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DOMINICAN REPUBLIC: ANALYSIS OF THE CLIENTS OF FONDO MICRO

by

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Executive Summary

This report provides a preliminary quantitative analysis of the financial results of five organizations which are clients of FondoMicro. It also includes a qualitative assessment of the long-run vision held by these institutions' managers and of the organizations' ability to allow a transformation into self-sustainable institutions, whose financial contracts are useful to small and micro entrepreneurs.

The five organizations studied are ADEMI (Asociación para el Desarrollo de Microempresas, Inc.), ADEPE (Asociación para el Desarrollo de la Provincia Espaillat, Inc.), ADOPEM (Asociación Dominicana para el Desarrollo de la Mujer), FONDESA (Fondo Para el Desarrollo, Inc.), and the Candelaria Credit Cooperative (Cooperativa Nuestra Señora de la Candelaria, Inc.).

Overall preliminary financial results for these five lenders show a positive trend. Except for ADOPEM in 1992 (to a minor extent) and FONDESA during 1992 and 1993, all have been profitable in accounting terms. In addition, a measure of subsidy dependency suggests that ADEMI could be profitable even if it had to pay market rates of interest for its funds. This is the case of Cooperativa Candelaria, which operates entirely on market terms.

These lending organizations do not, to any great degree, use funds subsidized by donors in order to leverage funds from non-donor sources. Funds borrowed from commercial banks do not make up a significant portion of any of these lenders' liabilities (i.e., they are not used to fund their portfolio). Moreover, only ADEMI and Cooperativa Candelaria accept deposits (or deposit equivalents).

By current standards for microfinance institutions, all of these lenders (except FONDESA in the past) run relatively efficient operations. That is, they do not seem to use excessive resources to produce their financial services, although there is still room for improvement.

Cooperativa Candelaria and the other AIRAC cooperatives (Asociación de Instituciones Rurales de Ahorro y Crédito), upgraded by the earlier Ohio State University's Rural Financial Services Project, are already self-sustainable and operate as full financial intermediaries, with no donor funds. ADEMI would be self-sustainable, if donors would force the issue. ADOPEM is a few steps away from self-sustainability, and the difficulties remaining are not insurmountable.

ADEPE's lending program, in turn, could eventually become independent of subsidies, but it will have to get much bigger and its parent institution will have to adopt the same hard-nosed philosophy as the lending program. Cross-subsidization from the lending program to other activities will have to be avoided. FONDESA has the desire and the vision to be self-sustainable, but its small size and the staggering losses from the past that had to be absorbed in the last two years make realization of such potential less certain.

FondoMicro's funds and technical assistance have been instrumental in bringing the Dominican market for microfinance to its present state, although ADEMI preceded its operations. FondoMicro prodded those lenders whose portfolios reeked with delinquent loans from past years into painful but healthy sanitizations. By basing the maintenance and/or expansion of its lines of credit on financial results and on loan recuperation, FondoMicro has motivated its clients to pay more attention to aspects of lending that matter for self-sustainability. Funds and technical assistance from FondoMicro should continue to be contingent on steady progress of its clients toward self-sustainability.

DOMINICAN REPUBLIC: ANALYSIS OF THE CLIENTS OF FONDOMICRO[1]

by

Mark Schreiner and Claudio Gonzalez-Vega[2]

I. INTRODUCTION

A. Purpose

This study examines five clients of FondoMicro in three areas.

1. The analysis of the lenders' financial results indicates the impact of the provision of financial services on the institution. This analysis should facilitate identification of the changes to existing policies, procedures, or levels of resources that will lead to self-sustainability.

2. The analysis of the lenders' outreach results suggests the impact of the provision of financial services on people. This matters because FondoMicro and its client organizations are supported by donors for whom financial self-sustainability is not an end in itself, but rather a means to the end of long-run improvement in people's standards of living.

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[1] Report prepared for the USAID Mission in the Dominican Republic. The authors were in Santo Domingo from February 27 to March 11 (Schreiner) and from March 7 to March 12 (Gonzalez-Vega), for a rapid assessment of the country's microfinance sector. They were accompanied by Richard Rosenberg.

[2] The authors are Graduate Research Associate and Professor of Agricultural Economics, respectively, at The Ohio State University. They are particularly grateful to Richard Rosenberg (AID's Economic Growth Center), who accompanied them to Santo Domingo, and with Douglas Ball, Mario Dávalos, Andrés Dauhajre, Pedro Jiménez, Camilo Lluberes, Mercedes de Canalda, Mike Deal,Larry Laird, Efraín Laureano, Luis González, Virginio Gerardo, Mercedes de Beiss-Goico, Ramiro Tejada, Adalgisa Adams, Luis Mosquera, Eduardo Latorre, Dorca Barcacel, Cristián Reyna, Jorge Quilvio, and many other representatives of the organizations visited as well as knowledgeable friends in the Dominican Republic who shared their views with the authors. This rapid assessment is preliminary and inevitably contains important errors and omission. The authors assume full responsibility for these shortcomings and for the opinions expressed, not necessarily shared by the sponsoring organizations. They hope, however, that the implicit recommendations will be helpful in providing better financial services to the Dominican poor.

3. The analysis of the lenders' development over time indicates whether gambling (investing) more resources on these institutions is likely to pay off in the future. Examination of past trends in financial results and of the managers' qualitative vision for their organizations' future may serve to guide allocations of donor assistance.

B. Methodology

The financial analysis includes three areas:

1. Accounting profitability:

   Financial statements from clients of FondoMicro show if actual income exceeds expenses.

2. Commercial profitability:

   Adjusted financial statements from clients of FondoMicro, in conjunction with shadow prices assigned to various subsidized resources, produce an index of subsidy dependency which indicates the direction and size of the changes necessary, were the lender to pay commercial prices for all its resources and break even.

3. Leverage of donor resources:

   Donors want present investments to increase the future supply of resources at the service of microfinance. A donor leverage index summarizes the amount of resources (outstanding portfolio) that an institution generates for each unit of subsidized resources (liabilities and capital) used.

The analysis of outreach includes two areas:

1. Characteristics of loans

   A loan contract is characterized by its terms and conditions. Contractual dimensions such as loan size, repayment schedule, real effective interest rate, and monthly payment determine which people find borrowing to be welfare-improving.

2. Characteristics of borrowers

The impact of identical loan contracts varies by type of borrower. Donors have different expectations for an institution's progress toward self-sustainability if its services are used by a (difficult) segment of the population the donor wishes to target.

The analysis of lender development includes three areas:

1. Financial trends

Experience suggests that successful microenterprise finance institutions pass through a period of exponential growth which enables them to capture economies of scale and to reach significant numbers of borrowers. Analysis of financial statements can reveal whether the lender is entering, leaving, or within the transformation phase.

2. Operational Efficiency

In addition to interest rate policies that do not generate sufficient earnings from lending to cover costs, lack of self-sustainability usually stems from operational inefficiencies, which may be battled on two fronts. The first is through clientele growth and economies of scale; the second is through time and economies of learning.

3. Institutional Vision

The metamorphosis from a subsidy-dependent non-government lending organization (NGO) to a self-sufficient financial intermediary requires vision and desire from the management as well as flexibility from the institutional structure. Qualitative analysis can indicate whether the lender plans to make the transformation and whether the organization's ground rules can even allow it.

C. Data

The preliminary quantitative analysis presented here is based on financial data collected from the clients of FondoMicro and from FondoMicro itself. All figures have been adjusted in accordance with the guidelines for the analysis of microenterprise finance institutions published by the InterAmerican Development Bank (1994). Except for where specific units are indicated, all figures are in thousands of real 1992 Dominican pesos.[3]

There were numerous holes and inconsistencies in the original data sources. The figures presented here are therefore best viewed as simply indicators of trends, directions, and magnitudes, best useful for seeing broad patterns. Appendices I and II detail the derivation of the figures presented in this report and identify their limitations. The qualitative analysis is based on interviews with the personnel of the lenders and with FondoMicro officers, as well as on reviews of documents provided by USAID and the lending organizations.

II. ANALYSIS OF FINANCIAL RESULTS

[3] When the symbol DR$ is used, figures are nominal, in pesos of current value. When no symbol is used, figures are in thousands and have been deflated by the Consumer Price Index, to represent thousands of pesos of constant purchasing power at 1992 prices.

A. Accounting Profitability

Accounting profit, also called net income, is the excess of income over expenses in a period. Return on assets (ROA) is a measure of net income that controls for the level of resources required to produce that profit. For example, ADEMI's 1994 net income of 23,371 and average annual assets of 185,251 produced a ROA of 13 percent.

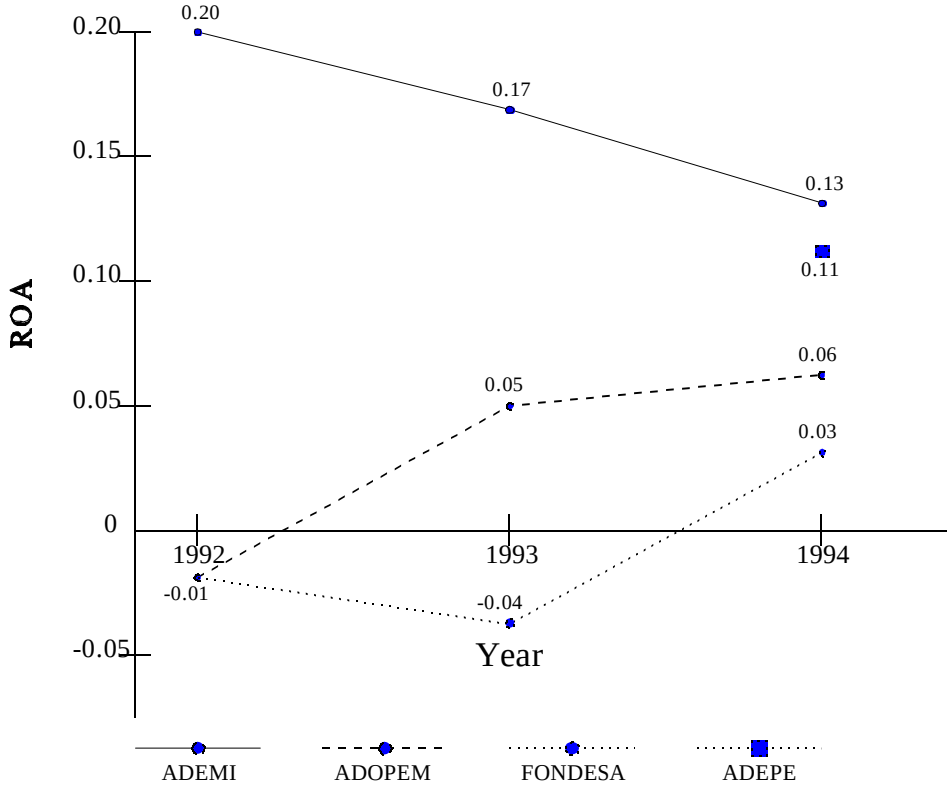

Figure 1. **Return on Assets for four NGOs (1992-1994).**
Note: Figures are shown in Table I.2.
Data for Cooperativa Candelaria were not collected.

Figure 1 graphs ROA for 1992-94 for the four NGOs. It illustrates that ADEMI, ADEPE, ADOPEM, and FONDESA had positive accounting profits and thus positive ROA by 1994 (or even before). Indeed, FONDESA became profitable only that year. Cooperativa Candelaria is excluded from the graph, due to lack of data, but most (if not all) credit cooperatives associated with AIRAC have been profitable.[4] Since 1992, ADEMI's ROA has decreased from 20 to 13

[4] All credit cooperatives associated with AIRAC have good data and accounting records. The authors simply did not have time to visit the cooperative and collect the information. Rather, some

percent; ADOPEM has raised its ROA from -1 to 6 percent. FONDESA had an ROA of -4 percent in 1993, but this organization became profitable in 1994.[5]

Positive accounting profit is a significant achievement for a microfinance institution. Precious few of the thousands of microfinance institutions perform at this level. All of the clients of FondoMicro were generating retained earnings and increasing the amount of resources available for microfinance over time. For the time being, the organizations are growing and are able to meet their financial obligations.

B. Commercial Profitability

There are two reasons why accounting profit does not imply long-run self-sustainability. First, inflation erodes the value of the equity base and, therefore, even an institution that shows an accounting profit will see its equity base shrink, until the organization collapses, if profits are not plowed back at a rate higher than inflation.

Second, subsidies are a form of quasi-equity whose real value must be maintained. All clients of FondoMicro, except for the AIRAC cooperatives, receive large subsidies, both via FondoMicro loans at lower-than-market interest rates as well as from other sources. In the long run, these subsidies will dry up and disappear. Thus, long-run self-sustainability requires that lenders generate profits in order to accumulate sufficient retained earnings to replace subsidies in the future.

A microfinance institution is commercially profitable if it earns a return so high that it could pay the going rate of return for capital from private investors for its equity and subsidies (quasi-equity) and still show an accounting profit. One indicator of commercial profitability is Yaron's (1992b) Subsidy Dependency Index (SDI). The SDI indicates the percentage change, holding everything else constant, in the average rate of return on the loan portfolio that would enable the lender to pay commercial prices for its equity and liabilities and operate without subsidies.

Thus, an SDI equal to one (100 percent) would mean that interest rates must be doubled in order to break even. This may not be enough. Clearly, a lending organization should generate more than zero profits if it wants to grow and protect itself from unexpected negative shocks. In

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data were obtained from FondoMicro, because this is one of two cooperatives which borrowed from FondoMicro.

[5] Return on performing assets measures profitability more accurately than does ROA, but the organizations examined here generally have such low levels of non-performing assets that the directions and the magnitudes of the results are not affected by simply including all assets in the calculation.

turn, a negative SDI is desirable, because it connotes commercial profitability; the lender could earn less on its portfolio, pay commercial rates for its liabilities and capital, and still show an accounting profit. A positive SDI indicates, instead, that commercial profitability would require a higher rate of return on the portfolio than that being earned.

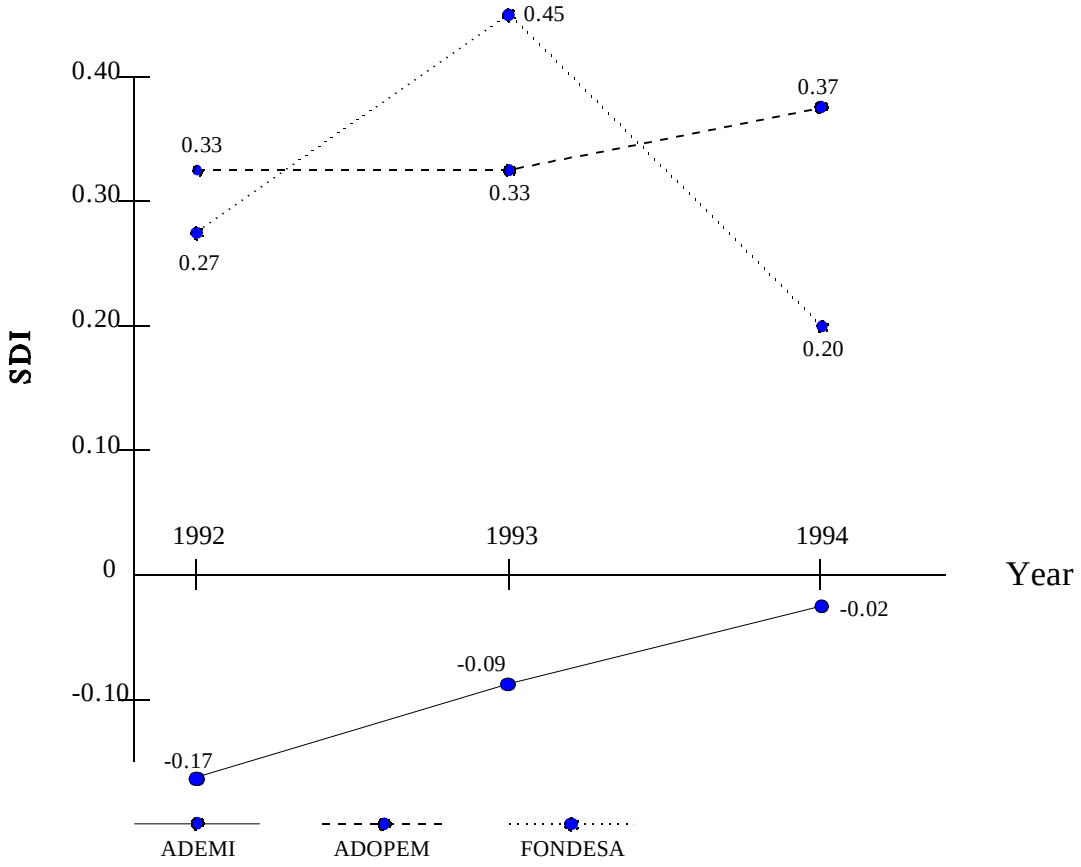

Figure 2. **Subsidy Dependency Index for Three NGOs (1992-1994).**

Figure 2 plots the SDI for three clients of FondoMicro for 1992 to 1994. The details of the calculations appear in Appendix II. ADEMI was more than commercially profitable for 1992-1994, as indicated by its negative SDI. However, ADEMI's SDI became less negative, as its level of commercial profitability declined over time. The change in ADEMI's SDI probably has not resulted from reduced operational efficiency, but rather from its foray into small business lending, with funds heavily subsidized by the European Development Bank. In addition, by doubling its equity in the three-year period, ADEMI doubled its implicit cost of equity. In general the SDI will increase if actual profits do not grow as fast as equity. In any case, its SDI understates ADEMI's impressive strength, reflected by other indicators.

Cooperativa Candelaria was also commercially profitable. This cooperative operates on market terms and essentially uses no donor-generated resources. It is totally free from subsidy dependency. Thus, among the lenders studied, the least dependent on subsidies is Cooperativa Candelaria. This success probably results largely from the cooperative's basic philosophy, shared with all of the affiliates of AIRAC, that mere existence depends on commercial profitability. Growth is expected to come from within, and management is freed to direct the institution to earn profits rather than to cater to the whims of donors. Cooperativa Candelaria did receive about DR$8,000 in subsidies in 1993, and it borrowed about DR$33,000 from FondoMicro.[6] Both figures are by far the smallest for any of the lenders studied here.

The SDI reveals that ADOPEM and FONDESA, although profitable in accounting terms, by 1994, are not profitable in commercial terms. From 1992 to 1994, ADOPEM would have had to charge a rate of interest about 33 percent higher on its loans in order to be commercially profitable (e.g., about four rather than three percent and about 3.3 instead of 2.5 percent per month on its loans). Although FONDESA experienced an important improvement in commercial profitability in 1994, it would still have to increase its interest rates to become independent of subsidies (i.e., charge about 48 rather than 40 percent per year).

Thus, ADOPEM is not yet commercially profitable. In fact, its SDI slightly worsened even as its accounting profits grew. There are several possible explanations of this trend:

1. ADOPEM may be less efficient than is possible;
2. ADOPEM has grown explosively since 1992. That growth, however, may not have generated sufficient economies of scale, or it may have created costs of learning and of adjustment that have yet to be overcome;
3. ADOPEM makes more (a greater number of) and smaller loans than do the other lenders. This raises its costs relative to the others, because a large part of the costs of lending are invariant to the size of the loans;
4. The small size of ADOPEM's loans and the fact that the loans are exclusively for women may enable ADOPEM to woo potential donors more easily than otherwise, reducing external pressures to grow out of subsidies.

5. Most likely, its lack of commercial profitability reflects that ADOPEM charges slightly lower effective interest rates than the other three NGOs, despite its higher average costs of lending. Commercial profitability could therefore most likely be achieved by revising its interest rate policies.

In turn, FONDESA's commercial profitability appears to have improved dramatically in 1994, although the organization is still subsidy dependent. This result can be traced in part to

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[6] All values in this report are measured in thousands of 1992 pesos of constant purchasing power, except when the symbol DR$ is used, which designates nominal values (current pesos). The loan from FondoMicro is equivalent to US$2,568.

improvements in operational efficiency, despite FONDESA's small size and lack of economies of scale. In addition, in 1993 and 1994, FONDESA sanitized its portfolio, writing off about DR$1.2 million in bad loans that should have been written off long before. FONDESA's high SDI reflects in part the short-term ill effects of this long-term medicine.

Although profitable in accounting terms, ADEPE's lending operation is not commercially profitable. This is reflected by a very high SDI, which suggests the need to almost double interest rates. Moreover, ADEPE dabbles in much more than just lending. Among other things, it operates a hog and poultry farm, a watershed reforestation project, a rural solar electrification project, and a processor of animal feed. These activities are not always profitable. The hog and poultry farm, intended to generate surpluses to cross-subsidize other projects, has in fact shown deficits and has been subsidized by ADEPE's lending arm.

Furthermore, a large part of ADEPE's accounting profit derives from grants, and this generates a high subsidy dependence. The long-run viability of ADEPE's lending program depends on the institution's ability to confer discipline on its other children, or to run its lending program as an entirely separate entity, charging interest rates that cover all (explicit and implicit) costs. That is, it must generate sufficient profits to reduce its subsidy dependency.

C. Leverage of Donor Resources

Donors want microfinance institutions to use donor resources to facilitate capturing funds from the public and from commercial sources, thus multiplying the effects of the donors' investment (Rosenberg). The Donor Leverage Ratio (DLR) is the amount of assets (portfolio) controlled by a microfinance institution (less capitalized earnings from previous periods), divided by the amount of subsidized donor liabilities used in that period. The DLR increases as the institution funds its activities more with deposits, retained earnings, and commercial loans. A higher DLR would typically indicate a higher return to a donor's investment, but interpretation of this rough indicator must be cautious. See Appendix I for more details about the derivation of the DLR in this report.

The DLR divides the lenders studied here into three groups. The first group contains Cooperativa Candelaria. For each peso of liabilities subsidized by donors, the cooperative generated over 100 pesos in assets. Note, however, the lack of cause and effect; the subsidized funds were not the enabling factor in attracting non-subsidized funding. Rather, what mattered was the cooperative's intrinsic safety and soundness and its basic philosophy of funding itself through retained earnings, membership fees, and voluntary deposits. The DLR is not very meaningful in this case.

The second group contains ADEMI. For each peso of subsidized liabilities from donors, ADEMI generated about 1.5 to two pesos in assets. These non-subsidized funds have had three sources:

1. A line of credit with Banco Popular.

   This line of credit is used sparingly and represents less than one percent of the organization's liabilities. It functions chiefly as a source of cash, should ADEMI's "depositors" decide to withdraw their funds *en masse*.

2. Loans from micro and small entrepreneurs.

   These are deposits, guised to avoid laws against deposit-taking by non-regulated institutions. They represent about 17 percent of ADEMI's liabilities.

3. Retained earnings.

   Almost half of ADEMI's assets (43 percent in 1994) are funded with retained earnings, and more than 20 million (pesos of 1992) have been added each year to its equity.

As noted in the discussion of the SDI, ADEMI could afford to pay commercial prices for all its funds. It does not, however, take advantage of its creditworthiness to borrow on the market, and it would be foolish from its perspective to do so, when it can continue to build its equity base with the aid of cheap donor funds. Donors cannot expect a lender to leverage donor funds when the donors themselves are willing to provide almost all the funds the lender wants.

FondoMicro plans to reduce lending to ADEMI until this organization represents 50 percent or less of the portfolio of FondoMicro. This implies reducing ADEMI's line of credit from about DR$54.6 million to about DR$34.1 million.[7] Because ADEMI is strong and because FondoMicro funds are already priced at 80 percent of prime, ADEMI should have no trouble replacing these funds from commercial sources, should it choose to do so.

The third group contains ADEPE, ADOPEM, and FONDESA. From 1992 to 1994, this group generated about one peso of assets for each peso of subsidized liabilities from donors. Any leverage of donor funds occurred via the generation of retained earnings, because of the three, only ADOPEM holds (forced) deposits and none borrows commercially.[8]

Subsidies from donors for members of this third group, therefore, have not yet led to increasing use of non-subsidized funds. Whereas Cooperativa Candelaria has been weaned and ADEMI is ready to be weaned, ADEPE, ADOPEM, and FONDESA are not yet profitable

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[7] From US$4.2 million to US$2.7 million

[8] ADOPEM does have a loan at commercial prices that is not backed by donor guarantees, but it is a mortgage on their locale. Forced deposits are not a genuine market tool to mobilize funds. They reduce subsidy dependency only because when they are used as compensating balances on a loan, the effective rate of interest increases.

enough to nourish themselves with more expensive, and more substantive, commercial funds. The question for donor strategy is how to increase the fledglings' strength and whether the required investment is worth it.

III. ANALYSIS OF OUTREACH

A. Characteristics of Loans

The single most important characteristic of a loan contract from the borrower's perspective is the matching of the average monthly payment to the borrower's pattern of cash flow. In turn, the average monthly payment depends on the initial loan amount, the repayment term, the nominal interest rate, and any fees or obligatory deposits. Table 1 presents these elements for the lenders under examination.

The lowest average loan amounts belong to ADOPEM at DR$4,381 and to Cooperativa Candelaria at DR$9,683.[9] These lenders also show the smallest minimum size loans. These figures fall out from their client's repayment capacity. ADOPEM, for example, targets women microentrepreneurs. The cooperatives do not target their loans, however, but it turns out that they often lend to teachers and other workers with regular but relatively low salaries, for consumer expenditures such as housing improvements.

The highest average loan amounts belong to ADEMI (at DR$22,396), FONDESA (at DR$20,881), and ADEPE (at DR$15,394).[10] Again, these figures reflect the specific clientele of each lender. ADEMI lends for microenterprises and not for consumer expenditures. ADEMI is also expanding its lending to small businesses, which partly explains the increase in its average initial loan amount from DR$12,303 in 1992 to DR$18,474 in 1993 and to DR$22,396 in 1994. Loans to small businesses also account for ADEMI's showing the largest maximum loan at DR$950,000 and the largest maximum term at 60 months.

The relatively large average loans of FONDESA and ADEPE reflect their focus on lending to manufacturing enterprises, often for small durable producer goods such as electrical generators. For all five lenders, the most common loan term is a year or less (8 to 12 months).

The nominal monthly interest rate charged over the initial loan amount ranges from about 2.5 percent for ADEMI, ADEPE, and ADOPEM to 3.3 percent for FONDESA, and 4.0 percent

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[9] At the exchange rate of DR$12.85 per US dollar, these amounts are, respectively, about US$341 and US$754.

[10] For micro loans, ADEMI's average loan is DR$17,430 (equivalent to US$1,356).

for Cooperativa Candelaria.[11] Although Cooperativa Candelaria has the highest nominal monthly interest rate, it has the lowest real effective monthly rate, because the other lenders deduct larger fees from the initial loan amount up front and/or require obligatory deposits. It turns out that the real effective monthly interest rate from Cooperativa Candelaria is about 2.9 percent, whereas for ADEMI, ADEPE, and ADOPEM it is about 4.4 percent. The highest real effective monthly rate (6.3 percent) belongs to FONDESA, which charges both the second-highest nominal monthly interest rate and the highest loan fee.

Finally, the average monthly payment follows the pattern of the average initial balance. ADEMI, FONDESA, and ADEPE, the lenders with the greatest focus on small and manufacturing enterprises, have the largest monthly payments. Their clients have enterprises which can use larger loans and which can produce cash flows that can support larger monthly payments. ADOPEM and Cooperativa Candelaria, the lenders whose clients have smaller cash flows, make smaller loans which require smaller monthly payments.

[11] This discussion pertains only to each lender's loan package that is in the microenterprise range. The terms of some loans from some of the lenders depend on the size of the loan and/or the supposed source of the funds lent. The figures used here are representative for the average loan under DR$30,000 for these lenders. For more details, see Appendix II.

Table 1. All lenders: Loan Conditions, 1994.

	ADEMI	ADEPE	ADOPEM	Candelaria[a]	FONDESA[a]
Average loan amount (current pesos)	17,430	15,394	4,381	9,683	20,881
Maximum	950,000	80,000	200,000	200,000	350,000
Minimum	500	N/A	400	500	2,500
Average loan term (months)	10	8	12	N/A	12
Maximum	60	12	24	N/A	24
Minimum	1	6	8	N/A	4
Debt service load					
Average outstanding balance (current pesos)[b]	8,715	7,697	2,191	4,842	10,441
Monthly nominal interest rate (%)[c]	2.5	2.7	2.5	4.0	3.3
Loan fees (%)[c]	6.0	4.0	2.0	1.0	8.0
Obligatory deposit (%)[c]	0.0	0.0	8.0	N/C	0.0
Real effective monthly interest rate (%)[d]	4.4	4.4	4.2	2.9	6.3
Average monthly payment (current pesos)[e]	2,179	2,335	475	1,190	2,436

Notes: [a] Figures for Candelaria and for FONDESA are for 1993.

[b] Expected average outstanding balance computed as one-half of the initial loan size.

[c] Interest, fees and compensating deposits computed as a percentage of initial loan size.

[d] The calculation of the real effective interest rate and average monthly payment for Candelaria assumes a 12-month loan and no compensating balances. The calculations for ADEMI are for its micro loans only. The average ADEMI loan amount including small loans is DR$22,396.

[e] Including amortization and interest payments. Equal installments over the average term to maturity are assumed.

B. Characteristics of Borrowers

Table 2 details the proportions of the total number of loans granted to a given classification of borrower as well as the proportions of the total amount loaned going to that classification. Cells are empty when the relevant data were not available. Cooperativa Candelaria is omitted from the table because the data was not collected by the authors.

ADOPEM lends exclusively to women, ADEPE lends mostly to men, and ADEMI and FONDESA divide their portfolios more evenly between men and women. ADOPEM's vocation is lending to women, whereas the male-dominance reflected in ADEPE's portfolio may in part reflect its focus on agriculture and manufacturing.

The sectoral distribution of ADEMI's loans reflects lack of targeting based on factors not related to repayment capacity. Trade (or commerce) accounts for 44 percent of the portfolio, manufacturing for 34 percent, and services for the remaining 22 percent. For FONDESA, targeting of the manufacturing sector stands out, with 76 percent of the portfolio in that sector, 17 percent in trade, and 11 percent in services.

Table 2. All lenders: Borrower Characteristics (percentages), 1994.

			ADEMI	ADEPE	ADOPEM	FONDESA
GENDER	No. Loans	Women	43	13	100	
		Men	57	87	0	
	Amount Loaned	Women			100	46
		Men			0	54
ACTIVITY	No. Loans	Manufacturing	34			72
		Commerce	44			17
		Trade	22			11
	Amount Loaned	Manufacturing	37			76
		Commerce	45			13
		Service	18			11
LOCATION	No. Loans	Urban	100	69	90	100
		Rural	0	31	10	0
	Amount Loaned	Urban	100			100
		Rural	0			0
METHOD	No. Loans	Individual	100	[a]	[b]	95
		Group	0			5
	Amount Loaned	Individual	100			
		Group	0			
TYPE	No. Loans	Micro	99	100		91
		Small	1	0		9
	Amount Loaned	Micro		100		
		Small		0		

Notes: Blanks designate instances where data are not available.

[a] ADEPE has stopped making loans to groups. Some loans to groups are still outstanding from the past, but data were not available to make the distinction.

[b] ADOPEM lends to groups, but a breakdown was not available. The vast majority of the amounts in its portfolio go to individual borrowers.

The lender's clients are overwhelmingly urban. Only ADEPE, with 30 percent of its loans in agriculture, has a significant rural presence, and even ADEPE is trying to shift its portfolio away from agriculture, because its urban portfolio has a better repayment record and generates more profits.

The loans are, except for small parts of the portfolios of FONDESA and ADOPEM, disbursed to individuals rather than to groups. ADEPE lent to groups in the past, but it does not anymore. As discussed in Schmidt and Zeitinger (1994), this shift is likely to have positive effects both on borrower welfare and on the ability of lenders to learn and to increase efficiency over time.

Finally, most loans are disbursed to micro businesses rather than to small businesses. The fact that a small business usually borrows larger amounts than a micro business means, however, that these relatively few loans account for a relatively large share of the amount of pesos lent.

IV. ANALYSIS OF LENDER DEVELOPMENT

A. Financial Trends

Financial progress over time can be viewed through the growth of various categories of the balance sheet (assets, liabilities, and equity) and measures of profitability (ROA and SDI). This section concentrates on the balance sheet, profitability having been discussed earlier. The appendices contain balance sheets for all the lending organizations studied, from 1992 to 1994, and Table 3 shows the annual real growth rates of assets, liabilities, and equity for the four NGO lenders. Sufficient data for Cooperativa Candelaria were not collected. This prevents a trend analysis, but such analysis is less relevant in this case, because of the cooperative's history of slow, controlled growth, its commercial profitability, and its independence from donor subsidies.

Table 3. All Lenders: Annual Growth Rates of Assets, Liabilities, and Equity (percentages), 1992-1994.

Lender	Annual Growth Rate	1992	1993	1994
ADEMI	Assets	65	54	20
	Liabilities	69	58	17
	Equity	61	49	23
ADEPE[a]	Assets	2	-1	27
	Liabilities	14	03	12
	Equity	-16	-9	62
ADOPEM	Assets	77	104	30
	Liabilities	149	128	25
	Equity	-3	33	54
FONDESA	Assets	41	14	15
	Liabilities	29	19	22
	Equity	101	0	-14

[a] Refers to ADEPE's total operation.

ADEMI seems to be emerging from a period of extremely rapid growth and entering a stage of steady growth. Growth of assets, for example, stood at 65 percent in 1992, 54 percent in 1993, and 20 percent in 1994. Liabilities and equity followed the same pattern. ADEMI seems to have already taken advantage of many of the economies of scale available from growth, and it has also been around long enough to perfect its lending and administrative technologies. Further growth will probably continue, albeit at a pace resembling more that of 1994 than that of 1992, with ADEMI expanding branches outside of Santo Domingo and opening new branches, and with an increasing prominence of relatively large loans to small businesses.

The total activities of ADEPE grew spectacularly in 1994, compared to its past performance, due to a large donation for a reforestation project. Its lending operation has grown slowly, however. Although ADEPE is certainly learning to run a commercially profitable lending operation, its very small absolute size makes it seem unlikely that growth will complement this learning enough to push ADEPE over the hump towards long-term self-sustainability in the near future. Further, the administration must divide its time and energy between lending and others projects, reducing its efficiency. Future growth will likely stem from a movement of the portfolio out of agriculture and into the more profitable urban enterprise sector.

ADOPEM grew even more rapidly than ADEMI during 1992 and 1993, before showing a similar slowdown in 1994. It should be noted, however, that ADOPEM's growth of assets of 77 percent in 1992, 104 percent in 1993, and 30 percent in 1994 occurred over a substantially smaller absolute base than did ADEMI's growth of assets. For example, ADEMI's asset growth rate of 54 percent in 1993 represented an increase in the absolute level of assets of DR$59.4 million, whereas ADOPEM's asset growth rate of 104 percent corresponded to an absolute growth of DR$10.9 million.

ADOPEM's average loan size is about one-fifth that of ADEMI, and it appears that the growth of this organization has resulted more from increasing the number of loans rather than from increasing their size. It seems that ADOPEM has learned the state-of-the-art in lending technology, and that its lack of commercial profitability probably stems mostly from the inherently less-profitable nature of small loans. Although improved profitability may likely result more from increasing the size of loans to repeat borrowers than from increasing the number of loans to new borrowers, it seems inevitable that ADOPEM will have to raise interest rates to cover the costs of serving a more difficult clientele.

FONDESA has seen declining growth. In 1992, assets grew 41 percent, liabilities grew 29 percent, and equity grew 101 percent. In 1993, however, assets grew 14 percent, liabilities grew 19 percent, and equity grew 22 percent. Equity decreased in 1994, by 14 percent. This reflected major write-offs of bad debt. This unfavorable figure is thus partly the short-term effect on long-term structural changes FONDESA is making, as it consciously attempts to learn sound lending practices and as it pays for its unsound policies of the past. It is uncertain, however, whether and/or when the changes will lead to the sustained growth that can take advantage of complementary economies of scale.

B. Operational Efficiency

Efficiency refers to producing a given amount of output as cheaply as it is technically possible. Taking ADEMI as a standard, because of its profitability and maturity in both size and learning, ADEPE and ADOPEM seem to be operating fairly efficiently, given the dimensions of their organizations and the size of their loans. FONDESA lags behind. Data limitations preclude conclusions concerning the efficiency of Cooperativa Candelaria, but all indications suggest highly efficient operations.

Table 4 shows that ADEMI and ADEPE, despite gross differences in their overall size, have remarkably comparable measures of operational efficiency. For example, each one has a ratio of loan officers to total staff of about 0.55. Although ADEMI dwarfs ADEPE, its size has not led to a higher ratio of field workers to office workers. This can probably be attributed to ADEMI's strategy of horizontal expansion, through relatively autonomous branches. Each branch has a relatively fixed overhead of managers, accountants, and secretaries, and the economies of

scale available from growth result mostly from better occupation of the staff of the central office rather than from fuller use of the staff of the branches.

ADEPE has no branches and certainly no economies of scale to speak of, and yet the average number of loans managed by a loan officer is higher for ADEPE (163) than for ADEMI (123). Although ADEMI's loan officers handle a higher average portfolio (DR$1,768,000) than do ADEPE's loan officers (DR$1,569,000), the difference is surprisingly small, given their relative size as organizations and that ADEMI makes larger loans than does ADEPE.

One widely recognized benchmark for operational efficiency is that each loan officer manage a portfolio with at least 100 loans, with a total value of over US$100,000.[12] ADEMI and ADEPE eclipse both of these marks easily.

ADOPEM has a ratio of loan officers to overall staff of 0.36, considerably less than ADEMI and ADEPE. ADOPEM's loan officers, however, disburse 403 loans per year, more than double the figures put up by ADEMI and ADEPE. In addition, ADOPEM's average loan officer manages a portfolio of DR$1,303,000, about three-fourths the size of that managed by ADEMI's average loan officer, even though ADOPEM's average outstanding portfolio is less than one-eighth the size of ADEMI's average outstanding portfolio.

[12] This mark is close to what most of the lenders studied here require of their loan officers, in order to qualify for performance bonuses.

Table 4. All lenders: Operational Efficiency Indicators, 1994.

	ADEMI[a]	ADEPE	ADOPEM	Candelaria[a]	FONDESA[a]
Personnel Resources					
Number of loan officers	99	4	17	N/A	5
Number of loan staff	179	8	47	N/A	14
Output Data					
Number of loans disbursed	13,184	686	6,848	518	261
Number of loans to first-time borrowers	3,954	N/A	N/A	N/A	98
Amount disbursed (thousand current pesos)	295,270	10,560	30,000	5,016	5,450
Average loan disbursed (current pesos)	22,396	15,394	4,381	9,683	20,881
Portfolio Data					
Average outstanding loan portfolio (thousand current pesos)	159,855	5,921	19,207	3,098	4,132
Average number of active loans	12,095	652	N/A	N/A	N/A
Average outstanding active loan (current pesos)	13,217	9,081	N/A	N/A	N/A
Average loan balance (current pesos)[b]	11,198	7,697	2,191	4,842	10,441
Efficiency Indicators					
Output data indicators					
Number of loans disbursed/loan officer/year	133	172	403	N/A	52
Amount disbursed/loan officer/year (thousand pesos)	2,983	2,640	1,765	N/A	1,090
Portfolio Data Indicators					
Active loans/loan officer	123	163	N/A	N/A	N/A
Outstanding portfolio/loan officer (thousand pesos)	1,768	1,569	1,303	N/A	829
Active loans/loan staff	68	82	N/A	N/A	N/A
Outstanding portfolio/loan staff (thousand pesos)	978	785	471	N/A	296

Note: [a] Figures for Candelaria and FONDESA are for 1993. ADEMI figures include both small and micro loans.

[b] One-half of average loan size.

It seems that ADOPEM uses a higher ratio of support staff to loan officers to enable each loan officer to make an extraordinarily large number of small loans. It is possible that larger loans could be a source of improved profitability for ADOPEM, by increasing the amount of income per loan relative to the fixed cost of making the loan. It is also possible, however, that ADOPEM can make many loans per loan officer precisely because smaller loans mean smaller losses when default occurs. Thus, loan officers do not need to invest as much time and effort in screening potential borrowers and monitoring their repayment as they would if the loans were larger. Self-sustainability in making such small loans will require somewhat higher interest rates, in any case.

ADOPEM's average loan officer nearly reached the US$100,000 mark for their average outstanding portfolios. ADOPEM, however, was not commercially profitable, whereas ADEMI was. Despite its operational efficiency, ADEPE is not commercially viable, either, given its extensive use of highly subsidized funds.

FONDESA cannot boast of its operational efficiency. Its ratio of loan officers to overall staff is 0.36, equal to that of ADOPEM, but FONDESA does not balance the figure with impressive figures for numbers of loans nor for size of portfolio, as ADOPEM does. In spite of the fact that FONDESA's average loan size of DR$20,881 is surpassed only by ADEMI, the average outstanding portfolio of its loan officers stands at 829 (thousand 1992 pesos) per year, far less than for the other lenders.

In short, FONDESA appears to be less (technically) efficient in comparison with the other lenders studied here. Despite FONDESA's having more staff to support its loan officers and its having an average loan size almost as large as ADEMI's, it has far fewer loans in the average loan officer's portfolio than do the other lenders, and the size of that average portfolio is smaller. This may provide some useful insight behind FONDESA's limited profitability.

C. Institutional Vision

Donors are less concerned about where a microfinance institution is now than they are about where the institution will be in the future. No NGO that lends will break free of subsidies and transform into a self-sufficient financial intermediary unless:

(a) its personnel want to transform the institution; and
(b) the organizational framework allows for transformation (González-Vega).

The qualitative assessment presented below reinforces results from the quantitative analysis discussed above for some of the lenders, but for others the two analyses provide contrasting implications.

1. ADEMI

ADEMI has embodied the cutting-edge in microenterprise finance for 15 years, and the dean of Dominican microlenders continues to push itself to innovate and to improve. ADEMI pioneered the use of employee incentive schemes, and recently introduced a pension plan for all workers and a loan program for vehicle purchases for managers. It recognized that formal classroom instruction for borrowers had no effects beyond raising ADEMI's costs of operations and it replaced classes with field advice from loan officers on an as-requested basis. ADEMI provides a type of "deposit" service for its larger clients, and pays them a rate higher than the average rate paid on ADEMI's other liabilities. Although ADEMI is not regulated by the Dominican banking authorities, it has prepared itself to handle the contingency of a run by depositors.

As an institution, ADEMI has built increases in productivity into the system. The computerized accounting and information management systems are focused on providing loan officers with the information needed to dun delinquent borrowers quickly. Staff conferences and continuing education are regular features of the institutional landscape. Finally, ADEMI's leadership in the person of Pedro Jiménez is nothing if not dynamic.

While ADEMI does not scorn subsidies from donors, it views donors and their money as means to ADEMI's ends. ADEMI has solicited credit from commercial banks, and the commercial banks stand ready to lend, should ADEMI decide it wants the funds. ADEMI already pays 80 percent of prime for the one-third of its portfolio borrowed from FondoMicro. It is a matter of time and donor discipline before ADEMI crosses the frontier to being commercially profitable while actually paying commercial interest rates for its funds.

Funds and technical assistance from FondoMicro have no role in ADEMI's future. The only remaining role for donors in ADEMI's development is to nudge ADEMI out of the nest and leave it alone. ADEMI can fly already. Although building equity with donor largess and tax-exempt status is not bad for the organization, ADEMI has better things to show the world.

2. ADEPE

ADEPE presents somewhat of a contradiction. Although its lending operation is profitable in accounting terms and it features elements conducive to self-sustainability, such as high operational efficiency, its institutional vision is not clearly focused on that goal.

ADEPE's lending program exhibits elements of the state-of-the-art in that:

(a) It pays its loan officers incentive payments for reducing the level of arrears in their portfolios.
(b) It matches schedules of payments on agricultural loans to the sector's natural seasonality, while still requiring monthly payments from urban enterprise borrowers.

(c) It plans to shift away from agricultural loans and toward more-profitable urban loans.
(d) It has switched from accrual to cash accounting.
(e) It keeps accounts for the lending operation distinct from the accounts of its other projects, but still cross-subsidizes the latter with profits from the former.
(f) It sanitized its portfolio, at the prodding of FondoMicro, ridding it of delinquent loans that had been carried for years.
(g) It recognizes that the value of the institution is its accumulation of information about their clients' repayment probabilities.

Unfortunately, ADEPE's institutional structure betrays some fundamental weaknesses:

(a) It relies on two- to three-hour weekly meetings by volunteers on its board of directors (credit committee) to take care of many administrative matters, including the approval of loan applications.
(b) It dabbles in non-financial projects, many of which are completely funded by donors. These projects detract from the organization's will to demand financial autonomy from any project and siphon profits from the lending program, that could be capitalized to allow for future growth.
(c) It has never requested a loan from a commercial bank. It relies almost entirely on donor-generated, subsidized liabilities.
(d) It claims to have never experienced a default on a group loan, an unlikely event.
(e) It tells the consultant researching this report that what it needs most from USAID is more funds at cheaper interest rates and for longer terms.
(f) It adjusts its interest rate by the calendar rather than by the market. For example, after the monetary adjustments in September of 1994, the market rate jumped six percentage points. ADEPE's rate remained fixed because the semi-annual change had just been made in July.

In the long run, the weaknesses of ADEPE as an organization may endanger its strengths as a lender. Its mothering of a gaggle of projects suggests that ADEPE will try anything a donor will fund. The weak projects lose money and eat up the profits earned by the strong projects. It may never overcome its high subsidy dependency.

The final obstacle is the organization's attitude. ADEPE was founded in 1975 and it appears to have become entrenched in a paternalistic philosophy of development. The executive director believes that clients value ADEPE's training more than ADEPE's loans, and that borrowers need training to keep them from indebting themselves to the point of insolvency. The director envisions the organization as "the corrector of the dysfunctions of the economic system," and claims that the *barrios* would rise up in armed revolt if ADEPE did not have the funds to continue supplying them with loans. It seems unlikely that such views would be compatible with a program that is to be independent of subsidies in the long run.

Technical assistance from FondoMicro seems to have had a healthy effect on ADEPE's lending program, but it seems unlikely that FondoMicro or any donor can force a change in the organization's attitude toward operations in general.

3. ADOPEM

ADOPEM, second only to ADEMI in both numbers of loans and size of portfolio, implements several cutting-edge ideas drawn from the worldwide microfinance community. Still, ADOPEM is not yet commercially profitable, and several organizational problems remain. Overall, ADOPEM probably represents the best horse for a donor gamble in the near future. It is not far away from self-sustainablity.

Like ADEMI, ADOPEM accepts unregulated "deposits" in the form of loans from clients. ADOPEM has also implemented several innovations unique among the lenders in this study. For example, ADOPEM has introduced a scheduled savings scheme whose cash flows mimic those of the *san*, a ubiquitous informal financial instrument (ROSCA) in the Dominican Republic. Another example is its care in crafting incentives for its loan officers. Their portfolios grow by budding, as an experienced loan officer turns over half of his portfolio to a new loan officer. Part of the remuneration of all officers depends on the rate of growth of their portfolios and on the repayment records of their clients.

ADOPEM also has some less-flashy and still important institutional strengths. It responded to a mandate from the Inter-American Development Bank to lend at low interest rates by requiring borrowers to keep compensating balances with the institution. This policy change, along with increased fees, partially made up for the decreased interest income. This mandate was unfortunate, however, as ADOPEM's interest earnings are not being sufficient to make it commercially viable. ADOPEM employs mobile collectors for its loans to groups, because the amounts are so small that requiring the groups' members to repay at ADOPEM's central offices, as is required of clients with individual loans, would create transactions costs that would swamp all other considerations. Finally, ADOPEM has proposed a consortium with other microlenders to share bad-borrower lists (credit-rating tool).

Not all of ADOPEM's operations conform with the latest wisdom in microfinance. Deposits can be withdrawn only with three months' notice. When, in 1991, the Inter-American Development Bank suggested that ADOPEM could lose access to its Small Projects Loan, at below-market interest rates, if it borrowed elsewhere at below-market rates (from FondoMicro), ADOPEM temporarily stopped applying for funds from FondoMicro. All borrowers are charged two percent of their initial loan for training, whether the borrower attends the classes or not. Except for a mortgage on the office, ADOPEM has not borrowed from commercial banks without the support of donor guarantees.

As with ADEPE, ADOPEM's biggest limitation may be its organizational habits. ADOPEM explicitly sees itself as a *development* institution rather than as a *financial* intermediary.

After all, it does not lend to just anyone who is creditworthy and who can repay; only poor women may apply. ADOPEM's attitude toward its clients is decidedly maternalistic:

(a) ADOPEM believes that Dominican women would not have an entrepreneurial spirit if ADOPEM did not instill it in them.
(b) The loan officer is known as a *promotor*. His job is to comb the *barrios* to locate women who, even though they are creditworthy and would have something to gain from borrowing, nevertheless have not contacted ADOPEM on their own.
(c) ADOPEM gives women a can with a hole cut in the lid as a piggy bank in an effort to encourage them to save. The institution believes that the women did not save at all before becoming clients of ADOPEM.
(d) ADOPEM believes that the women need training in order for their businesses to grow.

Even with these few weaknesses, ADOPEM has a healthy long-term vision for itself and its role in microfinance in the Dominican Republic. If FondoMicro and its funds were to disappear, ADOPEM's management says it would probably cut off the institution's training arm, turn to commercial banks for funds, and survive. Donor's forcing such measures, however, would be more appropriate with ADEMI than with ADOPEM. Donors should encourage ADOPEM to develop the capacity to make the larger loans that would seem to be the highest hurdle currently separating ADOPEM and commercial profitability. In fact, one of the items on ADOPEM's wish list from donors is loan officers specially trained for lending to small businesses. ADOPEM should also understand that continued focus on very small loans would require somewhat higher interest rates.

4. Cooperativa Candelaria

Research for this report did not include a site visit to Cooperativa Candelaria, and thus there is limited scope for a qualitative evaluation of its institutional vision and prospects for long-term development. Visits were made to AIRAC, the association of financial cooperatives, created by the earlier Ohio State University Rural Financial Markets Project, of which Cooperativa Candelaria is a member, and some conclusions can be drawn from AIRAC's general track record.

The cooperatives are unique in that they are already commercially viable and independent of donor subsidies. Through AIRAC, they have banded together to provide each other with a quasi-interbank funds market, a monitor of financial health, and, not unimportantly, a brand name. AIRAC members pay for the association's services, do not target loans, and have no significant non-financial projects to distract them.

AIRAC also recognizes its weaknesses and is working to ameliorate them:[13]

(a) As a *de facto* regulator with no power to close dangerously weak cooperatives, AIRAC welcomes the idea of putting the cooperatives under the formal coercive and regulatory power of the government's Superintendency of Banks.
(b) The cooperative governance system of one-member, one-vote makes individual cooperatives vulnerable to domination by borrowers to the detriment of savers, and AIRAC is working on a scheme which would give those members with more invested in a cooperative a comparatively greater voice in its decisions.
(c) As an incentive beyond that of being able to use membership in AIRAC as a signal to depositors of safety and soundness, AIRAC plans to grade cooperatives into at least two levels based on their financial strength.

The cooperatives are thriving without donor funds. Their total assets of DR$243 million exceed those of ADEMI. Virtually all of the liabilities of the cooperatives are acquired on purely market terms. Only two cooperatives, Candelaria and Neyba, have borrowed from FondoMicro, and this borrowing represents only about two percent of the portfolios of these intermediaries. The cooperatives do not want dump trucks of donor subsidies. They know that their absorptive capacity for outside funds is low, and they are wary of the incentive-destroying effects such outside funds have had on financial cooperatives in the past.

5. FONDESA

The future of FONDESA is more murky than that of other organizations examined here, perhaps with the exception of ADEPE. There are several reasons to hope that FONDESA will reverse the poor financial results of the past and improve its relatively inefficient operations. The president of FONDESA's board has a dynamic, long-run vision for the organization and appears to be up-to-date on the latest ideas concerning how to run a self-sufficient microfinance institution. For example, he believes that USAID and FondoMicro deserve places on FONDESA's board and would be welcomed there. The executive director is young and energetic. Since his installation in July, 1993, he has made radical reforms to the program's policies, including incentives for loan officers based on the size and number of loans in their portfolios and on their recuperation rates.

The importance in the institution's portfolio of loans to groups has decreased dramatically. Two FondoMicro technicians spend two days a week working with the organization's personnel, and FONDESA has developed a strategic plan with the help of FondoMicro, the principal thrust of which is financial self-sufficiency through increased returns on the portfolio, cost controls, reformed policies, and effective recuperation procedures. FONDESA has borrowed DR$1 million

[13] In many ways, AIRAC is a credit cooperative of credit cooperatives, and thus it is subject to many of the same critiques that apply to the traditional credit cooperative itself. See Chaves (1994).

on market terms from Banco Popular, and it is applying for another DR$3 million from commercial banks.

Be that as it may, FONDESA has yet to show that it has turned the corner. In fact, its operational efficiency is not encouraging. Of the five lenders studied here, FONDESA charges the highest monthly interest rate for its loans but still shows the lowest accounting profit (return on assets). Its loans have an average size that ranks just below that of ADEMI, and yet the outstanding portfolio of the average loan officer is smaller than those of the other lenders studied here. Thus, FONDESA uses more inputs to produce less outputs. In addition, FONDESA remains wedded to the idea that training of borrowers is essential to success in lending, even though borrowers are not willing to pay for the full costs of that training. This emphasis on training adds to its costs, while the experience of the other lenders shows that its contribution to a successful financial operation is not significant.

Whether FONDESA will turn itself around has yet to be seen. The will seems to be there, but past problems will, at best, lengthen the process of reform and, at worst, derail it. Time will tell if FONDESA can acquire the capacity to reduce costs and improve efficiency. Given this uncertainty and FONDESA's small size, donors may wish to continue to rely on loans and technical assistance from FondoMicro as their chief means of support for FONDESA. The long-term perspective of its present management would make this a reasonable investment.

V. CONCLUSION

The final analysis must acknowledge that ADEMI and the AIRAC cooperatives dwarf ADEPE, ADOPEM, and FONDESA in size, in profitability, and in prospects for continued service. It would not be incorrect to link the relative sizes and futures of the lenders studied here directly to their history of profitability. Nor would it be inappropriate to link their history of profitability to how closely their operating philosophy resembles that of a commercial bank rather than that of a development agency. Future assistance from FondoMicro will promote microfinance in the Dominican Republic inasmuch as it promotes a philosophy focused on commercial profitability.

All five lenders examined here seem to have adopted the financial technologies that have garnered an international consensus as being the best tools currently available for reaching self-sustainability. Not all five, however, have had equal success in implementing those tools within their specific institutional settings. Loans and technical assistance from FondoMicro should continue to be allocated with the idea of providing incentives for those lenders who already possess the proper tools to use them with materials purchased at market prices. In particular, loans from FondoMicro should not crowd out loans from commercial banks, as has happened in the past with ADEMI and FONDESA.

ADEMI remains the showcase. It continues to grow and improve. Its recent expansion into lending to small businesses has decreased the relative importance of micro loans in its portfolio, but not their absolute importance, and the earnings from the new market can only strengthen the institution. ADEMI towers over the other lenders, disbursing almost five times as much as the other four combined. ADEMI is ready to strike out on its own.

ADEPE's lending program is operationally efficient but not commercially profitable. The tininess of the lending program and the lack of focus of the overall institution could very well hamper fulfillment of its potential. Paternalistic attitudes must also be overcome.

ADOPEM efficiently provides very small loans to a very large number of women. Unfortunately, it seems that efficiently providing this product is not enough for commercial profitability. The outlook for ADOPEM is good if it can increase the size of its loans without increasing the risk it must bear or if it can increase interest rates to be able to cover its costs without subsidy dependency. Increasing loan sizes and charging higher rates will also require unlearning some attitudes. Self-sustainability is, however, within reach.

Cooperativa Candelaria and the other members of AIRAC prove microfinance can be self-sustainable. Evolution based on slow, safe growth with retained earnings and funds raised (as deposits) from the public would undoubtedly be a model preferred by donors if such growth were not so slow and if it did not require such careful attention to individual institutions during the initial stages. Credit cooperatives must overcome, nevertheless, shortcomings emerging from its property rights and governance structure (Chaves). Slow growth, high requirements of outside assistance, and diffused property rights and governance structures would be salient features of NGOs as well. No dominant organizational design seems to emerge from best practice elsewhere, but clear lessons of financial practice have been universally learned (Gonzalez-Vega and Graham).

In quantitative terms, FONDESA presents the bleakest outlook. Its profitability and efficiency are the lowest among lenders in the study. These poor figures may, however, have resulted from having to write off huge portions of its portfolio that were lost in the years before the present management was installed. Qualitatively, the institution seems to have personnel with the knowledge and desire to turn the lender around. Whether FONDESA will be successful or not is uncertain but not impossible.

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Appendix I

ADJUSTMENTS TO FINANCIAL STATEMENTS AND EXPLANATIONS

This appendix discusses the calculations used in the analyses performed in this report. It first discusses the calculations of the figures that appear in the main body of the text, before discussing the figures that appear only in Appendix II, which details the financial results of the individual lenders.

A. Adjusting nominal to real figures

Except for figures pertaining to arrears and adequacy of provisioning, all figures in this report have been converted to real 1992 Dominican pesos. This conversion helps keep the effects of inflation from masking the true trends surfacing in the lender's operation over time. For reference, Table I.1 provides the inflation rate, the average exchange rate of the peso against the dollar, the average prime rate (on loans) in the commercial banking sector, and the average passbook savings rate for the period.

The inflation figures are derived from Central Bank reports and may not be an entirely accurate reflection of the price changes observed by participants in financial markets, but they represent the best estimates available. Note that adjusting for inflation means that the sum of accumulated and capitalized earnings presented on a balance sheet for one year does not equal the capitalized earnings carried into the next year. Backing out the inflation adjustment will restore the equality.

Table I.1. Monetary Statistics, Dominican Republic, 1992-1994.

	1992	1993	1994
Inflation rate (annual percentages)	4.2	2.9	14.3
Average exchange rate (pesos per US$)	12.58	12.50	12.85
Prime rate, commercial bank loans (%)	24.6	24.8	24.1
Passbook savings rate (%)	6.0	6.0	6.0

Source: Banco Central de la República Dominicana.

B. Adjusting the financial statements

In accordance with guidelines of the InterAmerican Development Bank (1994) for the analysis of microenterprise finance institutions, the raw data provided in the financial statements from the lenders were adjusted, in an attempt to reflect better their true financial position. These adjustments took four basic forms:

1. Adjustments to provision expenses and write-offs.

The IDB guidelines call for writing-off any loan with payments more than 90 days overdue. In addition, they suggest that the reserve for loan losses should be equal to at least the sum of 10 percent of the value of loans with payments one to 30 days overdue; 25 percent of the value of loans with payments 31 to 60 days overdue; and 50 percent of the value of loans with payments 61 to 90 days overdue. The analysis here adjusts provisions and write-offs accordingly and makes the corresponding adjustments to the portfolio account. In most years, most lenders carried as many loans 90 or more days overdue as they did loans in arrears for less than 90 days. Writing-off loans delinquent for more than 90 days is probably the biggest single source of differences between the adjusted balance sheets presented in this report and the original ones presented by the lending organizations themselves.

2. Adjustments for grants and donations.

Some lenders received grants that were not reported in the financial statements. Usually, these were in-kind donations, such as computer equipment. When possible, the value of these grants was included in the statement of profits and losses as donation income and an offsetting expense was recorded.

3. Adjustments for accrual accounting.

According to IDB guidelines, interest accrued on loan payments that has yet to be received by the lender should not be counted as income. This is a conservative accounting convention, whose intent is to prevent the reporting as income of the interest accrued on bad loans that the lender has no realistic chance of ever collecting. The lending organizations under study invariably presented an asset account labeled as “accrued interest.” Although all the lenders under study had switched from accrual to cash accounting by 1994, it was noted that the balance in the interest accrued account was generally too large to represent only “interest accrued” on deposits owned by the lender in other financial intermediaries. To be conservative (as strict as possible) any amount labeled as accrued interest was merged into the portfolio account. The results of the analysis under this convention did not differ in order and direction from the results obtained when accrued interest was maintained as a separate account.

4. Other adjustments.

Many other adjustments were needed to make the financial statements conform with the IDB guidelines. For example, for some years and for some lenders, arrears were presented as one single unaged figure rather than aged in 30-day brackets. It was again conservatively assumed (on the basis of observed trends) that all these arrears were older than 90 days (strict criterion).

In a few instances, more than one balance sheet existed for a lending organization for a given year. In other cases, the sum of accumulated earnings and capitalized earnings from one year did not equal the capitalized earnings presented for the following year. In still other cases, an account labeled "adjustments" appeared in the capital section of the balance sheet and seemed to be an accounting plug to make assets equal the sum of liabilities and equity. In all of these cases, the analysts exercised judgement and tried to err on the side of underestimating equity, assets, and profits, and overestimating arrears. It also came to pass that financial results were not always available from all lenders in all years. In these cases, financial data on the borrowing institution were obtained from FondoMicro.

These adjustments are reflected in the balance sheets that appear in Appendix II. Notes concerning specific adjustments and assumptions made for specific lenders accompany the balance sheets presented there. The sources of data, the conventions employed, and the intermediate calculations have been documented and are available on request.

The analysis here does not pretend to approach anything resembling an audit. Most lenders were visited for less than half a day. Most discussion focused on the management's vision for the institution and the institution's relationship with USAID and FondoMicro rather than on accounting practices. The figures here should be, therefore, viewed merely as broad indicators of trends, directions, and orders of magnitude. They are sufficient, however, to derive interesting conclusions.

C. Measures of financial results

1. Measures of Accounting Profitability

Return on assets is defined as net income in the period divided by the average level of assets in the period. Average assets are calculated, as are all average figures in this report, as the simple average of assets at the year's start (last year's end) and assets at the year's end. These simple year-end averages were observed not to differ substantially from the averages that were derived when monthly figures were used. The year-end figures were used to increase comparability, because monthly figures were not available for some of the lending organizations.

Return on equity (ROE) is defined as net income in a period divided by the average level of equity in the period. Equity is defined as the difference between assets and liabilities, or as the difference between what an entity owns and what it owes. As a lender is financed more with debt,

such as with borrowings from FondoMicro or with deposits from the general public, ROE will be higher for a given level of net income (due to leverage).

2. Measure of Subsidy Dependency

The Subsidy Dependency Index (SDI) was developed by Yaron (1992). Examples of its use appear in Yaron (1992 and 1994) and in Gurgand *et al*. (1994). The index gives the percentage increase in the average on-lending interest rate were the lender to pay commercial rates for all its funds, operate without subsidies, and break even in accounting terms, holding all other factors unchanged.

For the purposes of this report, the shadow (imputed) price of the lender's equity, donations, and subsidized funds is taken to be the prime (loan) rate in the commercial banking sector. Although Yaron (1992) suggests the use of the rate that would have to be paid to depositors as the implicit price of funds, this is not appropriate here, because the Dominican microlenders would turn to commercial lenders, not depositors, if subsidies were to end. Moreover, they would even have to pay rates higher than prime in order to gain access to bank credit, given the riskiness of their portfolios and weak organizational design. The commercial loan rate in the Dominican banking system for the relevant years appears in Table I.1 above.

The SDI was calculated by dividing the total subsidy implicitly received by the lender by the total interest income actually received by the lender. The implicit subsidy has several components. All outright donations were counted as subsidy. There is an implicit subsidy associated with the lender's use of equity, because the organization does not have to pay a private investor a return. The implicit cost of equity was taken to be the average level of equity in the year multiplied by the prime rate in the commercial banking sector, a figure which probably underestimates the return that private investors would expect from an investment as risky as a microfinance organization. The implicit subsidy associated with soft loans from donors was taken to be the difference between what the lender did pay on its borrowings and what it would have had to pay (the prime rate found in the market). Finally, profits represent earnings that would normally accrue to private owners and thus are the implicit subsidy is reduced by the period's profits.

A negative SDI suggests that a lender could have been commercially profitable; it could have reduced the rate of interest it charges on its loans and still would have been able to pay for its liabilities, even if those liabilities had market prices. A positive SDI suggests that the lender would have to increase the rate charged on its loans if it were to earn a profit and pay market prices for its funds.

3. Measure of donor leverage

The Donor Leverage Ratio (DLR) developed here indicates how many pesos of assets (or, alternatively, loan portfolio) a lender generated for use in microfinance for each peso of liabilities subsidized by donors, assuming that the subsidized pesos are not withdrawn by the donors at the

end of the period. The DLR is a simple ratio formulated here on the basis of concepts developed in Rosenberg (1994). The numerator is the level of assets at the end of the period, less earnings accumulated from previous periods, or alternatively the value of the outstanding portfolio. The denominator consists of the sum total of all subsidized funds used by the lender. Loans from commercial banks that are backed with donor guarantees are considered to be subsidized. A DLR below unity indicates that the lender has not turned the donor investment into increased resources at the service of microfinance. A DLR greater than unity indicates that the lender has generated some level of market-priced funds.

Rosenberg (1994) has proposed a typology of microfinance institutions based, among other things, on the DLR:

Level I: The institution is not profitable even in accounting terms. The DLR is below one.

Level II: The institution shows an accounting profit, but has little or no equity. Its loan portfolio is funded via soft loans from donors. The DLR is about one.

Level III: The institution shows an accounting profit, but a donor has made donations that do not need to be repaid, generating equity for the institution. For each peso of equity, the institution can borrow about another peso on the commercial market. The DLR is about two.

Level IV: The institution shows an accounting profit, has an equity base, and possesses a license as some type of formal financial institution. The license signals financial strength to potential creditors. The public, be they commercial banks or private depositors, are willing to lend the organization up to some multiple of the institution's equity base. The DLR could be as high as 12.

Level V: The institution makes such high profits that private investors start microfinance institutions as a purely profit producing proposition (demonstration effect). The DLR is arbitrarily high.

Cooperativa Candelaria would fall in Level IV, inasmuch as its DLR is over 100 (between 119 and 145). It does not have, however, a license from a formal regulatory authority that would sanction its deposit mobilization activities. In fact, the Dominican Superintendency of Banks does not even regulate financial cooperatives at all. AIRAC has requested such a prudential framework. Thse cooperatives are true financial intermediaries and lend mostly from locally mobilized deposits. Any donor funds they use are insignificant. As was the case with the SDI, interpretation of the DLR in this case must be extremely cautious and must not suggest causality.

ADEMI has a DLR of about 1.5 or even two and it would fall in Level III. Part of its portfolio is funded by retained earnings and by "deposits" from the public, but soft loans from donors continue to make up the largest part of its liabilities. As a result of such strong donor

inclination to fund ADEMI, not much leverage is achieved. Abundant donor support potentially discourages local funds mobilization. Since it would not be advisable for ADEMI to grow faster than it has, however, donor funding has been sufficient for its expansion. The organization's profitability would allow it to attract, however, local funds at market terms if it was forced to.

ADOPEM and ADEPE have DLR indicators around unity and thus would fall in Level II. Both show an accounting profit, but neither raises a significant amount of funds from the market. ADOPEM does show a small amount of (forced) savings from its clients, through compensating balances required when obtaining a loan, which can hardly be considered as market-generated deposits but are not donor-generated either. ADOPEM has some funds from commercial loans, while ADEPE relies almost entirely on donor funds and its accumulated equity. The only "return" on the donors' investment are retained profits channelled into lending rather than ADEPE's other activities.

FONDESA's DLR is also around unity, but would probably qualify for Level I only. Although it had not shown an accounting profit in the earlier two years, it has improved its performance in 1994 and, if it continues along this route, it will reach level II soon.

As may be evident, this typology involving use of the DLR has several weaknesses:[14]

1. The DLR (at a given point in time) does not forecast the amount of pesos that a single donor-subsidized peso now will generate for use in microfinance in the future. Rather, it indicates how many pesos of loan assets the lender has relative to each peso of subsidized funds among its liabilities. That is, it shows a picture at a given point in time, not the potential influence of the donor funds over time. If there are lags, the DLR will increase over time. For example, a new financial institution may not utilize at first all the leverage authorized by prudential regulation. An appropriate indicator will be a ratio of the present value of all corresponding future assets and liabilities, but this is difficult to estimate.

2. Subsidized funds are assumed to "cause" non-subsidized funds, but in fact there may be no such cause and effect. Clearly, the DR$39,000 pesos that donors subsidized for Cooperativa Candelaria are not responsible for its mobilization of DR$4,096,000 in deposits from the public. The problems of interpretation encountered here are typical of all impact studies. Just as funds lent to borrowers are fungible, creating intractable difficulties in measuring the additionality created by a loan, funds lent to organizations are fungible and subsidized funds can not take all the credit for enabling an institution to mobilize funds from commercial sources. Moreover, in some circumstances there may actually be an inverse causality, with donor funds discouraging the mobilization of non-donor funds (substitution effects).

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[14] These weaknesses refer to the indicator developed here to capture the critical concept discussed by Rosenberg, not to the concept itself.

3. Although it describes features of well-know organizational types, many institutions may not fit all the criteria for any single level in the Rosenberg typology. Any classification is thus tentative.

4. The DLR calculation here gives soft loans from FondoMicro, costing 80 percent of prime, the same weight as outright donations (to equity accounts). Similar problems were faced in classifying donor-guaranteed loans from commercial sources.[15] A more complex weighting system than used here may be appropriate in more detailed studies.

The ideal measure of an institution's performance would tell a donor three things:

1. Whether the fledgling institution is making progress, or if it is at least trying in good faith, in heading toward the goal of self-sustainability.

2. If progress is satisfactory, what are the amounts involved and over what timeline would further subsidies strengthen the institution and its learning process rather than encouraging it to get fat and lazy.

3. Whether the fledgling can survive being pushed out of the nest.

Although the DLR as applied here and Rosenberg's (1994) typology do not address all of these needs perfectly, they are still useful tools. Given that the technology exists for operating self-sustainable microfinance organizations, these measures focus attention on the problem of mobilizing sufficient funds to take advantage of such technology (González-Vega and Graham). These funds must ultimately come from the public and be priced by the market. The DLR provides a useful indicator of direction and orders of magnitude in mobilizing market-generated funds.

For reference, the proportion of each lender's portfolio funded by FondoMicro appears in Table I.3.

Table I.3. All Lenders: Proportion of the Portfolio Funded By FondoMicro (percent), 1994.

ORGANIZATION	%
ADEMI	28
ADEPE	25
ADOPEM	50
Candelaria	1

[15] In this case, the donor investment is not the entire amount of the organization's equity (loan), but only the donor's contingent liability (expected loss).

FONDESA	45

Table I.2. All Lenders: Traditional Profitability, Subsidy Dependency Index, and Donor Leverage Ratio, 1992-1994.

Lender	Measure	1992	1993	1994
ADEMI	ROA	0.20	0.17	0.13
	ROE	0.47	0.41	0.30
	SDI	-0.17	-0.09	-0.02
	DLR[a]	1.64	1.66	1.46
	DLR[b]	1.94	1.95	1.83
ADEPE	ROA[c]	-0.09	-0.02	0.45
	ROA[d]	N/C	N/C	0.11
	ROE[c]	-0.24	-0.07	1.30
	ROE[d]	N/C	N/C	0.28
	SDI	N/C	N/C	0.99
	DLR[a]	N/C	N/C	1.17
	DLR[b]	N/C	N/C	1.25
ADOPEM	ROA	-0.01	0.05	0.06
	ROE	-0.02	0.23	0.33
	SDI	0.33	0.33	0.37
	DLR[a]	1.02	1.08	1.16
	DLR[b]	1.12	0.95	1.09
FONDESA	ROA	-0.01	-0.04	0.03
	ROE	-0.03	-0.17	0.19
	SDI	0.27	0.45	0.20
	DLR[a]	0.99	0.96	1.04
	DLR[b]	1.08	1.07	1.01

Note: N/A means not available, N/C means non calculable.

[a] Defined as assets minus capitalized earnings divided by donor-generated liabilities.

[b] Defined as the ratio of the loan portfolio divided by donor-generated liabilities.

[c] Refers to ADEPE's total operation.

[d] Refers to ADEPE's lending activity only.

Source: Computed by the authors on the basis of unpublished, adjusted records.

Table I.2 presents ROA, ROE, SDI, and DLR indicators for 1992 to 1994 for the four NGO lenders. Sufficient data for Cooperativa Candelaria were not obtained from FondoMicro. Details of the intermediate calculations of the SDI and the DLR for the individual lending organizations appear in Appendix II.

D. Measures of financial trend

The growth rates of assets, liabilities, and equity are calculated from the adjusted balance sheets as the ratio of the difference between the amount at the previous year's end over the amount at the year's end.

E. Measures of operational efficiency

All of the measures of operational efficiency are derived straightforwardly, as indicated in the original table in the text. The average active loan outstanding was taken to be the loan amount at the end of the previous year plus that at the end of the year divided by two. The average loan outstanding balance was computed as the average (initial) loan size divided by two.[16]

F. Measures of loan conditions

Two measures appearing in table 1 on loan conditions require explanation. The real effective monthly interest rate is calculated as that interest rate which would make the cash flows associated with the loan and its payments have a present value of exactly zero at the time the loan is disbursed (IDB, 1994).[17] Consider the example of a micro loan from ADEMI. The average initial loan is DR$17,430. After the fee of six percent of the initial amount is deducted from the disbursement, the borrower actually receives DR$16,384. The nominal monthly interest rate is 2.5 percent, charged (uniformly) each month over the initial amount of the loan irrespective of repayment of the principal, thus implying monthly interest payments of DR$436. For a ten-month loan, with equal monthly amortization, the monthly principal repayment would be DR$1,743, and the total monthly payment would be DR$2,179. This figure (appropriately deflated) appears in Table 1 in the text as the average monthly payment by the borrower. The discount rate that makes the present value of 10 payments of DR$2,179 equal to the present value of DR$16,384 now is 5.6 percent per month. The inflation rate in 1994 in the Dominican Republic was 14.3 percent,

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[16] For the portfolio at large this assumes that all loans have the same term to maturity and that the portfolio is in steady state.

[17] This rate is known as the Internal Rate of Return on the sequence of cash flows.

or 1.2 percent per month. Subtracting this from the 5.6 percent gives the 4.4 percent that appears in the table as the real effective monthly interest rate.[18]

G. Figures in Appendix II

1. Balance sheets

Adjustments made to the balance sheets were explained above. Any notes specific to an individual lender are made after the presentation of that lender's balance sheets in Appendix II.

2. Subsidy Dependency Index

This table presents details (items) useful in the calculation of the Subsidy Dependency Index, including subsidy components.

3. Donor Leverage Ratio

This table presents details useful in the calculation of the Donor Leverage Ratio, for two alternative versions: with or without deduction of capitalized earnings from total assets and with respect to performing assets (loans).

4. Profitability analysis

The figures in this table are calculated as proportions of the annual average portfolio, without netting out reserves. This approach is useful for detecting changes in various revenues and costs over time and how these changes affect the institution's return on performing assets.

5. Balance sheet distribution

The various accounts from the balance sheet are presented as proportions of the lender's total assets. This table is useful for determining if the institution has a disproportionately large amount of fixed (and other non-performing) assets.

6. Analysis of income structure

This table presents credit income, other income, and donation (grant) income as proportions of the portfolio (without netting out reserves) and as proportions of total

[18] The real rate was approximated by the difference between the nominal interest rate and the inflation rate, ignoring second-order terms, given the low rates of inflation.

income. The purpose of the table is to detect the relative importance of donations and non-credit income in the financial institution's revenues.

7. Analysis of operational cost structure

This table presents administrative costs, depreciation, other costs, provision expenses, and financial expenses as proportions of the portfolio (without netting out reserves) and as proportions of total expenses. An institution that is progressing should see an increasing proportion of its expenses going to financial costs and a smaller proportion to administration.

8. Analysis of unadjusted arrears

The figures in this table have not been adjusted in accordance with the IDB's guidelines, but rather were lifted straight from the institution's financial statements. Ideally, all loans with payments 90 days or more overdue would be written off.

9. Loan collections and unadjusted provisions for bad loans

The first part of this table presents the amount that came due during the year and the amount that the lender lost during the year. Losses are defined as the write-offs of the year plus any increase from the previous year in the amount of loans with payments overdue by 90 days or more. Recuperation is the percentage collected of the total amount that should have been collected.

The second part of the table presents various indicators of portfolio risk and of the lender's ability to provide for that risk. If the lender is effective at collecting overdue loans and if the lender diligently writes off uncollectible loans, then the ratio for arrears over the outstanding portfolio may be larger than the ratio of reserves over the outstanding portfolio. The ratio of losses over total disbursements and the ratio of provisions over total disbursements should be about equal for a lender which responsibly accounts for the fact of uncollectible loans and which is not growing explosively or otherwise in some state of flux.

Appendix II

NOTES ON INDIVIDUAL LENDERS AND ADJUSTED FINANCIAL STATEMENTS

A. ADEMI

This section presents a brief historical background on ADEMI, highlighting its operational policies and some key dimensions of its loan contracts. Several tables derive relevant financial information, followed by clarification notes.

ADEMI was founded in 1983. By early 1995 it boasted 24 branches in 20 cities. Between 1992 and 1994, ADEMI's loan portfolio grew at an outstanding average rate of 35.9 percent per year in real terms and its assets almost doubled (see balance sheet in Table II.1). Its loan portfolio represented 87 percent of total assets, a comparatively high proportion. Deposits were 23 percent of liabilities in 1993, but this proportion declined in 1994. ADEMI also accumulated equity rapidly, at a real rate of 35.7 percent per year during the period.

All the financial statements used in this analysis had been audited. Some information from statements prepared by FondoMicro was also used. The 1994 portfolio contains DR$3,297,194 which are not counted as arrears but which represent loans whose collection has been classified as being in "administración judicial." This is a classification of ADEMI's and apparently it does not imply that legal proceedings are being undertaken in order to collect the loans. The analysis did not count these loans as being part of arrears, nor did it write them off. The authors were unable to verify the true nature of this account, however.

It was noted in the main text that loans to small businesses carry different terms than do loans to microenterprises. Loans under DR$50,000 have a six percent fee charged up front and carry a monthly nominal interest rate of 2.5 percent. According to data from FondoMicro, the average term for these loans is ten months. Loans between DR$50,000 and DR$200,000 carry a two percent fee and charge interest at the nominal rate of three percent a month, over the decreasing unpaid balance. Loans from DR$200,000 to DR$800,000 carry a two percent fee and charge a yearly rate of 30 percent over the outstanding balance.

Loan officers are university graduates with degrees in economics or business. Loan officers with more than 130 clients in their portfolio, a portfolio of over US$100,000, and arrears under eight percent receive a bonus of 40 to 50 percent of their monthly salary.

Table II.1. ADEMI: Adjusted Financial Statements, 1992-1994.

ASSETS	**1992**	**1993**	**1994**
Cash and deposits	5,839	13,717	14,385
Loan portfolio	94,798	144,711	174,999
(Reserve for bad loans)	(1,062)	(1,455)	(1,814)
Fixed assets (net)	6,739	8,261	11,180
Other assets	3,001	3,477	3,049
Total Assets	111,307.00	168,702	201,800
LIABILITIES			
Loans	44,277	72,004	90,334
Deposits	13,835	22,899	19,645
Other liabilities	4,632	4,217	6,107
Total liabilities	62,744	99,121	116,086
EQUITY			
Capitalized earnings	28,918	45,484	62,343
Accumulated earnings	17,653	24,097	23,371
Total equity	46,571	69,581	85,714
Total liabilities and equity	109,315	168,702	201,800
INCOME			
Credit income	43,834	54,566	63,234
Donation income	553	6,471	0
Other income	1,856	2,400	5,098
Total income	46,243	63,437	68,332
EXPENSES			
Administration	16,165	19,580	20,810
Provisions for bad loans	2,762	3,116	7,393
Depreciation	303	403	448
Other expenses	339	0	169
Total Operating Costs	19,569	23,100	28,820
Financial costs	9,021	16,240	16,141
Total expenses	28,590	39,339	44,961
NET INCOME	17,653	24,097	23,371

Note: All figures are in thousand pesos at constant 1992 prices (real terms).

In 1991, ADEMI had loans outstanding from Banco Popular worth DR$9.5 million. This implies that a decrease in the use of funds from commercial sources coincided with an increase in funds from FondoMicro (fungibility). Loans from all sources increased an outstanding 42.8 percent per year in real terms, from 1992 to 1994, allowing a substantial increase in operations.

The negative implicit interest subsidy on borrowed funds in 1993 (shown in Table II.2) could have resulted from ADEMI's paying interest rates on deposits and whatever few commercial loans it had that were in fact higher than the prime loan rate that is being used here to impute a cost to soft loans. There is a negative implicit subsidy for this year also in an SDI calculation that appears in one of ADEMI's (1994b) publications. It is ADEMI's ability to generate profits well above the shadow rate of return (prime) that leads to a negative SDI.

Table II.2. ADEMI: Subsidy Dependency Index, 1992-1994.

	1992	**1993**	**1994**
Average annual borrowed funds	38,622	58,141	81,169
Actual financial cost	9,021	16,240	16,141
Shadow financial cost	9,513	14,390	19,561
Implicit subsidy on borrowings	492	-1,850	3,420
Average annual equity	37,744	58,076	77,647
Actual profits	17,653	24,097	23,371
Shadow return on equity	9,296	14,374	18,713
Implicit subsidy on equity	-8,357	-9723	-4658
Other subsidies	553	6,471	0
TOTAL SUBSIDY	-7,312	-5,102	-1,237
Interest actually earned on portfolio	43,834	54,566	63,234
SUBSIDY DEPENDENCY INDEX	-0.17	-0.09	-0.02

Note: All amounts in thousands of real 1992 pesos. The SDI would be the same if the subsidy is computed in nominal terms.

Table II.3. ADEMI: Donor Leverage Ratio, 1992-1994.

	1992	1993	1994
(1) Total assets less capitalized earnings	80,397	123,218	139,457
(2) Loan portfolio	94,798	144,711	174,999
(3) Deposits	13,835	22,899	19,645
(4) Commercial borrowing	0	2,000	1,000
(5) Liabilities from the market	13,835	24,899	20,645
(6) Liabilities from donors	48,909	74,221	95,441
LEVERAGE OF DONOR LIABILITIES			
Version 1: (1)/(6)	1.64	1.66	1.46
Version 2: (2)/(6)	1.94	1.95	1.83

Table II.4. ADEMI: Profitability Analysis (percentages), 1992-1994.

	1992	1993	1994
Financial income	61	53	43
Financial costs	12	14	10
Gross Financial Margin	49	39	33
Operating costs	26	19	18
Net Operating Margin	23	20	15
Imputed capital costs	13	10	14
MARGIN	10	10	1
Required yield on portfolio	50	43	42

Note: All figures expressed as percentages of the average annual portfolio.

Table II.5. ADEMI: Balance Sheet Distribution (percentages), 1992-1994.

	1992	1993	1994
ASSETS			
Cash	5	8	7
Loan portfolio (net)	86	85	86
Fixed assets (net)	6	5	6
Other assets	3	2	2
LIABILITIES and EQUITY			
Loans	41	43	45
Deposits	13	14	10
Other liabilities	4	2	3
Capitalized earnings	26	27	31
Accumulated earnings	16	14	12

Note: All proportions computed as percentages with respect to total assets.

Table II.6. ADEMI: Analysis of Income Structure, 1992-1994.

	1992		1993		1994	
	% of Portfolio	% of Total Income	% of Portfolio	% of Total Income	% of Portfolio	% of Total Income
Credit income	57	95	46	86	40	93
Other income	2	4	2	4	3	7
Donations	1	1	5	10	0	0
TOTAL	61	100	53	100	43	100

Table II.7. ADEMI: Analysis of Operational Cost Structure, 1992-1994.

	1992		1993		1994	
EXPENSES	% of Portfolio	% of Total Expenses	% of Portfolio	% of Total Expenses	% of Portfolio	% of Total Expenses
Admininstration	21	57	16	50	13	46
Depreciation	0	1	0	1	0	1
Other costs	0	1	0	0	0	0
Provision	4	10	3	8	5	16
Total Operating Expenses	26	68	19	59	18	64
Financial Expenses	12	32	14	41	10	36
TOTAL EXPENSES	37	100	33	100	28	100
NET INCOME	23		20		15	

Table II.8. ADEMI: Analysis of Unadjusted Arrears, 1992-1994.

	1992		1993		1994	
ARREARS	Amount	% of Portfolio	Amount	% of Portfolio	Amount	% of Portfolio
1-30 days	3,141	4	4,184	3	5,432	3
31-60 days	1,356	2	2,069	1	2,764	1
61-90 days	818	1	1,145	1	1,800	1
More than 90 days	1,967	2	3,023	2	9,264	5
Total	7,282	8	10,421	7	19,260	10

Table II.9. ADEMI: Loan Collection and Unadjusted Provisions For Bad Loans, 1992-1994.

	1992	1993	1994
LOAN COLLECTIONS			
Total due in year	141,279	197,703	240,137
Losses	2,833	2,761	8,072
Recuperation (%)	98	99	97
PORTFOLIO RISK COVERAGE (%)			
Arrears/Portfolio	6	5	5
Reserve/Portfolio	3	3	4
Losses/Total disbursed	2	1	2
Provision/Total disbursed	2	1	2

B. ADEPE

Background notes on operational policies and contract terms and conditions are followed by tables with financial information and clarification comments.

ADEPE was founded in 1975 in Moca. Its loan officers are university graduates in economics.

Two sets of figures are presented here for 1994. One includes ADEPE's lending activities along with its other non-financial operations, whereas the other one represents the financial results of ADEPE's lending activities only. The data did not permit a similar breakdown for 1992 and 1993.

The hog and poultry farm lost DR$850,000 in 1994, a loss equal to about half of the profit generated by the lending operation. In addition, in 1994 ADEPE received substantial donations to undertake a reforestation project. This showed up as donation income for the total operation but not for its lending arm.

The analysis uses figures obtained from FondoMicro. The figures match the audited figures presented by ADEPE in its financial statements for 1992 and 1993. The data on the sectoral distribution of the portfolio are as of September, 1994.

Table II.10. ADEPE: Adjusted Financial Statements, 1992-1994.

	1992	1993	1994[a]	1994[b]
ASSETS				
Cash and deposits	722	320	1,380	399
Loan portfolio	4,755	5,189	5,641	6,276
(Reserve for bad loans)	(187)	(223)	(219)	(70)
Fixed assets (net)	1,138	954	964	978
Other assets	625	767	1,113	700
Total Assets	7053	7,594	8,880	8,283
LIABILITIES				
Loans	3,345	3,153	4,219	3,595
Deposits	0	0		0
Other liabilities	1,400	1,754	1,259	1,427
Total Liabilities	4,745	4,907	5,477	5,022
EQUITY				
Capitalized earnings	2,924	2,265	(163)	2,426
Accumulated earnings	(616)	(164)	3,565	834
Total Equity	2,308	3,201	2,263	3,260
Total Liabilities and Equity	7,053	7,007	8,880	8,283
INCOME				
Credit income	908	1,308	1,714	1,188
Donation income	695	537	4,011	381
Other income	927	1,908	1,884	1,031
Total Income	2,530	3,753	7,610	2,600
EXPENSES				
Administration	1,173	1,264	1,021	647
Provisions	1,070	673	771	142
Depreciation	199	167	201	47
Other expenses	678	1,793	1,907	858
Total Operating Costs	3,120	3,897	3,901	1,693
Financial Costs	26	20	144	72
Total expenses	3,146	3,918	4,045	1,766
NET INCOME	(616)	(64)	3,565	834

Notes: [a] Figures are consolidated and include both lending and non-lending operations.
[b] To the extent possible, figures exclude non-lending operations.

It is important to reiterate that the balance sheet and all other figures, except for the calculation of the SDI and the DLR for 1994 and those tables concerned only with aspects of the lending program, include the financial results for many and diverse projects which ADEPE pursues apart from its lending. Figures for the lending arm are provided for 1994 only in Table II.10. Thus, ADEPE's overall statement of profits and losses shows a net income of 3,565 for 1994, whereas the profit figure appearing in the calculation of the SDI is 834. This is because the SDI was calculated using the costs and revenues for the lending program apart from ADEPE's other activities. This separation of accounts was not possible in 1992 and 1993, explaining why no SDI nor DLR figures are presented for those years, as shown in Tables II.11 and II.12.

In addition, in 1994 it was possible to eliminate some accounts from the balance sheet that obviously had no connection with ADEPE's lending program. For example, the reforestation project with USAID had its own cash account, own administrative expense account, and the like and these were eliminated when possible from both sides of the balance sheet. Such eliminations could not be made due to data limitations for the years prior to 1994.

Some general expense accounts were not separated by project. In these cases, the proportion of overall administrative expenses that were assigned to the administration of the lending program by ADEPE itself was used to assign a proportion of the undifferentiated expense accounts to the lending program.[19] All donations that could not easily be attributed to other projects were assigned to the credit program.

The interest rate charged on loans depends on the ostensible source of those funds from the various donors which subsidize ADEPE. For example, micro loans with FondoMicro funds have a yearly nominal interest rate of 32 percent, or 2.67 percent per month, with a four percent fee paid up front. Loans to agriculture with IDB funds carry an annual interest rate of 44 percent. Micro loans from IDB funds carry a six percent fee and an annual nominal rate of 26 percent.

Arrears in agriculture were 26 percent of the agricultural portfolio outstanding, while loans to microenterprises had an arrears rate of 10 percent. FondoMicro agreed to lend to ADEPE only if it raised its levels of provisions to the larger of three percent of the portfolio or 50 percent of arrears 90 to 180 days old plus 100 percent of arrears older than that. FondoMicro reports indicate that more than half of the total portfolio had one or more payments in arrears. This figure was reduced to 30 percent by April of 1994, through the insistence and assistance of FondoMicro.

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[19] A similar technique was used to assign some portion of the institution's equity to the lending program, in order to calculate the SDI for 1994.

Table II.11. ADEPE: Subsidy Dependency Index, 1992-1994.

	1994
Average annual borrowed funds	3,374[a]
Actual financial cost	72
Shadow financial cost	813
Implicit subsidy on borrowings	741
Average annual equity	3,230[a]
Actual profits	834
Shadow return on equity	778
Implicit subsidy on equity	56
Other subsidies	381
TOTAL SUBSIDY	1,178
Interest actually earned on portfolio	1,188
SUBSIDY DEPENDENCY INDEX	0.99

Note: Figures pertain as much as possible to lending operations only.

[a] Estimated on the assumption that all borrowed funds in 1993 were for lending and that all equity for 1993 resulted from lending profits. This overestimates the implicit subsidy.

Table II.12. ADEPE: Donor Leverage Ratio, 1992-1994.

	1994
(1) Total assets less capitalized earnings	5,856
(2) Loan portfolio	6,276
(3) Deposits	0
(4) Commercial borrowing	0
(5) Liabilities from the market	0
(6) Liabilities from donors	5,022
LEVERAGE OF DONOR LIABILITIES	
Version 1: (1)/(6)	1.17
Version 2: (2)/(6)	1.25

Note: Figures pertain to lending operations only.

Table II.13. ADEPE: Profitability Analysis (percentages), 1992-1994.

	1994
Financial income	45
Financial costs	1
Gross financial margin	44
Operating costs	30
Net operating margin	14
Imputed capital costs	14
MARGIN	0
Required yield on portfolio	45

Note: All figures expressed as percentages of the average annual portfolio and pertain, as much as possible, to lending operations only.

Table II.14. ADEPE: Balance Sheet Distribution (percentages), 1992-1994.

	1992[a]	1993[a]	1994[a]	1994[b]
ASSETS				
Cash	10	4	16	5
Loan portfolio (net)	66	73	61	75
Fixed assets (net)	16	13	11	12
Other assets	9	10	13	8
LIABILITIES and EQUITY				
Loans	46	42	48	43
Deposits	0	0	0	0
Other liabilities	19	23	14	17
Capitalized earnings	37	33	-2	29
Accumulated earnings	-2	3	40	10

Note: [a] All figures expressed as percentages of total assets and pertain to all operations.
[b] All figures expressed as percentages of total assets and pertain to credit operations only.

Table II.15. ADEPE: Analysis of Income Structure (percentages), 1992-1994.

	1992[a]		1993[a]		1994[a]		1994[b]	
	% of Portfolio	% of Total Income	% of Portfolio	% of Total Income	% of Portfolio	% of Total Income	% of Portfolio	% of Total Income
Credit Income	19	36	25	35	32	23	20	46
Other Income	19	37	37	51	35	25	17	40
Donations	15	27	10	14	74	53	6	15
TOTAL	53	100	72	100	141	100	44	100

Note: [a] Figures pertain to consolidated operations.
[b] Figures pertain to lending activities only.

Table II.15. ADEPE: Analysis of Operational Cost Structure (percentages), 1992-1994.

EXPENSES	1992[a]		1993[a]		1994[a]		1994[b]	
	% of Portfolio	% of Total Expenses	% of Portfolio	% of Total Expenses	% of Portfolio	% of Total Expenses	% of Portfolio	% of Total Expenses
Administration	25	37	25	34	19	25	11	37
Depreciation	4	6	3	4	4	5	1	3
Other costs	4	22	36	46	35	47	14	49
Provision	22	34	14	17	14	19	2	8
Operating Expenses	65	99	78	99	72	96	29	96
Financial Expenses	1	1	0	1	3	4	1	4
TOTAL EXPENSES	66	100	79	100	75	100	30	100
NET INCOME	-13		-3		66		14	

Note: Figures pertain to consolidated operations.

Table II.17. ADEPE: Analysis of Unadjusted Arrears, 1992-1994.

ARREARS	1992		1993		1994	
	Amount	% of Portfolio	Amount	% of Portfolio	Amount	% of Portfolio
1-30 days	21	0	34	0	275	4
31-60 days	23	0	18	0	109	2
61-90 days	12	0	8	0	55	1
More than 90 days	194	4	86	2	197	3
Total	250	5	146	3	636	9

Table II.18. ADEPE: Loan Collection and Unadjusted Provisions for Bad Loans, 1992-1994.

	1992	1993	1994
LOAN COLLECTIONS			
Total due in year	N/C	5,201	8,914
Losses	729	310	97
Recuperation (%)	N/C	94	99
PORTFOLIO RISK COVERAGE (%)			
Arrears/Portfolio	1	1	6
Reserve/Portfolio	0	0	0
Losses/Total disbursed	N/C	5	1
Provision/Total disbursed	N/C	0	0

C. ADOPEM

This section presents background information on operations and contract terms. Following the balance sheet are general notes concerning the analysis.

ADOPEM was founded in 1982. It is a member of the Women's World Banking network, and it lends only to women. There is one central office in Santo Domingo and a branch in Santiago. The founder's daughter, who has studied finance in Japan and given instruction to an institution similar to ADOPEM in South Africa, is now the executive director.

ADOPEM's loan portfolio grew at the extraordinary rate of 62 percent per year in real terms, between 1992 and 1994. This last year it represented 80 percent of total assets. The organization's equity grew 43 percent per year in real terms.

All of the loan officers are university graduates with degrees related to business, and most are culled from a large internship program. The loan officers must grow their portfolios by 10 percent every month, and after a portfolio reaches a certain size, it must be divided with a new loan officer in amoeba fashion.

Table II.19. ADOPEM: Adjusted Financial Statements, 1992-1994.

	1992	1993	1994
ASSETS			
Cash and deposits	595	1,902	1,536
Loan portfolio	8,418	16,270	22,145
(Reserve for bad loans)	(187)	(223)	(219)
Fixed assets (net)	502	2,111	2,419
Other assets	1,079	1,158	1,649
Total assets	12,399.00	21,219	27,530
LIABILITIES			
Loans	4,732	12,699	16,163
Deposits	200	601	696
Other liabilities	2,810	4,364	5,205
Total liabilities	7,742	17,664	22,064
EQUITY			
Capitalized earnings	2,723	2,841	3,967
Accumulated earnings	(58)	714	1,499
Total equity	2,665	3,555	5,466
Total liabilities and equity	10,407	21,219	27,530
INCOME			
Credit income	2,928	4,893	6,838
Donation income	55	967	1,110
Other income	72	455	141
Total income	3,055	6,315	8,089
EXPENSES			
Administration	1,904	2,965	3,792
Provisions	447	390	680
Depreciation	95	107	161
Other Expenses	55	586	301
Total operating costs	2,501	4,048	4,934
Financial costs	612	1,553	1,657
Total expenses	3,113	5,600	6,590
NET INCOME	(58)	714	1,499

The figures used in this report are from unaudited statements provided by ADOPEM for 1994 and from audited statements provided by FondoMicro for 1992 and 1993. Adjustments for loan-loss reserves and provisions for 1994 that were suggested by FondoMicro were also used to help adjust the figures for that year. The accounts kept by FondoMicro for 1992 and 1993 contain adjustments to the capital account that probably require to make the balance sheets from consecutive years tie together. Arrears for 1992 were not aged. Writing them off in that year would have penalized 1992 disproportionately and thus only half of that amount was written off in the adjusted figures, with any balance that made it to 1993 being written off in that year.

ADOPEM has and has had several loans from commercial banks, but they all have been backed with guarantees from donors. The one commercial loan that is unbacked by a donor guarantee is a mortgage loan with their locale as collateral.

ADOPEM offers several types of loans. Solidarity-group loans range from DR$400 to DR$6,000, carry terms of four to eight months, and charge an interest rate of three percent per month over the initial loan amount. There are no fees with the loans through groups. Micro loans range from DR$1,000 to DR$200,000. The terms vary from six to 24 months, the monthly interest charge is 2.5 percent. Borrowers must put up a two percent fee up front, along with a two percent fee for the provision of training, and six percent for membership fees and compensating balances. These balances earn six percent annual interest and may be withdrawn by the borrower when the loan has been paid in full, but even then there is a three-month mandatory delay between the request for withdrawal and the actual disbursement. Loans from IDB funds are supposed to go only to women whose income does not exceed DR$12,558 per household member.

ADOPEM has developed a savings instrument called the SAM, a play on the Dominican word *san*, the name of a type of informal rotating savings instrument (ROSCA). At ADOPEM, women commit to depositing a set amount of money at set intervals of time. After a certain number of deposits, the women receive their deposits back, without interest. There is a substantial penalty for early withdrawal or for missing a scheduled deposit. While an interesting attempt to build on a thriving informal financial phenomenon, clients have not flocked to use it. This is not surprising (although ADOPEM's staff were surprised), given the implicit negative return on the deposit. In the *san*, on the other hand, those with early drawings get the hole pot (loan) at no explicit interest.

Table II.20. ADOPEM: Subsidy Dependency Index, 1992-1994.

	1992	1993	1994
Average annual borrowed funds	3,271	8,716	14,431
Actual financial cost	612	1,553	1,657
Shadow financial cost	801	2,157	3,478
Implicit subsidy on borrowings	189	604	1,821
Average annual equity	2,713	3,110	4,510
Actual profits	(58)	714	1,499
Shadow return on equity	668	770	1,087
Implicit subsidy on equity	726	56	-412
Other subsidies	55	967	1,110
TOTAL SUBSIDY	970	1,627	2,519
Interest actually earned on portfolio	2,928	4,893	6,838
SUBSIDY DEPENDENCY INDEX	0.33	0.33	0.37

Table II.21. ADOPEM: Donor Leverage Ratio, 1992-1994.

	1992	1993	1994
(1) Total assets less capitalized earnings	7,684	18,378	23,563
(2) Loan portfolio	8,418	16,270	22,145
(3) Deposits	200	601	696
(4) Commercial Borrowing	0	0	995
(5) Liabilities from the market	200	601	1,691
(6) Liabilities from donors	7,542	17,063	20,373
LEVERAGE OF DONOR FUNDS:			
Version I: (1)/(6)	1.02	1.08	1.16
Version II: (2)/(6)	1.12	0.95	1.09

Table II.22. ADOPEM: Profitability Analysis (percentages), 1992-1994.

	1992	1993	1994
Financial income	45	51	42
Financial costs	9	13	9
Gross financial margin	36	39	33
Operating costs	37	33	26
Net operating margin	-1	6	8
Imputed capital costs	13	11	15
MARGIN	-14	-5	-7
Required yield on portfolio	59	57	49

Note: All figures expressed as percentages of the average annual portfolio.

Table II.23. ADOPEM: Balance Sheet Distribution (percentages), 1992-1994.

	1992	1993	1994
ASSETS			
Cash	6	9	6
Loan portfolio (net)	79	76	80
Fixed assets (net)	5	10	9
Other assets	10	5	6
LIABILITIES and EQUITY			
Loans	45	60	59
Deposits	2	3	3
Other liabilities	27	21	19
Capitalized earnings	26	13	14
Accumulated earnings	-1	3	5

Note: All figures expressed as percentages of total assets.

Table II.24. ADOPEM: Analysis of Income Structure (percentages), 1992-1994.

	1992		1993		1994	
	% of Portfolio	% of Total Income	% of Portfolio	% of Total Income	% of Portfolio	% of Total Income
Credit income	43	96	40	77	36	85
Other income	1	2	4	7	1	2
Donations	1	2	8	15	6	14
TOTAL	45	100	51	100	42	100

Table II.25. ADOPEM: Analysis of Operational Cost Structure, 1992-1994.

	1992		1993		1994	
EXPENSES	% of Portfolio	% of Total Expenses	% of Portfolio	% of Total Expenses	% of Portfolio	% of Total Expenses
Administration	28	61	24	53	20	58
Depreciation	1	3	1	2	1	2
Other costs	1	2	5	10	2	5
Provision	7	14	3	7	4	10
Operating Expenses	37	80	33	72	26	75
Financial Expenses	9	20	13	28	9	25
TOTAL EXPENSES	46	100	45	100	34	100
NET INCOME	-1		6		8	

Table II.26. ADOPEM: Analysis of Unadjusted Arrears, 1992-1994.

ARREARS	1992 Amount	1992 % of Portfolio	1993 Amount	1993 % of Portfolio	1994 Amount	1994 % of Portfolio
1-30 days	0	0	306	2	419	2
31-60 days	0	0	192	1	330	1
61-90 days	300	4	133	1	266	1
More than 90 days	311	5	544	4	1,202	5
Total	611	9	1,175	9	2,217	10

Table II.27. ADOPEM: Loan Collection and Unadjusted Provisions For Bad Loans, 1992-1994.

	1992	1993	1994
LOAN COLLECTIONS			
Total due in year	7,605	13,054	21,342
Losses	345	359	772
Recuperation (%)	95	97	96
PORTFOLIO RISK COVERAGE (%)			
Arrears/Portfolio	4	5	5
Reserve/Portfolio	3	2	1
Losses/Total disbursed	3	2	3
Provision/Total disbursed	1	1	1

D. Cooperativa Candelaria

The cooperative was founded in 1967. The store (*colmado*) originally associated with the cooperative was sold in 1993, and only financial business remains.

FondoMicro provided data for the cooperative for one year, 1993. The net income reported here reflects an adjustment for a large write-off of loans in arrears for more than 90 days. Because it was obtained from FondoMicro and not from the cooperative itself, there was less data for Cooperativa Candelaria than for the other lenders studied here. It is also the only institution studied that was not personally visited by the analysts.

The membership contributions are technically refundable, but only after 10 years, and so the analysis here considers them as paid-in capital. Passbook accounts pay 12 percent on an annual basis, twice as much as the large commercial banks pay for similar deposits. Time deposits earn 16 percent annually. Loans carry an interest charge of four percent per month over the initial balance, with a one percent up-front fee.

A subsidy dependency index was not computed for Coperativa Candelaria. Since it essentially does not borrow or receive donor funds, there is no implicit subsidy on borrowings. Given its cooperative nature, equity contributions earn implicit returns (not measured here) through the interest rate structure on deposits and loans. Donation income is insignificant. The cooperative is essentially free from subsidy dependency.

Similarly, the amount of donor-generated liabilities is minuscule compared to assets and the loan portfolio, with the associated high DLR shown in Table II.29. This ratio has to be interpreted with caution.

Table II.28. Candelaria: Adjusted Financial Statements, 1993.

	1993
ASSETS	
Cash and Deposits	1,681
Loan portfolio	3,924
(Reserve for bad loans)	(92)
Fixed assets (net)	99
Other assets	86
Total assets	5,699
LIABILITIES	
Loans	33
Deposits	4,019
Other liabilities	646
Total liabilities	4,698
EQUITY	
Capitalized earnings	925
Accumulated earnings	77
Total equity	1,002
Total liabilities and equity	5,699
INCOME	
Credit income	1,328
Donation income	6
Other income	152
Total income	1,486
EXPENSES	
Administration	598
Provisions	214
Depreciation	0
Other Expenses	0
Total Operating Costs	812
Financial Costs	598
Total expenses	1,409
NET INCOME	77

Table II.29. Candelaria: Donor Leverage Index, 1993.

	1993
(1) Total assets less capitalized earnings	4,774
(2) Loan portfolio	3,924
(3) Deposits	4,665
(4) Commercial borrowing	0
(5) Liabilities from the market	4,665
(6) Liabilities from donors	33
LEVERAGE OF DONOR LIABILITIES	
Version 1: (1)/(6)	122.41
Version 2: (2)/(6)	118.91

Table II.30. Candelaria: Profitability Analysis (percentages), 1993.

	1993
Financial income	38
Financial costs	15
Gross financial margin	23
Operating costs	21
Net operating margin	2
Imputed capital costs	-12
MARGIN	14
Required yield on portfolio	24

Note: All figures expressed as percentages of the average annual portfolio.

Table II.31. Candelaria: Balance Sheet Distribution (percentages), 1993.

	1993
ASSETS	
Cash	29
Loan portfolio (net)	67
Fixed assets (net)	2
Other assets	2
LIABILITIES and EQUITY	
Loans	1
Deposits	71
Other liabilities	11
Capitalized earnings	16
Accumulated earnings	1

Note: All figures expressed as percentages of total assets.

Table II.32. Candelaria: Analysis of Income Structure, 1993.

	1993	
	% of Portfolio	% of Total Income
Credit income	43	89
Other income	5	10
Donations	0	0
TOTAL	48	100

Table II.33. Candelaria: Analysis of Operational Cost Structure, 1993.

	1993	
EXPENSES	% of Portfolio	% of Total Expenses
Administration	19	42
Depreciation	0	0
Other costs	0	0
Provision	7	15
Total Operating Expenses	26	58
Financial Expenses	19	42
TOTAL EXPENSES	45	100
NET INCOME	2	

Table II.34. Candelaria: Analysis of Unadjusted Arrears, 1993.

	1993	
ARREARS	Amount	% of Portfolio
1-30 days	195	5
31-60 days	151	4
61-90 days	74	2
More than 90 days	105	3
Total	525	13

E. FONDESA

The analysis of this section uses data obtained from FondoMicro. The amounts match the audited figures presented by FONDESA in its financial statements for 1992 and 1993. The 1994 figures are not audited. In 1993, FONDESA inherited the assets, liabilities, equity, and employees of PROAPE, a sister institution which provided training services. PROAPE had positive equity at the time, and many of its debts were to the mother institution that it shared with FONDESA and which were subsequently forgiven. Thus FONDESA gained from the absorption.

FONDESA's portfolio grew 17 percent per year in real terms for 1992-1994, less rapidly than for the other NGOs. Earnings on its loan portfolio grew only 11 percent per year. This was compensated by a sharp reduction in operating expenses, to finally generate profits in 1994. FONDESA has several non-financial activities, including training courses for clients and organizing a marketing fair for clients every year. It also has helped a group of ambulatory vendors organize a credit union.

The data provided by FondoMicro contain an "adjustment" capital account for 1992 and 1994. The analysis attributes this adjustment to donations, given the unlikelihood that the institution received no donations in these years, as reported in the data. The original arrears data appeared all lumped into the one-to-30-days category, an unlikely situation, that the authors were not able to verify given the institution's past collection history. The adjustment made provisions under the assumption that FONDESA's records are accurate.

At the end of 1993, half of a delinquent portfolio of DR$1.2 million was written off. The other half was written off at the end of 1994. Thus, FONDESA has realized a staggering sanitization of its portfolio in the past two years. This was part of a strategic plan formulated with the help of FondoMicro and whose implementation is required for continued and/or increased access to its loans. These write-offs pay for the mistakes of the past today. For example, net income in 1994 was reduced by the write-off of DR$0.6 million, even though only about DR$0.2 million of new arrears occurred in 1994. As a consequence, FONDESA's equity in 1994 was lower than in 1992.

Loans under DR$50,000 required a fee of eight percent charged in advance and carried an annual interest rate of 40 percent over the initial (unmodified) balance. Loans over DR$50,000 charged an annual interest rate of 38 percent over the initial balance, with a fee of six percent up front. Although FONDESA had a portfolio of loans to groups of DR$152,800 outstanding in 1992, this had decreased to DR$18,863 in 1993.

It is important to note that although the portfolio and borrowing from FondoMicro grew in 1994, FONDESA reduced its borrowings from commercial banks from DR$1.5 million to DR$0.4 million. It seems that subsidized funds from FondoMicro substituted for funds from the commercial banks previously obtained at market prices (fungibility).

Table II.35. FONDESA: Adjusted Financial Statements, 1992-1994.

	1992	1993	1994
ASSETS			
Cash and deposits	561	351	481
Loan portfolio	3,934	4,611	5,341
(Reserve for bad loans)	(125)	(191)	(202)
Fixed assets (net)	201	236	204
Other assets	124	367	349
Total Assets	4,696	5,374	6,173
LIABILITIES			
Loans	3,408	3,575	4,646
Deposits	0	0	0
Other liabilities	227	740	620
Total liabilities	3,635	4,315	5,266
EQUITY			
Capitalized earnings	1,087	1,239	720
Accumulated earnings	(27)	(180)	187
Total equity	1,060	1,059	907
Total Liabilities and Equity	4,696	5,374	6,173
INCOME			
Credit income	2,001	2,251	2,223
Donation income	0	383	8
Other income	0	465	221
Total Income	2,001	3,099	2,452
EXPENSES			
Administration	1,110	2,089	1,249
Provisions for bad loans	451	438	383
Depreciation	81	72	38
Other expenses	0	0	0
Total Operating Costs	1,642	2,599	1,671
Financial costs	386	680	594
Total Expenses	2,028	3,279	2,265
NET INCOME	(27)	(180)	187

Table II.36. FONDESA: Subsidy Dependency Index, 1992-1994.

	1992	1993	1994
Average annual borrowed funds	2,834	3,491	4,110
Actual financial cost	386	680	594
Shadow financial cost	698	864	991
Implicit subsidy on borrowings	312	184	396
Average annual equity	794	1060	983
Actual profits	-27	-180	187
Shadow return on equity	196	262	237
Implicit subsidy on equity	223	442	50
Other subsidies	0	383	8
TOTAL SUBSIDY	534	1,009	455
Interest earned on portfolio	2,001	2,251	2,223
SUBSIDY DEPENDENCY INDEX	0.27	0.45	0.20

Table II.37. FONDESA: Donor Leverage Ratio, 1992-1994.

	1992	1993	1994
(1) Total assets less capitalized earnings	3,608	4,135	5,453
(2) Loan portfolio	3,934	4,611	5,341
(3) Deposits	0	0	0
(4) Commercial borrowing	0	0	0
(5) Liabilities from the market	0	0	0
(6) Liabilities from donors	3,635	4,315	5,266
LEVERAGE OF DONOR LIABILITIES			
Version 1: (1)/(6)	0.99	0.96	1.04
Version 2: (2)/(6)	1.08	1.07	1.01

Table II.38. FONDESA: Profitability Analysis (percentages), 1992-1994.

	1992	1993	1994
Financial income	62	73	49
Financial costs	12	16	12
Gross financial margin	50	57	37
Operating costs	51	61	34
Net operating margin	-1	-4	4
Imputed capital costs	16	10	13
MARGIN	-17	-15	9
Required yield on portfolio	79	87	58

Note: All figures expressed as percentages of the average annual portfolio.

Table II.39. FONDESA: Balance Sheet Distribution (percentages), 1992-1994.

	1992	1993	1994
ASSETS			
Cash	12	7	8
Loan portfolio (net)	82	82	83
Fixed assets (net)	4	4	3
Other assets	3	7	6
LIABILITIES and EQUITY			
Loans	73	67	75
Deposits	0	0	0
Other liabilities	5	14	10
Capitalized earnings	25	23	12
Accumulated earnings	-1	-3	3

Note: All figures expressed as percentages of total assets.

Table II.40. FONDESA: Analysis of Income Structure, 1992-1994 (percentages).

	1992		1993		1994	
	% of Portfolio	% of Total Income	% of Portfolio	% of Total Income	% of Portfolio	% of Total Income
Credit income	62	100	53	73	45	91
Other income	0	0	11	15	4	9
Donations	0	0	9	12	0	0
TOTAL	62	100	73	100	49	100

Table II.41. FONDESA: Analysis of Operational Cost Structure, 1992-1994.

	1992		1993		1994	
EXPENSES	% of Portfolio	% of Total Expenses	% of Portfolio	% of Total Expenses	% of Portfolio	% of Total Expenses
Administration	35	55	49	64	25	55
Depreciation	3	4	2	2	1	2
Other costs	0	0	0	0	0	0
Provision	14	22	10	13	8	17
Total operating expenses	51	81	61	79	34	74
Financial expenses	12	19	16	21	12	26
TOTAL EXPENSES	63	100	77	100	46	100
NET INCOME	-1		-4		4	

Table II.42. FONDESA: Analysis of Unadjusted Arrears, 1992-1994.

ARREARS	1992		1993		1994	
	Amount	% of Portfolio	Amount	% of Portfolio	Amount	% of Portfolio
1-30 days	0	0	0	0	0	0
31-60 days	0	0	0	0	0	0
61-90 days	0	0	0	0	0	0
More than 90 days	536	13	1,200	24	674	10
Total	536	13	1,200	24	674	10

Table II.43. FONDESA: Loan Collection and Unadjusted Provisions For Bad Loans, 1992-1994.

	1992	1993	1994
LOAN COLLECTIONS			
Total due in year	2511	4874	N/C
Losses	281	836	673
Recuperation (%)	89	83	N/C
PORTFOLIO RISK COVERAGE (%)			
Arrears/Portfolio	0	0	0
Reserve/Portfolio	3	7	6
Losses/Total Disbursed	7	15	N/C
Provision/Total Disbursed	0	7	N/C