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ABSTRACT

Providing financial services to a poor, rural clientele in a sustainable fashion has been one of the challenges of microfinance. In order to overcome the obstacles of high transaction costs and low population density in rural Latin America, many financial institutions have adopted a member-based methodology through either credit unions or village banks. The following analysis compares and contrasts the outreach and sustainability of these two types of rural member-based institutions in Latin America by examining five institutions. In order to measure outreach, a Depth of Outreach Index (DOI) is constructed and contrasted to the Subsidy Dependence Index (SDI), a measure of institutional sustainability. Credit unions tend to have higher degrees of sustainability while village banks tend to have a greater depth of outreach. However, the authors conclude that a trade-off between outreach and sustainability is not a necessary concession since credit unions have a greater scale and reach a more heterogeneous population (including the poor) while village banks can make significant progress towards achieving sustainability.

OUTREACH AND SUSTAINABILITY OF MEMBER-BASED RURAL FINANCIAL INTERMEDIARIES IN LATIN AMERICA
A Comparative Analysis

INTRODUCTION

The sustainable provision of financial services to under-served sectors of the population has been increasingly recognized among scholars, donors and practitioners as a useful tool in poverty alleviation, enterprise development and financial-sector deepening. While the majority of clients served by the formal financial sector in developing countries tend to be upper class, urban, educated males, some financial intermediaries have attempted to encompass a wider range of clientele by operating in more isolated, rural areas. Due to the information asymmetries and high transaction costs associated with financial intermediation in rural areas, member-based institutions such as credit unions and village banks have evolved as a mechanism to transfer the high cost of screening, monitoring, and evaluation from an external financial intermediary to the village level.

This paper analyzes the degree to which member-based institutions reach an under-served segment of the population (including low income, illiterate, rural clients, and women) and the degree to which their depth of outreach is correlated with institutional dependence on external subsidies. The analysis focuses on measures of sustainability and outreach as well as their inter-relatedness for three credit unions and two village banking programs[1] in Latin America. The credit unions in the study are Unión Popular in Guatemala, Cupocrédito in Colombia, and OSCUS in Ecuador and the village banking programs are FINCA Costa Rica and CARE Guatemala. A contrast between the two member-based approaches is highlighted throughout the analysis.

BACKGROUND

In order to examine the outreach and performance of these member-based institutions, a brief description of the context in which they operate is useful. Three of the institutions are in Central America (two in Guatemala and one in Costa Rica) while the other two are in South America (Colombia and Ecuador). While similar in some respects, several notable contrasts are evident when examining the country contexts and the rural environments where the institutions operate.

THE COUNTRY CONTEXT

The countries of Costa Rica, Guatemala, Colombia and Ecuador differ from one another as well as with regard to other regions of the world in several ways. Table 1 presents general socio-economic conditions of these countries in comparison to East Asia and the Pacific, South Asia, and sub-Saharan Africa.

TABLE 1. COUNTRY CHARACTERISTICS

[1] The five case studies were prepared for The World Bank *Sustainable Banking with the Poor* project.

	Costa Rica	Guatemala	Colombia	Ecuador	East Asia & Pacific	South Asia	Sub-Saharan Africa
1994 GNP/capita, US$	2400	1,200	1670	1280	460	860	320
Gini Index	46.1%	59.6%	51.3%	46.6%	NA	NA	NA
Average annual GNP/capital growth 1985-1994	2.8%	0.9%	2.4%	0.9%	6.9%	2.7%	-1.2
Average annual inflation 1984-1994	18.2%	19.5%	25.6%	47.5%	NA	NA	NA
Adult illiteracy 1995	5%	44%	9%	10%	17%	50%	43%
Population density, inhab./km^2	64.7	94.5	31.9	39.4	106.0	237.7	23.6
Rural population	51%	59%	38%	43%	68%	74%	69%

Source: The World Bank, 1996.

On average, these Latin American countries are wealthier than other developing regions of the world. While their annual GNP per capita growth rates (ranging from 0.9 to 2.8 percent) do not equal the impressive rates of East Asia and the Pacific (averaging 6.9 percent) for the period 1985 to 1994, they are positive and far surpass the negative growth rates experienced in sub-Saharan Africa (-1.2 percent). With the exception of Guatemala, the adult illiteracy rates of these Latin American countries are below the other regional averages. Each of the Latin American countries has a high average inflation rate for the period 1985 to 1994. Inflation rates were particularly high during the 1980's, but decreased significantly in the 1990's.

Costa Rica stands out among these four countries. Not only is its GNP per capita of $2400 significantly higher than the other three countries, but it has the highest growth rates, lowest inflation rate, and lowest adult illiteracy rate. Guatemala, on the other hand, has the worst performing economy of the countries studied. Its GNP per capita and GNP growth rate are the lowest of the four Latin American countries while its adult illiteracy rate is more than four times that of the other countries.

The Gini index provides an indicator of income inequality within a country. The closer to unitary the measure is, the more unequal the distribution of income is. While no measures are available for the other regions, in general, the Latin American countries have some of the highest Gini indices in the world with Brazil being the highest at 63.4 (World Bank 1996). In contrast, developed countries average between 0.3 and 0.45. Guatemala stands out as having a highly unequal income distribution, with a Gini coefficient of 0.59. Colombia also has a high measure of 0.51. Both Costa Rica and Ecuador have somewhat more equitable income distributions, averaging 0.46.

THE RURAL CONTEXT

The population density in Latin America is relatively low compared to other regions of the world. Table 1 shows that the population density for Costa Rica, Guatemala, Colombia, and Ecuador is lower than the averages for other developing regions of the world. Colombia and Ecuador have especially low population densities (31.9 and 39.4 respectively), while Costa Rica has a population density of 64.7 and Guatemala has a population density of 94.5. In addition to having relatively low population densities, each of these countries is mountainous (with Costa Rica being the least mountainous). The rugged terrain in these countries makes accessing rural areas difficult and time-consuming since often the roads reaching rural areas are not well maintained.

The rural infrastructure is underdeveloped in Latin America with a lower frequency of clean water, health services, education, and formal financial services than in urban centers. Most of the rural people work in agriculture related industries that have inherent risk due to variations in climate and international prices. It is not surprising that a marked rural exodus has occurred, driving rural people to the large cities. In 1970, 43 percent of the Latin American population lived in rural areas. By 1993, only 29 percent lived in rural areas. The countries in this study have a greater rural population than the Latin American average. Colombia is the most urban with only 38 percent of its population living in rural areas, followed by Ecuador (43 percent), and Costa Rica (51 percent). Guatemala has a majority of its population (59 percent) living in rural areas.

Formal financial services, especially from commercial banks, often are not well developed in the rural areas of Latin America and target an upper income clientele. Most of the financial services offered to low and middle income clients come from informal sources such as commercial credit, moneylenders, ROSCAs (rotating savings and credit associations), and friends and family. However, some member-based institutions including credit unions and village banks have had success in reaching under-served rural clients.

RURAL MEMBER-BASED FINANCIAL INTERMEDIARIES: VILLAGE BANKING VS. CREDIT UNIONS

Both village banking and credit unions have a member-based structure. There are several advantages to having a membership structure. A large urban-based bank may not possess sufficient information regarding the credit-worthiness of rural clients. Member-based institutions often can overcome these information asymmetries through a greater understanding of the local context and its residents. The use of village level knowledge about potential members helps to reduce screening, monitoring and evaluation costs.

While membership is a key component of both methods, village banking and credit unions differ in several ways. Credit unions are owned by members through the holdings of equity shares. All members have savings in some form resulting in a "savings-first" focus, a characteristic that differentiates credit unions from the growing number of "credit-first" (Graham 1994) programs throughout the world that do not emphasize or offer savings facilities. A large volume of internally generated funds is on-lent to members through individual loans. Typically, the legal status of credit unions is as a non-profit institution operating as a cooperative financial organization that may or may not be regulated by the banking superintendency. Decisions regarding leadership, rules, and conditions are made by the members using a one-person-one vote structure, although in some cases (such as Cupocrédito), not all members are voting members. While the ultimate control of the credit union is left to the member-owners that form the General Assembly, the daily operations are run by a management staff.

Village banking was developed in the 1980's and has been extensively adapted and implemented by a number of international NGOs such as FINCA International, CARE, and ActionAid. The original method called for the formation of self-managed peer lending groups that would receive external loans at first and then gradually would mobilize internal savings to self-capitalize so that autonomy would be reached in three years. This concept of graduation, however, was replaced in the 1990's in favor of an ongoing relationship between the village banks and the external source of funding (for example, FINCA). Some of the general characteristics of village banking include: mandatory savings in order to receive loans, credit blockage to the entire village bank if even one person does not repay, the possibility of on-lending the savings held in an internal account, and standardized and simultaneous loan terms.

The village banking method has been adapted in many different ways. The heterogeneity of the approach is evident in the contrast between CARE Guatemala and FINCA Costa Rica. In general, FINCA Costa Rica follows a minimalist approach that focuses solely on the provision of financial services, while CARE Guatemala has a more comprehensive approach including a greater emphasis on training and enterprise development. FINCA Costa Rica serves a largely educated male rural clientele that has had prior experience with agricultural loans. In addition, a more developed legal system has allowed for legal recourse in the case of default. These conditions have allowed FINCA Costa Rica to offer strictly individual loans. In contrast, CARE Guatemala serves rural women without prior experience with formal finance and with little education. No legal remedies are available to pursue delinquent loans in rural Guatemala. In order to serve this market niche, CARE Guatemala has found it necessary to provide more training and to block additional credit to the village if even one woman defaults, thus relying on peer pressure and solidarity as enforcement mechanisms.

Table 2 compares some of the basic characteristics of the five member-based institutions studied. The credit unions have been in operation for several decades in comparison to the village banks which were founded in the 1980's. In addition, both of the village banking programs serve fewer than 10,000 clients while the credit unions serve between 10,000 to 388,000 clients. The village banking programs have a lower average loan size as a percentage of GDP per capita with CARE Guatemala standing out as offering the smallest loans averaging only $171 or 14 percent of GDP per capita. The provision of micro-level financial services by village banks is not surprising given that that original village banking method was developed to provide financial services to the very poor. In contrast, the credit unions serve a wider range of socio-economic levels within a community including the poor, the middle class, and the relatively wealthy.

TABLE 2. BASIC INSTITUTIONAL CHARACTERISTICS

	VILLAGE BANKS	CREDIT UNIONS

	FINCA Costa Rica	CARE Guatemala	Unión Popular	Cupocré dito	OSCUS
Foundation	1984	1989	1972	1960	1963
Country	Costa Rica	Guatemala	Guatemala	Colombia	Ecuador
Number of clients	7253	4090	10,732	387,846	55,457
Average loan size, US$	1006	171	1079	2199	954
Average loan term	24	6	36	15	
Average loan/GDP/cap	0.42	0.14	0.90	1.32	0.75
Average deposit size, US$	25	53	204	217	149
Average savings/GDP/cap	0.01	0.04	0.17	0.13	0.12
Average equity shares,	150	0	53	226	59
Growth of loan portfolio, % per year	16	71	43	27	36

Source: 1995 data for FINCA, CARE and Cupocrédito; 1996 data for Unión Popular and OSCUS
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Not only do the village banks offer smaller loans, but they also have shorter terms on average than the credit unions. In many respects, FINCA Costa Rica is an anomaly among village banking programs in that it offers larger loans with longer terms than other village banking institutions. In addition, some of the village banks formed by FINCA Costa Rica have the option of purchasing equity shares, a feature more characteristic of credit unions.

On the deposit side, village banks typically require savings before a loan can be attained. While voluntary savings is a growing phenomenon in village banking, most of the deposits are linked to access to credit and few members are solely depositors. Therefore, it is not surprising that the average deposit size for the village banking programs in quite small. In credit unions, it is more common to have members who choose to save without requesting credit.

OUTREACH

Von Pischke[2] describes a frontier between the formal and informal financial sectors. Those outside the frontier do not have regular access to formal financial services. They comprise a heterogeneous population, where the degree of exclusion from financial services may vary and their distance from the poverty line (in either direction) in their respective countries may differ.[3]

In measuring institutional outreach, it is important to distinguish between *extent* (or breadth) and *depth* of outreach, the former accounting for the absolute number of households or enterprises (or relative market penetration) in the target population reached by the institution, the latter indicating how

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[2] Von Pischke, J.D. Finance at the Frontier: Debt Capacity and the Role of Credit in the Private Economy EDI Development Studies, The World Bank, 1991.

[3] Hulme, D. and P. Mosley. *Finance Against Poverty*. Routledge, London and New York, 1996.

deep in the pool of the under-served the institution or program has been able to reach.

DEPTH OF OUTREACH INDEX (DOI)

In developing countries, several categories of people consistently have been under-served by financial institutions. These categories, usually bearing some degree of positive correlation across them, include (but are not restricted to):

The poor

Formal financial intermediaries experience relatively high transaction costs when dealing with very poor people because of the very small size of each transaction. For instance, the cost of offering savings facilities to clients who make frequent micro-deposits can be quite high. The same applies for very small loans that require similar bureaucracy as larger loans in formal financial institutions, but capture very little rent, resulting in losses.

Women

Women have been excluded from formal financial services for a variety of reasons. Perhaps foremost is a cultural bias against women. At the household level, most financial decisions have been made by male heads of household, although this cultural norm is shifting gradually. In addition, women represent some of the poorest people in developing countries. Their micro-enterprises and petty trade do not have sufficient scale to interest formal financial intermediaries. Finally, literacy requirements have barred some illiterate women from obtaining formal financial services. Female clients have been targeted by microfinance institutions not only because of their exclusion from formal finance, but also because women spend a greater percentage of their share of household income on food, children's clothes, education, and health than men do, as demonstrated in several studies. [4]

Rural inhabitants

Due to the high transactions costs associated with serving a largely dispersed population and the high risk associated with agriculture, formal financial intermediaries have avoided rural areas. However, this negligence is particularly alarming in Sub-Saharan Africa given that approximately 70 percent of the population lives in rural areas (see Table 2). Government sponsored programs that offer rural credit have resulted in disappointing performance due to their reliance on subsidized interest rates, inappropriate terms and conditions, a lack of repayment enforcement, and corruption.

The uneducated

[4] For example, see Hopkins, J., Levin, C., Haddad, L. "Women's Income and Household Expenditure Patterns: Gender or Flow? Evidence from Niger," American Journal of Agricultural Economics, Dec. 1994.

People who cannot read and write face an obvious obstacle to obtaining financial services that require any type of written application or paperwork. Microfinance institutions have served the illiterate by adopting innovative techniques including oral training and screening, pictorial training, group guarantees, and use of thumbprint signatures.

These categories are used here to define and measure a *depth of outreach indicator* (DOI) for the institutions under analysis. The categories were chosen not only for their association with the degree of exclusion from financial services, but also for their relative ease of measurement in simple, rapid-appraisal type surveys of the programs' clienteles. Other variables (such as ethnicity or national origin) could be used in different scenarios, depending upon the factors perceived as determining exclusion. Given the likely correlation between the variables in the DOI, many people fall into several or all of the categories (i.e., poor, female, rural and illiterate).

To analyze the degree to which financial institutions serve the rural, female, poor and illiterate clients, depth of outreach diamonds can be constructed. These diamonds present these four outreach indicators for the clients of microfinance institutions and compare them to overall country averages. The diamonds provide a simple graphic representation of the four outreach indicators. Three of the variables (urban, male, and literate) are percentages calculated on a 0 to 1 scale. Rather than using GDP per capita as a measure of country level income, the more appropriate measure of GDP divided by the economically active population (EAP) was used. This measure was normalized to one for the country average. The income of the clients was put on the same scale by dividing the average income of the clients by the country level income. Using this approach, smaller diamonds reflect a greater depth of outreach.

The DOI measure sums the differences between the institutional outreach averages and the country averages. A positive number indicates that the institution serves a clientele that is more rural, poor, female, and illiterate than the country average. While not a perfect measure of outreach, the DOI improves on the use of traditional outreach proxies such as loan size since it incorporates various outreach indicators and takes country averages into account. In addition, its simple graphic nature and use of easily available data make it a useful, intuitive measure for cross-institutional analysis

.

Depth of Outreach in the Five Case Studies

The DOI is used to examine the outreach of the village banks *versus* the credit unions in this study. Measures of the degree to which these institutions serve poor, female, rural, illiterate clients were compared to the percentage share of these categories in the general population of the country (Figure 1). The most important finding from this type of analysis is that the village banking clients are more rural, female, poor, and illiterate than the country average, while credit unions tend to serve more literate, urban males. In terms of reaching under-served portions of the population, village banking appears to have a deeper outreach when examining the average clients of the institutions. This point is illustrated in Figure 1 as the outreach diamond for village banks falls within the corresponding country average while the credit union outreach is largely outside of the country average with the exception that credit unions serve clients with incomes slightly below the GDP per economically active person. Figure 1 averages the individual village banks and credit unions, while the same type of analysis for each individual institution is presented in Appendix 1. The breakdown of the individual institutions mirrors the averaged results found in Figure 1.

SUSTAINABILITY

While it is clear that the average clients served by village banks are further beyond the traditional financial frontier than credit union clients, it is important to examine to extent to which these institutions are sustainable. Table 3 provides various measures of sustainability and efficiency for each of the five institutions.

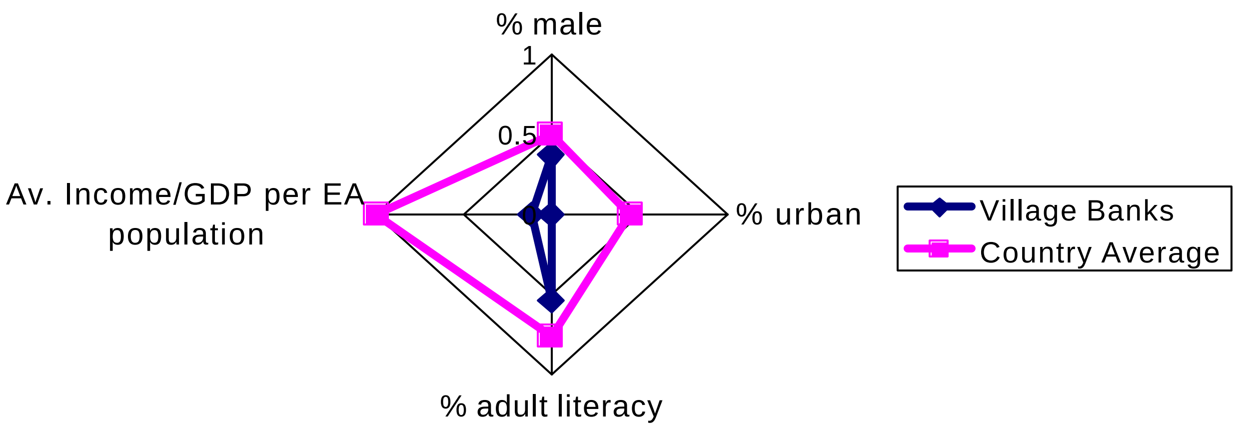
Perhaps one of the most comprehensive indicators of sustainability is the Subsidy Dependence Index (SDI) (Yaron 1992). The SDI measures by what percentage interest rates charged to clients would have to be increased hypothetically in order to cover program costs and eliminate subsidies. The SDI measures for credit unions are very close to zero, indicating self-sufficiency without a dependence on external subsidies. Meanwhile, the village banking programs would have to more than double interest rates in order to operate without subsidies. In the case of CARE Guatemala, a heavy reliance on subsidies results in an SDI measure of 477 percent. It is not surprising that CARE Guatemala also shows operational and financial self-sufficiency ratios[5] of less than one. Across the board, credit unions have higher ratios of operational and financial self-sufficiency.

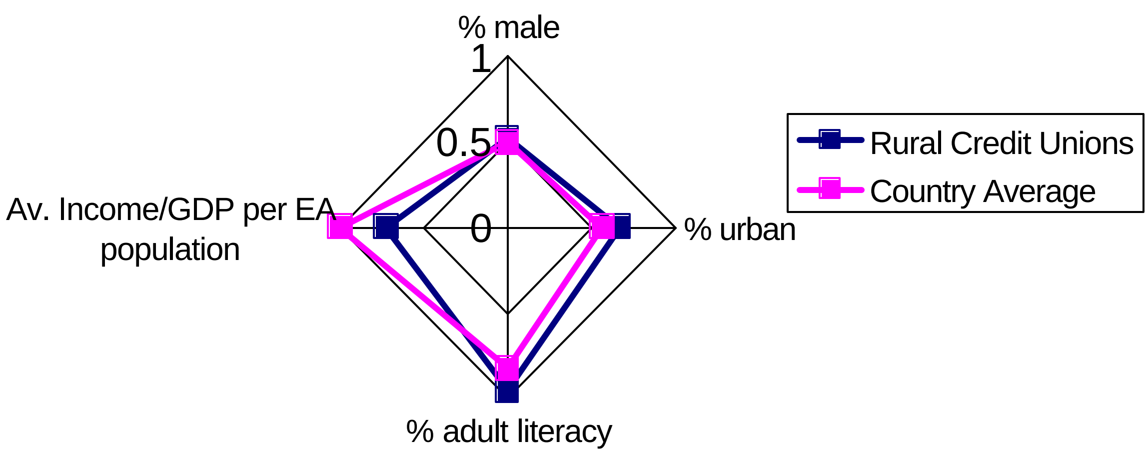
One of the most interesting findings in the comparison of credit unions and village banks is that village banks charge higher real effective interest rates. Nominal interest rates charged by village banks are sometimes misleading since they are quoted as flat rates. In addition, membership and application fees as well as the requirement of mandatory savings contribute to an elevated effective interest rate. The higher real effective interest rates charged by village banks reflect the high cost of reaching a marginalized clientele. In spite of these higher interest rates, the village banks still depend on subsidization.

Another key contrast between the village banks and credit unions is related to savings mobilization. The volume of savings as a percentage of the total outstanding loan portfolio is relatively insignificant for village banking in contrast to credit unions. The volume of savings in two of the three credit unions exceeds its loan portfolio while the savings to loan ratio for the village banks is less than 10 percent. This contrast underscores the importance of savings mobilization in credit unions. In many rural finance institutions, savings has been overlooked

[5] Operational self sufficiency is defined as operating income divided by operating expenses. Financial self-sufficiency is defined as operating income divided by operating as financial expenses.

FIGURE 1. OUTREACH OF VILLAGE BANKS AND CREDIT UNIONS





despite the fact that deposits provide a highly valued service to the rural poor who often lack reliable places to store their money with a positive return. In fact, many experts agree that savings facilities are the more commonly demanded financial service and represent a critical element of poverty alleviation (USAID 1991). The small average deposit size of these credit unions ($190) illustrates an important role that credit unions are playing in rural finance.

No conclusions can be drawn about repayment performance since both the arrears rates and portfolio at risk measures vary from institution to institution seemingly regardless of institutional type. In addition, the salaries paid to loan officers as a percentage of GNP per capita are similar for each institutional type.

TABLE 3. SUSTAINABILITY INDICATORS

	VILLAGE BANKS		CREDIT UNIONS		
	FINCA Costa Rica	**CARE[a] Guatemala**	**Unión Popular**	**Cupocrédito**	**OSCUS**
SDI	1.39	4.77	0.03	0.12	-0.03
Operational self-sufficiency**	1.44	0.29	2.12	2.35	2.75
Financial self-sufficiency**	1.08	__	1.11	1.14	1.19
Arrears rate, %	7.59	0.00	5.00	2.37	na
Portfolio at risk, %	18.31	0.00	6.50	22.00	12.00
Real effective interest rates, %	55.00	38.25	19.51	12.88	11.04
volume savings /vol. loans outstanding	0.05	0.09	1.37	1.18	0.91
Loan officer salary/GNP/capita	2.30	3.10	2.70	3.23	2.05

Source: 1995 data for FINCA, CARE and Cupocrédito; 1996 data for Unión Popular and OSCUS.
[a] All funds used by CARE are grants.
Operational self-sufficiency is defined as operational income divided by operational costs. Financial self-sufficiency is defined as operational income divided by operational costs + financial costs.

OUTREACH VS. SUSTAINABILITY

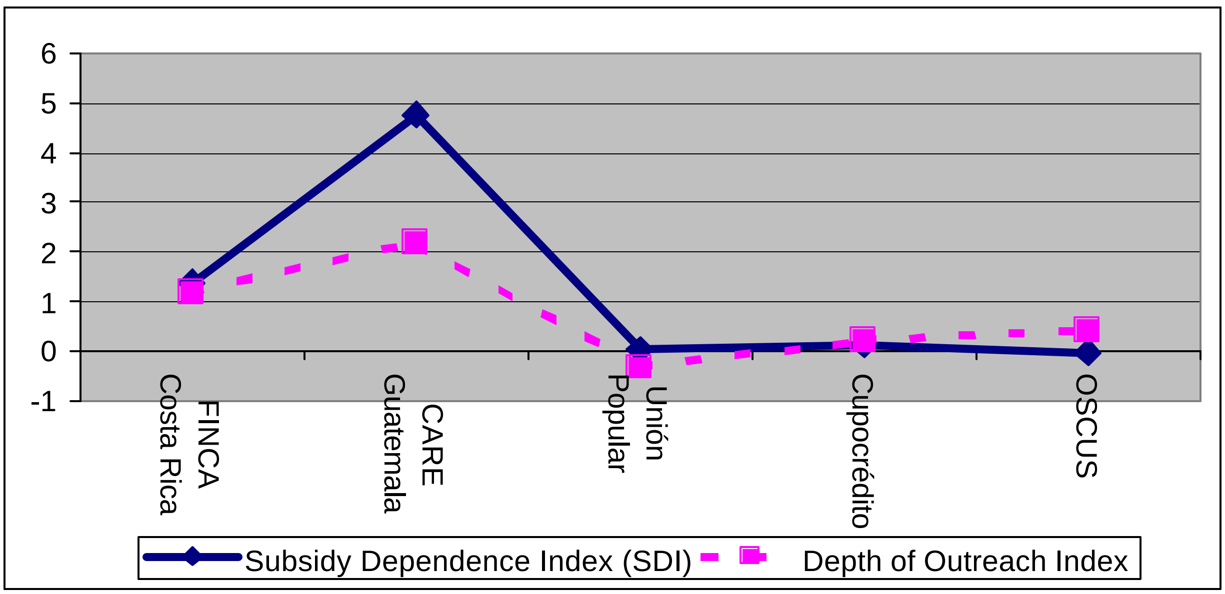
On the surface, the data shows that credit unions have the advantage in sustainability while village banking programs have a deeper outreach. However, the extent to which these two desirable characteristics are mutually exclusive remains an important research and empirical question. In order to analyze their relationship, it is first necessary to examine outreach and sustainability together. Figure 2 illustrates this relationship, showing a notable pattern between the DOI and the SDI measures. An obvious trend exists between outreach and sustainability: the deeper the outreach to under-served clients, the more reliant is the institution on subsidies in order to cover program costs. The correlation between the two measures is 0.93.

Despite the correlation between outreach and dependence on subsidies, one can not conclude that outreach and sustainability are mutually exclusive goals. Two main arguments offer hope to the feasibility of providing financial services to the rural poor in a sustainable manner. First, credit unions can and do serve the poor. Secondly, village banks can approach sustainability as they gain experience and scale.

CREDIT UNIONS CAN AND DO REACH THE POOR IN ADDITION TO THEIR OTHER CLIENTS

One of the problems of examining institutional averages of outreach is that the degree of heterogeneity of clients is missing. While the village banks studied serve a somewhat homogeneous clientele (i.e. the rural poor and in the case of CARE, 100 percent female), the credit unions serve a cross-section of the rural population including lower, middle, and occasionally upper income classes. Members include farmers, housewives, bakers, shoemakers, microentrepreneurs, laborers, teachers, and public employees. Given the larger number of clients served, many rural credit unions serve as many marginalized clients as the village banks. Rather than specifically targeting the poor, credit unions seek a diversified clientele. This heterogeneity facilitates the financial intermediation process by matching surplus and deficit units and hedges against risk through portfolio diversification. Table 4 illustrates the wide range of household income levels of the members of six Guatemalan credit unions.

FIGURE 2. OUTREACH VERSUS SUSTAINABILITY



Source: 1995 data for FINCA, CARE and Cupocrédito; 1996 data for Unión Popular and OSCUS.

The average household monthly income for members of Unión Popular in Guatemala is $429. This average is skewed upwards due the presence of a few relatively wealthy members. Table 4 shows that only 17 percent of Unión Popular members have monthly incomes in excess of $400. At the other end of the income spectrum, 16 percent of Unión Popular's members have *household* incomes less than $120 per month. This low income level is comparable to the village bank members. The other credit unions in Table 4 have an even higher percentage of clients in the low income ranges. In many cases, the number of members within the low income bracket served by credit unions may exceed the total number of clients of a village banking program due to the relatively larger size of credit unions.

The range of loan sizes provided by credit unions reflect the variation in income levels to some extent. For example, the average loan size provided by OSCUS in Ecuador is $954, roughly 75 percent of the average GDP per capita (Table 5). However, nearly 1,800 loans (15 percent of the total loans granted) are for sums of less than $300. Average loans of $150 are only 12 percent of GDP per capita, a ratio even lower than the average loan to GDP per capita ratio of 14 percent for the micro village banking program of CARE Guatemala.

TABLE 4. DISTRIBUTION OF INCOME BY CREDIT UNION, GUATEMALA 1991
Percent of Members per Range of Average Monthly Income, US$

CREDIT UNION	<$20	$21-$60	$61-$120	$121-$200	$201-$400	>$400	NA
Santa Maria Asunción	8%	35%	32%	14%	8%	2%	1%
Parroquial Guadalupana	0%	9%	30%	18%	25%	11%	7%
Guayacán	9%	8%	26%	25%	21%	8%	4%
Teculutan	2%	3$	26%	32%	21%	15%	1%
UPA	5%	3%	25%	22%	14%	8%	22%
Unión Popular	2%	1%	13%	22%	27%	17%	18%

Source: Boucher et al. (1992)

Table 5 also demonstrates that half of OSCUS borrowers are women. The number of OSCUS members that have savings accounts far exceeds the number with credit. While only 5737 women have loans, 26,501 women have savings accounts and shares. The average savings account size for women is $142, however 50 percent of the number of deposits are for values less than $30. Thus, the number of poor, rural women being served by micro-financial services in OSCUS is greater than the number served by the entire village banking program of CARE Guatemala, a program that exclusively serves poor rural women. If one were to map out the outreach diamond for this segment of OSCUS clients, it would be very similar to the village banking outreach diamonds, although the literacy rate for credit unions would be higher since village banking avoids the requirement of literacy through the use of oral communication, fingerprint signatures, and pictorial training.

VILLAGE BANKS CAN GRADUALLY APPROACH SUSTAINABILITY

A second reason why outreach and sustainability do not have to be mutually exclusive is that village banks are becoming more sustainable. While these two programs have not severed their dependence on subsidized interest rates and donor grants, they are much younger institutions using a relatively new approach that constantly is being adapted with each new year of experience. Since the programs are relatively young, their client base is not as developed as the credit unions. Due to their limited membership base, economies of scale have not been reached. Nevertheless, each year has led to improved indicators of sustainability. When looking at time-series data, the general trend towards sustainability has been positive.

TABLE 5. LOAN DISTRIBUTION BY SIZE AND GENDER FOR OSCUS CREDIT UNION, ECUADOR 1997

	WOMEN			MEN		
SIZE RANGE DOLLARS	WOMEN % TOTAL LOANS	# WOMEN LOANS	VOLUME WOMEN LOANS	MEN % TOTAL LOANS	# MEN LOANS	VOLUME MEN LOANS
$ 1 - 150	51%	403	$ 46,501	49%	388	$ 27,264
$ 151 - 300	50%	495	$ 164,908	50%	492	$ 56,389
$ 301 - 900	49%	2,215	$ 1,107,077	51%	2,303	$ 1,204,244
$ 901 - 1,500	50%	1,076	$ 1,341,545	50%	1,066	$ 1,326,310
$ 1,501 - 3,000	49%	1,364	$ 2,743,302	51%	1,398	$ 2,690,762
$ 3,001 - 4,500	48%	92	$ 335,265	52%	99	$ 328,625
$ 4,501 - 6,000	50%	89	$ 447,077	50%	90	$ 438,110
$ 6,000 +	50%	3	$ 18,645	50%	3	$ 18,238
TOTAL	50%	5,737	$ 6,204,318	50%	5,839	$ 6,089,944

Source: Almeyda and Branch, 1998a

FIGURE 3. VILLAGE BANKING SDI MEASURES: 1991 - 1995

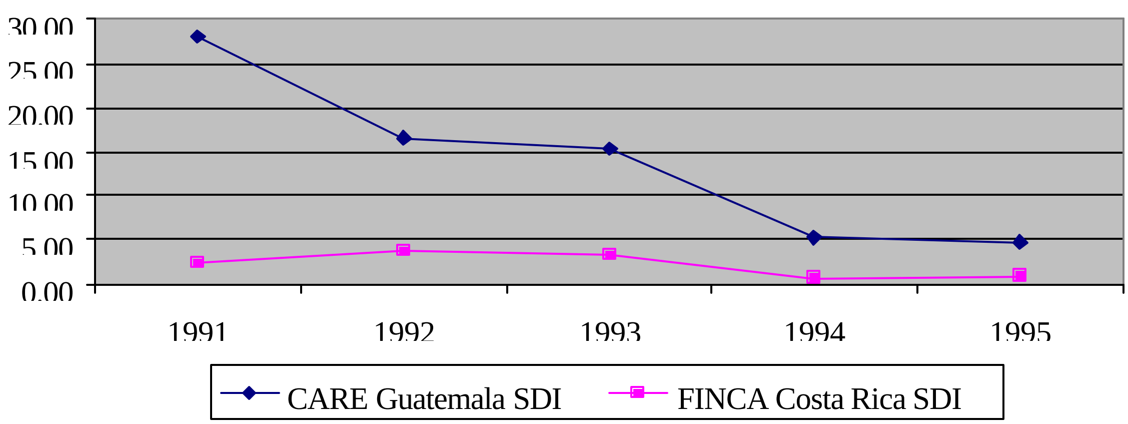


Figure 3 displays the evolutions of the SDI measure for CARE Guatemala and FINCA Costa Rica. The younger, more comprehensive program of CARE Guatemala has a much higher SDI in part due to the depth of its outreach but also is experiencing a marked decline. The SDI for FINCA Costa Rica has remained somewhat stagnant in the past few years after declining dramatically in the 1980's. The ability of these institutions to lower their SDI measures to levels comparable to credit unions is still an open question which may be answered over the next decade as new cost reducing innovations are implemented and economies of scale are reached.

CONCLUSIONS

In any context, sustainable financial institutions are desirable in that permanency creates confidence among clients and financial viability allows institutions to reach wider markets without relying on subsidies for the targeting of one small sector of the population. In rural Latin America, a wide range of market niches exists for financial intermediation. Village banking and credit unions offer two member-based approaches to serving the rural financial market. They offer different financial products to different target groups. Their outreach goals vary as village banking targets the very poor (and often women) while rural credit unions have a lower and middle class clientele.

When examining data from three rural credit unions and two rural village banking programs in Latin America, a strong correlation was found between depth of outreach and reliance on subsidies. The village banking programs that target more poor people, rural inhabitants, uneducated people, and women than are found in the general population tend to be less sustainable than the credit unions which do not have the same depth of outreach.

Despite the relationship between outreach and sustainability, this paper does not suggest that the two necessarily are mutually exclusive. While on average, credit unions serve a wealthier clientele than village banks, they offer financial services to a much more heterogeneous population. The poorest 15 percent of their members are similar in socio-economic characteristics to the clients of village banking. In addition, the credit unions have had success in providing these clients with highly demanded voluntary micro-deposit instruments. This financial intermediation is being performed in a sustainable fashion without significant external subsidies. In addition, village banking programs do not have to be *unsustainable* in order to have depth of outreach. Experience, innovations, and reaching economies of scale have led village banking programs to become more financially viable and the programs continue to strive towards sustainability. In sum, it is possible for each of these methodologies to co-exist with different institutional objectives and financial services that can strengthen the rural financial landscape.

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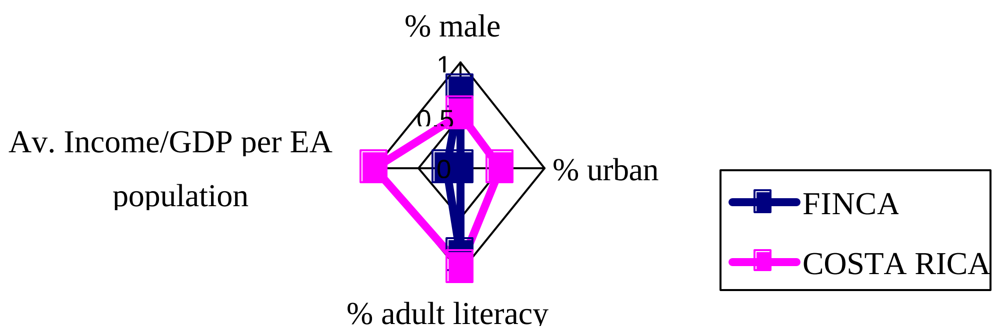
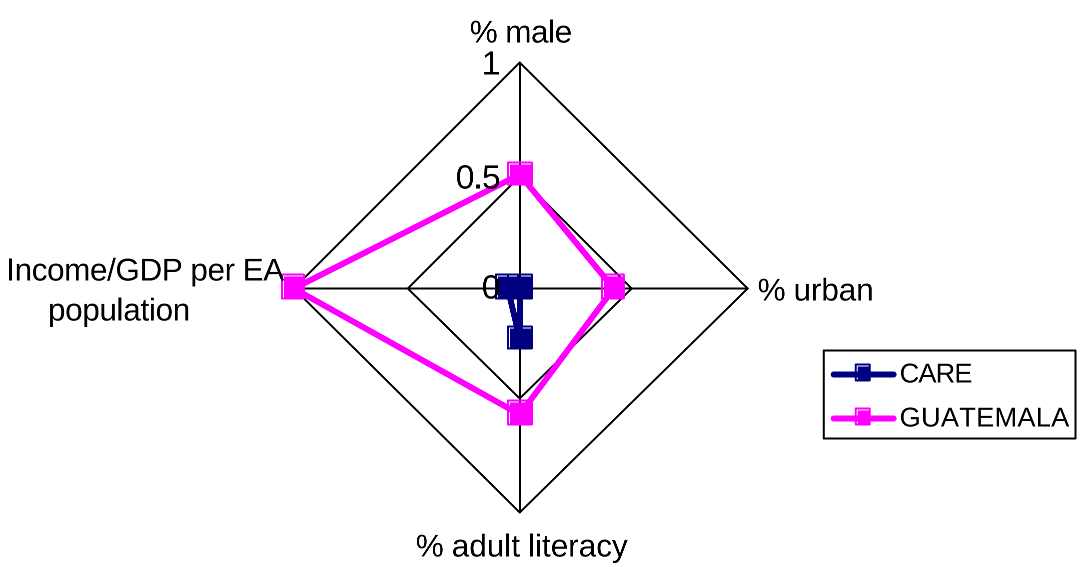
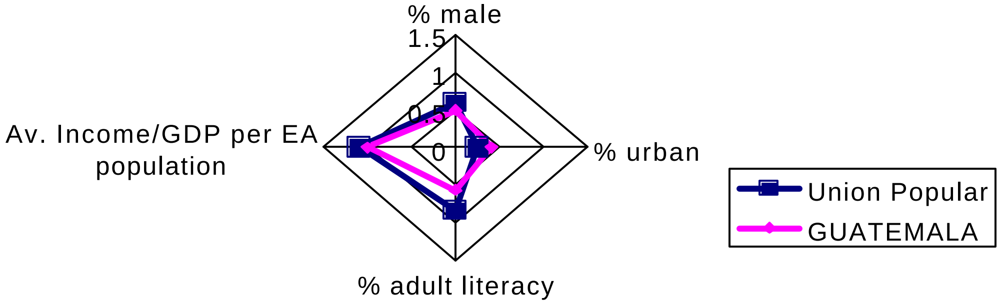
APPENDIX 1. INSTITUTIONAL OUTREACH

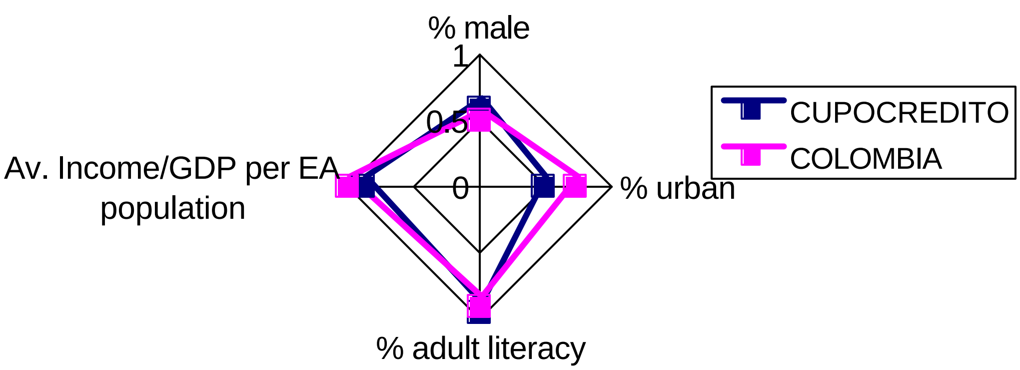
VILLAGE BANKING OUTREACH

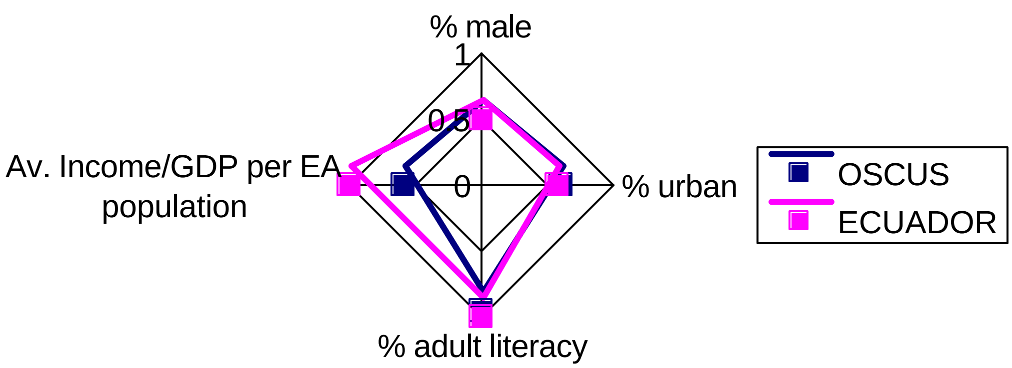




CREDIT UNION OUTREACH







Appendix

SUSTAINABLE BANKING WITH THE POOR - LIST OF CASE STUDIES

1. ***BÉNIN - Fédération des caisses d'épargne et de crédit agricole mutuel*** (in French). Cécile Fruman. Avril 1997.

2. ***BENIN, FECECAM***. Cécile Fruman. June 1997.

3. ***Bolivia: Assessing the Performance of Banco Solidaro*.** Peter Fidler. August 1998.

4. ***Burkina Faso: Le Projet de promotion du petit crédit rural - PPPCR***. Julia Paxton. August 1997.

5. ***Costa Rica: FINCA Village Banking***. Julia Paxton, March 1998.

6. ***Egypt, Alexandria Business Association***. Tom Dichter. December 1997.

7. ***Guatemala CARE Village Banks Project*.** Julia Paxton. October 1997.

8. ***Guatemala CARE - Proyecto de Banco Comulales*** (in Spanish). Julia Paxton, Octubre 1997.

9. ***Indonesia - Bank Rakyat Idonesia (BRI) Unit Desa 1970-1996***. Stephanie Charitonenko, Richard H. Patten, and Jacob Yaron. June 1998

10. ***Kenya KREP***. Stephanie Charitonenko. August 1998.

11. ***Mali CVECA - Pays Dogon*** (in French). Cécile Fruman. Avril 1998.

12. ***Mali Self-Managed Village Savings and Loans Banks (CVECA - Pays Dogon)***. Cécile Fruman. May 1998.

13. ***Niger Credit Unions (Caisses Populaires d'Epargne et de Crédit).*** Korotoumou Ouattara, Mayada Baydas and Julia Paxton. April 1998.

14. ***Philippines - TSPI***. Tom Dichter. August 1998.

15. ***South Africa: Get Ahead Foundation***. Craig Chruchill. January 1998.

16. ***Thailand BAAC - The Thai Bank for Agriculture and Agricultural Cooperatives***. Tetsutaro Muraki, Leila Webster, and Jacob Yaron. April 1998.

17. ***Zimbabwe, Zambuko Trust*.** Peter Fidler and Mohini Malhotra. April 1997.

Cases Available on the Web at: http://www-esd.worldbank.org/html/esd/agr/sbp/