In US Dollars)

	Income	(%)	Expenses	(%)	Net Income	(%)
Loans, PMA	279,619	43.0	189,712	61.5	80,907	24.3
Deposits, Banks	62,930	9.7	NA		62,930	19.0
Managed Credit	307,086	46.3	118,913	38.5	188,173	56.7
TOTALS:	649,635	100.0	308,625	100.0	332,001	100.0

Source: Hand-written notes provided by Mr. Celiar Lopez

Note: Although the information supplied in the above table should be considered broadly indicative of the general relationships, it should be interpreted with some caution, due to the fact that it is not taken directly from audited statements.

the net income, as may be seen from the accompanying table supplied by the Department's General Manager, Mr. L. Celiar Lopez. (It will be noted here that, in his reports of April 10 and April 12 for USAID/Bolivia, the consultant called attention to the growing importance of income from this program, and predicted that the PMA would become the most important source of income for the Federation by the beginning of 1988.)

Expenses in the above table refer to financial costs only, and do not capture all expenses related to the provision of the services which generate the income listed in the first column of figures. The management information system currently used by FENACRE is not adequate to permit a detailed analysis of expenses. Many expenses incurred by the Federation are associated with departments or activities that generate little or no income, but which support, in varying degrees, the credit activities that generate the major portion of the Federations income. Since the PMA credit activities are directed at the public which does not directly benefit from the other services provided by FENACRE, it seems reasonable to conclude that most of the expenses incurred by the non-income producing departments should be charged against the external credit lines targeting the cooperative sector. Since FENACRE is currently operating with a deficit, it appears that the income it generates from its dealings with the public are being used to subsidize the cooperative sector.

Viewing this same issue from another point of view, instead of retaining earnings to recapitalize itself after the decapitalization produced by hyperinflation, in managing external lines of credit, the Federation is using earnings from its lean, aggressive, expanding, private-sector oriented department to subsidize the more paper-laden, bureaucratic work of international donors.

The FENACRE Staff and Directorate do not appear to have an adequate understanding of the extent to which they are subsidizing international donors, most notably USAID, nor the tremendous future that could be theirs were they to follow the course indicated by their natural strengths and the comparative economic advantage that credit unions in the Bolivian context enjoy over other financial institutions. They appear blinded by the illusion of plentiful external resources to the tremendous potential they possess as a domestic, second level financial intermediary.

This potential may be quantified using figures for average savings balance for credit union members in Third World. According to figures recently released by the World Council of Credit Unions in Madison, Wisconsin, at the end of 1986 the average credit union member in developing countries had savings deposited in his institution approximately equal in value to $340.00. The developing countries contributing to this average figure include many from Africa and parts of Asia where per capita income is as low or lower than in Bolivia. If FENACRE were, once again, to represent the 200 institutions that comprised the Federation before the period of hyperinflation, and if each credit union, on average, counted 2,500 active members who maintained savings balances equal to the 1986 average for credit union members in developing countries, the system would control deposits of 170 million dollars. This figure should be compared with the ten or twenty million in external credit that the system might be called upon to manage.

It should be pointed out that, in the above table, most of the income from banks should be counted with the 24.3% of net income generated from domestically mobilized resources when figuring the contribution made by the PMA to FENACRE's bottom line, due to the fact that that FENACRE maintains large interest earning deposits in commercial banks as part of the reserves it must have to back up the deposits from the public.

The PMA: Serving Non-Members:

Although FENACRE is a second level institution, wholly owned by a fluctuating number of primary affiliates, its highly successful savings mobilization project, the PMA, is based on direct dealings with the public. The considerable success of this USAID-sponsored effort should be judged against the fact that this program is leading the Federation in a direction contrary to the long-term interests of its affiliates and contrary to its own institutional comparative advantage. Ideally, the Federation should emerge as a second level financial institution, providing a variety of services to its affiliated primary institutions. The PMA, however, places FENACRE on the same operational level as the credit unions, and hence in direct competition with them. Instead of fostering the vertical integration of the credit union system, the PMA may lead to its disintegration.

Striking evidence that the process of disintegration may have already begun--even as the system is beginning to pull itself together after the disaster of hyperinflation--was encountered in Cochabamba at one of the most successful of the credit unions included in the survey. At the time of the visit by the Catholic University team to this credit union, Hospicio was celebrating the recent opening of the first of a planned series of branch offices in a neighboring towns. Upon opening a branch office, the main office of the credit union will gradually take on some of the characteristics of a second-level institution. If the process of integration--so important to a financial system based on deposit mobilization--were to proceed along natural developmental lines, this downward reach of the credit union toward expanded ties with the public, through a system of branch offices, would be complimented by a corresponding upward reach, toward closer ties with the institution on the next level, that is, with the Federation. However, instead of strengthening its ties with FENACRE, Hospicio is considering severing them, principally, it appears, because of dissatisfaction with the Federation's current policy of dealing directly with the public.

Hospicio's readiness to consider severing ties with the Federation is spurred not only by its frustration with the Federation's descent, via the FMA, into direct competition with its primary institutions, but also by the perception that ample resources may be available through Central Bank rediscount lines, notably the various credit lines supplied by USAID and the US PL-480 Program. With the hope of eventually being able to administer lines of credit, Hospicio has begun the paper work necessary to qualify as an ICI, or Intermediate Credit Institution.

This is a particularly distressing development. . Within the past two years this exemplary credit union has risen from the rubble left by hyperinflation, purchased and refurbished a mission school, begun a very popular health maintenance organization, extended millions of dollars of credit, paid out hundreds of thousands of dollars of interest to depositors, remodeled its building in the center of Cochabamba, placed tens of thousands of dollars on deposit with FENACRE--_all on the basis of a policy of aggressive domestic resource mobilization_. Now, partly because of what it perceives to be unfair competition for deposits on the part of its umbrella organization, and partly as a response to the lure of easy money from the central government and international donors, Hospicio is wavering in the course that has brought it so much success to date. Once again the natural course of development of a potentially extremely important domestic financial institution has been disrupted by the well-intended but poorly conceived intervention of an international donor.

A second curious aspect of the FMA operation, which serves to underline the extent to which the Federation is being led, by the success of the FMA, away from its rightful role as a second level financial institution based on the deposit-mobilizing capabilities of its affiliates, concerns the structure of assets and liabilities. In general, as was noted in the introductory chapter, deposit accepting financial intermediaries usually serve many more savers than borrowers. Although complete figures were not available, it appears that FENACRE, through the FMA, is serving an unusually high number of borrowers compared with savers. The bulk of the funds FENACRE has mobilized through the FMA come from a relatively small number of rather large dollar denominated time deposits. FENACRE uses these funds to serve a relatively large number of small borrowers according to a policy referred to by Federation officials as the "democratization of credit." Until recently FENACRE made 90-day signature loans for up to a maximum of US$2,000. As a result of experimentation with borrower demand, the term of these unsecured loans was doubled to 180 days, while the maximum amount approved without a real guarantee was reduced by half, from $2,000 to $1,000.

This slight modification of the original "democratic" credit policy allows the Federation to enjoy a slight savings in its transactions costs while serving an approximately equal number of borrowers. It also points up FENACRE's continued emphasis on retail financial activities, which is not the proper domain of a Federation of financial institutions, but rather of its affiliates.

External Credit Lines: Serving Non-Affiliates:

As of October 30, 1987, FENACRE's books showed a total of Bs.17,481,214.41 in refinanced loans. Although the figures available to the consultant did not give sufficient detail to permit an exact breakdown, it is clear from conversations with FENACRE staff members that the bulk of this credit was extended to the so called "integrated cooperatives," which are not financial institutions, and which, therefore, are not affiliated with this Federation of Credit Unions. The fact that FENACRE is being led by the conditionalities placed on the external credit lines to work with non-affiliated institutions and production groups compounds the feeling evoked by the success of the PMA that the Federation, instead of helping its affiliates reassert themselves as financial institutions after the destruction wrought by hyperinflation, is competing with them.

The PMA Compared with External Credit Lines:

The superior service that a financial institution is able to provide when it enjoys the independence derived from its ability to mobilize its own resources may be seen by contrasting the service FENACRE is able to provide within the PMA compared with the service it provides to the end user of credit through the various external lines under its administration. According to the General Manager of FENACRE's Operaciones Department, the average loan made with PMA funds requires less than thirty days to process, from the time of initial application to the disbursement of funds. These loans currently bear a rate of interest of 2.5% per month, and a term of 180 days. The Agricultural Production Loans, by contrast, typically are placed at the disposal of the end user two to three months after the beginning of planting season, that is, long after the point where they might have an influence on production. Agricultural production loans from these sources frequently are used to repay credit obtained in the informal sector, reportedly at the rate of 10% per month.

When a few months of high rates from the informal sector are averaged in with the lower rates available on the international lines, the average financial cost of the service to the borrower is probably greater than the cost of credit made with locally mobilized resources.

FENACRE'S Strategy for Development:

FENACRE's long-term comparative advantage, as a federation of credit unions, is as a second or third level financial institution based on domestic deposit mobilization. As was pointed out in the introductory chapter, deposit accepting institutions require a much higher degree of integration into the financial system than does the original stand-alone, share-based credit union. Furthermore, because these institutions may reach a vast market usually neglected by commercial banks in Third World environments, the growth potential for an integrated system of deposit-accepting credit unions is very great. To reach its potential, FENACRE must assert itself as a second-level financial institutions supplying the services demanded by its affiliates.
This general prerequisite may be thought of as having two components:

PREREQUISITES TO THE ATTAINMENT OF FENACRE'S POTENTIAL

a) After the period of service as a distributor of fertilizer, the Federation must reassert itself as a financial institution.

b) Upon regaining credibility as a financial institution, FENACRE must begin to evolve in a direction dictated by its comparative advantage within the larger context of the Bolivian credit union movement, that is, as a second-level financial institution providing services to its deposit-accepting affiliates.

While FENACRE, as the income figures displayed in the above Table clearly indicate, has largely achieved the first of these objectives, considerable confusion remains at the Federation headquarters in Cochabamba concerning the attainment of the second. On the one hand, the success of the PMA as a generator of net income is causing the Federation, particularly the FENACRE staff, to press for the expansion of this program to other population centers, notably Santa Cruz and La Paz. If the PMA encounters the same success in these cities that it has enjoyed in Cochabamba, this program--which, it will be recalled, places the Federation on the same operational level as its members--may emerge as a major source of friction between the FENACRE and its affiliates. Secondly, while FENACRE officials speak of the Federation becoming a second-level financial institution, which they sometimes refer to as a cooperative bank, and sometimes as a "Financiera," they do not have a vision of a vertically integrated institution based on domestic resource mobilization on the part of its affiliates. Instead, they speak of the Federation becoming an intermediary between external donor organizations and the cooperative sector in general. One plan, which is still in the formative stages, foresees the creation of a finance company that would be 51% owned by FENACRE and 49% by international donor organizations, perhaps USAID.

FENACRE appears to be following a confused and decidedly second-best development strategy, one that reflects the powerful influence of the incentive structure created by the international donor community. When FENACRE officials speak of domestic resource mobilization, they are building on their PMA experience, which leaves the Federation at the level of a primary financial institution, in direct contact with the public. When they speak of FENACRE as a second-level financial institution, they forget about domestic resource mobilization and focus, instead, on their role as broker, to the cooperative sector, of the foreign savings available through international donors. In both instances, the Federation is being maneuvered onto a collision course with its affiliates.

Out-Competing Its Affiliates for Deposits

Because of its image as a national institution that enjoys the support of the international community, FENACRE is able to out-compete its affiliates for deposits from the public. In Cochabamba, for example, Hospicio--which began its deposit mobilization campaign at approximately the same time that the Federation began the PMA, but with no technical assistance from USAID--is forced to pay approximately 50% more than.its umbrella organization for otherwise similar deposits: While FENACRE is able to mobilize substantial resources locally by paying 20% per annum on dollar deposits, that is, just two percentage points over what commercial banks are paying, Hospicio is currently paying upwards from 30% per annum on its dollar denominated time deposits.

Competing With, Rather than Complimenting its Affiliates

The competition from FENACRE in the area of deposit mobilization would not hurt the credit unions if the Federation were inclined to reinvest a substantial portion of the funds captured from the public in loans to its affiliates. Such a policy, by lowering the cost of funds to the credit unions, would orient the primary institutions toward the umbrella organization, and, consequently, contribute to the integration of the system. Instead, however, of using the funds mobilized from the public to strengthen its battered affiliates, FENACRE, by its policy of making numerous small loans directly to individuals, is competing for precisely the same borrowers served by the credit unions.

It is difficult to escape the impression that the PMA credit policy reflects, at least to some extent, a desire on the part of FENACRE to project the image of an institution capable of reaching the populations targeted by the principal international donor organizations.

By aiming to expand its role as broker of foreign savings to the cooperative sector, FENACRE is preparing to intensify the competitive pressure it is currently applying to its struggling member institutions through the PMA. Just as FENACRE's PMA credit policy targets the potential credit union borrower, so do donor sponsored lines of production credit. Instead of concerning itself more intensely with the needs of its dues-paying affiliates, FENACRE, through its Department of Projects, is gearing up to provide a broad range of technical assistance to non-affiliated production cooperatives, so that they may qualify for externally funded lines of credit, which FENACRE will then administer. Credit from international donors, of course, is even less expensive than the credit FENACRE extends through its PMA program, which makes the Federation the fiercest competitor to its own affiliates.

FENACRE, of course, did not set out with the express purpose of harming its affiliates. Like its member credit unions, the Federation, in its struggle to right itself after the debacle of hyperinflation, is merely responding to the economic signals of a rather powerful, albeit somewhat perverse, incentive structure, much of which has been put in place by the international donor community.

It is difficult not to conclude, as one watches the Federation contort itself in response to what it perceives to be the expectations of the international donors--turning away, in these contortions, from its affiliates and the bright future that it could make with them--that the credit union system of Bolivia would be much stronger tomorrow if all hope of managing external credit lines could be extinguished today.

CHAPTER FIVE: THE CREDIT UNIONS

In this chapter, the data collected on Forms I through IV will be analyzed and interpreted. The first section treats the institutional data, collected on Forms III and IV. The institutional data is also analyzed in Appendix C to this report, which also contains the raw data from Forms III and IV.

Section II of this chapter reviews the data collected principally from the 3,563 individual ledger cards sampled at the 19 credit unions included in the survey. This is the data that was recorded on Form I, and which is presented in considerable detail in Appendix D.

The third section to this chapter reviews the data on credit union credit activities, collected on Form II. The reader should consult Appendix E to this report for the tables and other data upon which the discussion of credit activities is based.

Copies of the data collection forms are presented in Appendix A.

It must be acknowledged at the outset that, due to the severe time and resource constraints discussed at considerable length in the Introduction, the analysis presented in this chapter by no means exhausts the database created by the Catholic University team. An effort has been made to focus on the areas that have a direct bearing on the major policy issues facing FENACRE and the international donor organization that my concern themselves with the Federation's future.

Section I

Emerging from Hyperinflation: The Institutional Data

During the period of national crisis, many credit unions, having lost the bulk of their earning assets (and liabilities) to hyperinflation, used their cooperative structure to provide services of a non-financial nature. A surprising number, in response to the crisis in public education, opened schools during this period, or laid the plans to open them. The typical credit union of the era of hyperinflation, however, came to resemble a dry goods store more than anything else. During this period, when, it will be recalled, the Federation was engaged in the distribution of fertilizer and other agricultural inputs, the typical credit union became a distributor of basic necessities, such as rice, noodles, cooking oil, detergent and toilet tissue.

While it remains to be seen whether the entry into formal education will prove a boon to the movement over the long run, with the return of stability, it did not take the credit unions long to discover that they had lost their temporary comparative advantage in the distribution of commodities. As unsold stocks began to accumulate in their storerooms, the credit unions began returning to their original activities. Instead of mobilizing resources from their members to send trucks to the frontier with Chile or Brazil to bring back merchandise, the credit unions began using the resources mobilized from their members to make loans to individuals, many of whom, then, as private entrepreneurs, sent trucks to the frontier.

This is a slightly more round-about way of providing credit union members with the basic commodities they demand, but one that has proved to be more efficient than the direct approach--in Bolivia as well as in innumerable other historical contexts. The credit union specializes in mobilizing resources and extending credit, that is, in providing financial services--an area where it has a considerable comparative advantage--leaving the provision of most real services in the hands of the wide assortment of individuals and groups that make up its loan clientele.

The transformation, in the year following the end of hyperinflation, of Bolivian credit unions from institutions engaged principally in the provision of real services into financial institutions, is visible in the changing structure of their assets and liabilities, as reported in the annual reports of the credit unions included in the survey. Table 5-1, below, presents the averages for important items included in these year-end statements, in both absolute and percentage terms, and the percent change between the two reporting periods.

In the accompanying table, the percent figures do not sum to 100, due to the fact that many items are excluded from this table, and to the fact that items from both sides of the balance sheet are included. The raw data with which this table was constructed, as well as corresponding tables for the various geographic regions and individual credit unions included in the survey, are presented in Appendix C to this report.

Table 5-1: STRUCTURE OF ASSETS AND LIABILITIES: 1985 and 1986
(In Bolivian Pesos)

	1985	1986	% Change
Total Assets	3,092,425.34	11,020,143.51	356.36
% Total	100.00	100.00	
Total Loans	365,314.38	4,091,165.63	1,119.90
% Total	11.81	37.12	
Fixed Assets	2,238,594.57	3,646,842.90	162.91
% Total	72.39	33.09	
Deposits	476,091.43	6,704,144.57	1,408.16
% Total	15.40	60.84	
Capital	1,759,679.16	3,050,126.20	173.00
% Total	56.90	27.68	
Revalued Capital	2,286,327.11	1,099,294.09	----
% Total	73.93	9.98	

Source: Data Collection Forms III and IV, and Annual Reports from the Cooperatives in the Sample

NOTE: These figures are averages for all the credit unions in the survey excluding those from Oruro, for which 1985 data was not collected.

As may be seen in the above Table, while reported total assets for the 16 institutions included in these averages grew by more than 356 percent, total loans grew three times as fast, causing them to rise to 37.12% of total assets at the end of 1986, compared with 11.81% at the end of 1985. At 37.12%, Total Loans are the most important component of Total Assets, followed by Fixed Assets, which make up 33.09% of the total.

It is quite significant that Deposits grew even faster than Total Loans, increasing 1,408.16%, causing them to rise from 15.40% of Total Assets and Liabilities in 1985 to 60.84% by the end of 1986.

The fact that deposits grew even faster than loans during this period of transition serves to underline the importance of domestic resource mobilization to the growth of financial systems. While international donors tend to focus on the perennial problem of a scarcity of resources, the more fundamental problem appears to be an underdeveloped or impaired financial system, which fails to mobilize the resources that are available. As the credit unions reassert themselves as financial institutions after the destruction wrought on them by hyperinflation, the rebuilding process begins on the basis of deposit mobilization.

Another interesting point that may be made on the basis of the above table concerns the relatively strong capital position of these 'decapitalized' financial institutions. At the end of 1985, the 16 cooperatives providing input for Table 5-1 reported capital that averaged 56.50% of total assets and liabilities. By the end of the following year, capital had fallen to 27.68% of total assets and liabilities, which, however, is still a rather high ratio for deposit accepting financial institutions.

The credit unions, despite having been battered by inflation, still have considerable positive net worth, due to the fact that the same process that destroyed their financial assets also destroyed their liabilities, leaving their real assets--typically consisting of developed real estate, part or all of which is used for their offices and meeting places--virtually unencumbered. These unencumbered real assets--particularly when they exist in the highly visible form of attractive buildings, give the credit unions a firm basis on which to pursue deposit mobilization. Using a conservative rule of thumb whereby a deposit accepting institution may comfortably have liabilities equal to ten times its capital, the capital position of Bolivian credit unions at the end of 1986 would appear sufficient to support a four or five fold expansion of deposits, with no further expansion of the equity base. Given the ease with which an expanding credit union is able to add to its capital base, through the share contributions of its members, and the fact that a certain amount of asset revaluation was still occurring during 1987, it would seem at least theoretically possible for the system to continue to expand for a while at the breathless pace of 1986.

Although the figures for 1987 were not yet available at the end of the data collection phase of this study, it appears that at the end of 1986 the credit unions were poised to capture an increased market share from commercial banks and other providers of financial services, providing, of course, that no new disincentives to domestic resource mobilization were put in place during 1987.

Section II

The Individual Ledger Cards:

Socio-economic Profile of the Credit Union Members:

While a wealth of socio-economic data was collected on the 3,563 credit union members sampled by means of Form 1, and the 1,187 credit union borrowers sampled by means of Form 2, time does not permit a detailed analysis of this data within the main body of the report. The interested reader is referred, instead, to the relevant portions of the Appendices D and E, particularly Tabla 1 of Appendix D, "Analisis Segun Ocupacion," and Tabla 11 of Appendix E, "Analisis de Prestatarios Segun Ocupacion." Many other statistics are also contained in the general portions of these two important appendices. Since these appendices contain Tables for the various regions as well the sample as a whole, they may prove useful for other investigations ancillary to the main thrust of this report.

The Preponderance of Savers Among Credit Union Members

One of the most important findings of the survey of the nineteen credit unions was the surprisingly low percentage of borrowers among active credit union members. Among the 3,563 individual ledger cards examined, only 149, or slightly more than 4.18%, were found with loan balances greater than zero. Even when allowance is made for the fact that in five of the 19 credit unions sampled, the ledger cards of members with loans were inadvertently excluded from the sample, the number is surprisingly low. Even if the population statistic were one or two hundred percent greater than the sample statistic--a relatively unlikely event--we would have to conclude that the great majority of credit union members join for reasons or services other than credit.

One service that appears to be in great demand among credit union members is that of savings and time deposits. Despite the severity of the continuing economic dislocation of the country, the average savings balance shown on the 3,563 individual ledger cards sampled was over US$100.00 at the current exchange rate, (Bs. 226.37). While it is clear that the average figure is heavily influenced by a relatively small number of large deposits, it is very significant that 650 of the 3,563 ledger cards, or 18.24, showed savings balances greater than Bs.100.00.

Of even greater interest, perhaps, is the fact that, at the national level, the average savings balance of credit union members <u>without</u> loans is significantly larger than that of members with loans, as may be seen in the flowing Table:

Table 5-2: Average Savings Balances:
Members with Loans Compared with Member with No Loans
(In Current Bolivian Currency)

Members with Loans	Members Without Loans
174.68	228.62

Source: Appendix D, p. 106.

The significance of this statistic derives from the fact that we expect savings balances to be positively correlated with loan balances, due to the fact that credit unions traditionally grant loans on the basis of savings, and frequently capitalize a portion of the loan, in the form of a frozen deposit in the borrower's savings account, to bring the relationship between savings balance and loan balance into line with the credit union's current guidelines or policies.

In fact, such policies, and such a positive correlation were observed. The global average savings balance for members without loans is affected by the particularly aggressive deposit mobilization occurring in one of the five geographic regions included in the survey, in Cochabamba, as may be confirmed by consulting the portions of Appendix D which present the data by region. In the other regions, the average savings balance of the sub-population of members with loans exceeds the average savings balance of members without loans.

This statistic may be given an interesting interpretation: The existence of a large number of credit union members who use their institution principally as a place to hold their savings suggests that the credit unions have evolved to the point where they are serving two functionally distinct populations, savers and borrowers. Since savers are the foundation upon which all financial institutions are ultimately built, it is gratifying to note that Bolivian credit unions are paying attention to them, and, judging by the numbers, appear to be serving them well.

The Size-Distribution of Savings Deposits

As may be seen in the table below, the size distribution of savings balances is strongly skewed to the left, or low end of the range. Almost seventy percent of credit union members in the sample had savings balances of Bs.50.00 or less. These 2,487 accounts controlled less than four percent of the total savings found in the sample. At the other end of the range, the 2.5% of the deposits over Bs.1,000 controlled 73% of the savings.

Table 5-3: SIZE DISTRIBUTION OF SAVINGS BALANCES

Size of Account	0 - 50	51-100	101-250	252-500	501-1000	>1000
Number	2,487	426	357	141	63	89
% Tot.	69.8	12.0	10.0	4.0	1.8	2.5
Cum.	69.8	81.8	91.8	95.7	97.5	100
Balance	31,223	31,838	57,331	48,860	47,549	588,743
% Tot.	3.9	3.9	7.1	6.2	5.9	73.0
Cum.	3.9	7.8	14.9	21.1	27.0	100

Source: Tabla 4, Appendix D

Several Comments are in order:

The top end of the range is heavily influenced by the aggressive deposit mobilization by the credit unions in Cochabamba, as may be see by referring to the corresponding regional tables in Appendix D. In La Paz, for example, 18.5% of the total savings are held in the 75.3% of the accounts of Bs.50.00 or less, and zero percent is held in accounts greater than Bs.1,000.00. In Santa Cruz, 30.2% of the total savings in the sample are held in the less than 1% of the accounts with balances exceeding Bs.1,0000.

The skewness of the size distribution of savings balances probably corresponds roughly to the distribution of income and wealth in Bolivia.

This skewness reflects the fact that credit unions, being demand-driven institutions, respond to the exigencies of the market place, which reflect, necessarily, the underlying distribution of wealth and income.

Measures of Credit Union Activity:

The following table gives some perspective on how credit union members are using their institutions. The most interesting statistic in this table is the ratio of average number of deposits per year to the average number of withdrawals, which for the sample as a whole is 13.76. There is little doubt that the high ratio of deposits to withdrawals is part of the legacy of credit unionism, which began, it will be recalled, with share deposits which, in practice, were not to be withdrawn. That this is the case here is suggested by the disaggregated statistics for the various regions and individual credit unions presented in the same table. In those regions and in those cooperatives where deposit mobilization has been most successful, that is, in the credit unions of Cochabamba, the ratio of deposits to withdrawals is lowest. It is apparent that aggressive deposit mobilization requires giving the savers easy access to their savings, which points up, once again, the liquidity management problems facing the maturing credit unions, and the consequent need for greater vertical integration within the credit union system.

A statistic that only appears to conflict with this interpretation of the ratio of deposits to withdrawals may be found in Tabla 9, of Appendix D, p. 113. According to this Table, almost 30% of the total savings balances found in the sample of 3,563 individual ledger cards belong to credit union members who have not visited their credit union even once in the past twelve months, to make a deposit or a withdrawal, and a total of almost 40% were controlled by members who made only two or fewer visits within the year.

The fact that a large percentage of the funds deposited in credit unions are controlled by members who rarely visit the credit union may be reconciled with the observation that credit unions emphasizing deposit mobilization show a lower deposits to withdrawal ratio by noting that many credit union members with substantial deposits are merely nominal members of the cooperative, drawn to it by the attractive savings instruments available there. Several of the credit unions in Cochabamba, for example, actively mobilize deposits from the public at large. Many of these depositors fill out a membership application, and may be granted membership or, in some instances, "pre-membership" status, but they are not credit union members in the traditional sense. They may visit the institution once every 90 or 180 days to renew their certificates of deposit, but otherwise take no part in credit union activities or other credit union services.

This active courting of non-member depositors by the most aggressive mobilizers of domestic resources among the Bolivian credit unions underlines the extent to which they have grown beyond the original share-based model, and the urgency of the need for increased vertical integration within the system via a second-level financial institution owned by the credit unions, working with them and on their behalf.

AVERAGE NUMBER OF DEPOSITS AND WITHDRAWALS FROM SAVINGS ACCOUNTS
(By Region, and for Selected Credit Unions)

Region or Cooperative	Sample Size	Number of Deposits 12 Months	Number of Withdrawals 12 Months	Ratio of Deposits to Withdrawals
Bolivia as a Whole	3,563	3.44	0.25	13.76
REGIONS:				
Santa Cruz	825	5.17	0.09	57.44
La Paz	838	3.39	0.19	19.84
Cochabamba*	1,164	1.97	0.54	3.65
Oruro	327	3.33	0.02	166.50
Sucre	369	4.56	0.02	228.00
SELECTED INSTITUTIONS:				
Jesus Nazareno	208	5.27	0.07	75.28
San Luis	134	3.05	0.13	23.46
Hospicio	361	1.83	0.11	16.64
Cristo Rey	281	3.46	0.11	31.45
Santa Ana	237	2.62	1.13	2.32
Santisima Trin.	214	7.15	0.03	238.33
Huayna	112	2.50	0.20	12.50
Magisterio Rur.	84	1.77	0.0	588.50

Source: Data Base 1 (Form I)
*
See footnote, Next Table, as well as Tabla 9, Appendix D.

The next table, below, shows the extent to which the current level of activity is dependent on the resources that have been mobilized within the past 12 months, and is, therefore, an approximate measurement of the rate at which the system has been expanding during the past 12 months. At the national level, gross deposits into savings accounts within the 12 month period previous to the team's visit to the credit union represent 71.15% of savings balances at the times of the respective visits, indicating that the explosive rate of growth in deposits recorded for 1986 has slowed considerably in 1987. It still appears to be considerable, however--perhaps in the 200% range, compared with the 1,408.16% noted above, (See Table 5-1).

SAVINGS BALANCE COMPARED WITH AMOUNT DEPOSITED
IN SAVINGS ACCOUNTS DURING PAST 12 MONTHS

Region or Cooperative	Average Savings Balance	Average Saved Past Year	Ratio of the two Averages (X 100)
Bolivia as* a Whole	149.44	106.33	71.15
REGIONS:			
Santa Cruz	147.45	111.24	75.44
La Paz	42.68	23.33	54.66
Cochabamba*	292.98	206.49	70.48
Oruro	32.40	24.31	75.03
Sucre	47.84	40.41	84.47
SELECTED INSTITUTIONS:			
Jesus Nazareno	96.60	90.01	93.18
San Luis	81.48	81.00	99.41
Hospicio	592.26	356.10	60.13
Cristo Rey*			
Santa Ana	440.90	389.32	88.30
Santisima Trin.	95.14	41.23	43.34
Huayna	22.88	31.61	138.16
Magisterio Rur.	72.75	56.77	78.03

Source: Data Base 1 (Form 1)

* Forty time deposits in dollars at the cooperative Cristo Rey, which were included in the data recorded on Form I, have been disregarded in the calculation of these averages. When these forty deposits are included, the average savings balance at the national level is 226.37, and the average amount saved during the previous 12 months is 105.12, giving a ratio or 45.44, while for Cochabamba the corresponding figures are 515.93 and 193.63, for a ratio of 38.69, and for Cristo Rey they are 1,034.49, 26.54, and 2.56%, respectively.

The Supply of and Demand for Credit: The Loan Files
Introduction

Emulating Informal Financial Institutions:

One of the most interesting observations that may be made on the Bolivian credit unions as they emerge from the period of hyperinflation is the extent to which they appear, as they continue to distance themselves from the original share-based model, to have learned from the informal sector, particularly from the "Intermediarios," who broker funds between savers and borrowers. This emulation of the informal sector is no more in evidence than in the speed with which they are able to process and close loans, as may be seen from the following table of dollar denominated loans.

WAITING TIME BETWEEN LOAN APPLICATION AND DISBURSEMENT
(320 Loans in US Dollars)

Number of Days	0 - 2	3 - 6	7 - 14	15 - 30	> 30	No Data
No. Loans	89	25	21	35	78	72
% Tot.	27.8	7.8	6.6	10.9	24.4	22.5
Cum. %	27.8	33.2	43.1	56.6	77.5	100.0
Amount	109,851	44,570	45,657	62,767	85,963	116,000
% Tot.	23.6	9.6	9.8	13.5	18.5	25.0
Cum. %	23.6	33.2	43.1	56.6	75.1	100.1

Source: Tabla 12a, Appendix E

Note: This table does not match the table referred to in Appendix E, due to the fact that obvious errors in the calculation of percents and cumulative percents have been corrected here. This note also applies to the following table, which corresponds to Tabla 12b of Appendix E.

From the above table we note that <u>at least</u> 27.8% of the credit union borrowers obtaining dollar denominated loans received their loans within two days of making application. The percentage of borrowers receiving their dollar loans within two days may actually be considerable greater, due to the rather large number of loan files where the data did not provide one or the other of the two dates needed to make the calculation. If only the loan files with complete data are consulted, 35.9% of all borrowers received their loans within two days, [89/(320-72)] = 35.9%, and 54.4% receive them within two weeks.

A similar pattern is observed in the case of loans denominated in Bolivianos, as my be seen in the following table. While the number of loans being made within two days of application is not quite as great in the case of local currency loans as in the case of dollar denominated loans, the number of loans being closed within two weeks is very close in both cases, particularly when the comparison is made with the sub-set of dollar loans for which complete data was available. That figure of 54.4% is virtually identical to the 54.0% of local currency loans disbursed within two weeks of application.

WAITING TIME BETWEEN LOAN APPLICATION AND DISBURSEMENT
(867 Loans in Bolivianos)

Number of Days	0 - 2	3 - 6	7 - 14	15 - 30	> 30	No Data
No. Loans	206	131	172	157	139	62
% Tot.	23.8	15.1	19.8	18.1	16.0	7.2
Cum. %	23.8	38.9	58.7	76.8	92.8	100.0
Amount	142,522	98,301	231,534	214,628	130,275	57,208
% Tot.	16.3	11.2	26.5	24.5	14.9	6.5
Cum. %	16.3	27.5	54.0	78.6	93.5	100.0

Source: Tabla 12b, Appendix E

See Note to previous table.

The impressive performance of the credit unions in making timely loans should be contrasted with the glacial slowness with which external credit lines are processed. Agricultural production credit lines handled through the Central Bank, for example, frequently are not available to the end user until months after the time when they were needed, so that credit from this source does not finance production, at all, but merely serves to reduce the small farmer's average borrowing costs. According to a high ranking FENACRE staff member, most of the production credit handled by them--because it arrives too late to be used for production--is used to repay loans obtained in the informal sector or from credit unions.

The Declining Rate of Interest

After the data on the waiting time between loan application and loan disbursement, perhaps the most interesting data to emerge from the survey concerns the impressive, steady decline in the loan rate of interest that is observable from between the final quarter of 1986 and the third quarter of 1987. During the period of hyperinflation, the rate of interest on credit union loans reached as high as 20% per month <u>in dollars.</u> As late as the Summer of 1986, credit union loan rates as high as 20% per month in local currency were observed. By the end of 1986, however, loan rates, responding to the inexorable law of supply and demand so frequently overlooked in the search for solutions to Third World economic development problems, were declining so rapidly that credit unions were found offering to rewrite loans made just a few months previously, in order to maintain the good will of their borrowers. By the beginning of 1987 loan rates had begun the process of steady decline observable in the table below.

THE DECLINING RATE OF INTEREST ON LOCAL CURRENCY LOANS

Time Period	Number of Loans	Rate of Int.	Average Size	Average Term
Prior to Jan.,'86	84	8.70	888.80	8.2
1st Qtr. 1987	217	6.16	910.50	6.2
2nd Qtr. 1987	317	5.09	1,004.00	6.4
3rd Qtr. 1987	164	4.39	1,042.20	7.2
Oct.-Nov. 1987	3	2.35	831.6	9.6
No Dates	82	--	--	--

Source: Table 14, Appendix E.

Analysis According to Stated Loan Use:

ANALYSIS OF STATED LOAN USE

The interested reader is referred to the global and regional versions of Table 13a in Appendix E for an analysis of loans according to stated end use. Unfortunately, Table 13b, which analyzes dollar denominated loans according to stated use, was defective to the point that the consultant was not able to use it in in this report.

It is important to remember when consulting these tables that stated loan use and the actual use to which a loan is put may be quite distinct, and not necessarily due to any duplicity on the part of the person filling out the application: Small producers, who, in general, are much better at making economic decisions than at economic analysis, may not even know what their loans actually finance, in the relevant economic sense, inasmuch as credit invariably finances marginal economic activity, that is, activity that would not be engaged in in the absence of credit.

One hint that the stated loan use may not be the same as the actual use comes from the relative uniformity of average loan size across many of the different categories at the national level for loans made in the local currency. Four of the 12 categories in the global or national version of Table 13a categories are grouped around an average loan size of Bs.1,000, four more are in the Bs.1,500 to Bs.1,700 range, and four in the Bs.300 to Bs.500 range.

Additional Observations and Remarks:

Many interesting findings buried in the scores of tables that make up the three large appendices to this report have escaped comment for no reason other than the shortage of time. Other potentially interesting questions that could be answered by consulting the databases created by this survey have not even been asked, due to the same shortage of this most perishable of resources. It is believed, however, that the inclusion of the omitted material would not affect the major conclusions of this report, except to strengthen them. An analysis of the loan data from Form II from the point of view of the variable called "aprobacion," for example--the ratio of loan amount to amount applied for--would serve to underline the high quality of credit service the deposit-based primary institutions are able to offer: 1,123 of a sample of 1,187 loans, almost 95%, were made for the entire amount on the loan application.

Finally, a caveat on the interpretation of an important conclusion of this report: The fact that the Federation is judged to be following a confused development strategy should <u>not</u> be construed as a judgment on the quality of FENACRE's staff or directorate, for a number of reasons. On the one hand, it should be remembered that the FENACRE decision making process at the policy level is democratic. Inconsistent or confused policies may reflect the inconclusive results of political tug of wars between rival factions on the board representing thoroughly coherent but opposing viewpoints. The situation is further complicated by the fact that the paid staff, which tends to view the organization from yet another perspective, occupies a power base of its own. Lastly, it must be borne in mind that a confused development strategy might represent the most rational or perfect response to a confusing or flawed incentive structure.

CHAPTER SIX: MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary of the Most Important Findings:

The survey discovered an apparent majority of Bolivian credit unions growing rapidly while reasserting themselves as financial institutions in the relative stability of the post-hyperinflationary environment. A three-fold increase in total assets and liabilities during 1986--part of which was illusionary, reflecting a revaluation of fixed assets in terms of the stabilized national currency--was led by an eleven-fold real increase in outstanding loans and a fourteen-fold real increase in deposit liabilities.

Although all credit unions reported strong loan demand, the most surprising result of the survey was the heavy preponderance of savers among credit union members. The ability of the credit unions to meet the demand on the part of their members for deposit facilities gives these alternative financial institutions the liquidity to provide an unusually high quality of service to borrowers, as measured by the speed with which loans are processed and the ratio of loan amount applied for to loan amount granted. Almost 95 percent of the applicants in the sample of 1,187 current loan files surveyed received 100% of the requested amount, and <u>at least</u> 54.4% (646 of a total of 1,187) received their loans within two weeks of making application.

Although the credit unions are very effective and aggressive deposit mobilizers, they face a number of liquidity management problems peculiar to deposit accepting institutions working without the benefit of a lender of last resort. They also face growing competition from their own umbrella organization.

FENACRE, due partly to the success of its deposit mobilization program, the PMA, launched at the beginning of the present period of relative stability, and partly as a response to the incentive structure created by international organizations, is following a confused development strategy which places it on a collision course with its affiliates that may lead to the relative disintegration of the credit union system. Because of its stature as a national institution with ties to international organizations, the Federation is able to out-compete its own affiliates for deposits from the public. As an agent for international donors, FENACRE is able to out-compete them in the provision of credit to the cooperative sector, in terms of cost if not in terms of quality of service. By focusing on deposit mobilization from the public and the brokering of foreign savings to the non-affiliated cooperative sector, the Federation is neglecting the legitimate needs of its own affiliates for both technical and practical assistance in the difficult area of liquidity management. Instead of following the proven development strategy of vertical integration over a broad base of domestic resource mobilization, the Federation has adopted the curiously schizophrenic strategy of descending to the level of its affiliates as a domestic financial intermediary, while by-passing them almost completely when acting as a second level institution, that is, when intermediating between domestic borrowers and the brokers of foreign savings.

Conclusions:

The principal conclusions deriving from the survey may be stated briefly:

1) The FENACRE system of credit union has the potential to emerge as an important force for the economic development of Bolivia, based on the demonstrated ability of the primary institutions to mobilize deposits from their members and from the public, and to provide a high quality of credit service to their members.

2) The FENACRE system of credit unions will fail to reach its considerable potential due to the confused development strategy currently being followed by the umbrella organization:

-- Instead of providing the primary institutions with the services they need to thrive as deposit accepting institutions, FENACRE, itself, has descended to the organizational level of a primary institution, where it competes with its affiliates in the mobilization of deposits.

-- When FENACRE does act as a second level institution--when it manages lines of credit for external donor organizations--it tends to by-pass its affiliates all together, dealing, instead, directly with production cooperatives and other groups that are not members of its system.

Both of these tendencies on the part of the Bolivian National Federation of Credit Unions--to compete with its affiliates when acting as a mobilizer of domestic resources, and to by-pass them when acting as an intermediary of foreign resources --is a source of contention within the system that will lead to its relative fragmentation and disintegration.

3) Much of the confusion in FENACRE's development strategy is attributable to a perverse incentive structure created by the international donor community, most notably by USAID and the US PL-480 Program.

Recommendations:

USAID has three general options concerning future involvement with FENACRE and Bolivian credit unions, which correspond, roughly, to 1) continuing with the status quo, 2) withdrawing the resources presently managed by FENACRE at the end of the current contract period and reducing the level of support to the provision of a small amount of technical assistance, and, 3) maintaining the current level of involvement, but revamping the program to create an incentive structure conducive to the vertical integration of the system and effective mobilization of domestic resources.

The first of the above options is the least desirable, being both costly and destructive. The second option is the most cost effective, from a simple economic perspective, but may be politically costly, for a variety of reasons. The third option offers the brightest perspective for the assisting the broad cross section of economically active Bolivians served by credit unions, but may be unworkable because of bureaucratic and legal constraints affecting donor organizations. In the following paragraphs, the major costs and benefits of these three general options are highlighted.

OPTION I:

The major benefits that attend Option I are those that attend any effort to maintain the status quo: It is familiar, no one is require to stick his neck out, an entrenched constituency supports it, on a bureaucratic and operational level, it works, and so forth. On the cost side, there are the unknown opportunity costs associated with possible alternative uses of the resources currently administered by FENACRE, such as the benefits that might be derived by lending these funds long-term for the building farm access roads, markets, and so forth, as well as the inhibiting impact that the management of these funds by FENACRE is having on the development of the Bolivian credit union system, discussed at length in the main body of this report.

If the present policies and present trends continue, FENACRE will continue to distance itself from its affiliates, and eventually from the cooperative sector in general. The power of the FENACRE staff will continue to grow and the power of the elected board will decline as the Federation's managers comprehend the long-range significance of the fact that in the matter of its two principal sources of funds--deposits mobilized directly from the public and lines of credit coming from international donor organizations--the umbrella organization is independent of its legal owners, the credit unions. When this happens, FENACRE will be well on its way to becoming just another commercial bank in a country that is suffering from over-capacity in its banking industry.

OPTION II.

There are many benefits that could be derived from reducing drastically the Agency's level of involvement with FENACRE: Most importantly, resources could be freed for alternative investments, and the Federation could be led to discover its natural comparative advantage, as a provider of services to its affiliates. There are a number of serious objections to such a radical approach, however. On the one hand, at this point in its evolution, after the success of its PMA Program, it may take more than benign neglect to reorient the Federation away from direct dealings with the public toward the provision of services to its affiliated primary institutions. Secondly, if USAID and PL-480 were to suddenly drop FENACRE, other international donors would probably pick them up and continue with similar programs of similarly destructive repercussions. Finally, it might be very costly, politically, to abandon an organization that has tuned itself so finely to what it perceives to be the Agency's wishes.

Because of the serious cost considerations outlined above, neither Option I nor Option II should be considered positive recommendations. If the Agency were forced to choose between one of the two, the gamble of the second alternative should be preferred to the well-understood and certain disruptiveness of present policies.

OPTION III: A POSITIVE RECOMMENDATION

Because of the enormous potential that credit unions, as domestic financial intermediaries, possess for raising the standard of living of a broad cross section of the Bolivian population, and because of the considerable momentum with which the system is moving in a misguided direction, the Agency should continue its current level of involvement with FENACRE, but with a new focus on the incentive structure created by its intervention.

The desired incentive structure would have the following characteristics: it would lead to increased vertical integration and increased domestic resource mobilization by the credit union system. It would do so by orienting the credit unions towards the Federation as a supplier or services, and the Federation towards its affiliates, as suppliers of loanable funds.

These objectives could be achieved with the following modification of the conditionalities placed on the funds managed by FENACRE:

1) The Agency should require that all on-lending of its funds be handled by credit unions affiliated with FENACRE. Moreover, in order to maintain the discipline that is crucial to any institution or system built on deposit mobilization, it is important that all loans made with external funds be made <u>to</u> the credit unions, not <u>through</u> them. Each institution, beginning with the Federation, must be responsible for the repayment of credit lines received from the institution above it, without regard to the performance of the intermediate or final borrowers.

Making the primary institutions responsible for the repayment of the credit lines means, of course, that they must also be given greater discretion in the making of the loans. In other words, if the Agency were to adopt this approach, it would have to give up the illusion that directed credit is a viable option for intervening in financial systems.

To insure that outside resources have no adverse impact on domestic resource mobilization, they should be handled only by affiliates that have shown proficiency in mobilizing and managing deposits from the public, and which maintain some minimum percentage of these funds as a reserve in FENACRE. Loans from the Federation to the primary institutions should be structured similarly to the loans the primary institutions make to their members, with the terms, particularly the rate of interest, reflecting the leverage involved.

2) To avoid the destructive and perverse incentive structures and the pattern of poor service to the ultimate borrower that are created when financial institutions are forced to work with non-market rates of interest, the institutions handling the lines of credit should be given great latitude in setting the rate of interest. Optimally, the lending rate of interest should be set at the marginal cost of funds to the borrowing institution, so that the respective institutions perceive no disincentive to continue mobilizing deposits, neither from the public, in the case of the primary institution, nor from the credit unions, in the case FENACRE.

3) In general, USAID/Bolivia should resist the temptation to view FENACRE as its agent, or, worse yet, as a 'channel' for its resources. Such an attitude exposes the Agency to the charge of perpetuating a condition it is charged with eradicating. Rather, USAID should recognize the potential that resides in the FENACRE system of credit unions to become a force for the economic development of Bolivia, one that may continue serving AID's target populations long after the last Mission personnel have been recalled to Washington. AID should not attempt to reach <u>through</u> the Federation of credit unions to a population that it may be forced to abandon tomorrow. Instead, the Agency should focus on the Federation, itself, in an effort to establish FENACRE on the broad and firm basis of domestic resource mobilization--the only foundation substantial enough, over the long haul, to support economic development.

BACKGROUND READING:

The following reports were written by the consultant to the same general purpose as the present one, and may be helpful to the Agency as it attempts to define its future interventions with FENACRE:

"Savings Mobilization in the Strengthening Financial Markets Project: A Working Paper for USAID/Bolivia," La Paz, March, 1987.

"Some Observations on Production Credit and the Use of PL-480 Funds: A Background Report for USAID-Bolivia," La Paz, April 10, 1987.

"The FENACRE System of Credit Unions: A Strategy for Donor Assistance," La Paz, April 13, 1987.

NOTE CONCERNING THE AVAILABILITY OF APPENDICES AND THE ANNEX

A limited number of Appendices and a single copy of the Annex to this report were printed. Copies of the Appendices were supplied to the USAID Mission to Bolivia, to the Catholic Univer-sity of Bolivia, Department of Cooperative Studies, La Paz, and to Abt and Associates, Inc., Washington, D.C.

The single copy of Annex One was delivered to the USAID Mission in La Paz.