
I. Introduction

The Government of the Philippines has waged war against poverty ever since independence in the mid-1940s. One of the important instruments used was credit policy, aimed at moving funds as quickly as possible to the target groups. Since the private commercial banking system could not be depended upon to perform such function, the government created several types of highly specialized financial institutions such as rural banks and private development banks, provided them with substantial capital subsidies, and made them conduits of subsidized credit programs targeted to those sectors.

The results of these efforts had been generally disappointing. More specifically, the credit subsidies went to those who did not need them most, leaving the target beneficiaries without access to external funds. Worse is that their repayment records were very poor, making the credit programs unsustainable and causing the collapse of several rural and private development banks.¹ On the other hand, several informal credit institutions that did not receive any government subsidies had done well in terms of delivering credit to and collecting loans from small borrowers who were rationed out by the formal banking system.²

Still, the government believes that the objective of making credit available to those sectors in a sustainable manner can be achieved by avoiding the mistakes of past credit programs. While it has changed the features of its credit programs through the specialized financial institutions, such as aligning the interest rates to the market rates, it has also started to look for alternative and more effective credit conduits. Convinced of the comparative advantage of informal financial institutions in lending to small borrowers, the government started to use them as credit conduits towards the second half of the 1980s.

One type of financial institution that has been increasingly used as credit conduit of these special credit programs is the credit union system.³ Credit unions mobilize savings from and lend funds to their members. However, their resources may not be sufficient to satisfy the growing credit demands of their members. Credit unions confronted with this problem try to solve it by asking their members to line up for credit and by rationing credit. This could involve

opportunity costs to those who wanted to have a certain amount of credit at a particular time. Access to additional external sources of funds could relax this resource constraint.

The major issue raised here is whether this new strategy has been effective in making credit available to the sectors that have no access to the formal banking system without causing problems internal to the credit unions. More specifically, to what extent did it affect the performance of credit unions in terms of savings mobilization, credit allocation and profitability? This paper attempts to provide an empirical analysis of this issue.

The next chapter gives a brief overview of the financial system in the Philippines and a review of financial policy changes in the recent past. Chapter III discusses two special credit programs of the government that explicitly use credit unions as credit conduits. Chapter IV analyzes the differential impact of access to external sources of funds, such as the special credit programs, on the performance of credit unions. The last chapter gives a summary of the major results and makes some concluding remarks.

II. Overview of the financial system

A. Composition of the sector

Like other developing economies, the domestic financial system of the Philippines consists of two major sub-systems: the formal and the informal financial systems. The latter function outside the purview of regulations imposed by regulatory agencies such as the Central Bank on the formal financial system with respect to capital, reserves and liquidity requirements, ceilings on lending and deposit rates, mandatory credit targets, and audit and reporting requirements.

The formal financial system may further be divided into two, namely the banking and non-banking institutions. The banking system is composed of commercial banks, thrift banks, rural banks and specialized government banks. Non-bank financial intermediaries include insurance companies, investment institutions, fund managers, non-bank thrift institutions and

other financial intermediaries. All, except insurance companies which are supervised by the Insurance Commission, are regulated and supervised by the Central Bank.

Table II.1 shows the assets of the various types of financial institutions for the period 1986-1992. The total nominal assets of the sector increased by more than a hundred percent during the indicated period. The relative size of the financial system, which is measured here as the ratio of the total assets of the financial sector to GNP, declined in 1987 and 1988, but quickly turned around in the last three years. As of 1992, total assets comprised four-fifths of GNP, significantly higher than those of 1986 which were only two-thirds of GNP.⁴

Table II.2 shows the relative sizes of the major types of financial institutions based on assets. The dominance of the banking system in the financial sector is clearly visible. Almost four-fifths of the total assets of the sector belong to the banking system. There is no indication in the recent past of any decline in the relative size of the banking system. The dominance of the banking system in the financial system will likely remain in the medium-term especially with the relaxation of bank entry and branching regulations recently adopted by the Central Bank and the relatively successful rehabilitation of several failed banks.

The informal financial system, on the other hand, consists of a very heterogeneous groups of players. Its total size is still unknown and there is no effort on the part of the government to systematically gather information about them. However, results of small sample surveys suggest that it is quite large and is a dominant financial system, particularly in low-income urban and rural areas. Agabin *et al.* (1989) attempted to estimate the size of the informal financial markets using data from nationwide sample survey conducted in 1987. The results showed that of the estimated ₱45 billion (US\$ 1,770 milliard)¹ borrowing by households, 59% came from the informal credit markets. The proportion of loans coming from the informal credit markets is higher for rural areas than for Metro Manila and other urban areas, indicating that the informal credit markets play a critical role in rural areas which are not well served by formal financial institutions. Of the total number of sample borrowers, 66%

¹ US\$ 1 = ₱25,40 (September 1995).

borrowed from the informal financial markets. Again, the proportion of borrowers from the informal financial markets is higher for rural areas than for Metro Manila and other urban

Table II.1: Assets of the domestic financial system, 1986-1992 (in billion Pesos)

	1986	1987	1988	1989	1990	1991	1992
Banking system	289.00	313.20	360.10	465.36	579.78	682.95	750.62
Commercial banks	252.26	278.44	312.35	409.18	510.35	591.34	629.81
Private	164.40	179.40	224.60	296.13	365.70	406.64	419.96
Government	50.76	49.94	51.85	71.22	88.95	120.88	148.34
Foreign	37.10	49.10	35.90	41.83	55.70	63.82	61.51
Thrift banks	17.60	19.50	24.90	32.20	37.29	47.04	59.62
Savings and mortgage banks	8.10	10.60	14.20	19.60	21.72	29.63	36.35
Private development banks	5.60	5.40	6.70	8.35	11.18	12.17	16.83
Stocks savings & loan associations	3.90	3.50	4.00	4.26	4.39	5.25	6.45
Rural banks	9.10	9.70	10.70	12.16	13.46	15.49	18.16
Specialised government banks	10.04	12.64	12.15	11.81	18.68	29.08	43.03
Non-bank financial intermediaries	111.80	119.20	132.80	172.01	172.70	245.84	287.24
Insurance companies	77.49	90.10	106.10	125.63	121.47	181.70	209.15
Government	57.19	64.73	76.43	89.42	76.32	130.32	152.78
Private	20.30	25.37	29.67	36.21	45.15	51.38	56.38
Investment institutions	23.30	20.80	21.40	20.99	21.62	25.63	27.32
Investment houses	7.50	9.00	8.40	6.75	6.05	6.97	5.43
Finance companies	5.60	7.00	7.40	4.44	4.61	5.94	8.36
Investment companies	10.20	4.80	5.60	9.80	10.96	12.71	13.54

Table II.2: Distribution of assets of the financial system, 1986-1992 (in percent)

	1986	1987	1988	1989	1990	1991	1992
Banking system	71.89	72.13	72.67	72.57	76.56	73.11	71.85
Commercial banks	62.75	64.12	63.03	63.81	67.39	63.31	60.29
Private	40.90	41.31	45.33	46.18	48.29	43.53	40.20
Government	12.63	11.50	10.46	11.11	11.75	12.94	14.20
Foreign	9.23	11.31	7.24	6.52	7.36	6.83	5.89
Thrift banks	4.38	4.49	5.03	5.02	4.92	5.04	5.71
Savings and mortgage banks	2.01	2.44	2.87	3.06	2.87	3.17	3.48
Private development banks	1.39	1.24	1.35	1.30	1.48	1.30	1.61
Stocks savings & loan associations	0.97	0.81	0.81	0.66	0.58	0.56	0.62
Rural banks	2.26	2.23	2.16	1.90	1.78	1.66	1.74
Specialised government banks	2.50	2.91	2.45	1.84	2.47	3.11	4.12
Non-bank financial intermediaries	27.81	27.45	26.80	26.82	22.81	26.32	27.49
Insurance companies	19.28	20.75	21.41	19.59	16.04	19.45	20.02
Government	14.23	14.91	15.42	13.94	10.08	13.95	14.62
Private	5.05	5.84	5.99	5.65	5.96	5.50	5.40
Investment institutions	5.80	4.79	4.32	3.27	2.86	2.74	2.62
Investment houses	1.87	2.07	1.70	1.05	0.80	0.75	0.52
Finance companies	1.39	1.61	1.49	0.69	0.61	0.64	0.80

areas. Comparing the total amount of loans outstanding of the informal sector with that of the banking sector, Agabin *et al.* found that the former was equivalent to only 6% of the latter for the rural areas and 3% for the urban areas. However, if loans granted by banks to large corporate enterprises were excluded so that only loans going to individuals and small

enterprises were considered, then total informal loans outstanding would be about 46% of the total bank loans in the case of rural areas and 14% in the case of urban areas.

For practical purposes the credit union (CU) system could be included in the informal financial system. It is perhaps the most organized subsystem in the informal financial system. Although the Cooperative Development Authority (CDA) is supposed to regulate and supervise credit unions, in practice it has not done so. More specifically, it has not imposed minimum capital requirements, reserve requirements, mandatory credit allocation, etc., and does not conduct financial audits of credit unions. Thus, credit unions can be almost as flexible as informal moneylenders in many aspects of their operations. Unlike deposits in banks, deposits in credit unions are not covered by any insurance. However, there has been no case in the Philippines that a collapse of one credit union ever created a ripple effect in the credit union system.

To date, there is no accurate count of the total number of credit unions in the country because many have not yet registered with the CDA. No sanctions are imposed on unregistered credit unions. Existing studies using sample surveys have shown the phenomenal growth of credit unions' assets in real terms in the 1980s.⁵ They were able to weather the economic crisis that struck in the mid-1980s better than the formal financial system. Even more interesting is that credit unions depended solely on internally generated capital to sustain operations and enhance their viability as financial institutions, whereas many banks that received subsidies collapsed and had to be rehabilitated by the government. In some areas of the country, credit unions appear to be much larger than thrift or rural banks.

B. Major government financial policies

1. Competition policy

Prior to the 1980s, the government adopted a policy of "forced" financial specialization, i.e., financial institutions were to offer only limited financial services and products. This resulted in the fragmentation of the financial system and less competition. The reforms

initiated in the 1980s were aimed at improving competition in the financial system. Thus, the policy of "forced" specialization was abandoned by reducing functional distinctions among various types of financial institutions so that one group of financial institutions can effectively compete with other groups. Merger and consolidation have been encouraged so that financial institutions can exploit economies of scale and effectively compete in the market. More recently, bank entry and branching regulations have been relaxed, paving the way for more competition among various types of financial institutions in urban and rural areas.

2. Interest rate policy

Although the anti-usury law was de facto abolished in the early 1970s, still the Central Bank administratively set interest rates until 1981. In 1981, interest rate ceilings on all types of deposits and loans were lifted, except that of short-term loans lifted in 1983.

Previously, the rediscount window was used by the Central Bank to direct the flow of credit through banks to priority sectors by giving these sectors preferential rediscount rates which could be as low as 1 percent and rediscounting value which could be as high as 100 percent. This policy was changed in 1985 when the Central Bank started setting one rediscounting value equivalent to 80 percent of the value of the original loans and one rediscount rate for all eligible papers which has been aligned with the market rate.

Credit unions have never been subjected to interest rate ceilings imposed on banks. Also, they have never been given access to the rediscounting window of the Central Bank.

3. Credit policies

Special credit programs that carried interest rates well below the market rates proliferated in the 1970s. Many of them had been directly managed by the Central Bank. The political nature of these special credit programs resulted in the diminution of the power of the Central Bank to control credit and monetary aggregates.

Towards the second half of the 1980s, the policy on special credit programs was changed. First, the government adopted the policy of aligning the interest rates on special credit programs with the market rates. However, some special credit programs, such as the Department of Social Services and Welfare, still carry below-market interest rates. Second, the funds of the 20 out of the 46 agricultural credit programs were consolidated and are now being used to beef up the existing credit guarantee and insurance programs of the government.⁶ Third, special credit programs that used to be managed by the Central Bank have been transferred to the appropriate government financial institutions so that the Central Bank can now concentrate its efforts in the management of monetary aggregates and in bank supervision. And fourth, specialized government financial institutions are now concentrating on wholesale lending to exploit economies of scale, reduce risk and avoid competition with private financial institutions. That is, they lend to small banks, credit unions and NGOs, which in turn lend to target beneficiaries.

4. Loan portfolio regulations

The government still maintains the policy of directing credit to certain sectors of the economy as embodied in several portfolio regulations. The investment-to-deposit ratio rule requires all banks to reinvest and/or relend 75 percent of the total deposits mobilized in a particular area. Another portfolio regulation is the requirement for all banks to allocate 25 percent of their total loanable funds to agriculture/agrarian reform beneficiaries. The third and most recent portfolio regulation is the requirement that all banks allocate 10 percent of their loanable funds to small enterprises.

Credit unions are not covered by these regulations.

5. Safety and soundness regulations

The Monetary Board has placed emphasis on the stability of financial institutions. The minimum capital requirement for various types of banks has been raised. Those that are allowed to perform more functions have higher minimum capital requirements than those with

fewer functions. Also, the definition of the net worth to risk asset ratio was clarified so that the true risk exposure of financial institutions can be easily monitored by the authorities. An improvement was made in the financial institutions' reporting requirements and specific guidelines for asset valuation and loan loss provisions to tighten, standardize and apply criteria uniformly to all banks.

Credit unions are not subjected to these regulations.

III. Special credit programs and non-bank credit conduits

On the whole, special credit programs using the banking system as credit conduits performed poorly. More specifically, they largely failed to reach the targeted beneficiaries; default rates were very high which caused the dissipation of funds and the collapse of several banks; and, above all, they discouraged savings mobilization (Lamberte and Lim 1987). The 1983-84 economic crisis had further worsened the situation. Even good borrowers could not repay their loans because of high interest rates and loss of demand for their products. As may be seen in Table III.1, the past due loan ratios of the banking system have remained high long after the crisis. Banks, in an effort to clean up their bad loan portfolios invested in safer income earning instruments such as the Treasury bills.

Table III.1: Past due ratios of loans of the banking system (in million Pesos)

Bank	1986	1987	1988	1989	1990	1991	1992
Rural banks	36.70	31.70	29.50	26.30	25.00	23.20	24.13
Commercial banks	23.87	13.59	9.63	7.14	6.77	9.36	5.62
Private development banks	n.a	n.a	43.94	36.98	24.22	25.68	15.61
Specialised government banks	n.a	n.a	22.33	19.61	12.92	8.35	3.73

Note: n.a. - not available

Past due ratios = past due loans/loans outstanding

Among thrift banks, only data for private development banks are made available to the research team.

Source: DER, Central Bank of the Philippines

While the banking system was trying to recover from the crisis and to adjust to a liberal policy regime initiated in the second half of the 1980s, the non-bank informal lending institutions, such as credit unions and some NGOs with credit programs, had been doing well as pointed out in the earlier chapter. Their good credit performance could be attributed to the following factors:

- (1) they are mass-based and have adequate information about the credit worthiness of their borrowers;
- (2) they have built-in mechanism for continuous savings mobilization;
- (3) they can exert strong social pressure on borrowers which is important in securing prompt repayment; and
- (4) most of them have very dedicated leaders.

Recognizing the problem of the banking system and the good performance of non-bank credit institutions, the government therefore changed its strategy of delivering credit to priority sectors. Instead of channelling credit funds solely through banks, the government has now made use of NGOs as credit conduits. The following discusses two of the special credit programs: one for the non-agricultural sector and the other for the agricultural sector.

A. Tulong Sa Tao Self-Employment Loan Assistance (TST-SELA) Program ⁷

The TST-SELA Program is a special credit program for the non-agricultural rural sector started in April 1987. It is being implemented by the Bureau of Small and Medium Business

Development (BSMBD) of the Department of Trade (DTI) with an initial funding from the government of ₱30 million.

The TST-SELA is different from previous credit programs in that it uses NGOs as conduits, instead of the banking system. The program abides by the prevailing interest rate policy of the government by not putting a cap on the end-user lending rate. NGOs may charge sub-borrowers whatever is the prevailing commercial rate in the area. But DTI charged a fixed 7% for its loans to NGOs. This gives NGOs a reasonable spread to cover administrative costs and credit risks.

The TST-SELA Program quickly became popular as can be gathered from the number of NGOs across the country that participated in the program. Because of this, it quickly ran out of funds, prompting the government to tap the ADB for additional funds. This paved the way for the successor of the TST-SELA, the NGO-Microcredit Project (MCP) I. The following are the specific objectives of NGO-MCP I, which are basically the same as those of the TST-SELA, which are:

- (i) to increase employment opportunities in the rural areas for the unemployed and underemployed, and particularly for disadvantaged groups such as subsistence farmers, the landless and women;
- (ii) to assist the poor in the formation and strengthening of self-help groups (SHGs) to facilitate capital formation, economies of scale, productivity, procurement and marketing arrangements;
- (iii) to enhance incomes and purchasing power in rural areas to stimulate the rural economy and reduce rural-urban migration;
- (iv) to encourage savings mobilization among targeted low-income groups; and

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- (v) to strengthen NGOs as intermediaries for meeting the credit needs of low-income borrowers with no collateral, particularly in the rural areas.

The target beneficiaries, i.e., microenterprises including cottage industries are group-based in nature, require modest capital, are labor-intensive and use low technology and local raw materials. Since this was the first time ADB was involved in such a project, it was decided to make it a pilot project, limiting the number of regions to be targeted to six. The six regions were selected based upon the following criteria: high incidence of poverty, existence of viable NGOs that would act as the credit and technical assistance intermediaries and equitable geographical distribution.

The TST-SELA Program was expanded to all sectors, i.e., agroprocessing, manufacturing, cottage, handicraft, trade, transport and services, excluding agricultural production. It emphasized lending to self-help groups in preference to individuals. The intermediary NGOs would offer the beneficiaries a package of services which would include general capacity-building of beneficiary self-help groups, assistance in the institution of savings schemes, technical and project management training, and services related to procurement and marketing. The TST-SELA Program would delegate decision-making to the regional level; and the TST-SELA Program would give NGO representation in the national and regional policy and decision-making bodies of the Program.

Only NGOs, **including credit unions**, that met the required accreditation criteria were qualified to participate in the Project, effectively screening out weak NGOs. DTI evaluated, selected and accredited NGOs according to a number of institutional, financial and other criteria.⁸ Processing and approval of subloans to final beneficiaries were the responsibility of participating NGOs. However, NGOs had to follow the criteria imposed by DTI.⁹ Accredited NGOs can onlend to beneficiaries through non-accredited smaller NGOs, they are eligible for lines of credit up to a maximum of ₱2 million at a time for onlending and repayment periods cannot exceed five years inclusive of a grace period.

Microenterprises and cottage industries, either owned by individuals or self-help groups, in rural areas qualify for this credit program. Subloans to **individual** borrowers would be made in amounts of up to ₱25,000 at an annual interest rate not exceeding the commercial bank interest rate prevailing in the area, with fixed repayment periods of up to two years. On the other hand, subloans to **self-help groups** would be made in amounts of up to ₱200,000, at an annual interest rate not exceeding the commercial bank interest rate in the area, with fixed repayments periods of up to five years.

The Project became operational in April 1989 and was completed in August 1991, 15 months ahead of schedule because the NGOs were able to disburse all the funds to subborrowers. Benefitted from the projects were 278 NGOs, of which 60% were credit unions, which onlent the funds to 21,100 microenterprises and self-help groups. The size of the loans to NGOs averaged ₱775,000 and to final beneficiaries, ₱11,000. The geographic distribution of sub-loans is shown in Table III.2. The project final beneficiaries were mostly of the "non-bankable" types with limited mortgageable assets and household income of below ₱2,500. Accordingly, the loan from the Project was able to increase the beneficiaries' income by 50% to 200%.

The past due loans of NGOs with the Program were estimated at 15% and default rate at 2%. Credit unions appear to have a better repayment record than other types of NGOs because of experience in lending and credit collection. Most of them strived hard to repay the Program promptly and maintain a good credit track record even if some of their subloans were past due.

The loan collection rate of NGOs from their sub-borrowers averaged 81%. This varied by region from a low of 67% to a high of 92%. Regions that were struck by natural calamities, such as devastating typhoons and the eruption of Mt. Pinatubo experienced lower collection rates. NGOs restructured loans in these areas but did not yet feel the need to write them off. Again, credit cooperatives showed a better collection rate than other types of NGOs.

Table III.2: TST-SELA/NGO-MCP approvals by region (as of December 31, 1993)

Region	TST-SELA amount	N° of NGOs	NGO-MCP amount	N° of NGOs	NGO-MCP II amount	N° of NGOs	Amount approved	N° of NGOs
I	16,740,000	38			11,300,000	27	28,040,000	65
CAR	12,791,000	30			7,620,000	16	20,410,000	46
II	24,660,000	31			36,300,000	46	60,960,000	77
III	3,130,000	11	60,875,000	53	41,080,000	47	105,090,000	111
IV	10,540,000	24			65,910,000	73	76,450,000	97
V	2,470,000	11	18,883,000	59	15,400,000	53	36,750,000	123
VI	3,890,000	13			4,390,000	5	8,280,000	18
VII	5,580,000	19	24,903,000	45	35,390,000	61	65,870,000	125
VIII	2,900,000	8	33,303,731	39	26,570,000	34	62,310,000	81
IX	15,870,000	55			17,620,000	41	33,490,000	96
X	3,540,000	8	28,429,000	42	26,180,000	46	58,150,000	96
XI	3,300,000	12	41,225,700	55	19,070,000	28	63,650,000	95
XII	7,370,000	17			10,010,000	10	17,380,000	27
NCR	15,070,000	15			22,000,000	18	37,070,000	33
Total	121,191,000	278	207,619,431	295	51,956,000	75	380,766,431	648

Note: CAR - Cordillera Autonomous Region

Source: Bureau of Small & Medium Business Development,
Department of Trade and Industry.

While NGOs paid DTI 7% on subsidiary loans, they charged beneficiaries an average of 18% per annum, leaving them a spread of 11 percentage points. This seems to cover their administrative cost in handling small loans and the risk involved in lending to "non bankable" borrowers, in most instances.

The follow-up project DTI/ADB financed with US\$ 35 million (NGO-MCP II) and started in April 1992 contained some modifications; first, it includes all regions of the country. Second, the accreditation criteria for participating NGOs were revised to allow NGOs in remote areas of the country to participate in the project. Third, the requirement that at least 80% of the loans be used to finance manufacturing activities was eliminated so long as they are not used for agricultural activities. Fourth, DTI's lending rate to NGOs was increased to

12% per annum which would allow the government to cover its costs related to foreign exchange risk, DTI's administrative overheads and provisions for loan losses. Fifth, a surcharge of 2% on top of the onlending rate to final beneficiaries was slapped to establish the capital build up fund for the microenterprises.

As of December 31, 1993, DTI already approved loan applications of 589 NGOs with a total value of ₱352 million. Assuming a loan of ₱25,000 for each beneficiary, then this second project must have benefitted at least 14,000 borrowers. Again, credit unions comprised about 60% of the total number of NGO-beneficiaries.

B. The Development Assistance Program for Cooperatives and People's Organization (DAPCOPO)¹⁰

DAPCOPO is a special credit program for the agricultural sector with practically the same rationale and features as the TST-TELA. It was established in May 1990 by the Agricultural Credit Policy Council (ACPC). Its objectives are:

1. Provide credit assistance to agriculture-based groups and/or projects that are not serviced by banks by channeling funds via existing federations of cooperatives and people's organizations or networks of NGOs;
2. Assist the federations of cooperatives and people's organizations and NGO networks in building up their capabilities as financial intermediation institutions;
3. Develop and strengthen viable rural community-based organizations that can perform and/or facilitate credit delivery and savings mobilization in the countryside; and
4. Encourage the development of linkages among community-based groups and banking institutions.

The program has three components, namely: (1) the **credit component** which addresses the credit needs of the non-bankable farmers' groups and their members; (2) the **institution-building component** which provides financial assistance to farmers' groups for their capability-building efforts; and (3) **savings mobilization component** which encourages beneficiaries to increase their savings and link up with banking institutions.

Unlike the TST-SELA which deals directly with primary cooperatives, DAPCOPO deals only with federations which, in turn, lend to their member primary cooperatives, which, in turn, lend to their members. The federations are to assume the credit risk. However, only those that qualify under the following criteria have access to the assistance of DAPCOPO:

- (i) Federations should have proven management capability to undertake group lending activities (i.e., at least three (3) years satisfactory track record in lending);
- (ii) Federations should have savings mobilization/capital formation programs;
- (iii) Federations should have counterpart operating and loan funds and capital accounts (equity) equivalent to the proposed loan from the program.

A committee composed of representatives from the cooperative and NGO community sector, the Land Bank of the Philippines and Agricultural Credit Policy Council screens and accredits eligible cooperatives.

DAPCOPO's loans to federations could be as long as five years with interest rate pegged at the prevailing Land Bank's rediscount rate on its loans to banks. Since the start of the project, the rediscount rate of Land Bank has ranged between 11% and 15%. There is no cap on the interest rate on sub-loans. Accordingly, interest rates on final borrowers ranged from 18% to 21%. To realize the objective of savings mobilization, the federations are required to put up a deposit fund equivalent to 15% of the requested loan fund.

Table III.3 gives a summary of the accomplishment of the program as of December 1993. Fourteen federations availed of the program, of which four operate on a nation-wide basis and ten on a region-wide basis. The program granted ₱24.1 million loans to these

federations benefiting 119 primary cooperatives and 10,551 individual borrowers. Repayment rate was 97% at the federation level and 100% at the program level because as mentioned earlier, federations are to assume the credit risk. Savings generated by the federations amounted to only ₱2.2 million.

The programs discussed above are just two of the many special credit programs using NGOs including credit unions as conduits. Other credit programs with similar features are funded by the Technology and Livelihood Resource Center (TLRC), the Social Security System (SSS), the Government Social Insurance System (GSIS), the Development Bank of the Philippines (DBP) and others. Aside from these, primary credit cooperatives have access to funds from within the cooperative system through the central liquidity fund or interlending scheme established by some federations such as NAMVESCO and PFCCO, and to external funds from some large NGO networks such as the Philippine Business for Social Progress (PBSP).

IV. Access to external sources of funds and the performance of credit unions

The major testable hypothesis of this study is that access to external funds has an impact on credit union performance in terms of savings mobilization, loan allocation, profitability, etc. and some qualitative indicators such as management policies and style. This hypothesis is tested using data from a sample of credit unions.

A. The sample credit unions¹¹

The sample used in this study is based on the survey of credit unions affiliated with the Philippine Federation of Credit Cooperatives (PFCCO) and the National Market Vendors Credit Cooperatives (NAMVESCO) which was conducted by Pragma Corporation between 15 November and 12 December 1993 using a structured interview schedule. The sample

consisted of 100 credit cooperatives affiliated with PFCCO and 30 with NAMVESCO. Both federations operate on a nation-wide basis.

Nine out of 15 administrative regions of the country were selected as sampling universe since these regions have the largest concentration of PFCCO- and NAMVESCO-affiliated cooperatives. These are Regions II, III, IV, V, VII, X, XI, XII, and the National Capital Region (NCR). Affiliated-cooperatives with assets of ₱2.5 million and above were all included in the sample. The rest of the sample were drawn from the sampling universe using simple random sampling.

Aside from answering the questionnaire, the respondents (i.e., managers and/or treasurers of the sample credit unions) were also requested to submit financial reports for the years 1990, 1991 and 1992. This study utilized the information contained in these reports, except those pertaining to loan delinquency and credit union membership which were based on the questionnaire.

Table III.3: Development Assistance Program for Cooperatives and People's Organizations (DAPCOPO)

Federation	Service area	Loans granted (in MP)	Loans generated	N° of primary beneficiaries	N° of ind. beneficiaries	Repayment rate on federation level 1 ²	Repayment rate on program level 2 ³	Savings generated (federations)
1. FFFCI	Nationwide	5.00	9,65 7,13 2.00	8	2,87 5	100%	100%	581,12 4.94
2. KASAMA	Region IV	1.00	2,43 3,55 0.85	15	487	82%	100%	432,70 9.51
3. PFCCI	Nationwide	1.40	2,17 7,67 9.00	9	345	100%	100%	108,83 3.95
4. CECI	Nationwide	1.20	1,73 0,00 0.00	8	2,66 6	98%	100%	51,09 0.00
5. NORLU	Regions I & II	1.50	1,27 5,50 0.00	15	352	75%	100%	9,83 7.50
6. DAFENACO	Region XI	1.00	1,30 3,62 0.57	9	1,08 7	—	100%	46,49 9.28
7. MASS-SPECC	Regions X, XI & XII	3.00	1,13 0,00 0.00	4	493	100%	100%	nd
8. CFPI	Nationwide	1.50	486,00 0.00	13	402	92%	100%	144,03 0.00
9. TAGCODEC	Regions III & IV	2.00	2,25 0,00 0.00	11	1,14 0	60%	100%	502,50 0.00
10. VICTO	Region VII	1.50	2,05 0,00 0.00	6	98	100%	100%	nd

² Repayment from primaries to federation.

³ Repayment from federation to program

11. MASNAMARCO	Region II	2.00	2,98 6,05 1.62	9	105	100%	100%	300,00 0.00
12. BCDC	Region V	1.00	400,00 0.00	4	nd	75%	100%	nd
13. AFCCUI	Region VI	1.00	588,00 0.00	8	268	100%	100%	18,00 0.00
14. CAVALCO*	Region II	1.00						
Total		24.10	28,46 7,53 4.04	119	10,55 1	97%	100%	2,19 4,62 5.18

Note: * - newly released loan
nd - no data
All repayment rates expressed as percentage of matured loans.

Although the sample credit unions have been in existence for more than three years, the analysis of the performance of credit unions is limited to the years 1990-1992 for which data are available.¹² Upon inspection of the returns, it was found out that 25 credit unions did not submit complete financial reports, especially those pertaining to 1990 and 1991. Since this study intended to analyze the performance of credit unions over the above-mentioned period, it was therefore decided to drop from the sample credit unions those with incomplete financial reports. Thus, the sample size used in this study has been reduced to 105.

The next step was to identify credit unions that have outstanding loans payable or borrowings by examining the individual balance sheets. Credit unions that have outstanding loans payable in any one year during the period 1990-1992 were classified as belonging to the first group. This was further sub-divided into two groups, namely: those that have outstanding loans from the TST-SELA Program and those that have outstanding loans from sources other than the TST-SELA Program. The TST-SELA Program is distinguished from credit unions' other sources of borrowing because it is the largest government-sponsored credit program in terms of area coverage and financial resources with financial support from a multilateral institution (ADB) that uses credit unions as credit conduits. The Program is expected to have a differential impact on the performance of credit unions that have access to external funds.¹³

A great majority of the sample credit unions did not specify in their balance sheets the sources of borrowing. Thus, a list of TST-SELA borrowers was secured from the DTI-BSMBD, which was used to identify from the sample credit unions those that borrowed from the TST-SELA Program. The list of credit unions with approved loans from the TST-SELA Program included in the sample is shown in Table IV.1. The 31 credit unions come from 9 regions of the country. The most recent loans they obtained from the TST-SELA Program range from ₱150,000 to ₱2 million. Upon inspection of the balance sheets, it appears that some credit unions that borrowed from the TST-SELA Program also borrowed funds from other sources, however, to a much more limited extent.

The 105 sample credit unions are distributed as follows:

-
- Group I: with borrowings from TST-SELA Program - 31;
 - Group II: with borrowings from other sources - 35; and
 - Group III: without any borrowings - 39.

The information obtained from the financial reports were supplemented by personal interviews with the managers of five credit unions included in the sample: 2 each from Groups I and III and 1 from Group II.

B. Methods of data analysis

It would have been ideal to have a pre-test, post-test experimental-control group design to test the hypothesis of this study were it not for data constraint. Given this data constraint, the study used the post-test experimental-control group design. The limitations of this design are well known and should be taken into account in interpreting the results.

Table IV.1: Credit unions with approved loans from TST-SELA

ID. N°	Date approved	Amount approved (₱)	Province	Region
85	June 4, 1992	67,50 0	Isabela	II
11	July 2, 1992	1,00 0,00 0	Pampanga	III
67	May 6, 1993	2,00 0,00 0	Bulacan	III
97	March 30, 1993	500,00 0	Batangas	IV
7	June 3, 1993	2,00 0,00 0	Paranaque Area II	NCR
77	Feb. 5, 1993	1,00 0,00 0	Manila Area II	NCR
122	Oct. 6, 1992	700,00 0	Davao del Sur	XI
121	March 2, 1993	2,00 0,00 0	Davao del Sur	XI
55	April 21, 1992	500,00 0	Misamis Oriental	X
87	Oct. 22, 1992	150,00 0	Camarines Sur	V
65	Oct. 9, 1989 Nov. 16, 1990	1,50 0,00 0 1,00 0,00 0	Bulacan	III
10	July 25, 1990	1,50 0,00 0	Bulacan	III
68	Oct. 12, 1990	1,00 0,00 0	Bulacan	III
88	Feb. 21, 1990	150,00 0	Camarines Sur	V
94	April 30, 1991	150,00 0	Camarines Sur	V
25	Dec. 10, 1990	500,00 0	Negros Oriental	VII
52	Dec. 15, 1989	700,00 0	Camiguin	V
54	July 17, 1989 Aug. 22, 1990	765,00 0 470,00 0	Isabela	II
19	Oct. 23, 1989 March 8, 1991	1,00 0,00 0 1,00 0,00 0	Isabela	II
84	Jan. 16, 1991	500,00 0	Isabela	II
20	July 3, 1991	400,00 0	Isabela	II

112	July 5, 1988 Nov. 25, 1989	350,00 0 500,00 0	NCR	NCR
27	May 31, 1989	1,00 0,00 0	NCR	NCR
30	Jan. 11, 1990	2,00 0,00 0	NCR	NCR
50	Oct. 19, 1988	1,00 0,00 0	Misamis Oriental	X
44	Oct. 12, 1990	2,00 0,00 0	NCR	NCR
131	May 6, 1993	2,00 0,00 0	Rizal	IV
127	July 13, 1993	2,00 0,00 0	Quezon	IV
53	Dec. 21, 1992	150,00 0	Agusan del Norte	X
21	Nov. 28, 1990	250,00 0	Negros Oriental	VII
64	March 14, 1989 Aug. 22, 1990	500,00 0 1,75 0,00 0	Ilocos Sur	I
	Average	1,11 8,06 5		

Note: Those who have recently approved loans had loans under the previous programs. Source: DTI-BSMBD.

The study mainly conducted tests of differences of means of particular variables among the three groups mentioned above. Before this procedure was applied, a test was performed to determine whether the data are normally distributed.¹⁴ The results show that data for almost all variables are not normally distributed, suggesting that the characteristics of the sample can be better represented by the median values instead of the means. As regards the testing for the differences of the characteristics of the three groups, the nonparametric Kruskal-Wallis one-way analysis of variance is deemed a more appropriate test procedure than the parametric one-way Analysis of Variance (ANOVA). Nevertheless, just for purposes of comparing results, ANOVA was also applied to test for differences in the characteristics of these three groups.¹⁵ Duncan's multiple-range test was used to determine which of the three population means are different from each other. The results of the two statistical test procedures are the same in most cases.

C. Economic status of members of credit unions

A study by Relampagos, Lamberte and Graham (1990) which made use of data collected from 227 individual members drawn randomly from some 30,000 members of *PFCCO-affiliated credit unions* found that a large majority of the sample were wage earners whose average annual income from occupation was slightly more than the national average family income from main occupation. The average current annual expenditures comprised 60% of the average current annual income, suggesting substantial savings potential of credit union members. Almost all of the respondents were borrowers from their credit unions. Aside from the credit unions, some of them also availed of the services of banks. Forty percent of the respondents had deposits with banks. However, only 5% were able to borrow from banks.

With respect to NAMVESCO, Lamberte and Balbosa (1988) conducted a survey of 82 credit union members, of which 50 were members of *NAMVESCO-affiliated credit unions*. Members of the credit unions were mostly self-employed who were running their own business. This is to be expected because NAMVESCO-affiliated credit unions operate in public markets and mainly cater to market vendors. They were relatively well-off with annual per capita income more than twice the estimated national per capita income. Their average annual family expenditures were about half their total annual family income, suggesting that they were on the average net savers. Fifty-six (56) percent of the sample had deposits with banks. However, only 4 of the 82 respondents were able to borrow from a bank. Almost all of them borrowed from their credit unions.

In general, the two studies showed that credit union members belong to households with above-average standard of living measured in terms of income, residential status and amenities they consume. Still, they have very little access to credit from the formal banking system, which necessitated most of them to join a credit union.

D. Performance of credit unions 1990-1992

1. Size of the credit unions

The size of the sample credit unions may be measured in terms of the number of members and total assets. One hypothesis here is that access to external sources of funds by credit unions could have attracted more people to join the credit union to appropriate for themselves the benefits from such privilege. Thus, credit unions that have access to external funds are likely to have more members than those that do not have access. Also, they are likely to have higher proportion of active members to total number of members for the same reason mentioned above.¹⁶ Another hypothesis is that external funds could have contributed significantly to the financing of the assets of credit unions. That is, access to external funds could mainly account for the growth of assets of credit unions.

A great majority of the sample credit unions gave information on the number of members in 1992 but not in the previous years. Upon inspection of those credit unions that gave such information for the previous years, it was observed that the number of members did not differ so much in these three years. Thus, for purposes of the subsequent analyses, it might be safe to use the same number of credit union members for the three years for those that have incomplete information.

The three groups have on the average less than one thousand members (Table IV.2). Differences in the average number of members among the three groups are not statistically significant. A large proportion of the members of the three groups of credit unions have remained active, i.e., they made at least one transaction with their credit unions within a year. However, it varies across the three groups, and the differences are statistically significant. Group III consistently showed the highest proportion of active members to total members, while Group II the lowest.

The average assets of the three groups in 1990 was about ₱3 million. They all achieved a considerable growth in assets in the subsequent years. Group II appears to be the fastest growing group of credit unions despite the fact that it had the lowest proportion of active members to total members. In 1992, Group II's average assets amounted to ₱6.6 million, followed by Group I with ₱5.2 million and Group III with ₱4.3 million in that order. However, the differences in the average assets of the three groups are not statistically significant.

The assets per member give an indication of the resources available to each member of the credit union. In 1990, the average assets per member range from four to five thousand pesos. These had increased over the next two years, with Group II realizing the highest growth rate. In 1992, the differences in the average assets per member became statistically significant. Group III had the lowest assets per member at ₱5.7 thousand compared with Groups I and II which had ₱8.4 thousand and ₱9.6 thousand, respectively.

Part of the assets of Groups I and II had been financed by external borrowings. Without this, these two groups could have shown much lower assets than Group III. This is true for Group I in all the years and for Group II in 1990 as shown in Table IV.2. Still, the average assets adjusted for borrowings of the three groups are not statistically different from each other. Also, those of Groups I and II had consistently increased during the indicated period, implying that access to external sources of funds cannot fully explain the growth in assets realized by these credit unions.

2. Sources of funds

Credit unions have five possible sources of funds to finance their activities, namely: share capital, retained earnings booked as reserves, savings deposits, time deposits and borrowings from various sources. The hypothesis here is that access to external funds has undermined the savings mobilization efforts of credit unions.

Table IV.2: Indicators of the size of the credit unions (MEDIAN)

	1990	1991	1992
I. Average N° of members			
A. With borrowings			
1. TST-SELA I	750.0	750.0	750.0
2. Others (II)	794.5	710.0	754.5
B. Without borrowings (III)	676.5	670.0	683.0
II. % of active members			
A. With borrowings			
1. TST-SELA I	80.0*	80.0*	80.0*
2. Others (II)	70.7*	79.1*	73.0*
B. Without borrowings (III)	96.5*	96.1*	96.1*
III. Average total assets (P)			
A. With borrowings			
1. TST-SELA I	3,01	3,82	5,19
2. Others (II)	3,65	7,95	9,54
B. Without borrowings (III)	6.0	6.0	5.0
	2,94	4,23	6,60
	7,01	3,18	2,18
	1.3	0.6	9.7
	2,72	3,22	4,26
	1,62	6,38	1,71
	4.0	2.1	4.4
IV. Assets per member (P)			
A. With borrowings			
1. TST-SELA I	4,91	6,23	8,36
2. Others (II)	6.0	1.2	5.3*
B. Without borrowings (III)	4,26	5,76	9,58
	8.7	9.3	6.8*
	3,86	4,66	5,69
	1.6	1.4	0.1*
V. Average total assets adjusted for borrowings (P)			
A. With borrowings			
1. TST-SELA I	2,05	2,93	3,92
2. Others (II)	2,25	7,66	7,26
B. Without borrowings (III)	4.0	2.0	5.0
	2,58	4,19	4,78
	4,42	9,69	3,83
	8.0	3.0	7.4
	2,72	3,22	4,26
	1,62	6,38	1,71
	4.0	2.1	4.4

* The Chi-Square statistic is significant at the 10% level.

(i) **Loans payable/borrowing**

Table IV.3 shows the average outstanding loans payable or borrowings of Groups I and II. The average outstanding loans payable of Group I increased to about P1 million in 1991 but declined to P779 thousand in the following year. On the other hand, Group II's average loans outstanding payable increased fivefold during the period 1990-1992 from P40 thousand to P200 thousand. Still, it is significantly lower than that of Group I. It is to be noted that the TST-SELA program lends up to P2 million per credit union, whereas those of other programs have much lower loan ceilings. As shown in Table IV.1, credit unions' borrowings from the TST-SELA Program averaged P1.1 million.

On a per member basis, Group I still has significantly higher average borrowings than Group II in all the years considered. In 1992, the average outstanding borrowing per member was ₱1,894 for Group I and ₱205 for Group II.

Table IV.3: Outstanding loans payable/borrowings (MEDIAN)

	1990	1991	1992
I. Average loans payable (₪)			
A. With borrowings			
1. TST-SELA I	675,00	1,10	779,16
2. Others (II)	0.0*	0,00	7.0*
B. Without borrowings (III)	40,00	0.0*	200,00
	0.0*	146,69	0.0*
	0.0	0.3*	0.0
		0.0	
II. % of total resources			
A. With borrowings			
1. TST-SELA I	13.6*	21.2*	22.6*
2. Others (II)	1.3*	3.1*	3.4*
B. Without borrowings (III)	0.0	0.0	0.0
III. Loans payable per member (₪)			
A. With borrowings			
1. TST-SELA I	941.4*	1,12	1,89
2. Others (II)	54.8*	5.8*	3.7*
B. Without borrowings (III)	0.0	172.8*	205.0*
		0.0	0.0

* The Chi-Square statistic is significant at the 10% level.

The proportion of borrowings to total resources (i.e., liabilities plus share capital and reserves = total assets) gives an idea regarding the degree of dependence of credit unions on borrowings as a source of funds. This is observed to be increasing rapidly for both groups in 1991, but the increase tapered off in 1992. Group I had a significantly higher proportion of borrowings to total resources than Group II in all the years considered, implying that the former is more dependent on borrowings as a source of funds than the latter.

The findings above strongly justify our dividing of credit unions that have access to external funds into two groups.

(ii) Savings deposits

In 1990, only 11 out of 105 credit unions did not offer a savings deposits facility. This went down to 10 in 1991 and to 8 in 1992, suggesting that savings deposits will soon become a universal financial instrument offered by the sample credit unions to their members. It is to be noted that offering a savings deposit instrument to members increases a credit union's transaction costs since it requires that members be serviced whenever they make a deposit or a withdrawal of deposits.

The average outstanding deposits of the three groups had been increasing during the indicated period (Group IV.4). Group I had the fastest growth in savings deposits, followed by Group II. As of 1992, savings deposits averaged ₱0.7 million for Groups I and II and ₱0.4 million for Group III. However, the differences in the average savings deposits among the three groups are not statistically significant.

Table IV.4: Savings deposits (MEDIAN)

	1990	1991	1992
I. Average savings deposits (₱)			
A. With borrowings			
1. TST-SELA I	238,52	499,52	731,33
2. Others (II)	6.0	8.0	6.0
B. Without borrowings (III)	200,15	2,53	683,60
	2.2	1,15	4.9
	356,02	0.0	440,89
	6.4	422,68	4.1
		0.0	
II. % of total resources			
A. With borrowings			
1. TST-SELA I	8.1	12.2	12.9
2. Others (II)	14.3	10.5	14.0
B. Without borrowings (III)	12.1	11.4	10.0
III. Savings deposits per member (₱)			
A. With borrowings			
1. TST-SELA I	322.6	637.0	1,10
2. Others (II)	433.8	500.8	3.7
B. Without borrowings (III)	550.7	592.5	1,00
			6.8
			713.4

* The Chi-Square statistic is significant at the 10% level.

With respect to the contribution of each credit union member to savings deposits, an increasing trend can be clearly observed. Group III had the most sluggish growth in savings deposits per member among the three groups. In 1992, the average savings deposits per member of Groups I, II and III stood at ₱1.1 thousand, ₱1.0 thousand, and ₱0.7 thousand, respectively. It is to be noted, however, that these averages are not significantly different from each other.

The differences in the average proportion of savings deposits to the total resources among the three groups are not statistically significant. In 1992, it ranged from 10% to 14%. There is no definite pattern of increasing dependence of credit unions on this source of funds during the period in review.

The results show that access to external funds does not necessarily have a differential impact on the three types of credit unions as far as mobilization of savings deposits is concerned.

(iii) Time deposits

Time deposit instruments are not yet widely offered by credit unions to their members. Out of 105 credit unions, 76 did not have time deposits in 1990. This number went down to 70 in 1991, and to 65 in 1992. Indeed, there is a definite trend towards offering this instrument as an alternative source of funds of credit unions and an alternative investment instrument for members of credit unions.

The median time deposits is zero for all groups. However, a closer look at those credit unions that already offered time deposits would indicate the importance of this instrument as a source of funds. In 1992, it averaged ₱1.4 million for the 14 credit unions belonging to Group I and for the 12 credit unions belonging to Group II, and ₱1.2 million for the 14 credit unions belonging to Group III. These comprised approximately 10% of the total resources of the three groups.

(iv) Share capital

Share capital or fixed deposit has remained the most important source of funds for credit unions. The ceiling for the individual regular loan is usually based on the amount of share capital a member has with the credit union. Thus, those who want to borrow more must increase their share capital.

The average share capital of the three groups had been increasing during the period 1990-1992 (Table IV.5). Group I consistently had the lowest average share capital among the three groups during the indicated period. In 1992, share capital averaged ₱1.8 million for Group I, ₱2.7 million for Group II and ₱2.6 million for Group III. However, the differences in the average share capital among these three groups are not statistically significant in all the years considered.

The share capital per member had also been increasing for all the three groups during the period in review. In 1992, it averaged ₱2.9 thousand for Group I, ₱4.2 thousand for Group II and ₱3.5 thousand for Group III. The differences in the average share capital per member among the three groups are not statistically significant.

The proportion of share capital to total resources shows the degree of the dependence of credit unions on this source of funds. The results indicate that the three groups are significantly different in this respect. More specifically, Group III had a significantly higher degree of dependence on share capital as a source of funds than the other two groups. This is to be expected considering that it had not borrowed funds from external sources. Groups I and III seemed to have consistently reduced their dependence on this source of funds during the indicated period, whereas Group II did not show any definite pattern.

Table IV.5: Share capital (MEDIAN)

	1990	1991	1992
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I.	Average share capital (P)			
	A. With borrowings			
	1. TST-SELA I	1,10	1,45	1,85
	2. Others (II)	5,92	2,79	1,00
	B. Without borrowings (III)	9.0	3.0	5.0
		1,75	2,18	2,73
		7,96	4,91	4,45
		2.4	3.2	9.2
		1,71	2,22	2,60
		9,17	1,96	2,45
		0.7	7.0	0.6
II.	% of total resources			
	A. With borrowings			
	1. TST-SELA I	46.0*	40.3*	36.1*
	2. Others (II)	55.9*69.2*	59.1*	55.2*
	B. Without borrowings (III)		64.7*	63.8*
III.	Share capital per member (P)			
	A. With borrowings			
	1. TST-SELA I	2,27	3,14	2,91
	2. Others (II)	0.5	0.3	5.0
	B. Without borrowings (III)	2,20	3,20	4,16
		5.3	5.9	4.1
		2,67	3,27	3,47
		6.3	9.3	9.2

* The Chi-Square statistic is significant at the 10% level.

The results indicate that access to external sources of funds has not hampered the credit unions' effort to mobilize share capital.

(v) Reserve funds

Like other financial intermediaries, credit unions also allocate a portion of their profits to reserves to beef up their capital and to have enough funds against which future losses can be charged. The reserve funds of credit unions were quite large, comprising between 30% to 50% of savings deposits, and had been increasing during the period 1990-1992 (Table IV.6). In 1992, it averaged ₱204 thousand for Group I, ₱321 thousand for Group II and ₱312 thousand for Group III. The differences in the average reserve funds among the three groups are not statistically significant for all the years considered.

On a per member basis, reserve funds are observed to be also increasing during the indicated period. In 1992, reserve fund per member for Groups I, II and III averaged ₱261, ₱392 and ₱359, respectively. Also, the differences in the average reserve funds per member among the three groups are not statistically significant in all the years under review.

Group III consistently obtained the highest proportion of reserve funds to total resources among the three groups during the period in review, followed by Group II. The differences in the average proportion of reserve funds to total resources among the three groups are statistically significant. Again, this is to be expected because Group III had not obtained any loans to finance its activities.

Table IV.6: Reserve funds (MEDIAN)

	1990	1991	1992
I. Average reserves (₪)			
A. With borrowings			
1. TST-SELA I	58,80	119,44	203,46
2. Others (II)	5.0	7.0	9.0
B. Without borrowings (III)	118,98	187,47	320,74
	0.2	1.7	3.0
	175,91	260,66	312,20
	9.0	8.0	4.0
II. % of total resources			
A. With borrowings			
1. TST-SELA I	2.2*	2.9*	3.4*
2. Others (II)	5.1*	4.1*	5.0*
B. Without borrowings (III)	5.4*	6.0*	6.5*
III. Reserve fund per member (₪)			
A. With borrowings			
1. TST-SELA I	148.2	228.0	261.0
2. Others (II)	188.9	320.6	392.3
B. Without borrowings (III)	184.8	286.3	358.8

* The Chi-Square statistic is significant at the 10% level.

The general conclusion that seems to emerge from the results is that access to external sources of funds has not impeded the savings mobilization efforts of credit unions. There are several reasons for this. First, the credit programs using credit unions as conduits have stressed their complementary role to the internal funds generation effort of credit unions by explicitly incorporating in the loan conditionalities the savings generation program to be implemented by credit conduits. Second, credit unions have built-in savings mobilization programs; that is, borrowers are requested to include in their schedule of repayment a schedule of raising their fixed and savings deposits. Thus, as long as members borrow, they

are likely to continue saving in their credit union. Third, the interest rate on savings and time deposits offered by credit unions are higher than those offered by banks and are tax-free.¹⁷ And lastly, funds borrowed from external sources still form a small part of the total resources of credit unions. A large part of the loan portfolio of credit unions is still financed by internally generated funds. All these factors were absent when the earlier special credit programs were launched by the government and channelled through banks.

3. Uses of funds

The loan portfolio of credit unions grew in tandem with the growth of their total resources. In 1992, it averaged about ₱4 million for all the three groups, which was at least 60% higher than that of 1990 (Table IV.7). The differences in the average loan portfolio among the three groups are not statistically significant for all the three years.

The average loan per member increased moderately during the period in review. In 1992, it averaged ₱6 thousand for Groups I and II and ₱4.5 thousand for Group III. The differences in the average loan per member among the three groups of credit unions are also not statistically significant.

Table IV.7: Outstanding loans (MEDIAN)

	1990	1991	1992
I. Average outstanding loans (₪)			
A. With borrowings			
1. TST-SELA I	2,36	2,84	4,23
2. Others (II)	1,65	6,89	0,50
B. Without borrowings (III)	6.0	5.0	9.0
	2,17	3,10	4,09
	4,03	5,37	9,94
	0.0	5.0	2.2
	2,36	2,77	3,87
	0,82	9,17	1,44
	6.0	3.0	7.1
II. % of total assets			
A. With borrowings			
1. TST-SELA I	83.9*	84.6	80.1*
2. Others (II)	80.6*	82.6	83.0*
B. Without borrowings (III)	88.8*	84.2	84.5*
III. Outstanding loans per member (₪)			
A. With borrowings			
1. TST-SELA I	4,14	5,78	6,42
2. Others (II)	9.2	7.1	6.0
B. Without borrowings (III)	3,15	4,65	6,28
	0.8	5.0	7.0
	3,26	4,43	4,47
	6.9	2.9	7.0

* The Chi-Square statistic is significant at the 10% level.

Loans comprised between 80% and 89% of the total assets of the credit unions. The differences in the average proportion of the loan portfolio to total assets are statistically significant only in 1990. More specifically, Group III allocated more of their resources to loans

compared to Groups I and II. In the next two years, the three groups have more or less the same characteristics as far as allocation of their resources to loans is concerned.

4. Profitability

The spread that credit unions realize from borrowed funds could be high, thereby raising their profitability. It is to be noted that credit unions usually deduct the interest on the loans in advance. The effective interest rate on credit unions has hovered between 16% and 18% in the last few years.¹⁸ On the other hand, interest rate on special credit programs is usually charged on the outstanding balance. In the case of the TST-SELA, the interest rate was 7% per annum, which was recently revised to 12%. Clearly, credit unions can realize a substantial spread from these sources of funds. It is therefore hypothesized that credit unions with access to funds from external sources have higher profit rates than those without access to such funds.

Six indicators of profitability are used here (Table IV.8). The first is the ratio of total expenses to total income of credit unions, which measures the extent to which credit unions were able to manage their expenses. The computed ratios of total expenses to total income generally show that credit unions have been able to manage well their expenses. However, the performances of the three groups vary. In particular, the average ratios for Groups I and II rose in 1991, but declined in the subsequent year. In contrast, that of Group III increased consistently but only moderately. Despite this, their average ratio of total expenses to total income is significantly lower than those of Groups I and II in all the years being considered. In 1992, their total expenses were only about half their total income compared to two-thirds for the other groups.

The second indicator of profitability is the ratio of interest income to total assets, which measures the degree to which credit unions were able to maximize the return on assets by

investing them in interest-bearing assets. The results show that Group III had a significantly higher ratio of interest income to total assets than the other two groups. However, the subsequent years do not show any significant difference in the average ratios among the three groups. In 1992, the ratio was 11% for all three groups.

The third indicator is the ratio of interest expense to total resources, which measures the degree of dependence of credit unions on interest-bearing funds to finance their activities. Group I had significantly higher ratio in all the years considered, followed by Group II. On the other hand, Group III consistently showed the lowest ratio. These results are to be expected because Group I had much higher levels of borrowing than Group II, while Group III did not have any borrowings at all and had largely depended on share capital.

The fourth indicator is the ratio of interest income to total income, which measures the degree of credit unions' dependence on interest-bearing assets for their income. In 1990, the performances of the three groups were markedly different with Group III showing a significantly higher degree of dependence on interest income. In 1992, the average ratios are not significantly different from each other anymore. What is worth noting though is that the average ratios for Groups I and II markedly rose between 1990 and 1992 while that of Group III increased only slightly. The sharp rise in the degree of dependence of Groups I and II on interest income could have been due to the additional resources they obtained through borrowing that had been used to expand their loan portfolio.

The fifth indicator is the rate of return on assets or RORA (i.e., net income divided by total assets) which measures the overall efficiency of credit unions in managing their assets. The differences in the average rates of return on assets among the three groups are statistically significant in all the years being considered. In particular, Group III consistently obtained the highest rate of return on assets during the period in review. In 1992, their RORA was almost double those of Groups I and II. However, when compared with the RORAs of

different types of private banks (see Table IV.9), it can be said that Groups I and II have been definitely doing better.

Table IV.8: Indicators of profitability (MEDIAN)

	1990	1991	1992
I. Ratio of total expenses to total income (%)			
A. With borrowings			
1. TST-SELA I	66.7*	82.8*	67.3*
2. Others (II)	63.0*	68.6*	67.6*
B. Without borrowings (III)	50.0*	51.9*	52.2*
II. Ratio of interest income to total assets (%)			
A. With borrowings			
1. TST-SELA I	8.0*	8.1	11.1
2. Others (II)	8.6*	7.9	11.0
B. Without borrowings (III)	10.0*	8.9	11.0
III. Ratio of interest expenses to total resources or assets (%)			
A. With borrowings			
1. TST-SELA I	2.3*	2.6*	3.5*
2. Others (II)	1.8*	1.3*	1.6*
B. Without borrowings (III)	1.1*	1.2*	1.3*
IV. Ratio of interest income to total income (%)			
A. With borrowings			
1. TST-SELA I	54.2*	52.9	69.8
2. Others (II)	55.7*	52.7	68.0
B. Without borrowings (III)	62.4*	50.7	65.6
V. Rate of return on total assets (%)			
A. With borrowings			
1. TST-SELA I	4.6*	4.1*	4.7*
2. Others (II)	6.4*	5.3	4.5*
B. Without borrowings (III)	8.3*	7.8*	8.2*
VI. Rate of return on capital (%)			
A. With borrowings			
1. TST-SELA I	12.0	10.7	9.9
2. Others (II)	11.1	8.3	8.8
B. Without borrowings (III)	10.8	11.6	11.4

* The Chi-Square statistic is significant at the 10% level.

Table IV.9: Rates of return on assets by type of commercial banks (%)

	Universal banks	Ordinary commercial banks	Branches of foreign banks
1986	1.6	0.6	1.7
1987	1.8	0.8	1.3
1988	1.8	1.4	3.5
1989	2.0	1.5	3.0
1990	2.3	2.2	2.9

Source of basic data: Central Bank.

The last indicator is the rate of return on capital (i.e., net income divided by share capital plus reserves) which is also commonly known as the rate of return on investment (ROI). The ROI measures the overall profitability of the credit unions. The results show that the ROIs of the three groups are not significantly different from each other during the period in review, suggesting that access to external sources of funds do not have any impact on the overall profitability of credit unions. The ROIs realized by credit unions are on the average as attractive as the return on treasury bills.

In summary, the results generally do not support the hypothesis that credit unions with access to funds from external sources are more profitable than those without access.

5. Loan delinquency

Previous special credit programs coursed through the banking system had been characterized by very high loan delinquency, which eventually caused their collapse. The present credit programs involving credit unions could have such mark, and if this is true, then loan delinquency of those that have access to external funds is expected to be higher than that which do not have any external borrowings.

It has always been very difficult to detect loan delinquency of credit unions for several reasons. One is that many credit unions do not have a good monitoring system for delinquent

loans. Another is that it has been the practice among most credit unions to automatically restructure or advise the members concerned to restructure their past due loans.

The survey questionnaire asked the sample credit unions to provide information on the number and amount of past due loans by age. Less than half the total number of respondents supplied such information. The rest reported that either they do not have such information or have no past due loans at all, which is very dubious. The discussion is therefore limited to credit unions that furnished reliable information. This consists of 15 credit unions each from Groups I and III and 11 from Group II.

Table IV.10 shows the profile of the past due loans of individual credit unions as of 1992.¹⁹ The past due loan ratio (i.e., past due loans/total outstanding loans) averaged 14.0%, 12.3%, 13.5% for Groups I, II and III, respectively. These are not significantly different from each other, implying that the three groups have practically the same performance as far as past due loan ratio is concerned.

A closer look at the age distribution of past due loans, however, shows that about half the past due loans of Groups I and II were more than 12 months old. It is to be noted that the maturity of most loans of credit unions is only 12 months. In contrast, only one-third of the past due loans of Group III were more than 12 months old. Thus, in terms of the intensity of the past due loan problem, Groups I and II are worse off than Group III.

Within a group, the past due loan ratios vary widely among credit union members. In Group I, one credit union had a past due loan ratio of 43%, most of which were more than 12 months old. In Group II, one had a past due loan ratio as high as 70%, of which half were more than 12 months old. In Group III, the highest past due loan ratio was 44%, of which half were more than 12 years old.

Table IV.10: Past due loans, 1992
A. TST-SELA (I)

Age	Resp. 21	Resp. 65	Resp. 67	Resp. 88	Resp. 97	Resp. 52	Resp. 25	Resp. 11
2-6 months								
Number	11	40	102	8	12	81	54	20
Amount (P)	8,77 8	674,54 0	666,24 0	30,83 7	116,23 9	387,56 2	88,32 4	227,31 7
6-12 months								
Number	2	25	125	0	23	29	33	12
Amount (P)	2,55 0	192,72 6	922,53 5	0.0	128,85 0	76,23 3	81,45 4	128,72 3
Over 12 months								
Number	46	12	0	0	0	109	73	35
Amount (P)	96,36 3	96,36 3	0.0	0.0	0.0	156,74 9	132,58 3	385,51 9
Total:								
Number	59	77	227	8	35	219	160	67
% of total N° of members	13.1	7.9	11.9	7.9	5.8	20.9	12.0	17.0
Amount (P)	80,20 6	963,62 9	1,58 8,77 5	30,83 7	245,08 9	620,54 4	302,36 1	741,55 9
% of total outstanding loans	7.1	16.2	5.9	10.6	6.4	13.2	33.7	15.9
Age	Resp. 7	Resp. 10	Resp. 50	Resp. 30	Resp. 68	Resp. 121	Resp. 87	Total
2-6 months								
Number	482	7	61	0	150	0	7	1,03
Amount (P)	2,26 9,74 5	42,45 6	393,76 6	2,05 9,05 6	1,80 0,00 0	0.0	38,00 0	5 8,80 2,86 0 (30.0)
6-12 months								
Number	0	21	10	0	100	212	8	601
Amount (P)	0.0	100,21 6	43,38 8	0.0	900,00 0	2,09 4,09 5	44,25 0	4,71 5,02 0 (16.0)

Over 12 months								
Number	0	29	980	0	50	276	11	1,62
Amount (P)	0.0	166,91 5	5,21 5,07 9	7,38 0,12 9	580,00 0	1,59 8,19 5	87,50 0	1 15,86 7,91 0 (54.0)
Total:								
Number	482	57	1,05 1	0	300	489	26	3,25 7
% of total N° of members	19.3	6.2	10.0	0	18.8	19.8	14.3	13.6
Amount (P)	2,26 9,74 5	309,58 7	5,65 2,23 3	9,43 9,18 5	3,28 0,00 0	3,69 2,29 0	169,75 0	29,38 5,79 0
% of total outstanding loans	10.4	7.0	43.2	30.7	15.2	22.5	10.0	14.0

Table IV.10: Past due loans, 1992 (continued)
B. Others (II)

Age	Resp. 106	Resp. 34	Resp. 76	Resp. 71	Resp. 9	Resp. 124	Resp. 130
2-6 months							
Number	165	0	0	14	34	21	0
Amount (P)	2,33 0,73 2	531,29 6	0.0	165,22 2	252,65 0	132,35 2	0.0
6-12 months							
Number	91	0	8	3	57	39	0
Amount (P)	1,31 0,71 0	369,68 1	110,74 5	11,00 0	421,08 2	248,81 0	0.0
Over 12 months							
Number	224	0	145	0	137	154	170
Amount (P)	2,82 6,27 2	98,61 1	1,61 6,05 4	0.0	1,01 0,59 6	534,65 5	547,51 3
Total:							
Number	480	0	153	17	228	214	170
% of total N° of members	14.5	0	11.3	7.1	12.1	37.5	15.9
Amount (P)	6,46 7,71 3.0	999,58 8.0	1,72 6,79 9.0	176,22 2.0	1,68 4,32 8.0	915,81 7.0	547,51 3.0
% of total outstanding loans	13.9	11.0	14.7	10.1	12.0	70.4	7.8
Age	Resp. 48	Resp. 92	Resp. 104	Resp. 78	Total		
2-6 months							
Number	127	8	0	36	405		
Amount (P)	467,39 8	180,00 0	0.0	832,27 2	4,89 1,92 2 (34.1)		
6-12 months							
Number	33	5	0	0	236		
Amount (P)	258,53 1	50,00 0	0.0	0.0	2,78 0,55 9 (19.4)		

Over 12 months					
Number	0	4	7	0	841
Amount (P)	0.0	35,00 0	10,20 0	0.0	6,67 8,55 9 (46.5)
Total:					
Number	160	17	7	36	1,48 2
% of total N° of members	3.1	11.1	1.5	10.8	10.2
Amount (P)	725,92 9.0	265,00 0.0	10,20 0.0	832,27 2.0	14,35 1,38 1.0
% of total outstanding loans	1.5	46.2	0.2	12.0	12.3

Table IV.10: Past due loans, 1992 (continued)
C. Without borrowings (III)

Age	Resp. 126	Resp. 114	Resp. 111	Resp. 115	Resp. 70	Resp. 62	Resp. 12	Resp. 16
2-6 months								
Number	0	109	0	15	0	72	0	0
Amount (P)	0.0	969,23 2.0	710,03 0	209,69 9	0.0	349,50 6	0.0	0.0
6-12 months								
Number	0	225	0	10	7	30	0	0
Amount (P)	0.0	193,84 6	46,45 6	113,00 0	34,37 1	122,53 1	0.0	0.0
Over 12 months								
Number	652	110	0	20	29	206	25	28
Amount (P)	2,04 2,95 7	69,12 3	1,00 2,91 1	56,73 2	38,43 2	476,16 3	100,00 0	13,98 2
Total:								
Number	652	444	0	45	36	308	25	28
% of total N° of members	8.7	12.3	0	7.2	6.3	46.0	5.6	7.1
Amount (P)	2,04 2,95 7	1,23 2,20 1	1,75 9,39 7	379,43 1	72,80 3	948,20 0	100,00 0	13,98 2
% of total outstanding loans	21.3	11.9	38.5	27.1	3.9	44.3	1.7	0.3
Age	Resp. 8	Resp. 17	Resp. 32	Resp. 28	Resp. 23	Resp. 18	Resp. 83	Total
2-6 months								
Number	103	276	0	613	10	20	49	1,26
Amount (P)	71,11 5	482,05 4	0.0	1,97 0,35 0	15,61 7	80,00 0	416,31 4	7 5,27 3,91 7 (41.0)
6-12 months								
Number	112	646	1	126	5	0	106	1,26
Amount (P)	204,16 1	1,12 4,79 5	4,46 9	300,45 2	7,41 2	0.0	1,13 4,40 6	8 3,28 5,89 9 (26.0)

Over 12 months								
Number	49	26	4	82	20	0	9	1,26
Amount (P)	144,11	69,58	15,84	211,75	27,17	0.0	56,01	0
	2	0	7	2	7		0	4,32
								4,77
								8
								(33.0)
Total:								
Number	264	948	5	821	35	20	164	3,79
% of total N° of members	18.6	32.1	1.3	88.0	3.7	2.9	6.1	14.8
Amount (P)	419,38	1,67	20,31	2,48	50,20	80,00	1,60	12,88
	8	6,42	6	2,55	6	0	6,73	4,59
		9		4			0	4
% of total outstanding loans	5.5	2.5	0.3	29.1	10.5	3.2	8.7	13.5

It should be recalled that one of the accreditation criteria of the TST-SELA Program is that a credit union should have a past due ratio of not more than 15% of the total loan portfolio. It means that 7 of the 15 credit unions belonging to Group I will no longer qualify for the TST-SELA Program. It is, however, not clear whether such delinquency was associated with the TST-SELA Program. A check with two credit unions that borrowed from the TST-SELA Program shows that their loans financed by TST-SELA funds had lower delinquency ratio than their regular loans because borrowers were conscious about being able to renew their loans under the Program.

In general, the results seem to suggest that access to external funds does not have an impact on the loan delinquency problem of credit unions. Nevertheless, it is worth pointing out that the past due loan ratios of credit unions are alarmingly high. Although rural banks and private development banks are worse than the credit unions in this regard due to the debt overhang they experienced since the 1984-1985 economic crisis, nevertheless they have shown some improvements in the recent past (see Table IV.11).

Table IV.11: Past due loan ratios of the banking system (%)

	1990	1991	1992
Rural banks	25.0	23.2	24.1
Commercial banks	6.8	9.4	5.6
Private dev. banks	24.2	25.7	15.6
Specialised government	12.9	8.4	3.7

Source: DER, Central Bank of the Philippines

6. Qualitative indicators

The credit programs which make use of credit unions as lending conduits could have effected some qualitative changes in the credit unions, such as improvement in the

organizational structure, accounting system, reporting system, lending policies, management of loan portfolio, etc.

Since the survey did not gather information that would provide answers to those issues, the visit to five credit unions was utilized to fill up this gap. The results of our interviews generally show that the programs, especially the TST-SELA, have not caused or encouraged any qualitative changes in the operations of credit unions. The reason is that, except for savings mobilization, the loan covenants of the credit programs do not include conditionalities that would encourage some qualitative changes in the credit unions. For example, the requirement that a credit union borrower must have a past due loan ratio of not more than 15% of the total loans outstanding does not involve a condition that it improves its monitoring of past due loans to separate out at an earlier stage those loans that will have the potential to be repaid from those that have the potential to become in default.

Also, these credit programs build upon the existing practices of credit unions, unlike earlier credit programs which introduced new lending practices or policies. Understandably, there was no effort on the part of donor agencies to introduce qualitative changes in the operations of the credit unions.

V. Summary and concluding remarks

The government recently changed its strategy of delivering credit to those that have been rationed out by the formal banking system. As it changed the features of its special credit programs, such as aligning the interest rates to the market rates of interest rates, it also has started to use informal financial institutions as lending conduits. Two of these programs, namely the DAPCOPO and TST-SELA, cater to the agricultural and non-agricultural sectors, respectively. So far, the repayment records of these programs (i.e., from the intermediaries to the refinancing agents) has been remarkable.

Credit unions have been doing well in terms of mobilizing deposits and allocating credits to small borrowers rationed out by the banking system even during periods when the banking system encountered some difficulties. However, they often face some resource constraints which have prevented them from satisfying the credit demands of their members on time. Access to external sources of funds, such as those of special credit programs, could relax such constraint.

Given the disappointing performance of previous special credit programs and their unfavorable impacts on the lending conduits, it might be worthwhile to examine the effects of the recent special credit programs or similar facilities on the performance of credit unions. This paper has tried to analyze this issue using a post-test experimental-control group design. The sample consisted of 105 credit unions affiliated with two nation-wide federations.

The results generally show that access to external sources of funds such as the special credit programs of the government does not have significant differential impact on the performance of credit unions. More specifically, it has not undermined the savings mobilization efforts of credit unions. One of the reasons is that, unlike credit programs in the past, these special credit programs emphasize savings mobilization. Another reason is that

credit unions have a built-in savings mobilization program in their lending activities. Access to external sources of funds has also no significant differential impact on the overall profitability of credit unions as measured by the rate of return on investment and on loan delinquency problem.

The banking system is better served when it comes to dealing with resource constraints because they have access to the interbank markets and to rediscounting windows of the Central Bank and government-owned financial institutions which still carry special credit programs. Credit unions, on the other hand, do not have access to those facilities. Recently, some federations established a liquidity fund facility to facilitate the flow of funds from surplus credit unions to deficit credit unions. Still, these resources are very limited. The results seem to suggest that there is merit in providing credit unions with access to external funds to overcome their resource constraints.

One may raise the issue of whether credit unions are the right channels of credit to poor households. The TST-SELA, for instance, has specified that the final loan beneficiaries should belong to the low-income group. However, credit union members are on the average well off compared to the rest of the population. It is to be noted that credit unions do not discriminate poor and rich members when it comes to granting credit because every bona fide member is given an equal opportunity. Thus, it is argued that very small borrowers will not likely benefit from the loan programs if they are coursed through the credit unions.

To respond to this criticism, perhaps the experience of other countries with credit programs for the poor can be brought in. The KUPEDDES scheme of Indonesia immediately comes to our mind. KUPEDDES is a general credit program for all income classes of the rural population of Indonesia. Biggs et al. (1991) pointed out that: "While KUPEDDES does not satisfy the Congressional mandate to establish loan programs targeted on the poor, its impact on the rural poor is probably greater than that of any more sharply targeted program." (P. 47)

This can perhaps be said of the TST-SELA and DAPCOPO. Although these programs target a certain clientele, i.e., TST-SELA for non-agricultural activities and DAPCOPO for agricultural activities, nevertheless, they serve a much wider range of borrowers within the sector than the previous special credit programs. And coursing these loans through credit unions widen further the range of income classes that can benefit from the program.

Even if members of credit unions are on the average relatively well off, a great majority of them do not have yet access to credit from the formal banking system. The new strategy adopted for the special credit programs permits loans to be deployed to those who do not have access to credit from the banking system and yet have greater probability of success in their business. In our interviews with some managers of market vendors' credit unions, they said that members who have small businesses employ 2 to 4 people. Clearly, expansion of their business can lead to a creation of more job opportunities.

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Notes

- 1 This is well documented in earlier studies (see Lamberte and Lim 1987 for an example).
- 2 See for example Lamberte and Balbosa (1988) and Lamberte, Relampagos and Graham (1990).
- 3 See Lamberte and Balbosa (1988) for a discussion of the criteria for determining which institutions or activities belong to the informal financial markets.
- 4 The current exchange rate is ₱27.60/US \$1.
- 5 See Lamberte, Relampagos and Graham (1990) and Relampagos, Lamberte and Graham (1990).
- 6 This is called the Comprehensive Agricultural Loan Fund (CALF) being managed by the Agricultural Credit Policy Council (ACPC), an agency attached to the Department of Agriculture.
- 7 The information here are based on ADB's Appraisal of the NGO-Microcredit Project in the Philippines (November 1988), Project Completion Report of the NGO Microcredit Project in the Philippines (June 1992), Appraisal of the Second NGO Microcredit Project in the Philippines (October 1991), DTI's Mid-Project Review: Survey Results (July 1991), and interviews with officials of DTI-BSMBD.
- 8
- (a) *Institutional criteria*
- (i) They should be registered with the Securities and Exchange Commission or with the Bureau of Cooperatives Development or with such other regulatory body or agency as may be decided upon by the government and the ADB;
- (ii) Their management board should consist of members of high standing in the local community;
- (iii) They should have at least one year's experience in community development for income-generating projects for low income groups, with rural coverage;
- (iv) They should have a minimum staff beneficiary-group ratio of 1:20;
- (v) They should have provisions for periodic staff training programs; and
- (vi) They should have at least 20 square meters of office space.
- (b) *Financial criteria*
- (i) They should have externally audited financial statements;
- (ii) They should have a minimum net worth of ₱100,000; and
- (iii) They should have a net worth to risk asset ratio of not less than 1:5.
- (c) *Lending performance*
- (i) They should have experience in lending for at least one year;
- (ii) They should have a collection rate performance of over 80%, and past due ratio of not more than 15% of total loan portfolio;
- (iii) They should have a record of cost per job created of generally not more than ₱15,000; and
- (iv) They will provide at least 15% of the financing for each subproject.
- 9
- (a) The subborrower/s should belong to a low-income category;
- (b) The subborrower/s should preferably belong to a disadvantaged segment of the population such as the landless, subsistence farmers, the physically handicapped or women;
- (c) The sub-borrower/s should preferably be a self-help group/s;
- (d) The sub-borrower/s should preferably be a resident of the municipality where the subproject is to be undertaken; and
- (e) The sub-borrower/s should submit a subproject proposal that would meet the following requirements:
- (i) the subloan request will be up to ₱25,000 for an individual beneficiary or up to ₱200,000 for a

-
- group-based beneficiary;
 - (ii) the sub-borrower will provide at least 10 percent of the cost of the subproject in cash, or kind or labor;
 - (iii) the subproject will be viable on the basis of technical, financial, managerial and marketing considerations; it will particularly detail its procurement and marketing arrangements;
 - (iv) cash inflows from the operation of the subproject should, after meeting obligatory cash outflows, generally provide a cover for debt-service equal to a minimum of 1.2 times the required amortization;
 - (v) return on investment or financial internal rate of return of the subproject will generally be over 20 percent per annum;
 - (vi) the subproject will be labor-intensive and will utilize local raw materials;
 - (vii) cost per job created, directly and indirectly, under the subproject will generally not exceed ₱15,000; and
 - (viii) the subproject will provide for savings mobilization of at least 5 percent of the value of the loan during the period of amortization and in parallel with periodic repayments.

10 This is largely based on Alip *et al.* (1990).

11 This is based on the Survey Quality Control Manual and Software Design prepared by the Pragma Corporation which administered the survey.

12 Longer years would create more problems since a large number of credit unions, especially those located in rural areas, do not keep a good record of their financial reports.

13 Only 2 of the total sample have been identified to have borrowed from the DAPCOPO.

14 The PROC UNIVARIATE of the SAS package was used for this.

15 Since the number of observations were unbalanced, the PROC GLM for Unbalanced Anova of the SAS package was used.

16 It is possible that a credit union that has access to special credit programs has stopped recruiting new members to limit the gains from such programs to existing members. However, the results of our interviews with three credit unions that had borrowings do not support this.

17 All interest incomes are charged a 20% final tax withheld by banks. Deposits in credit unions are exempted from this.

18 Credit unions seldom change their lending rates.

19 Information on past due loans for earlier years are not available for almost all sample credit unions.