Can Financial Market Policies Reduce Income Inequality?

Glenn D. Westley

Inter-American Development Bank

Washington, D. C.

Sustainable Development Department
Technical Papers Series

Cataloging-in-Publication provided by the
Inter-American Development Bank
Felipe Herrera Library

Westley, Glenn D.

Can financial market policies reduce income inequality / Glenn D. Westley.
p.cm. (Sustainable Development Department Best practices series ; MSM-112)

1. Capital market--Latin America. 2. Income distribution--Latin America. 3. Equality--Latin America. I. Inter-American Development Bank. Sustainable Development Dept. Micro, Small and Medium Enterprise Division. II. Title. III. Series.

332.6731 W282—dc21

Glenn Westley is senior advisor for microenterprise in the Micro, Small and Medium Enterprise Division, Sustainable Development Department.

This paper updates an earlier version of this work by the same author, which appeared as Chapter 7 of the IDB's 1998-1999 Report on Economic and Social Progress in Latin America entitled, *Facing up to Inequality in Latin America.*

October 2001

This publication (Reference No. MSM-112) can be obtained through:

Small, Medium and Microenterprise Division
Mail Stop B-0800
Inter-American Development Bank
1300 New York Avenue, N.W.
Washington, D.C. 20577

e-mail: sds/mic@iadb.org
Fax: 202-623-2307
Web site: http://www.iadb.org/sds/mic

FOREWORD

How can we further develop a country's microfinance industry and what impact might this have on the country's income distribution? These are the twin questions tackled in this paper.

In attempting to further develop a country's microfinance industry, most donor and government efforts so far have focused on building retail capacity, that is, on starting up and strengthening microfinance institutions (MFIs) and credit unions. MFIs and credit unions are, after all, an important means by which microenterprises obtain credit, savings, and other financial services.

While it is important to continue to build retail capacity, this paper suggests that countries also have available an entire array of complementary policy measures that could greatly facilitate the delivery of financial services to microenterprises. MFIs, credit unions, and their clients will not have to swim so much against the tide if countries provide the public goods discussed here, including improved legal and regulatory frameworks in several areas and modernized legal registries, credit bureaus, and other institutions that support expanded intermediation activities.

These policy measures constitute a second generation of financial reforms, which aim to expand financial services to the bottom 40 percent of the economy that is now poorly nourished by such services. These measures are a follow-on to the first generation of financial reforms, which eliminated interest rate controls, freed bank entry, dismantled targeted credit programs, privatized and closed state banks, and reduced reserve requirements toward prudential levels. These first generation reforms have both made microlending possible (with its necessarily high interest rates), and, by fostering greater efficiency and competition in the banking sector, have helped stimulate the present-day drive by financial institutions to serve the microenterprise niche. The second generation financial reforms are meant to capitalize on this favorable macrofinancial environment and help bring to completion the task of making financial services available to most or all creditworthy enterprises in Latin America and the Caribbean.

This paper also marshals substantial arguments and data to support the contention that improving the access of micro and small enterprises (collectively called "smaller enterprises") to financial services could have an important salutary impact on a country's income distribution. To demonstrate this, the paper shows first that many poor own or are employed by smaller enterprises, second that smaller enterprises are indeed poorly served with formal and semiformal credit, and third that providing financial services to smaller enterprises increases their income and employment and reduces income inequality to an important degree.

Using household survey data from 15 Latin American countries, the paper finds that while the microenterprise sector accounts for 56 percent of all earners in the region, it includes 70 percent of the region's poor earners (with 35 percent of the poor earners being single-person-firm owners and the other 35 percent microenterprise employees). Given this huge presence of the poor in microenterprises, we must conclude that if we aim to reduce inequality in Latin America by increasing the incomes of poor earners, much of our efforts will need to focus on microenterprise owners and employees.

Alvaro Ramírez
Chief, Micro, Small and Medium Enterprise Division
Inter-American Development Bank

CONTENTS

Introduction 1

I. Reducing Income Inequality through Improved MSE Finance 3

Many Poor Own or Are Employed by Smaller Enterprises 3
Smaller Enterprises Are Poorly Served with Formal and Semiformal Credit 5
Providing Credit and Other Financial Services to Smaller Enterprises Can Reduce Income Inequality 8
Empirical Evidence on the Finance/Inequality Link 12

II. Financial Market Policies to Reduce Inequality 16

Improving Prudential Regulation of Credit Unions and MFIs 16
Improving Prudential Supervision of Credit Unions and MFIs 24
Improving the Legal Framework for Secured Transactions and Modernizing Supporting Institutions 31
Reducing Informality 33
Credit Bureaus 35
Leasing and Factoring 36
Strengthening Credit Unions and MFIs 37

References 44

Technical Annex 49

INTRODUCTION

Highly imperfect financial markets appear to be an important source of income inequality in Latin America. Implementing policy changes from a broad agenda of second generation financial reforms that is emerging in the region offers the possibility of helping to reduce this inequality by altering the conditions under which financial markets function. The primary problem whose foundations and ramifications we shall explore in many dimensions is the fact that in most countries of Latin America, banking institutions have shown a great reluctance to serve the lower end of the business market, namely, micro and small enterprises (hereafter, "MSEs" or "smaller enterprises"). As we shall see, large numbers of poor people both own and are employed by these firms. These two facts—that smaller enterprises have few financial services but many low-income owners and employees—together with the impact that greater access to credit and deposit services can have on the income levels of MSE owners and their employees, is the basis for the argument that the financial reforms discussed here can help reduce income inequality.

The proposed second generation financial reforms are *not* designed to help lower-income groups by simply delivering transfers to them, as was widely attempted in earlier decades with large-scale subsidized credit programs. Such methods created well-known inefficiencies and often did not succeed in redistributing income toward the poor, because the rich and powerful frequently captured the benefits.

Rather, the reforms proposed here attempt to make lasting structural improvements in how financial markets work, picking out needed changes in areas that are of particular benefit to smaller firms and their employees. The proposed reforms aim to make changes in the laws and regulations that surround financial transactions, in the institutions that support intermediation activities, and to the participants (financial institutions and borrowers) themselves.

These reforms largely take the form of the provision of either public goods that facilitate the flow of credit and other financial services to smaller firms or else training that is underprovided by the private sector.[1] The former category (public goods) consists of reforms in the following areas: improving regulation and supervision of credit unions and microfinance institutions (the main financial institutions that lend to microenterprises), improving the legal framework for secured transactions and modernizing supporting institutions, reducing informality, establishing or strengthening credit bureaus, and improving the legal and regulatory framework for leasing and factoring. In the latter category (training) belongs the strengthening of credit unions and microfinance institutions.[2]

Since the set of smaller enterprises is a very heterogeneous group, with the incomes of the owners and employees ranging from extreme poverty to very well to do, it is difficult to say a priori what the impact of the suggested reforms on the overall income distribution would be. However, three points can be made.

First, since the suggested policy interventions are generally low-cost means for increasing the access of marginalized groups to financial services, and since there is a growing body of evidence that increased financial depth is associated with greater economic productivity and growth,[3] the proposed

[1] Public provision of training may be justified up to a point by the fact that those who receive training may move to other financial institutions over time. Hence, private financial institutions, unable to capture the full social benefits of the training they provide to their personnel, will tend to invest less than is socially optimal in training activities.

[2] Some of this institutional strengthening goes beyond what could strictly be called training, for example including upgrading of management information systems and physical plant, undertaking market research, and rewriting strategic plans and operational manuals. Nevertheless, equity arguments may justify governments and donors making these investments in private sector institutions.

[3] For example, King and Levine (1993) find that a 10

reforms are likely to be desirable on efficiency grounds in any case. Moreover, their impact is potentially far-reaching. Based on economic censuses and other data, Westley and Shaffer (1999) find that micro and small enterprises appear to play a much larger role in economic production than is sometimes realized. For example, microenterprises alone account for approximately 20 percent of GDP and micro plus small enterprises account for approximately 40 percent of GDP in Brazil, Mexico, Belize, and the Dominican Republic (the only four countries for which sufficiently reliable data could be obtained). Hence, reforms of the type proposed here, that help provide financial services to the 20 to 40 percent or so of the economy that is poorly supplied with these services, could have macroeconomically significant impacts on productivity and growth.

Second, some of the suggested policy reforms can be targeted to serve low-income MSEs. For example, since poverty rates are generally much higher in rural than in urban areas (Table 1, below), one may put particular emphasis on strengthening credit unions and microfinance institutions located in or desiring to expand into rural areas. An effort to bring financial services to the poor in both rural and urban areas can also be made by carefully selecting from all credit unions and microfinance institutions those that serve a poor clientele in either area. It may also be beneficial to aim some of the training and strengthening programs at helping intermediaries to understand the potential profitability of serving the mass, low-income market segment, and to transfer to them technologies for efficiently delivering credit and deposit services to this market segment.

Third, there may be a natural market tendency for financial services to increasingly reach lower-income level microentrepreneurs as competition increases among financial institutions serving the whole range of smaller enterprises. Financial institutions may increasingly look for new niches that can be profitably exploited and may thus turn more and more to serving the large mass of lower-income microentrepreneurs. Thus, even if some of the policy changes suggested here do not immediately improve the income distribution (because their main initial beneficiaries are the larger MSEs with higher-income owners and employees), they may increasingly do so over time.

This paper consists of two parts. Part I presents empirical evidence and discusses likely mechanisms through which provision of additional financial services to smaller firms might reduce income inequality in Latin America, fleshing out the arguments made in the opening paragraph. It also presents international cross-section and Latin American evidence that this channel is an empirically important means for improving income distribution in the region. Part II discusses a number of specific reforms aimed at increasing smaller firm access to financial services.

---

percentage point rise in the ratio of private banking-system credit to GDP is associated with an increase in the annual GDP growth rate of about 1/3 of a percentage point. Ghani (1992) finds an even larger growth effect, approximately 1/2 of a percentage point. Westley (1994) discusses several channels through which increased intermediation may result in productivity and growth rate gains.

I. REDUCING INCOME INEQUALITY THROUGH IMPROVED MSE FINANCE

We begin with a series of three propositions, accompanied by empirical evidence. Taken together, the three propositions show that by providing credit and other financial services to smaller enterprises, we can reduce income inequality at the national level. The three propositions are as follows. First, the majority of the poor own or are employed by smaller enterprises. Second, smaller firms have very little access to formal or semiformal credit. Third, providing credit and other financial services to smaller enterprises can reduce income inequality (through a number of means, or channels). The empirical evidence marshalled in these three sections and in a final, fourth section strongly suggests that the income inequality reductions could be quite substantial.

Many Poor Own or Are Employed by Smaller Enterprises

The principal result of this section is that 70 percent of Latin America's poor earners are either employees of microenterprises[4] or are owners of a firm with no employees at all (single-person-firm owners). Such a high percentage implies that if we aim to reduce inequality in Latin America by increasing the incomes of poor earners, much of our efforts will need to focus on microenterprises in general and on microenterprise employees and single-person-firm owners in particular. The remainder of this section explains and elaborates on this key result.

Based on recent (1997-99) household survey data from 15 Latin American countries, Table 1 shows the percentages of employees and of firm owners with incomes below the poverty line, both for the overall population and for those living in rural areas. Two methods are utilized for determining whether an earner is poor: whether his/her individual earnings fall below an earner's poverty line, and whether the total household income per capita of the household to which the earner belongs falls below a per-capita-income poverty line.[5] While poverty is traditionally thought of in terms of the latter concept (household income per capita), we also examine individual incomes as a means to compare the earnings of different subgroups of the population (including employees of microenterprises and of larger firms, and owners of businesses with and without employees), uncontaminated by the income levels of other household members.[6] For purposes of the major comparisons we make, both poverty measures tell the same story. Important stylized facts from Table 1 include the following:

● *Employees*. Poverty rates among employees of microenterprises are substantial, much higher than among employees of larger firms (33 percent vs. 15 percent for the household poverty measure and 44 percent vs. 16 percent for the individual poverty measure).[7]

[4] In this section, microenterprises are defined as firms with five or fewer employees.

[5] Table 1 explains the procedures used to determine these poverty lines.

[6] We could compare the average income levels of these various groups, but since our interest really lies on the lower tail of the income distribution, we prefer to look at the percentages with earnings below some threshold.

[7] All percentages given in this section are unweighted averages of the 15 individual country values. See Table 1 for additional details. Unweighted averages are used in order to give measures that are more typical of the values likely to be encountered in any given country. Unweighted averages are not skewed by extreme values in one or two large countries, while weighted averages sometimes would have been.

Table 1 Poverty Rates, Judged by Household Earnings per Capita and by Individual Earnings [a] (% terms)				
	Household Earnings per Capita		Individual Earnings	
	National Sample	Rural Areas	National Sample	Rural Areas
1. All Employees and Firm Owners	26	48	31	50
2. Employees	22	43	26	40
3. Microenterprise Employees [b]	33	50	44	52
4. Other Employees	15	33	16	29
5. Firm Owners	31	53	40	58
6. Owners of Firms without Employees	31	52	43	60
7. Owners of Firms with Employees	20	38	20	35

[a] Each value shown in the table is an unweighted average of poverty rates in 15 countries (Argentina, Bolivia, Chile, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela), calculated from recent (1997-99) household surveys of each country. Following Psacharapoulos (1993), we employ a poverty line of US$ 60 per month per person in 1985 dollars, converted to each country's local currency value in the year of the survey using 1985 purchasing power parity exchange rates and local consumer price indices.

Each country's resulting poverty line, thus expressed in local currency, is then compared to the total income per capita of each household in that country to determine whether or not all earners in that household will be classified as poor.

To obtain the poverty line for individual earners, we multiply the $60 per month per person (expressed in local currency in the year of the survey) by the dependency ratio (=population/number of earners), which is calculated for each individual country from its household survey. These ratios typically range from two to three, and account for the fact that each earner supports a certain number of dependents. Finally, these poverty lines are compared to the income of each earner to determine whether or not that earner is classified as poor.

[b] Microenterprises are defined as firms with five or fewer employees.

● *Firm Owners.* There is significant poverty among single-person-firm owners, with an average poverty rate above that of wage earners as a whole (31 percent vs. 22 percent for the household poverty measure and 43 percent vs. 26 percent for the individual poverty measure). Poverty rates for owners of firms with one or more employees are lower (20 percent for both the household and individual poverty measures).

● *Rural versus National.* The poverty rates given in the preceding two bullets are based on the entire national sample, urban and rural areas combined. Poverty rates are substantially higher for those located in the rural areas. This is true across the board: for microenterprise and other employees, for owners of both single-person and larger firms, and with either definition of poverty.

Microenterprise employees and single-person-firm owners are large groups, containing an average (across the sample of 15 countries) of 30 and 26 percent of total earners, respectively. Given their high concentrations of poor, these two groups contain about 70 percent of Latin America's poor earners, with approximately 35 percent coming from the group of microenterprise employees and another 35 percent coming from the group of single-person-firm owners. These last three percentages hold with either definition of poverty, and for the rural areas as well as the national sample (i.e., about 70 percent of the rural poor also consist of microenterprise employees and single-person-firm owners). Hence, we reach the conclusion that if we aim to reduce inequality in Latin America by increasing the incomes of poor earners, much of our efforts will need to focus on microenterprise employees and single-person-firm owners.

Smaller Enterprises Are Poorly Served with Formal and Semiformal Credit

There is plenty of evidence that smaller firms are poorly served with credit from financial institutions. Table 2 shows that only 2.6 percent of the 59 million microenterprises in Latin America have formal or semiformal credit from a microfinance institution (MFI).[8]

Even leading microlending institutions in Latin America have small loan portfolios compared with the formal financial system (Table 3). Combining all formal (i.e., regulated) and semiformal sources of credit (semiformal sources consisting of NGOs and unregulated credit unions), total credit going to microenterprises is only about $2.5 billion in 1999 (see Table 4). This is merely one-half of one percent of the $499 billion that commercial banks provided to the Latin American private sector in 1999 and probably less than one percent of banking system credit going to *firms* of all sizes in the region.[9]

[8] While Table 2 provides perhaps the most detailed and accurate data available on the share of microenterprises with MFI credit, these data still suffer from several shortcomings. Nevertheless, these shortcomings are not likely to be important enough to change the general result that only a very small share of microenterprises in Latin America have credit from a formal or semiformal source. The shortcomings can be divided into those that affect the numerator and those that affect the denominator of the share statistic: (number of microenterprises with MFI credit)/(total number of microenterprises). It is likely that the data reported in Table 2 on both the numerator and denominator are underestimates of their true values for most countries and for the region as a whole.

The numerator is likely to be an underestimate because the data used for the number of microenterprises with MFI credit do not count any of the clients of credit unions or of many smaller MFIs. This is the most serious deficiency of these numbers. While Robert Christen (the author of the study from which the numerator values are taken) estimates that his data cover about 80 percent of the total MFI clients, the omission of all credit union clients is more serious. Table 4, below, shows that the credit union loan portfolio with microenterprises is twice that of the MFIs. If the average loan size of the credit unions were the same as that of the MFIs, this would mean that the credit unions would serve twice as many microenterprises as do the MFIs, so that 7.8 percent (rather than 2.6 percent) of all microenterprises would have credit from a credit union or MFI. But because credit unions serve many middle class as well as lower-income microentrepreneurs, the average size of their microenterprise loans may be above that of the MFIs, implying that significantly less than 7.8 percent of microenterprises have an MFI or credit union loan. There is an additional consideration that further reduces the estimate of the share of microenterprises with an MFI or credit union loan. This consideration comes into play because what Table 2 really measures is the sum of the number of loans on the books of each MFI. Individual microenterprises may have more than one loan outstanding at a given time with one or more MFIs (or credit unions), thus reducing the number and share of microenterprises with credit.

The Table 2 data on the total number of microenterprises (the denominator) are also likely to underestimate the true values because the household surveys on which these data are based classify each earner according to the earner's primary source of income. This means that the data in the denominator do not count any microenterprises that earners consider to provide secondary sources of income.

[9] The figure of $499 billion is obtained from the *International Financial Statistics*, line 22d. It represents the total private credit extended by commercial banks in the 26 borrowing member countries of the IDB at the end of 1999, converted to dollars. This $499 billion omits credit to the private sector extended by "other banking institutions" (that are not commercial banks) and thus is an underestimate of total banking system credit to the private sector. However, consumer lending (credit cards, residential mortgages, etc.) is perhaps 25-30 percent of total banking system private credit, the bulk of private credit going to traditional business lending in such sectors as industry and commerce. Hence, if $499 billion is an overestimate of private *business* credit from the banking system, it is probably not so by too much (the two omissions tending to cancel each other out). Finally, as noted in the footnotes to Table 4, total microenterprise credit from the banking system, NGOs, and credit unions is more than the $2.5 billion shown in that table (due to the omission of some, generally smaller, institutions), but is almost certainly less than $5 billion. Even with all of these adjustments, then, microenterprises appear to receive less than one percent of banking system credit to firms of all sizes.

Table 2 Share of Microenterprises in Latin America with MFI Credit						
Country	**Date of Household Survey**	**Number of Single-Person Firms**	**Number of Firms with 1-5 Employees[a]**	**Total Number of Microenterprises**	**Number of Microenterprises with MFI Credit**	**Share of Microenterprises with MFI Credit**
Bolivia	1999	1,300,313	62,008	1,362,321	379,117	27.83%
Nicaragua	1998	377,148	40,422	417,570	84,285	20.18%
El Salvador	1998	606,569	60,617	667,186	93,808	14.06%
Honduras	1999	832,941	58,239	891,180	107,054	12.01%
Chile	1998	1,069,139	138,045	1,207,184	82,825	6.86%
Guatemala	1998	1,328,476	93,238	1,421,714	71,187	5.01%
Costa Rica	1998	232,328	78,891	311,219	12,794	4.11%
Ecuador	1998	1,396,139	298,524	1,694,663	65,719	3.88%
Dominican Republic	1998	1,315,016	77,172	1,392,188	49,437	3.55%
Colombia	1999	5,726,653	775,152	6,501,805	219,240	3.37%
Paraguay	1998	319,113	668,213	987,326	30,203	3.06%
Peru	1997	4,102,561	2,763,632	6,866,193	185,431	2.70%
Panama	1999	267,854	21,150	289,004	6,390	2.21%
Mexico	1998	8,503,552	1,770,393	10,273,945	67,249	0.65%
Uruguay	1998	314,891	27,018	341,909	1,600	0.47%
Brazil	1999	16,567,943	2,421,810	18,989,753	62,485	0.33%
Argentina	1998	1,807,615	103,555	1,911,170	4,940	0.26%
Venezuela	1999	2,906,975	340,296	3,247,271	2,364	0.07%
Latin America Total Firms		**48,975,225**	**9,798,375**	**58,773,600**	**1,526,128**	
Latin America - Weighted Average Share[b]						**2.60%**
Latin America - Unweighted Average Share[c]						**6.15%**

Sources: Household surveys for number of microenterprises; Christen (2000) for number of microenterprises with MFI credit, except for Panama. Christen's data refer to the second half of 1999 and cover most of the larger regulated financial institutions and NGOs lending to microenterprises, but do not cover credit unions. Data for the number of microenterprises with MFI credit for Panama are obtained from the IDB loan files, refer to December 1999, and are as follows: Multicredit Bank 3881, Credifundes 1549, and Mi Banco 960.

[a] Unlike the other 15 countries in the table, in the Dominican Republic, Colombia, and Brazil, the number of firms with 1-5 employees is not counted directly, but, rather, is calculated as 83% of the total number of firms with 1 or more employees. This 83% share is the overall ratio for the other 15 countries, taken as a whole, of the number of firms with 1-5 employees divided by the total number of firms with 1 or more employees.

[b] Calculated as (total number of microenterprises with MFI credit)/(total number of microenterprises).

[c] Calculated as the unweighted average of the 18 individual-country percentages shown in the final column.

Table 3
Microlending by Leading MFIs:
Real Loan Interest Rates and Volumes of Microcredit

Country	Lender	Real Interest Rate (%)	Volume of Loans Outstanding (US$ millions)	Number of Loans Outstanding (thousands)	Average Loan Size (US$)
Bolivia	Banco Sol	25	66	76.7	861
Bolivia	Caja los Andes	25	30	33.7	892
Bolivia	FIE	28	16	23.5	681
Chile	Banco de Desarrollo	44	16	15	1067
Colombia	Finamérica	32	16.8	10.3	1636
Dominican Rep.	Banco Ademi	n.a.	41	13.9	2943
Ecuador	Banco del Pacífico	27	3	8	375
El Salvador	Financiera Calpiá	30	26.5	34.4	771
Guatemala	Banrural	n.a.	30	21	1429
Paraguay	Financiera Visión de Finanzas	37	8.7	8.5	1016
Peru	Mibanco	61	13.1	37.6	350
MEAN		34	24.3	25.7	1093

Sources: Real loan rate data are generally from 1999, and are as given in the Private Sector Initiatives Corporation (PSIC) reports to the Inter-American Development Bank. In the case of Mibanco (Peru), the PSIC data refer to 1997. In two cases—Banco de Desarrollo (Chile) and Banco del Pacífico (Ecuador)—the real loan data are from 1995-96, as reported by Baydas, Graham, and Valenzuela (1997). All other data (last three columns) are from Christen (2000) and refer to June-December 1999.

Table 4
Supply of Formal and Semiformal Credit to Microenterprises in Latin America
(1999 Stock, US$ millions)

1. Commercial Banks, *Financieras,* NGOs, and Other Microfinance Institutions	878[a]
2. Credit Unions	1654[b]
TOTAL	2532

[a] This estimate is from Christen (2000), and includes most of the formal and semiformal providers of microcredit in Latin America and the Caribbean besides the credit unions. Data are for June-December 1999. Christen estimates that his data cover about 80 percent of the microcredit provided by all MFIs in Latin America and the Caribbean.

[b] WOCCU (2000) provides data on total credit as of December 1999 of all WOCCU-affiliated credit unions in Latin America and the Caribbean. Outstanding credit for Costa Rica is not available for December 1999, and so we have used the December 1998 credit value, given in WOCCU (1999). Loan data for Argentina, Colombia, and Venezuela are not available for December 1999 or 1998, and savings data are not available for 1999, and so for Argentina and Colombia we have used the 1998 level of savings, which has typically been approximately equal to lending in these two countries (as it has for Latin America more generally). For Venezuela, credit and savings data are not available for either 1999 or 1998, and so we have used the December 1997 value for credit, given in WOCCU (1998). From an analysis of 55 credit unions in Guatemala, Honduras, and Bolivia, we find that 40 percent of total credit goes to microenterprises (farm and non-farm), and employ this value to derive the estimate given in the table. WOCCU estimates that WOCCU-affiliated credit unions account for at least 70 percent of all credit union lending in Latin America and the Caribbean in the years referred to by these data.

In contrast, Westley and Shaffer (1999) have estimated that microenterprises account for approximately 20 percent of Latin American GDP, and so it would appear that, relative to their output, these firms receive a disproportionately small share of credit from formal and even semiformal sources.

Does this minimal use of credit mean that small borrowers need less credit, or that they face highly restricted access to it? It is difficult to measure access to credit directly because limited use of it could, in principle, reflect either minimal demand or a restricted supply. However, there is evidence that small borrowers face more restricted access to credit than do larger borrowers. A number of studies have presented evidence that small borrowers show clear signs that their activities are restricted by the inability to obtain credit, and that larger borrowers are less affected by such credit constraints. Box 1 surveys some of these studies.

Another piece of evidence that smaller enterprises have many high-return projects waiting in the wings, frustrated by lack of finance, is the very high loan rates routinely paid by these firms when credit is made available to them.[10] Moreover, when good microlending programs are started up, they often attract a huge following despite charging high real loan rates. For example, by 1997, Banco Sol in Bolivia was only 10 years old (five years as an NGO followed by five years as a bank) and already served over one-third of the total clients of the entire Bolivian banking system.

Providing Credit and Other Financial Services to Smaller Enterprises Can Reduce Income Inequality

The provision of financial services to smaller enterprises helps to reduce income inequality through at least five means, or channels. These five channels involve: the use of credit for business purposes; the use of credit for nonbusiness purposes; the use of noncredit financial services, especially savings services; demographic and human capital effects that result from the income increases associated with the first three channels; and macroeconomic impacts on the aggregate investment ratio.

The first channel is perhaps the one most widely considered when thinking about the impact of financial services on the income levels of poorer households. In this channel, smaller enterprises purchase goods and services (machinery and equipment, raw materials, hired labor, etc.) in advance of production to meet both investment and working capital needs. We often observe that very shallow financial systems provide credit only to large businesses and wealthy individuals for such purchases. As the financial system deepens and competition among formal financial intermediaries increases, medium-size and smaller enterprises gain access to loans. It is likely that as smaller enterprises obtain credit, they will undertake many high-return projects that their own resources and those obtainable from informal sources (family and friends, moneylenders, suppliers, etc.) had not been sufficient to permit them to undertake. As noted earlier, one piece of evidence that smaller enterprises have many high-return projects waiting in the wings, frustrated by lack of finance, is the very high loan rates routinely paid by these firms when formal credit finally does become available to them (Table 3). In any event, since the decision to borrow is voluntary, the loan should enhance the welfare of the smaller enterprise owner and thus, to the extent that low-income entrepreneurs are the ones receiving the credit, improve the distribution of income.

Moreover, as the numerous impact studies surveyed by Sebstad and Chen (1996) make clear, smaller firm owners, including those below the poverty line, derive substantial income gains from access to credit, with the gains typically increasing over time as additional, larger loans are extended to them.[11] These studies also report substantial

[10] Table 3 gives the real (after-inflation) lending rates of some of the leading MFIs in Latin America.

[11] This is not to say that business failures don't occur among borrowers. For example, Hulme and Mosley (1996; 1998) find that while some borrowers *are* left worse off after they have made use of their loans, they are a distinct minority. In the 13 programs whose impact they evaluate, all are found to raise the aver-

employment creation by microloan programs. As shown in Table 1, the wage income levels of a sizable share of microenterprise employees still place them below the poverty line. To the extent that microcredit programs create jobs for such low-income earners, these programs are likely to be strong contributors to reducing income inequality. Finally, the fact that some smaller firms face a credit constraint (Box 1) lends further support to the idea that there will be increases in smaller firm output, income, and employment as this constraint is eased.

The second channel considers nonbusiness uses for credit. The finding here is that even when poor households use loan proceeds for nonbusiness purposes, their incomes are often increased over what they otherwise would have been. Hence, the distribution of income is improved. How might this occur?

Sebstad and Cohen (2000) carry out field studies of seven microlending programs and survey the extensive impact analysis literature. They find that in many microlending programs, a significant minority of loan recipients use at least a portion of their credit for nonbusiness purposes. The authors document many ways in which credit used for such purposes often improves household income levels, particularly in coping with shocks and economic stress events. Shocks and economic stress events include: a) systemic factors that affect large groups of people such as recessions, inflations, floods, earthquakes, droughts, hurricanes, and other natural disasters; b) individual emergencies such as illness, accidents, death, fire, theft, and job loss; and c) life cycle events such as marriages, funerals, childbirth, festivals, establishing a household, and education. Such shocks and economic stress events can have a much greater impact on the income levels of poor households, which typically have few assets to help them cope with these contingencies.

In the face of such shocks and stress events, loans allow recipients, particularly poor recipients, to attenuate or reverse downward pressures on household income levels in the short and longer runs. For example, loans may permit households to continue obtaining medical care, paying educational expenses, eating three meals a day, and generally maintaining or improving their human capital.

Loan proceeds may also be used to improve or enlarge housing, which sometimes doubles as workspace, especially for very small firms. This may permit a household business to be started or to expand, increasing household income. Many basic housing improvements can also have beneficial effects on the health and well-being of household members, which can have positive impacts on family income.

At times, borrowers may use some of their loan proceeds to help friends, relations, and others in their communities during times of economic duress for these other individuals. This builds valuable social assets that can be drawn on in times when the person who has given, in turn, has an emergency.

While Sebstad and Cohen (2000) find that microloans are primarily used to invest in one's own business, their study highlights the many ways in which nonbusiness loan uses can increase income. These nonbusiness loan uses can be especially important for the poor, who are particularly vulnerable to economic stressors due to their near-subsistence income levels and thin cushion of assets.[12]

age income levels of program participants. These findings of a positive overall impact are similar to those found in other impact studies.

[12] Even if the credit is used for pure consumption (with no income increasing effects at all), it is still a voluntary transaction and should still be expected to increase the general well-being of the low-income borrower and thus improve the distribution of income broadly defined (to include such welfare gains). This kind of welfare gain is particularly apparent in cases of consumption smoothing, in which a loan allows a low-income household to maintain its consumption of basic necessities despite a temporary shortfall in income.

Box 1
Credit Constraints

Beyond the tiny share of microenterprises with formal or semiformal credit and the small amount of total credit that microenterprises receive from these sources, there are two other types of evidence that smaller firms face significant credit constraints: surveys and analyses of market data. National surveys of micro and small enterprises often ask about major business problems, including lack of finance. Although these self-reporting data are properly deemed less reliable than market data, it is difficult to detect credit constraints in market data. This is because of the problems of disentangling statistically whether businesses that receive no formal credit simply aren't demanding it or are judged not to be good credit risks on the one hand, or whether, on the other hand, they are really being rationed by the financial intermediaries. Because of this difficulty, evidence of credit constraints based on analyses of market data is limited.

Among the few studies to attempt the detection of credit constraints from observed market behavior using reasonably recent Latin American data are Mushinski (1995) and Barham, Boucher, and Carter (1996). Based on data from three regions in Guatemala, these studies find that smaller firms desiring bank credit received it much less often than larger firms. Furthermore, credit unions in the three areas provided loans to a substantial percentage of these smaller, bank-rationed firms, suggesting that the companies were creditworthy enterprises. Jaramillo, Schiantarelli, and Weiss (1996) estimate the Euler (accumulation) equation for capital stock allowing for adjustment costs in a panel data set covering 420 Ecuadorean manufacturing firms over the years 1983-88. They find that smaller firms faced significant credit constraints both before and after interest rate ceilings were removed in Ecuador, while larger firms never did. Since smaller firms are defined as those with a capital stock of up to US$ 600,000 in 1975 prices, this study shows that even fairly sizable firms with substantial collateral can face credit constraints.

By asking firms directly whether they want to obtain credit and cannot, one may also obtain an indication of whether MSEs face a credit constraint. Nonetheless, these data must be interpreted with care because: (a) they are not based on actual behavior, (b) the price of credit is rarely made explicit (though may be understood to be at "market rates"), and (c) not all firms desiring credit would be deemed good credit risks by financial intermediaries.

Pons and Ortiz (1994) provide perhaps the most straightforward estimate of this type. Based on a national survey, they find that 42 percent of the smaller enterprises in the Dominican Republic would like to have credit and don't, and another 16 percent aren't sure. (The remaining 42 percent didn't want credit for a variety of reasons, including the fact that some already had it.) The impact of credit market restrictions extends even beyond this sizable group, however, as there are an unknown number of households that would like to begin their own businesses but don't for lack of credit to finance their start-up or subsequent operations.

Several other national surveys ask about major business problems, including credit constraints. In Guyana, Bresnyan (1996) finds that 62 percent of microenterprises face a "severe" or "very severe" "lack of cash in running their business," as opposed to a constraint that is "not severe." In the same survey, 39 percent cited the lack of finance as affecting the ability of the firm to grow. Magill and Swanson (1991) find that lack of sustained access to finance is by far the biggest problem that microenterprises face in Ecuador, even placing ahead of lack of market. EIM/International's (1996) survey of Trinidad and Tobago and ESA Consultores (1996) survey in Honduras both find that market opportunities are the biggest problem microenterprises face, followed in each case by lack of finance.

The third channel involves noncredit financial services, particularly savings services. In rural areas, even poor people often save in order to carry over income from one harvest to the next. Rutherford (2000) makes it clear that a great many of the poor in urban as well as rural areas save or would like to save in order to meet the kinds of emergency and life cycle needs described in discussing the second channel. In the absence of financial institutions that locate in lower-income rural and urban areas and offer deposit accounts, savings must be done in nonmonetary forms (jewelry and other valuables; house bricks and other building materials; livestock, crops, and other capital and inventory; etc.) or by holding cash if it is to be done at all (see Gadway and O'Donnell, 1995). These forms of savings have serious disadvantages, including the erosion of value with the passage of time (for example, cash may lose value with inflation, bricks may deteriorate, and grain may spoil), the possibility of theft, the high transactions costs that typically accompany the conversion of illiquid assets into cash (with a likelihood of additional losses if a sale must be made quickly because of an emergency), and problems of indivisibility (one cannot slaughter half a cow, sell half a ring, etc.).[13]

With their savings in commodities, households that need cash may be forced to choose between borrowing from informal markets at high interest rates or paying the high transactions costs and facing any indivisibility problems associated with converting illiquid assets into cash. Access to a liquid savings account would allow households to meet their routine and emergency liquidity needs more easily and cheaply, and thus avoid erosion of their income and wealth.

By avoiding the disadvantages of in-kind and cash savings, liquid deposit facilities also may encourage many households that would not have saved to become savers or to save more than they otherwise would have. The presence of savings or more savings in a household can help raise household income in a number of other ways. As McKinnon (1973) and others have pointed out, savings is an important means by which individuals start up or expand a business of any kind. Savings also permit individuals to take advantage of sudden business or other opportunities when they present themselves (e.g., the opportunity to purchase cloth or other business inputs in bulk when there is a sale). In many of the same ways that are discussed with reference to the second credit channel, savings can also help households resist downward pressures on their incomes from shocks and economic stress events by helping them to maintain or improve human, physical, and social assets. And savings are an excellent means for facilitating consumption smoothing.

Savings may also raise household income levels by facilitating entry into higher-risk, higher-return lines of business activity. Savings do this by providing a readily available cushion of financial support in case of failure. For example, such a cushion might allow farmers to shift out of a lower-risk, diversified cropping pattern, and specialize to a greater extent in higher-valued crops, with the knowledge that they have saved resources at hand to meet their families' most urgent needs in case things go badly. Farmers that are successful in this may, over time, become not just savings, but also credit, customers of the bank, with loans used to finance increased production costs and the purchase of livestock, equipment, and other assets. Low-income urban entrepreneurs might follow a similar trajectory, for example with the production and sale either of higher-value merchandise or of a larger quantity or variety of products. Again, savings provide a safety net for the household against the worst effects of business failure.

Finally, with more savings available, the supply of funds that may be used for informal lending will expand, driving down the informal lending rate, and widening the use of such credit. This may particularly benefit smaller enterprises and lower-income households, which, lacking access to formal loans, may disproportionately use informal credit.

[13] In periods of rapidly rising prices, commodities may, of course, serve as an inflation hedge, much as a reasonably remunerated deposit account does. However, the other disadvantages of holding savings in nonmonetary form still apply.

The fourth channel operates through demographics and human capital. It begins where the first three channels leave off, with an increase in the income levels of low-income families. Part of this increment in family income may be attributed to an increase in the labor force participation of women. Access to credit or savings facilities may allow women to start a business, in some cases part time and at home (possibly due to child care responsibilities) or, in other cases, full time and out of the home. It may also permit women with existing businesses to increase their incomes. Families with higher total incomes tend to have fewer children, leading to even greater levels of family income per capita because of the reduced family size. In the longer run, the human capital of the children born into these families also tends to be greater than it would have been in the absence of the expanded availability of financial services, as greater educational attainment and improved health status are both strongly related to family income, particularly to the income of the mother.

The fifth channel is macroeconomic in nature. As financial systems deepen and credit becomes more available, the ratio of aggregate investment to GDP should increase because of the relaxation of borrowing constraints. This rise in the investment ratio tends to drive down the rate of return on investment (due to diminishing marginal returns to capital) and increase real wages (since on average each worker now operates with more capital). Because the distribution of physical capital is far more concentrated in the hands of the well-to-do than is the distribution of income (see, for example, Wolff, 1991), this reduction in the rate of return to capital tends to reduce income inequality.

Empirical Evidence on the Finance/Inequality Link

This section provides evidence that the argument made so far—that providing financial services to smaller enterprises can reduce income inequality at the national level—is not only a valid proposition, but also an empirically important one. Specifically, this section shows that Latin American countries have relatively shallow financial systems and that such systems are strongly associated with greater inequality. That is the main result. Household survey data are also analyzed to obtain further supporting evidence that lack of smaller-firm finance could be an important contributor to greater income inequality. Finally, empirical evidence is presented showing that at least a few dozen credit unions and several MFIs have reached many poor, and thus could, in fact, raise incomes and reduce inequality through the many channels discussed in the preceding section.

Compared to East Asia and the Industrial Countries, Latin America Has Shallow Financial Systems ...

In the 1960s, financial depth—measured either by the ratio of broad money supply to GDP (i.e., M2/GDP) or by financial system credit to the private sector as a share of GDP (i.e., private credit/GDP)—was only about 25 percent higher in the emerging East Asian countries than it was in Latin America (see Table 5). But Latin America's macroeconomic and financial instability, financial repression, and relatively slow economic growth during much of the following decades slowed its financial development. East Asian financial depth steadily pulled away, and by the 1990s stood at two to three times the Latin American average. While part of this difference may simply reflect larger borrowers getting more credit in East Asia, such a sizable divergence may also stem from a broadening of the East Asian financial systems to include smaller firms, including many smaller firms that are linked to large firms through supply chains. In contrast, as we have already discussed, smaller firms in Latin America often find it very difficult to obtain credit.

Table 5 Financial Depth by Region (% terms)			
M2/GDP			
Period	**Industrial Countries**	**Latin America & Caribbean**	**East Asian Miracle Countries**
1960-70	51	21	28
1971-81	54	29	38
1982-92	57	37	55
1993-96	74	38	89
Private Credit/GDP			
Period	**Industrial Countries**	**Latin America & Caribbean**	**East Asian Miracle Countries**
1960-70	41	13	17
1971-81	47	21	31
1982-92	59	24	55
1993-96	77	27	86

Source: *International Financial Statistics.* The regional averages presented in this table for each period are calculated as unweighted averages of financial depth, averaging first across years and then across countries. Unweighted averages are used in order to give measures that are more typical of the values likely to be encountered in any given country. Unweighted averages are not skewed by extreme values in one or two large countries, while weighted averages sometimes are.

... And Shallow Financial Systems Are Associated with Greater Inequality

Is there any evidence that the relatively shallow Latin American financial systems have contributed to increased income inequality in the region? As shown in Deininger and Squire (1996, Table 5), it is certainly true that the Gini coefficients are much higher in Latin America than they are in East Asia or in the Industrial Countries. However, there are a number of other factors besides differences in financial depth that might explain Latin America's greater income inequality. Even after controlling for many of these other factors in international panel data regressions, however, I still generally find that financial depth has a statistically significant and negative association with income inequality (see Technical Annex, Table A1 for a representative sample of the regressions I have run). To give an idea of the magnitude of this effect, in regression 2 of Table A1, a 10 percentage point increase in M2/GDP (e.g., an increase from 20 percent to 30 percent) is associated with a decline in the Gini coefficient of 1.15 percentage points (e.g., a drop from 40 percent to 38.85 percent). The 50 percentage point difference in M2/GDP between East Asia and Latin America in the 1990s, then, would account for 5.75 (=5x1.15) percentage points of the difference in Gini coefficients between the two regions, or about one-half of the observed difference of 11 percentage points. The share of the income inequality differences between the two regions that is explained by differences in financial depth in the preceding decades is substantially smaller, however, given the much smaller differences in financial depth between the two regions in those periods.

The above findings of a significant and quantitatively important effect of financial depth in explaining variations in the Gini coefficient across countries and over time is corroborated by the other major international study in this area, that of Li, Squire, and Zou (1998). This study also finds M2/GDP to be significantly and negatively associated with the Gini coefficient, and consistently so even after including numerous sets of additional independent variables to control for other factors

deemed pertinent to explaining differences in income inequality across countries and over time.[14]

Household Survey Data Further Underscore the Importance of Finance

Beyond these international cross-section studies, Latin American household survey data suggest that inequality in the access to finance by firms of different sizes could well have an important effect on the overall distribution of income for countries in the region. Consider the following statistics. First, the income derived from unincorporated enterprises owned by household members averages 30 percent of total household income (while 65 percent is from wages and five percent from miscellaneous sources—interest, dividends, rents, remittances, pensions, etc.).[15] Second, household business income is distributed quite unequally, with a Gini coefficient that averages 0.56 (vs. 0.44 for wage income) in the 14-country sample. The substantial share of total household income that is obtained from business profits, and the significant inequality in the distribution of this business income, combined with the earlier demonstrations of the positive impact that credit availability generally has on income levels, support the notion that increasing the access of smaller firms and poor entrepreneurs to credit could play an important role in reducing income inequality in Latin America. This contention is further buttressed by the fact that approximately 70 percent of poor *wage* earners work in firms with five or fewer employees, the same firms that are probably most negatively affected by the lack of outreach of the Latin American financial systems.

Credit Can Reach the Poor

Finally, I present empirical evidence that at least a few MFIs and a few dozen credit unions in Latin America have reached the poor, and thus could, in fact, raise incomes and reduce inequality through the many channels discussed above. Navajas, et al. (1996) survey a total of 588 clients in five Bolivian MFIs and find the following percentages of poor borrowers: Banco Sol, 36 percent; Caja los Andes, 26 percent; FIE, 20 percent; Prodem, 81 percent; and Sartawi, 76 percent. The first three MFIs served urban areas in 1995 when the data were collected and the last two served rural areas. The five institutions together had a total of 167,000 microenterprise clients, of which 67,000 (or 40 percent) were poor, suggesting that credit can reach poor microentrepreneurs in substantial numbers.

Adding to this evidence, Dunn (1999) carried out a sample survey in August 1997 of 400 clients of ACP (a large MFI, now called Mibanco) in Peru. Selection criteria ensured that this sample was representative of ACP's overall clientele. The study finds that 28 percent of ACP's clients were poor.

Sample survey evidence from four studies by the World Council of Credit Unions (WOCCU) indicates that credit unions can also reach many poor. Taking random samples of members from credit unions participating in WOCCU credit union strengthening programs, the following percentages of members were found to be poor in the following countries and years: Ecuador, 1996—56 percent; Ecuador, 1999—18 percent; El Salvador, 1996—22 percent; and Nicaragua, 1997—49 percent.[16] Each of these studies is based on sampling from 9 to 14 credit unions, with the total number of observations ranging from 300 to 1227.

[14] In fact, my study and that of Li, Squire, and Zou are similar in many ways. The Li, Squire, and Zou study employs the Deininger and Squire (1996) set of Gini coefficients for 49 developed and developing countries over the years 1947-94. My study adds a few additional Gini coefficient observations to this set, and uses 11-year averaged data instead of Li, Squire, and Zou's five-year averages. Most importantly, perhaps, I test a number of explanatory variables that were not included in the Li, Squire, and Zou study.

[15] These percentages represent unweighted averages taken over household surveys in 14 countries: Argentina, Bolivia, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, Uruguay, and Venezuela.

[16] These poverty rates were calculated using a poverty line of US$ 2 per day per person together with the income data reported in the following four studies, respectively: Mesbah (1997), Vallejos (1999), Mesbah (1998), and Mesbah (1997a).

More poor were reached than are indicated by the above-cited 67,000 poor clients out of 167,000 in Bolivia or by applying the poverty rates just presented for ACP and the credit unions to the total number of ACP clients and the total number of members in the surveyed credit unions. This is true, first, because of the employment effects noted earlier. Second, even considering only firm owners, the poverty rates given above understate the share of poor microentrepreneurs who were served by the MFIs. This is because while many MFI clients start off poor, after receiving several loans and/or after having had access to savings services for a few years, the incomes of some of these clients will have risen above the poverty line. In other words, there may be quite a difference in the poverty rates of the set of existing clients as they are now versus the set of existing clients as they were when they first became clients.

II. FINANCIAL MARKET POLICIES TO REDUCE INEQUALITY

What can be done to make financial services more broadly available, in particular to smaller enterprises? Most countries in Latin America have already taken steps in this direction by eliminating interest rate ceilings, freeing bank entry, dismantling subsidized targeted credit programs and other forms of state-imposed credit allocation, privatizing and closing state banks, and lowering reserve requirements. These first generation liberalizing reforms have been conducive to the delivery of financial services to smaller firms in two ways. First, it becomes possible for financial institutions to charge the high interest rates such lending requires. Second, by fostering greater competition and efficiency in serving traditional, large-firm customers, intermediaries are encouraged to look for new, unexploited market segments such as serving smaller firms.

For countries that have not yet created more competitive financial markets or eliminated interest rate ceilings (including those countries that have reimposed interest rate ceilings such as Colombia and Ecuador), these are certainly important steps to take toward the goal of providing smaller firms with an increased level of financial services, and thereby attempting to reduce income inequality. However, as discussed earlier, very little formal or semiformal credit is reaching microenterprises even in many of the countries that have liberalized their financial systems, and many smaller firms face significant credit constraints. So one may ask, what else can be done?

The remainder of this paper consists largely of a discussion of a number of second generation financial reforms. The aim of these reforms is to deepen financial markets by extending financial services to much greater numbers of MSE participants. To the extent that financial services reach single-person-firm owners and help raise their incomes or reach somewhat larger enterprises and help create jobs, the reforms proposed here will help groups that contain the great majority of poor earners in Latin America. The second generation financial reforms discussed here are: improving prudential regulation and supervision of credit unions and MFIs (regulation and supervision are treated in two separate sections); improving the legal framework for secured transactions and modernizing supporting institutions; reducing informality; establishing or strengthening credit bureaus; improving the legal and regulatory framework for leasing and factoring; and strengthening credit unions and MFIs.

Improving Prudential Regulation of Credit Unions and MFIs

Many countries in Latin America have a body of prudential banking regulations that impedes lending to microenterprises. These regulations are typically designed with traditional commercial bank lending technologies and large loan sizes in mind. Their application in the microfinance setting generates unnecessary difficulties and inefficiencies for credit unions and MFIs (the two main types of financial institutions that lend to microenterprises). These difficulties and inefficiencies raise the already high cost of making microloans, increase the risk of insolvency for lenders, and restrict microcredit supply. In turn, these impacts reduce the incomes of many poor people who own businesses or who would be employed in the microenterprise sector. These ill effects can be eliminated by applying a more appropriately designed set of regulations to financial institutions making microloans.

In order to understand this issue (and additional discussion later on), Box 2 describes the salient features of the microlending technology that has been used successfully by a large number of MFIs around the world and in Latin America to make very small loans (e.g., $50 to $1500) while at the same time achieving delinquency rates that are on a par with those of the commercial banks (2 to 3 percent) and containing administrative costs. This technology is fundamentally designed to ensure that borrowers are *willing* to repay their loans, in addition to making the more traditional banking checks that they are *able* to repay. Two major variants of this technology exist, individual and

group lending, and high repayment rates have been achieved with both methods.

Box 2
The Microlending Technology

In ***group lending***, credits are granted to small, self-formed groups. These groups serve three purposes. First, they screen out bad credit risks since the whole group is held responsible if anyone in the group defaults, and hence they reduce the costs of gathering creditworthiness information. Second, they exert social pressure in the event a borrower fails to repay and, at the same time, offer the possibility of voluntary mutual aid by means of informal, within-group loans to a member in difficulty. Third, they offer the potential to further reduce administrative costs by allowing the bank to make and service a single group loan in place of several individual loans.

Individual lending is grounded in a detailed investigation and assessment of the borrower's character and his/her likely willingness to repay. Initial loan screening often includes visits to the business site and home, and talks with business associates and neighbors. An analysis of the overall business/household's cash flow (ability to repay) is also performed. Loans are generally extended based on these assessments, rather than being secured with physical collateral, which the microentrepreneur typically has very little of, and which would, in any case, entail prohibitive costs to take possession of and sell. ***Thus, in contrast to traditional bank lending, group and particularly individual microlending is said to be information intensive instead of collateral intensive.***

The remaining elements apply to both individual and group lending techniques:

- Repayment is further encouraged by a ***progressive lending scheme*** in which borrowers are first given very small loans with short terms. If successfully repaid, the loan amount and term are progressively increased in subsequent rounds of borrowing. In addition to rewarding repayment, this scheme also serves to establish a credit history for borrowers who typically have none to begin with, allowing the lender to decide whether to make larger, riskier loans based on this history.
- ***Frequent repayment schedules*** are employed to facilitate monitoring of borrowers.
- ***Incentive pay*** is used to help solve the MFI's principal-agent problem, with a loan officer's remuneration determined to a significant degree by his/her loan volume and portfolio delinquency rate.
- ***Staff are often drawn from the local service area***, so they have better access to information about potential borrowers.
- To help keep delinquency rates low in larger microlending programs, ***specialized software*** is used that tracks each individual loan and provides daily delinquency reports to loan officers. ***Delinquencies are followed up*** the next day or soon after.
- In order to reduce the borrowers' transactions costs and the intermediary's loan default losses, ***loan officers spend much of their time in the field***, screening new clients and checking on old ones, particularly those who are delinquent. The lender's ***administrative costs are held down*** by using inexpensive transportation (e.g., motorcycles, bicycles, and city buses), directly entering field-collected data into portable or hand-held computers (in lending programs of larger size), and maintaining relatively modest main and branch offices, in keeping with the fact that the program serves a clientele of more limited means.
- In order to increase the value to borrowers of the lending institution's credit services, and thus encourage loyalty and repayment, the ***loan approval and disbursement period is normally very rapid*** (often a matter of a few days).
- ***Microloan interest rates are set considerably above average commercial bank lending rates*** in order to cover the higher administrative cost margins of making much smaller loans. These cost margins are typically 15 to 30 percentage points or more, depending on average loan size, total program volume (due to economies of scale), and other factors.

We now discuss a number of key areas in which inefficient and ill-advised regulations are found or in which important regulations are absent. These are: minimum capital in nominal terms, capital adequacy, loan documentation and provisioning, external credit limits, governance regulations, and operational restrictions. Some of these regulatory problems are quite widespread in the region.[17]

Minimum Capital in Nominal Terms and Special MFI Windows

This section concludes, first, that the possibility of opening special MFI windows, with lower minimum capital requirements in nominal terms (e.g., US$ 1 million for MFIs versus US$ 5 million for banks), merits particular attention in Latin America. Second, the imposition of minimum capital requirements on credit unions together with the restriction that only those credit unions meeting these requirements can mobilize deposits—as has been legislated in Bolivia and is under consideration in Paraguay—is likely to be far from the ideal arrangement. I discuss two alternative arrangements that I believe are superior, both of which involve supervision of all but the tiniest credit unions and zero minimum capital requirements. These points are discussed in order.

MFI Windows

The 1990s have been a time in which many of the countries of Latin America have made great strides in improving the prudential regulation and supervision of their banking systems (see, for example, IDB, 1996, Part II, Ch. 4). Yet few have opened special windows by means of which NGOs can graduate to become regulated financial intermediaries capable of taking deposits. Such windows typically offer lower minimum capital requirements than those mandated for banks or *financieras*, but a more restricted range of permissible operations (typically prohibiting checking accounts, certain foreign currency operations, etc.). Special windows have been available in Bolivia and Peru since 1995 and have been recently opened in Honduras and El Salvador. These windows offer MFIs the possibility of providing valuable deposit services to their clients and, at the same time, greatly expanding their microcredit portfolios by leveraging scarce capital resources with deposits.

In their discussion of the MFI industry worldwide, Christen and Rosenberg (2000) offer a number of important preconditions and cautions to those advocating opening MFI windows in additional countries. First and foremost, the country's banking system must be reasonably well regulated and supervised before an attempt is made to further deepen the financial system by opening an MFI window. Second, there must be a supply of licensable NGOs, with clear institutional and financial strength and a track record of commercial-level profits, but insufficient capital to use existing bank or *financiera* windows. Third, even if these two preconditions are satisfied, opening a special window carries with it the risk that the regulatory authority may impose controls that are deleterious to microfinance. These might include interest rate ceilings (which can also be imposed on MFIs even if there is no special MFI window, as Colombia and Ecuador have recently demonstrated), restrictions on uncollateralized lending, limits on institutional ownership of MFIs, or other controls that are incompatible with current microfinance practices and potential innovations.

These three points are all well taken, particularly when discussing the MFI industry worldwide. However, if there is one region of the world that is most ready to open special MFI windows—with due consideration given to the risks entailed by these windows versus their benefits—it is Latin America. This is demonstrated by recent data published in the *Microbanking Bulletin,* which tracks 124 MFIs worldwide. The April 2001 issue (Tables 1 and D) shows that over half of the 124 MFIs are financially self-sufficient and that approximately two-thirds of the self-sufficient institutions worldwide are located in Latin America. In

[17] See Jansson and Wenner (1997), Rock and Otero (1997), Berenbach and Churchill (1997), Christen and Rosenberg (2000), and IDB (2001) for further discussion of issues related to the regulation and supervision of MFIs and credit unions.

addition, Latin America has been a leader over the last decade in modernizing prudential bank regulations and improving supervision. Very impressive gains have been made in these areas in at least a dozen countries in the region (IDB, 1996, Part II, Ch. 4).

Superintendencies have often cited budgetary restrictions as the cause for not opening special MFI windows (and for also refusing to supervise any or many credit unions). This argument is not justified. As Christen and Rosenberg (2000) note, even if MFIs paid the full cost of their supervision, they would have to add only about three or four percentage points to their loan rates to cover these costs. Given the already high spreads MFIs charge, another three or four percentage points are not likely to be critical to either microenterprise loan demand or to microentrepreneur income levels. This means that superintendencies would not have to cross-subsidize MFI supervision; they could dedicate every peso collected from banks to bank supervision and rely exclusively on MFI supervision fees to pay for MFI supervision. This opens up the benefits of supervision to the MFIs without taking any resources away from the clearly central task of protecting the integrity of the banking and payments systems. We conclude that MFI windows merit an especially close look in Latin America, particularly in those countries meeting the two preconditions given above.

Credit Union Restrictions

We now turn to the issue of imposing minimum capital requirements on credit unions and restricting deposit mobilization for those credit unions that do not meet these requirements. For example, in Bolivia, only credit unions with capital of about US$ 200,000 or more are eligible to be supervised by the bank superintendency and thus to mobilize deposits. The remaining, unregulated credit unions are permitted to accept only share certificates, which are redeemable only when a member leaves the credit union. Share certificates do not offer liquidity, a key feature of deposit accounts.

Bolivia's arrangement is far from ideal. Credit unions in Bolivia, as in much of Latin America, provide financial services to many people who otherwise would lack access. UNDESCOOP, a provider of technical assistance services to credit unions in Bolivia, has estimated that unregulated credit unions are present in approximately 180 of Bolivia's 311 *municipios* (a territorial division somewhat akin to a U.S. county). Of these 180 *municipios*, 90 would be without the services of any financial institution if it were not for the presence of an unregulated credit union. UNDESCOOP has also estimated that while some unregulated credit unions will merge and become regulated entities if the law is enforced and unregulated credit unions are barred from taking deposits, a great many of the unregulated credit unions will simply close down or will be greatly reduced in size and scope owing to the loss of deposit accounts.[18]

Two better solutions to the problem of how to deal with credit union deposit-taking both involve allowing all credit unions to continue to take deposits. These solutions recognize the fact that credit unions are often the only institutions in an area providing financial services, particularly in rural areas, where so many Latin American credit unions operate. The development challenge in Latin America is to increase financial system depth by extending the reach of financial institutions to unserved and underserved populations, and thus to reap the resulting economic growth and equity benefits. A strategy that restricts and closes credit unions, which are one of the major types of financial institutions serving these unserved and underserved populations, goes in the wrong direction, and so appears to be far from the ideal solution.

[18] Personal communication from Jorge Vargas Ortega, the general manager of UNDESCOOP. Westley and Branch (2000, Overview ch.) discuss the many obstacles to credit union mergers, and therefore, why the scenario described in the text would be likely to occur. One important obstacle to mergers is the fact that each credit union has a relatively large number of owners. This makes a merger much more difficult than in the case of corporations, where a majority of the shares often belongs to a small number of shareholders.

As will be discussed at greater length in the next section, on supervision, the first best strategy for dealing with the deposit-taking activities of credit unions is for a government entity, such as the banking superintendency, to supervise all but the very smallest credit unions (i.e., all credit unions with more than 50-200 members, say), providing that this government entity is capable and willing to supply good quality supervision services to the credit unions.

As with the MFIs, budgetary constraints should not stand in the way of this strategy. The credit unions generally can and should pay the full cost of their supervision, so that the superintendency would not have to divert resources from the important task of bank supervision. It would be in the credit unions' long-run interest to pay even the full cost of good quality supervision given the benefits conferred by such oversight. Credit unions could often pass the added costs on in the form of higher loan rates, particularly since they typically charge the same or less for their small loans than do the banks for their much larger loans. Moreover, many credit unions are located in rural areas, where they often have captive markets and substantial discretion to increase loan rates. In any case, good supervision may result in credit unions making significant efficiency gains, which may obviate the need for any loan rate increases at all. In addition, good supervision helps credit unions to become safer, more stable financial institutions. This, in turn, attracts deposits, thus providing additional resources for growth, service expansion, and further cost reductions through scale economies.

The second best strategy for dealing with the deposit-taking activities of credit unions would be for the superintendency to supervise only a much smaller set of the largest credit unions, for example, those with more than US$ 200,000 in capital (the present arrangement in Bolivia). The superintendency would delegate supervision of credit unions falling below the size cutoff to an oversight body that is *independent of the credit unions.* If the superintendency is unwilling or incapable of providing good quality supervision to even the largest credit unions, then the independent oversight entity would supervise all of the credit unions. The next section, on supervision, describes this strategy further.

Under both strategies, no minimum capital requirement is imposed. And, in both cases, the very smallest credit unions (those with less than approximately 50-200 members) would not be supervised. Rather, they would be treated essentially as ROSCAs or private savings clubs, which are small enough for the members to know each other very well. Because there is little desirability in restricting or controlling activities that are, for all practical purposes, informal finance, the very small credit unions would not be supervised.

Capital Adequacy

For several important reasons, the minimum ratio of capital to risk-weighted assets required of credit unions and MFIs (their capital adequacy ratios) should be higher than the capital adequacy ratio required of commercial banks. Yet, in Peru for example, the same ratio is required of all financial intermediaries, including all banks, regulated MFIs, and credit unions. In Bolivia, the same ratio is applied to all banks and regulated MFIs and to some credit unions. The same ratio is also applied to all banks and regulated credit unions in Argentina, Costa Rica, Ecuador, and Uruguay.

There are at least three reasons why MFIs and credit unions should be required to maintain higher capital adequacy ratios than banks. These have to do with governance, diversification, and earnings volatility.

Governance. In general, MFIs are largely owned by development organizations (especially donor and government agencies) and NGOs. For-profit private investors account for little or none of the capital base of most MFIs. In credit unions, each member has one vote regardless of his/her share capital holdings. Therefore, in contrast to banks, both MFIs and credit unions lack profit-driven investors on their boards of directors who: a) are willing and able to respond promptly to capital calls in order to replace lost capital and stave off bankruptcy; and b) scrutinize management closely

to be sure it operates as efficiently and profitably as possible (staying within a given level of risk tolerance), and thus maintains a level of financial performance that is as consistently solid as possible.

Diversification. Most credit unions and MFIs consist of one or a handful of offices located in a very limited geographic region. Therefore, they are geographically very undiversified in their loan portfolio and, in the case of credit unions, in their funding sources, which consist largely of local deposits. If an adverse local event occurs, these undiversified credit unions and MFIs may sustain grave financial damage. In contrast, banks are much more often regional or national in scope and consequently more able to withstand local shocks.

Earnings Volatility. This factor applies more to MFIs than to credit unions because MFIs much more consistently employ a lending technology in which administrative costs are a high percentage of loan amounts (say, 20 percent or more), whereas credit unions employ a lending technology much more like that of commercial banks. A significant part of the MFIs' large administrative cost outlays occurs during the early part of the loan cycle, especially for new client recruitment and loan analysis. If a substantial share of an MFI's loan portfolio goes into default, the MFI's earnings can be very gravely affected since the MFI does not receive the high interest rate charges that are meant to compensate for the high administrative costs. In contrast, commercial banks have much smaller administrative costs associated with their lending, often under five percent of the amount lent. If their default rate increases suddenly for whatever reason, their earnings are not reduced by nearly as much as for MFIs. This difference is magnified further by the fact that the bank typically can recover more of its loan losses by selling pledged collateral than can the MFI, since the MFI relies far more on character and cash flow information than on physical collateral (Box 2). Because large negative earnings can quickly decapitalize a financial institution, MFIs need to maintain a thicker capital cushion than banks in order to reduce their probability of bankruptcy to a similar (hopefully low) level.

To compensate for these three disadvantages, the capital adequacy ratios of MFIs and credit unions should be higher than for banks. The capital adequacy regulations noted earlier for Peru, Bolivia, Argentina, Costa Rica, Ecuador, and Uruguay may be seen as well-intentioned attempts to not penalize MFIs and credit unions by requiring of them higher capital adequacy ratios than are required of banks. In fact, however, these regulations are misguided because the MFIs and credit unions need the additional capital to protect themselves from the otherwise greater likelihood of insolvency.[19]

It is also possible to err in the other direction and demand much too high a capital adequacy ratio for MFIs and credit unions, overly suppressing their intermediation activities. Argentina has a risk-weighted capital adequacy standard that places a particularly onerous burden on microlenders. The risk weights used for determining capital adequacy are given in a schedule that goes as high as seven for very high interest rate loans, implying required capital of 80.5 percent of loan amount (seven times the basic 11.5 percent requirement). The rationale for such high risk weights is the assumption that high interest rate loans are risky loans. This assumption misses the mark in the case of microfinance, where high loan rates are generally the result of high administrative costs, not necessarily of high risk.

Finally, we turn to a capital adequacy practice for credit unions that is of questionable merit. Both Bolivia and Colombia permit larger credit unions to have much lower capital adequacy ratios than smaller credit unions, on the premise that larger credit unions are safer than smaller ones. In Bolivia, the capital adequacy ratios vary in steps

[19] It is not enough, as some have argued, simply to require that MFIs and credit unions strongly provision against loan losses. If there is a large negative shock and many borrowers are forced into delinquency and then into default, the resulting provisions (and subsequent losses) may render the MFI or credit union insolvent. What is needed is a thicker cushion of capital before the onset of the shock, so that the MFI or credit union can absorb the resulting losses without becoming bankrupted and thus defaulting on depositors and other creditors.

from 20 percent for the smallest supervised credit unions down to 10 percent for the largest ones. In Colombia, the range is even wider, from 30 percent down to nine percent.

To at least some of those who have worked extensively with credit unions, these differentials make little sense (e.g., see Richardson, 2000). In Latin America, one finds many small, well-managed credit unions and many large credit unions that are financial disasters, as well as the reverse. If there is any size versus safety pattern at all, it may well be the opposite of that implicit in the Bolivian and Colombian regulations. The reason for this is that as credit unions become larger, some outgrow the capacity of their member-based boards or their managers to administer them effectively. Recent empirical evidence from Colombia and Peru supports the proposition that larger credit unions are not necessarily safer (IDB, 2001). In both countries, no relation was found between credit union size (measured by total assets and by net worth) and credit union safety or quality (measured by a composite CAMEL type of rating and also by key single indicators such those measuring profitability, portfolio quality, and efficiency).

Loan Documentation and Provisioning

Bank superintendencies throughout Latin America typically require that regulated banking institutions gather extensive documented information in the course of granting each loan, in order to help the lender and regulator assess loan risk. Among the standard requirements for business loans are the past three to five years of balance sheets and income statements, documents establishing the value of physical assets owned, and information on existing liens. As explained in Box 2, individual microenterprise loans are normally extended on the basis of a current cash flow analysis of the combined household and business and a character assessment of the borrower. Group loans are extended on the basis of group guarantees and screening. Superintendencies that do not tailor reporting requirements to fit the nature of the lending methodology being used to make microloans, as some in the region do not, but instead insist on the presence of balance sheets, income statements, duly registered physical collateral, and other information where it is largely irrelevant, drive up the already-high administrative costs of making these loans (see IDB, 2001).

Traditional bank lending is collateral intensive and microlending is information intensive, yet both systems are capable of producing very high rates of repayment. Accordingly, 100 percent specific loan provisions for any non-collateralized loans whose repayment is overdue by even a single day, or general provisioning of 20 percent for all non-collateralized loans (late or not) vs. 1 to 3 percent for collateralized loans, would seem to inflict unduly harsh penalties on microlenders that have sufficient management quality to be supervised. Yet these regulations have been employed in several Latin American countries.

External Credit Limits

For credit unions, the amount of borrowing from noncommercial sources (in particular, from donors and governments) should be strictly limited in order to avoid situations in which these intermediaries are used as conduits for targeted credit programs, such as the agricultural credit programs of the past or the microenterprise credit programs of today. Reliance on such external funding sources has many deleterious effects, discussed in detail in Westley and Branch (2000, pp. 6-7), among which are the following. First, external credit tends to displace deposit mobilization, which is an important financial service in its own right. Second, it builds an unhealthy reliance on external donor or government programs that may one day be scaled back or eliminated. Third, reliance on external credit also builds expertise and a culture within credit unions of courting donors rather than providing good service to depositors, thus undercutting efficient, client-oriented credit union management. Finally, external borrowing unbalances the natural equilibrium in credit unions between net depositors and net borrowers, often leading credit unions to become borrower dominated. Such credit unions tend to offer low loan and deposit rates and to be weak on enforcing loan recovery and maintaining prudential controls, as has been seen in so many credit unions in Latin Amer-

ica that received donor and government funding in the 1970s and 1980s.

Most countries in Latin America do not regulate the level of credit union external debt. An exception is Bolivia, which restricts credit union borrowing from the government to one-third of total assets. This regulation is a good start but should be broadened to cover all debt from either government or donors. In light of the many pernicious effects of external credit, even lower limits are advisable on prudential grounds, perhaps of around 10 percent of total assets.

While it is inappropriate to impose external credit limits on non-deposit taking MFIs (which depend on external grants and loans for their funding), such limits may be useful and important for deposit-taking MFIs. As for credit unions, these external credit limits may help to strengthen the provision of deposit services, build self-reliance and a culture of service to clients instead of to donors and governments, and create a constituency of clients (namely, the depositors) interested in the maintenance of careful prudential management of the MFI. Tucker (1999) and Portocarrero and Nunura (1999) find that the Peruvian rural banks (the *cajas rurales)* receive over half of their total liabilities from government credit programs and that this is one of the major factors contributing to their weakness.

Governance Regulations

Bolivia has adopted a particularly extensive and well-conceived set of regulations meant to improve credit union governance. Moreover, in order to assist credit unions in bringing their bylaws into compliance with these regulations, the Bolivian superintendency has issued model bylaws that the credit unions may adopt wholesale or use as a guide to modify their existing bylaws. These regulations and bylaws are an excellent model for adaptation by other countries that regulate credit unions.[20] They may also serve as a good starting point for creating a similar set of governance regulations for MFIs. Such MFI governance regulations need to address many of the same problems addressed by credit union regulations. They could also address the special MFI problem of encouraging the transition from institutional ownership to ownership by private, for-profit investors.[21]

Among the major provisions of the Bolivian credit union governance regulations are those that define the principal functions of the board of directors—as distinct from the functions of management—and the numbers, qualification and disqualification criteria, and liability of credit union board members. The regulations define the functions and authority of the supervision committee—as the internal controller of the credit union with oversight over all credit union operations including those of the board of directors and management—as well as the liability of the supervision committee members. The Bolivian regulations mandate that credit unions have an internal auditor and that the auditor should be free to carry out his or her work fully and without restrictions. Loans to directors, senior management, and their families are prohibited. The Bolivian governance regulations put into practice many of the suggestions that Branch and Baker (2000) make in discussing governance problems and help the superintendency to prevent and control many types of credit union mismanagement problems.

Operational Restrictions

As noted in Jansson and Wenner (1997) and IDB (2001), many Latin American countries place minimum and sometimes maximum limits on the number of hours per day and days per week that branches of regulated financial institutions can operate, usually mandating at least five days per week and five to eight hours per day. This may pose a particular problem for credit unions and

[20] For more details on the Bolivian governance regulations, see Westley and Branch (2000, Chs. 8 and 11).

[21] One way this transition could be encouraged is by relaxing the minimum required capital adequacy ratio for MFIs that are majority owned by private, for-profit investors vis-a-vis those MFIs that are not. Even this relaxed ratio should still be higher than that applied to commercial banks given the greater earnings volatility and the generally lower levels of diversification of MFIs vis-a-vis banks.

MFIs, which may wish to open branches in rural or marginal urban areas where demand is not sufficient to justify such lengthy hours. Banco Sol in Bolivia, for example, has complained of this problem, having wanted to open branches in some areas for only two days per week.

Improving Prudential Supervision of Credit Unions and MFIs

If credit unions and MFIs are to have a long-term future as sound financial intermediaries, they almost certainly will have to be supervised. This is true for three reasons. First, prudential supervision helps financial institutions stay on the straight and narrow path of maintaining financial discipline and prudent management, something that so many unregulated Latin American credit unions and MFIs still have trouble doing today. Second, in the case of the MFIs, it opens the door for mobilization of deposits, a service that clients value highly, and one that allows MFIs to greatly leverage their capital base and expand their lending operations. Third, prudential supervision of deposit-taking institutions is important in order to protect and retain the confidence of the large number of small depositors who do not have the information or capacity to monitor the level of risk taken on by the financial institutions to which they have entrusted their savings.

Even though prudential supervision is important for protecting depositors and for the other reasons stated above, many superintendencies in Latin America have been unwilling to supervise any credit unions, much less all of them.[22] This is a clear defect in the region's prudential supervision systems, which leaves millions of depositors relatively unprotected and thousands of credit unions without much needed external discipline. Credit union federations in several Latin American countries have tried to fill this gap at least partly by attempting to supervise some or all of the credit unions that are federation members. This type of supervision has serious defects and can be improved upon by using one of two alternative systems described below. As will also be shown, there is some question about whether the banking superintendency is always the ideal body to supervise either the credit unions or the MFIs, even in cases where it has assumed these responsibilities. These issues are discussed in the first subsection below.

Just as credit unions and MFIs need to be regulated differently from banks, so they also need to be supervised differently. A number of these special supervisory considerations are discussed in the second subsection below.

Who Should Supervise MFIs and Credit Unions?

Until recently, there has been widespread agreement that if the government is to supervise MFIs and credit unions directly, the responsibility should be given to the existing bank superintendency—assuming that it has displayed reasonable competency in supervising banking institutions—rather than creating a separate MFI or credit union supervisory agency. Creating a new agency would be costly and inefficient in view of the substantial expenditures that would have to be duplicated in state-of-the-art information systems and specialized personnel. Keeping banking, MFI, and credit union supervision together in one institution would also facilitate a consistent regulatory approach to and treatment of different types of supervised financial institutions, and help avoid giving one institution an unfair advantage over another.

Despite these powerful arguments, some have begun to question the wisdom of entrusting the bank superintendency with the supervision of MFIs and credit unions, particularly when MFIs and credit unions represent only a small share of the financial system, as they do in most Latin American countries.[23] This is because the foremost responsibility

[22] Arzbach and Duran (2000) review the extent of credit union supervision in 16 Latin American countries.

[23] Credit unions lend substantially more than MFIs (Table 4), and yet credit unions typically account for only one to three percent of financial system lending in most Latin American countries (Figure 1, below). Credit unions and MFIs account for similarly small shares of financial system deposits and assets.

of the bank superintendent is to protect the integrity of the overall banking and payments systems, as it rightly should be. This means, however, that when banks get into trouble, inspectors and analysts may be taken away from their normal MFI and credit union supervision duties and assigned to the banking sector. They may be redeployed for extended periods of time to watch over either the troubled banks or the rest of the banking system in order to make sure that problems do not spread. Meanwhile, MFI and credit union supervision is likely to suffer.

For example, during Peru's 1998-99 economic downturn, the bank superintendency closed two troubled banks, merged one, and watched carefully over a number of others that were weakened. To accomplish all this, MFI inspectors and analysts were assigned to the banking system.[24] As a result, numerous MFIs had to wait two to three years for their annual inspection visit and the analysis based upon it.

If it turns out that as a result of banking system problems, MFIs and credit unions receive little or no effective supervision from bank superintendencies during substantial periods of time, the conventional wisdom concerning the superiority of this supervisory arrangement may have to be reconsidered. The question would then become, who should supervise the MFIs and credit unions instead? We examine this first for the credit unions, and then return to the MFIs.

In some Latin American countries, such as Peru and Mexico, credit union supervision is delegated, typically to the credit union federation. The superintendency often retains the right to oversee the supervision process and to impose sanctions on credit unions that violate the regulations—powers it retains, for example, in both Peru and Mexico.

A common argument made for delegating credit union supervision is that the bank superintendency does not have the resources needed to supervise so many additional financial institutions. The difficulty with delegating supervision, however, is that credit union federations typically have even less access to resources than do bank superintendencies. Hence, delegated supervision merely passes the buck. It does not solve the basic problem of ensuring that there are enough resources to provide good quality supervision; in fact, it may well exacerbate this problem.[25] A better solution to the resource problem is to give whomever supervises the credit unions the authority to charge the credit unions the full cost of their own supervision. As argued in the previous section, it is likely to be in the long-run interests of the credit unions to pay even this much, providing that the supervision is of good quality.

An even more fundamental flaw of the delegated supervision model is that it suffers from a severe conflict-of-interest problem. This problem stems from the fact that the federation is being asked to play two roles at once. In addition to its normal role as promoter of (and lobbyist for) credit unions, it is also being asked to serve as the regulator of credit unions. Since the credit unions own the federation, and credit union representatives comprise the federation's board of directors, the federation is likely to find it difficult to sanction and close down its credit union owners. This will be especially true when the larger and more powerful credit unions are the ones requiring such remedial actions.

A recent example of this problem is Costa Rica, where, in the mid to late 1990s, credit union supervision was delegated to Audicoop, an auditing and supervision cooperative owned by the credit unions. Audicoop boasted a competent professional staff that did good technical supervisory work. However, Audicoop's board of directors consisted of representatives of the supervised credit unions. As a result, the technical staff's recommendations for remediation and sanctions were

[24] Since credit union supervision is delegated to the credit union federation, these resources could not be similarly diverted.

[25] For example, the Peruvian credit union federation, FENACREP, collects enough revenue from its supervision fees to inspect only about 40 of its 130 member credit unions each year. It remains to be seen how Mexico will fare on this issue with its recently created system of delegated credit union supervision.

consistently overturned by Audicoop's board of directors. Board members did not want to punish their own credit unions or those of their friends. Because of the ineffectiveness of the delegated supervision system, the Costa Rican superintendency discontinued it in 1998.

At best, delegated supervision systems are likely to work episodically: badly during some periods of time, somewhat better during other periods of time. Peru provides an example of this. At the time of this writing, the credit union federation there has a strong leader, who was formerly a deputy minister in the Peruvian government. In his role as credit union supervisor, he has successfully enforced the credit union regulations, and even closed down several mid-sized credit unions. However, he is unsure about whether even he could close down some of the larger credit unions were it necessary to do so. And he is also unsure about what will happen after he is gone. If he is succeeded by a weaker leader, credit union supervision in Peru may well go the way of Costa Rica. I conclude that delegating supervision to the credit union federation is an inherently weak model, whose weaknesses may be overcome from time to time by a leader strong enough to resist his own board of directors.

Three Models

This section describes three supervisory arrangements that I believe are improvements over the badly-flawed model of delegated supervision. While these are described in terms of credit unions, each could work for MFIs as well. The three are given in declining order of what I believe will work well in Latin America.

The first choice remains direct supervision by the public sector, for two reasons. First, the protection of thousands of small depositors is essentially a public sector function. Second, a public agency does not suffer from the federation's conflict of interest problem. For the efficiency and consistency reasons described earlier, the supervision of credit unions would typically be handled by the bank superintendency, provided that it is able to do a good job of enforcing the credit union regulations (that is, provided it is not corrupt, incompetent, or overwhelmed by other responsibilities, for example) and that it is willing to do so as well. These conditions for the bank superintendency to be the first choice as credit union supervisor include the condition that credit union supervision resources are not drained for too long a period of time in response to banking system problems, as discussed earlier. If any of these conditions are not met by the bank superintendency, it may be best to create another public sector entity to undertake credit union supervision despite the inefficiencies and inconsistencies that this may create. For example, in the U.S., separate government agencies supervise banks and credit unions.

The second best system for credit union supervision is for the government to delegate supervision to a private supervisory entity that is *independent* of the credit unions. The credit unions would have no, or at most one, representative on the board of directors of such an entity (out of a total of five or more board members). The board of directors would consist of people such as representatives of the bank superintendency and finance ministry, and might also include eminent people in finance from the country's private sector or universities. Such a system is under consideration in Bolivia (for the credit unions that are not regulated by the bank superintendency) and in Panama. The Guatemalan credit unions, which are not supervised, have created a private rating agency whose board is structured along these lines. The idea in Guatemala is to provide credit union ratings that are impartial and uncontaminated by self-dealing, an objective that mirrors the goal here of providing impartial supervision.

The third best alternative is to adopt the German model of delegating supervision to two or more regional credit union supervision federations.[26] The board of directors of each regional federation consists of representatives of that region's credit unions. The advantage of having at least two such federations is that, following the German model,

[26] The Germans call these, "regional auditing federations." But the word "auditing" is used very broadly and includes all of the activities typically carried out by financial institution supervisors.

regional federation A never supervises the credit unions of federation A's board members. Rather, federation B does that. Three other factors or principles explain the success of the German model in Germany, and these should be adopted insofar as possible in Latin America by countries attempting to use this system there. First, the boards of directors of the regional federations are highly professionalized. Members often remain on these boards for a very long time, with ties to their original credit unions eroding quickly over time in an atmosphere that fosters professionalism in supervision. Second, the regional federations do only supervision. They perform no promotional or lobbying functions; these functions are carried out by separate organizations (DGRV and BVR). Third, it is likely that Germany brings more discipline to the task of making such a supervision system work than will most countries in Latin America.

Two final points should be made about supervision. First, in the last two models (of delegated supervision), the bank superintendency should closely oversee the supervision process in order to ensure that it is being carried out competently and without bias. For the same reason, the bank superintendency should also retain the power to sanction the credit unions and the entity to which it has delegated supervision.

Second, in none of the three supervision models is it appropriate to introduce safety net elements such as deposit insurance or a stabilization fund until a track record of good supervisory control has been established. [27] Otherwise, oversight by credit union members is relaxed before it has been adequately replaced by external oversight, introducing potentially very severe problems of moral hazard. That is, many credit unions may be tempted to operate in an overly risky fashion, reasoning that there is great upside potential to the risks they are taking, while the downside potential is now limited by the safety net. These actions could have the most serious repercussions for the financial stability of the overall credit union system. Two cases that merit attention in this area are Colombia and Mexico. Both have recently decided to include credit unions in a deposit insurance scheme. It remains to be seen if adequate supervisory control is first established. Mexico is an especially worrisome case in this regard because it is relying on a system of delegated supervision, which we have argued is, at best, effective episodically. Yet, the deposit insurance scheme is meant to be offered permanently.

[27] A stabilization fund collects regular contributions from all participating credit unions and uses these funds to shore up ailing credit unions, hopefully before these credit unions slide irreversibly into insolvency.

How Should MFI and Credit Union Supervision Differ from Bank Supervision?

Providing good supervision for MFIs and credit unions requires that superintendencies (and other supervisory entities) modify the methods that have traditionally been used for commercial bank supervision in a number of key areas. Given the recency of MFI and credit union supervision in most Latin American countries, this adaptive process is still in its early stages. Supervision modifications for MFIs and credit unions are discussed separately because the required adaptations are generally quite different for the two types of institutions.

MFI Supervision[28]

This subsection discusses the areas in which there are important differences between best practice MFI supervision and best practice bank supervision: portfolio quality assessment; systems, policies, and procedures; loan technology; loan tracking systems; MIS reports and follow-up; early warning indicators; fraud control systems; loan size limits; and liquidity risks.

An important traditional method used for assessing bank portfolio quality, namely, the desk analysis of a limited number of loans, does not work well for microfinance. Bank supervisors can examine the loan files of many or all of a bank's largest 300 borrowers and from this analysis can often assess the quality of a substantial share of

[28] This subsection draws significantly on CGAP (1998).

the bank's assets. In contrast, MFI portfolios typically consist of thousands or even tens of thousands of tiny loans. An analysis of any reasonable number of these loans does not generally provide coverage of a very high percentage of the MFI's assets. Further, bank supervisors can peruse a bank's individual loan files for financial statements, project and market analyses, and assessments of the value of pledged collateral. In contrast, MFI loan files generally provide none of this information since MFI loans are extended on the basis of either a character and simple cash flow analysis or else group guarantees (Box 2). This makes it very difficult to assess the merit of microlending decisions from a desk analysis of loan file information.

Given the difficulties of directly analyzing a large share of the loan portfolio, MFI supervision needs to focus on verifying the existence of adequate systems, policies, and procedures, particularly with regard to the loan portfolio, which comprises the bulk of most MFIs' assets. The remainder of this subsection considers some of the key systems, policies, and procedures that need to be analyzed.

First and foremost, supervisors must fully understand all aspects of the credit technology used by best-practice MFIs (Box 2). Only in this way can they make an informed judgment about whether the MFIs they are supervising are effectively controlling risks and costs, particularly in the critical analysis and collection phases of the loan cycle.

The loan tracking system is a key piece of an MFI's management information system (MIS). Supervisors must make sure that the loan tracking system properly reflects loans disbursed, payments received, and the delinquency status of all outstanding credits. Supervisors should take a significantly-sized stratified random sample of loans—stratified by branch office, loan officer, refinancing status, and any other important criteria—to check the tracking system against the ledger accounts and also to see where loan quality problems are arising. Field visits to a subsample of the individual borrowers should be made in order to check on the realism of the loan quality data being reported by the MFI.

MFI supervisors must verify whether the MIS produces timely reports for management in intelligible form and whether management then acts on these reports expeditiously. A good example of this is in the area of delinquency control. An axiom of microfinance is that delinquency must be maintained at reasonably low levels if the MFI is to be successful. The MIS of good MFIs produces reports of all delinquent loans in each loan officer's portfolio on the first day of loan delinquency. An increasingly severe range of actions should then take place starting within a day or two, beginning with the loan officer contacting the delinquent borrower, up through demand letters, and finally ending with legal action (with the last coming as quickly as within 30 days for some best-practice MFIs). The very existence of this series of predictable enforcement actions by itself helps to keep delinquency rates down.

A related issue is the rapidity with which MFI delinquency rates can deteriorate due to lax management combined with a portfolio of short-term, uncollateralized loans. Because of this problem, supervisors need to be sure that MFIs generate and utilize a system of early warning indicators. This system might look for such things as high levels of management or staff turnover, deposit rates that are substantially above the market, unusually rapid increases in loan volume, and changes in other variables that may be useful in predicting future problems, according to experience and analysis. MFI supervisors should also examine how management reacts when its early warning system indicates that there may be difficulties ahead.

Supervisors must assess the adequacy of MFI fraud control systems. Most MFI fraud is not at the treasury or other level that leaves a paper trail, in contrast to most cases of bank fraud (which typically do leave a paper trail of loans that were not duly recorded, properly signed off on, etc.). Rather, MFI fraud occurs at a level before any data are entered into the management information system. Common fraud problems in MFIs include phantom loans (loans to nonexistent or front businesses), kickbacks to loan officers for easy treatment of loan delinquency, and nonreporting by

loan officers of their clients' payments. MFIs are particularly prone to these problems given the perforce decentralized nature of their operations, with loan officers responsible for efficiently screening and administering large numbers of small loans simultaneously.

Effective fraud control systems include the following. To catch phantom loans and kickbacks, a person or unit in the MFI (ideally with loan officer or collection experience) visits all seriously delinquent clients and makes unannounced visits to a certain share of all other loan clients. To catch underreporting of the day's collections by loan officers, a loan officer's supervisor compares loan collections estimated at the beginning of each day with actual collections at the end of the day. The supervisor visits any loan accounts that cause discrepancies.

Another special MFI problem that supervisors must be vigilant about occurs when MFIs move into loan sizes above the limits of their loan methodology. The MFI may be able to handle loans in the $100 to $2500 range with the usual microfinance loan technology. Experience has shown, however, that if the MFI starts to make loans to larger firms for $10,000 to $20,000 or more, particularly to first time borrowers, it may well run into trouble. This is because such loans require a more profound cash flow and financial analysis of the firm and of the firm's collateral. The supervisor must assess whether the MFI is exceeding its own capacity for loan appraisal in this way.

Finally, supervisors must be aware that liquidity risks pose particular dangers for MFIs. This is because of the nature of their lending technology, which motivates repayment today with the promise of increasing loan sizes tomorrow. If clients get wind of a liquidity crunch that impairs the ability of the MFI to make further loans, word will spread quickly, and repayment of existing loans will often drop precipitously. Supervisors must take special care to check whether there is a sufficient liquidity cushion to cover likely contingencies and avoid this problem.

Credit Union Supervision

This section discusses the areas in which best practice credit union supervision departs significantly from best practice bank supervision: external credit, borrower domination, volunteer credit committees, fixed assets, and the low salary problem.

The preceding section, on regulation, has already enumerated many of the ill effects associated with credit union borrowing from noncommercial sources such as donors and government. Supervisors must be keenly aware of this issue, both to enforce any current regulation that limits such external borrowing and to be watchful for the ill effects caused by weak or nonexistent regulations in this area, either present or past.

One of the legacies of the extensive external borrowing that credit unions undertook in the 1970s and 1980s is the fact that so many of these institutions are still borrower dominated today. These credit unions are typically controlled by those desiring low interest rate loans and normally do little or no analysis of their loan applicants' ability or willingness to repay. These credit unions are generally weak on loan recovery and often have very high delinquency rates (the extent of which is sometimes hidden by accounting tricks such as only counting the missed payments, rather than the entire loan balance, as overdue). Loan provisioning is typically inadequate. As a result of their low loan rates, the interest rates that these credit unions can afford to offer depositors is generally low as well. This means that few serious depositors join these credit unions, at least if they have a bank or other reasonable alternative place to save. Because of their anemic deposit mobilization, such credit unions are chronically short of loanable funds. They often ration what funds they have by queuing applicants and lending a maximum of only a fairly low multiple of a member's contributed share capital (three times shares is a common loan limit). This loan rationing sometimes leads to favoritism, with credit union directors and managers and their families and friends obtaining favored treatment (earlier consideration of loan applications, larger loan amounts, etc.).

Supervisory bodies that face borrower dominated credit unions need to take and oversee actions on a number of interrelated fronts, including the following. First, supervisors should limit external credit in whatever way they can: by enforcing any existing regulations and, if necessary, through other forms of supervisory persuasion (holding up branching requests, etc.). Second, delinquency rates and other credit quality indicators should be carefully checked and recalculated as necessary to conform to accepted standards; adequate loan loss provisions should also be made. Third, proper loan analysis and loan recovery programs should be put into place. Fourth, credit manuals and procedures should be modified so that different types of loans (e.g., business, consumer, and home mortgage) are analyzed differently, rather than using only one standard loan form and methodology to analyze all loan types. Fifth, borrower dominated credit unions should be strongly encouraged to raise the interest rates offered on their deposits in order to attract serious savers. This will give these credit unions new funding sources from which to expand lending, eliminate loan rationing, and begin to offer new products of interest to their members, while simultaneously beginning to counterbalance the domination of their membership and board of directors by borrowers. Sixth, borrowing rates should be increased so that the credit union earns a profit. Most or all of these profits should be capitalized (rather than distributed to members) since credit unions typically have a very small cushion of institutional capital to protect member savings and shares and to serve as a funding source for future growth.

Supervisors must ensure that volunteer credit committees (composed of credit union members) play an appropriate role. In small credit unions, volunteer credit committees often do a good job of deciding on loan applications. This is because the credit committee members together often possess better information on the riskiness of their fellow borrowing members than a loan officer ever could. However, as credit unions grow toward several thousand members, credit committee volunteers cannot personally know all of the loan applicants. Further, it becomes impractical for the credit committee to approve all loans, given the large number of these operations. In any event, credit committee members do not possess the specialized risk analysis skills that are needed when detailed personal knowledge is no longer available. Therefore, as credit unions grow in size, volunteer credit committees should be disbanded or should assume the role of randomly reviewing whether loans comply with the credit union's policies and procedures. In place of the volunteer committee, loan decisions should be made by a technical committee composed of loan officers and credit managers.

Supervisors need to discourage or prevent credit unions from spending either too little or too much on fixed assets. Sometimes as a consequence of borrower domination (and the meager income flows that result), credit unions do not have enough resources to bring their physical appearance—premises, furniture, etc.—up to a reasonable standard. In other instances, adequate resources may exist but are not being allocated to this purpose. A shabby and unprofessional appearance discourages savers and stunts expansion, and thus can be quite damaging to the financial health of a credit union. At the other extreme, some credit union directors and managers spend lavishly on unproductive, showy fixed assets in order to serve their social goals or desires for self-aggrandizement.[29] Both extremes are to be avoided and merit supervisory attention.

Finally, credit union supervisors must be cognizant of the low salary problem. This is a chronic problem for credit unions in many parts of Latin America, in which the salary levels of credit union officials are held down by a membership that compares its own income level to that of the credit union officials. Low credit union salaries relative to those paid elsewhere in the financial sector often result in low effort and morale, high personnel turnover, and a general inability to recruit and retain high-quality staff. Credit union directors, managers, and members must be educated on the damaging effects that low salaries have on credit union performance, including poorer loan quality (from weaker loan screening and collection ef-

[29] In some countries, such as Chile, there is a tradition of credit unions spending excessively on fixed assets.

forts) and lower productivity and profits.[30] And they must be strongly encouraged through the supervision process to change this practice, particularly when it is having very harmful effects.

Improving the Legal Framework for Secured Transactions and Modernizing Supporting Institutions

In most Latin American countries, poorly formulated laws and inadequate or nonexistent legal registries impede the use of both movable goods and real property as collateral to secure loans. While this is a general system failure that affects firms of all sizes, its greatest impact is likely to be on small firms, rather than on large firms or microenterprises, a point we shall develop in this section. We begin the discussion by examining the nature of the problem, which has three major components: the creation, perfection, and enforcement of security interests.[31]

The Creation of Security Interests

The laws of many Latin American countries stipulate that only certain specific goods or certain classes of goods, but not others, may be used as collateral. This is frequently very limiting, as the gaps are often quite substantial and generally without any modern rationale. Many countries in Latin America also do not allow for *continuing security interests*, so that if the pledged asset is sold, the creditors often cannot automatically attach the proceeds, as creditors can in the United States and Canada, for example. Another useful device that is frequently not available in Latin America is the *floating security interest*. In Uruguay, for example, if a bank lends $50,000 against 100 head of cattle it must identify a particular 100 head by tattoo or other means, which makes loan monitoring very expensive. By contrast, in the United States and Canada, a loan can be based on a floating security interest in "$50,000 in cattle."

The desired reforms in this area are that people should be permitted to enter into contracts in which they can pledge a wide variety of assets as collateral. Lenders should be able to establish and retain their claims in an efficient manner.

The Perfection of Security Interests

This can be very difficult in Latin America. To be sure that there are no prior superior claims on an asset pledged as collateral, lenders must be able to search for such claims in the legal registry. In Uruguay, for example, this is quite difficult because the lender must know the date of the prior pledge; one cannot search by the name of the borrower or by using a description of the pledged asset. This process is even more cumbersome in Bolivia, where claims are filed chronologically and one must look through the entire registry for prior pledges. Further complications arise when, as occurs with some prevalence in Latin America, one needs official permission to search a registry. This permission may be difficult to obtain, perhaps involving bribes, delays, and uncertainty of ultimate access.

The desired reform in this area is to create accurate registries that are accessible to the public and inexpensive to search. This will facilitate the credit extension process. Strengthening or privatizing public registries is one possibility, as is introducing competition among public registries or permitting private registries to compete with public ones.

The Enforcement of Security Interests

In Uruguay, it typically takes six months to two years to repossess and sell collateral. A lengthy legal process involving the courts is required, rather than a rapid administrative procedure outside the court system. Such delays, with their at-

[30] Westley and Shaffer (1999) find that the impacts of low salaries on credit union delinquency rates and profits in a sample of 55 credit unions in Bolivia, Guatemala, and Honduras are statistically significant and quantitatively quite strong.

[31] See Fleisig, Aguilar, and de la Peña (1994) and Fleisig (1995a; 1995b) for additional discussion.

tendant risks and costs, are quite common in Latin America.

The desired reform in this area is to change the law to permit private parties to agree to rapid, non-judicial enforcement of contracts.

What impacts do these deficiencies have on the economy? The slow enforcement of security interests is particularly detrimental to the use of movable property as collateral. During the lengthy period of time it takes the lender to repossess and sell the pledged equipment or inventory, machinery may be left to rust, grain to rot, or cattle to die or be slaughtered. Or any of the pledged assets may be sold or shipped out of the country. Since movable property constitutes more than one-third of Latin America's capital stock and annual fixed investment, this is obviously an issue of great importance. If firms cannot purchase movable property using credit, or can only do so at the high interest rates normally reserved for unsecured loans, then firms will economize more on capital because of its greater cost or the lack of financing. And if banking institutions are less involved in such lending, they will carry out less of the project screening, liquidity provision, and risk pooling that helps intermediation raise investment productivity levels and overall economic growth rates. Because of these effects, together with the higher user costs of *real property* (due to the significant costs and risks to the lender of perfecting and enforcing security interests even in those types of assets), both income per capita and its growth rate will be lower than in a system in which movable and real property can be used effectively and inexpensively to secure loans.

How are these income losses distributed? The negative impacts are likely to be greatest on small firms run by less wealthy individuals. Wealthier businessmen and larger businesses are more likely to have real property assets, while small firms may have only their inventory or perhaps some equipment to pledge as security for a loan. Since real property is much more likely to preserve its value during lengthy enforcement proceedings, wealthier real property owners are more likely to be able to get credit or get it at much lower rates than small firm owners with only movable property to offer as collateral.

The negative impacts of these failings in the system of secured transactions are likely to be the greatest for small businesses for another reason as well. Given the substantial and largely fixed costs associated with perfecting and enforcing security interests, the interest rates charged on small loans will have to be increased by a much greater amount than the interest rates charged on large loans in order to recover these costs.

These secured transactions problems are also likely to affect small enterprises more than microenterprises. This is because microenterprise loans are normally based on cash flow and character assessments or on group guarantees (Box 2). In contrast, small firm loans—typically in the range of US$ 15,000 and higher—are much more often secured using physical property because of the greater loan size. Nonetheless, the availability of microenterprise credit may also be negatively affected through the credit chain. Microentrepreneurs may be able to obtain credit from their suppliers and purchasers if these suppliers and purchasers can obtain credit from the banking system using as collateral the equipment or inputs they are selling to the microentrepreneurs or the goods they are buying (or holding in inventory that they have already bought) from the microentrepreneurs. If suppliers and purchasers cannot obtain bank credit because of faulty secured transactions laws and supporting institutions, then less trade credit is likely to be available to microenterprises.

To summarize, improving Latin America's framework for secured transactions and modernizing the supporting institutions would probably increase the incomes of firm owners across a broad spectrum of firm sizes, with perhaps the greatest impact on the income of small firm owners vis-a-vis that of large firm owners and microentrepreneurs. Nevertheless, low-income subgroups of microenterprise owners and smaller firm employees do stand to make significant income gains.

Recognizing the potential importance of these reforms, several countries in Latin America have recently examined the issue of overhauling their secured transactions laws, including Argentina, Bolivia, El Salvador, Honduras, Mexico, Nicaragua, Peru, and Uruguay. Bolivia and Mexico have recently passed reform bills in this area.

Reducing Informality

Regulated banking institutions typically lend only to officially sanctioned businesses, not to unregistered enterprises. This increases the cost of credit for unregistered businesses and diminishes their likelihood of being able to borrow.[32] This section shows that unregistered enterprises tend to be very small firms owned by lower-income individuals (Box 3). It discusses the potential for reducing income inequality by making more and lower-cost credit available to these enterprises by increasing their formality levels through reductions in the initial and recurrent costs of formality and through land titling programs. By registering themselves, these firms can also take advantage of numerous other benefits of formalization besides credit access, some of which are presented in Box 3.

The barriers to formality are of two types, initial and recurrent, and it is reasonable to consider reducing both of them. The initial costs of registration can be substantial. For example, de Soto (1989) found in an actual experiment that to set up a small garment factory in Lima took 10 months, involved 11 separate and time-consuming procedures with various ministries and other state institutions, and cost US$ 1232 in fees, bribes, and lost profits, which equaled nearly three years of wages at the minimum salary level. Tokman (1992) also finds high access costs to legality in other Latin American countries. The time to register a small firm in the group of Latin American countries he studied was 10 months on average, ranging from about one month in Bolivia, Brazil, and Chile to two years in Guatemala. By contrast, Chickering and Salahdine (1991) report that a similar procedure takes about three hours in Florida and four hours in New York.

Formidable as the initial costs of formality may be, the recurrent costs, which must be paid every year, are likely to be even greater. These include such things as payment of income, payroll, and other taxes, as well as minimum wages and mandated fringe benefits; constraints on and additional costs of dismissal; and compliance with government-imposed procedural and paperwork requirements. On this last point, de Soto (1989) surveyed 37 formal firms operating in sectors with high levels of informality and found that 40 percent of the working time of administrative personnel was spent complying with the government's bureaucratic procedures, a cost that seems clearly exorbitant. The question of whether state-imposed taxes and regulations make labor costs too high and dismissal restrictions too strict is discussed in IDB (1998, Ch. 6). It is argued that most countries in Latin America would be well-advised to reduce many of these barriers to formality as a way to increase formalization rates and extend labor code protections and benefits—as well as the other advantages of formality, including better access to capital—to a larger percentage of earners.

[32] See, for example, de Soto (1989), Loayza (1996), McPherson and Liedholm (1996), and Orlando (1998). As an example of the high cost of borrowing, de Soto (1989) notes that in Lima in 1985 the nominal borrowing rate for informal firms was 22 percent per month, versus 4.9 percent for formal firms of comparable size.

Box 3
Informal Enterprises

What are the characteristics of unregistered, or informal, enterprises? As discussed by numerous studies in this area, including those cited above, informal firms are:

- usually very small, in order to escape detection by the authorities and avoid potentially severe penal-

ties in the form of fines or capital confiscation.

- often owned by those with lower educational levels, since the better educated are typically better able to navigate the bureaucratic obstacles to become registered. The better educated also tend to be more aware of and able to take advantage of some of the other, noncredit benefits of being formal such as government training and technical assistance programs, the ability to enter into and enforce legally binding contracts and obtain insurance, and the ability to bid on municipal procurement contracts.
- usually a much greater share of rural enterprises than of urban enterprises, which at least partly results from the fact that the former businesses are located much farther from administrative centers and thus are less likely to be caught and punished.
- often associated with home-based businesses, firms without a fixed location, and enterprises with very little capital because in each of these cases detection is more difficult. Informal firms also tend to maintain less capital in cases in which the penalty for detection includes capital confiscation.

These characteristics of informal firms (very small, rural, less human and physical capital, etc.) imply that, as a group, the owners of such firms will almost certainly have much lower incomes than the owners of formal firms.

What are the benefits to unregistered firms of formalization, beyond those noted in the second bullet above? Benefits include the fact that formal firms:

- may be able to obtain cost reductions by utilizing more capital equipment and operating in a single, fixed location.
- can avail themselves of the benefits of police and judicial system protection from crimes against their property.
- may pay much less in bribes to corrupt officials than do informal businesses. For example, de Soto (1989) found in Peru that the former pay an average of one percent of their gross income in bribes, versus 10 to 15 percent for the latter.
- may freely use advertising, an advantage whose significance is suggested by the fact that two-thirds of all small business customers in the U.S. are brought in by the signs displayed outside of shops and factories.
- may limit the personal liability of their owners through incorporation.

Land Titling

The discussion has thus far focused on the formalization of businesses through the lens of registration and subsequent compliance with tax, labor, and other codes. However, there is another sense in which reducing informality may increase the opportunities for low-income individuals to increase their earnings. Programs to regularize the land titles of small farmers and urban squatters may provide both groups with a potentially acceptable form of collateral and thus greater access to credit. De Soto (2000) discusses these and other benefits of properly titling real property and other assets.

Cross-Country Regression Evidence

Using a number of indicators, Loayza (1996) estimates the share of GDP produced by the informal (unregistered) sector in 14 Latin American countries in the early 1990s. He then employs these data along with several other standard variables to explain the growth rate of real per capita GDP in the 1980-92 period. He finds that the informality variable is always significant in his estimated growth equations, and consistently has a

coefficient value of around -1.3, indicating that a completely informal economy would have a growth rate 1.3 percentage points below that of a completely formal one. The question then becomes, how are the income losses associated with greater informality distributed?

To attempt to answer this question, I employed Loayza's informality data to explain the average value of the Gini coefficients over the 1982-92 period for the same 14 Latin American countries. Although the data sample is quite limited, and it is generally very difficult to explain inequality in the Latin American cross-section alone, I do find greater informality to be significantly associated with greater inequality, as the preceding discussion has suggested.[33]

Credit Bureaus

Public credit bureaus typically gather together the credit histories of all banking system borrowers, or all such borrowers with loans above a certain size. They are generally established by banking superintendencies to be of assistance in the task of supervising financial intermediaries. Credit bureaus help to assure the safety and soundness of the banking system by giving supervisors a tool to detect borrowers that may not be overextended at any single financial institution but *have* overborrowed from the banking system as a whole or are engaged in other irregularities.[34] Superintendencies may permit individual financial institutions to utilize this credit history information by either directly accessing the superintendency's database (usually for a fee), or by selling the data to private credit bureaus which in turn market the information to the financial institutions.[35]

Since smaller businesses often possess little collateral with which to secure a loan, one of the few resources they may have to help them obtain credit is their history of repayment of past loans. By making this credit history information widely available, a credit reporting system lowers the risk of losing access to credit for smaller firm entrepreneurs who wish to be geographically mobile or must relocate for any reason. It also potentially permits smaller firms to lower their cost of credit since the intermediary from which they have borrowed no longer has an information monopoly about the smaller firm's willingness and ability to repay loans.[36] Finally, credit bureaus stimulate the flow of credit to smaller firms because lenders know that if these borrowers default the information will be made public, damaging the small firm's credit reputation. Seeing that they have this disciplining device, financial institutions will be more willing to make loans, particularly to smaller firms, which may have little of the usable collateral that larger firms can offer to help ensure loan repayment.

In view of the potential for both efficiency and distributional gains, the policy recommendations that come out of this analysis are to consider: (a) establishing public credit reporting systems where they don't exist, (b) extending their coverage to smaller banking system loans where they do, and (c) ensuring wide access to this information (by the financial institutions and, for reasons of accuracy and transparency, by the credit report subjects themselves).

---

[33] Table A2 in the Technical Annex contains a few representative regressions.

[34] In Peru, for example, the banking authorities cite their recently expanded credit bureau for helping to stop a credit bubble in which consumers would borrow from one bank to pay another, much like a check-kiting scheme.

[35] Alternatively, a group of financial institutions may agree to pool information on their borrowers and thus create a purely private credit bureau. The fact that these lenders lack the superintendency's power to compel other financial institutions to participate has often limited the scope and utility of such credit reporting services.

[36] Of course, these two benefits (cost of credit and geographic mobility) apply to firms of all sizes, but they are particularly important for smaller enterprises since these firms often lack the collateral that would enable them to obtain a loan easily and cheaply from a financial institution that they have not dealt with before.

Candidates for these reforms include countries that currently do not have a credit bureau, including Trinidad and Tobago, Suriname, Guyana, Belize, and the Bahamas. Other countries in the region have credit bureaus with substantial loan size cutoffs, which do not track many smaller-firm loans. These countries include Colombia, Paraguay, and Uruguay, which have loan size cutoffs of US$ 12,500, US$ 2500, and US$ 18,000, respectively. At the other end of the spectrum, a number of countries have very extensive loan reporting systems. For example, the credit bureaus in Bolivia, Chile, Costa Rica, Dominican Republic, Ecuador, Peru, and Venezuela cover all size loans. A recent example of reform is Honduras, which, until 1999, did not have any credit bureau. The Superintendency installed a credit bureau in that year which tracked loans above 300,000 lempiras (about US$ 21,000) and then expanded the credit bureau to cover loans of all sizes in the year 2001.

Leasing and Factoring

Leasing and factoring offer ways for firms that currently possess little or no physical collateral to obtain loans, and thus may be of special interest to smaller firms. The problem addressed in this section is that a variety of legal, regulatory, and tax obstacles may impede more widespread use of these instruments to obtain durable equipment financing (in the case of leasing) or loans based on accounts receivable (in the case of factoring).

In leasing, the bank (or other financial institution) buys a piece of equipment that the firm would like to use, and retains ownership. The enterprise utilizes the equipment and pays a monthly rent (which represents interest on the credit outstanding plus amortization). An advantage of leasing over a straightforward bank loan, in which the enterprise would own the equipment and use it as collateral, is that, as the equipment owner, the bank does not have to be concerned about creating or perfecting a security interest. It can be sure that no one else has a legal claim on the equipment. In addition, in the case in which the firm defaults on its lease, *if* the bank can take possession of the equipment, it can sell that equipment immediately in the second-hand market (since the bank is the owner). This is perhaps the major advantage of leasing. By contrast, in a straight loan against collateral, the bank often must engage in lengthy proceedings to obtain a court order allowing it to sell the pledged asset (since the firm is the owner). With a lease as for a loan, however, the bank must often go through a long legal process to take possession of the equipment since it resides on the firm's property.[37] Thus, with leasing, one escapes some but not all of the problems associated with secured transactions. To facilitate leasing, then, parties should be permitted to contract for rapid and low-cost repossession of leased equipment in cases of default.

Other barriers to the more widespread use of leasing include regulatory and tax obstacles. On the former, allowing banks to enter the leasing business in Chile in the 1980s (as partial or sole owners of leasing companies) led to a large increase in leasing activity there. As a result of this, leasing became an important way in which credit was made available to smaller enterprises in Chile. It is not uncommon for a micro or small enterprise in Chile to lease equipment for as little as US$ 2000. Tax barriers can also stand in the way of leasing. If bank loan interest payments are tax deductible but lease payments are not, leasing will not flourish. In Argentina, until fairly recently, there was a double taxation problem. The leasing company paid the 21 percent value added tax when it bought the equipment, and then the lessee paid it again when he or she leased the equipment. Only in the last few years has legislation repealed the former levy, eliminating this problem.

A pioneer in the microcredit field, Bangladesh's Grameen Bank, has more recently also been demonstrating the feasibility of microleasing with a program that began by leasing power looms to poverty-level weavers in the Dhaka Zone in 1992. The Grameen Bank's program has since expanded

[37] An exception to this occurs for leased vehicles, which can be seized on the streets since streets are considered public areas. This is why vehicle leasing is much more common in most Latin American countries than the leasing of other equipment that remains on the lessee's private property.

to cover a wide variety of products (including sugarcane grinders, power tillers, battery chargers, ball-point pen production machines, baby taxis, and mini transport) in all 14 zones covered by the bank's operations. As of December 2000, the Grameen Bank had a leasing portfolio of US$ 7.8 million, with an average lease size of US$ 526 and a default rate of three percent. Nearly 68 percent of the lessees had moved into ownership of the equipment financed. The leasing program is open to second-time borrowers from the bank's microloan program, with leasing terms of up to three years and lease payments collected on a weekly basis.[38]

In factoring, the firm obtains a loan by making use of a somewhat nontraditional form of movable property collateral, its accounts receivable. This form of finance may be of particular interest to smaller firms since they are often labor intensive and may not have significant amounts of real property or even equipment that could be used to secure a loan. If, however, the smaller firm has substantial accounts receivable, particularly from large, bankable firms (for example, because they supply parts, other inputs, or services to these large firms), the smaller firm may be able to secure low-cost financing. This is because the interest rate charged on its receivables financing is primarily a function of the credit rating of the large firm, rather than of its own credit rating.

Since factoring is merely a special case of using movable property collateral to secure a loan, the obstacles to wider availability of such credit include all of the barriers discussed above in the section on secured transactions. Hence, to expand the use of factoring and thus the opportunities for smaller firms to obtain credit, the law must allow security interests to be created using invoices as collateral, there must be a way to verify that no one else has a prior claim on these invoices, and there needs to be a low cost means for lenders to enforce their security interests in case of default.

Strengthening Credit Unions and MFIs

This is the final financial market policy we shall consider for reducing income inequality. It may be considered a policy choice insofar as governments and countries can choose to what degree they will actively strengthen—and encourage donors and others to actively strengthen—the main formal and semiformal financial institutions that serve microenterprises, namely, credit unions and MFIs.

Very substantial government and donor resources have, in fact, been spent on strengthening these institutions in many, though not in all, Latin American countries. Most of these technical assistance funds have been channeled to MFIs, rather than to credit unions. This disparity is due, at least in part, to the perception that Latin American credit unions largely serve the middle class. While many middle class individuals undoubtedly are credit union members, the experience of a number of World Council of Credit Union personnel and of the author is that the Latin American credit unions also serve many poor persons. The data presented at the end of Part I, although very partial, corroborate these experiences, indicating that roughly the same percentage of credit union and MFI clients are poor. Moreover, the presence of middle class individuals in Latin American credit unions is

[38] Thanks to Syed M. Hashemi of CGAP and Dipal C. Barua, General Manager of the Grameen Bank, for this information. For more on microleasing and the Grameen Bank's program, see Gallardo (1997) and Dowla (1998).

often of great benefit to the poor credit union members. This is because the middle class members as a whole are generally sizable net savers while the poor are typically net borrowers. Hence, the middle class members effectively fund much of the borrowing the poor do from credit unions.

The great imbalance in the technical assistance support provided to MFIs versus credit unions by donors and governments appears even more unfortunate and unwise in light of the following:

- Though it is not widely recognized, credit unions are, in fact, the dominant supplier of microenterprise credit in Latin America, by a margin of two to one (Table 4).
- Credit unions provide savings services on a far broader scale than MFIs. Most MFIs offer little or no savings services.
- Credit unions provide a much broader range of credit products than MFIs, including housing and consumer loans, which MFIs are only beginning to offer.[39]
- A much greater share of credit unions than MFIs are located in rural areas, where financial services are far scarcer and poverty rates are substantially higher than in urban areas.

Despite these many advantages, credit unions have fallen far short of their potential. This is illustrated in Figure 1, which shows aggregate credit union deposits and loans relative to those of the commercial banking system in all Latin American countries for which data were available and in several industrial countries. The figure shows how severely stunted the credit union movement still generally is in Latin America, and suggests that there is great potential for expansion and growth. We now consider why the credit unions are operating so far below their potential in Latin America and what can be done about it.

Strengthening Credit Unions

We begin with a brief explanation of why Latin American credit unions are operating so far below their potential. Credit unions in Latin America were generally established in the 1950s, 1960s, and 1970s with the strong social welfare purpose of assisting the poor. Many were organized by Catholic priests and U.S. Peace Corps volunteers. They typically lacked professional management and were weak at loan recovery and at earning and retaining profits for future expansion. They usually kept loan rates very low in order to benefit borrowing members. Low lending rates meant that deposit rates were also normally kept low. But with substantial grant and soft loan funds available from donors, many credit unions grew rapidly in this period anyway despite the lack of deposit mobilization, loan recoveries, and retained earnings. With the drying up of much of these donor funds in the 1980s and 1990s, the credit union movements in many Latin American countries became moribund.

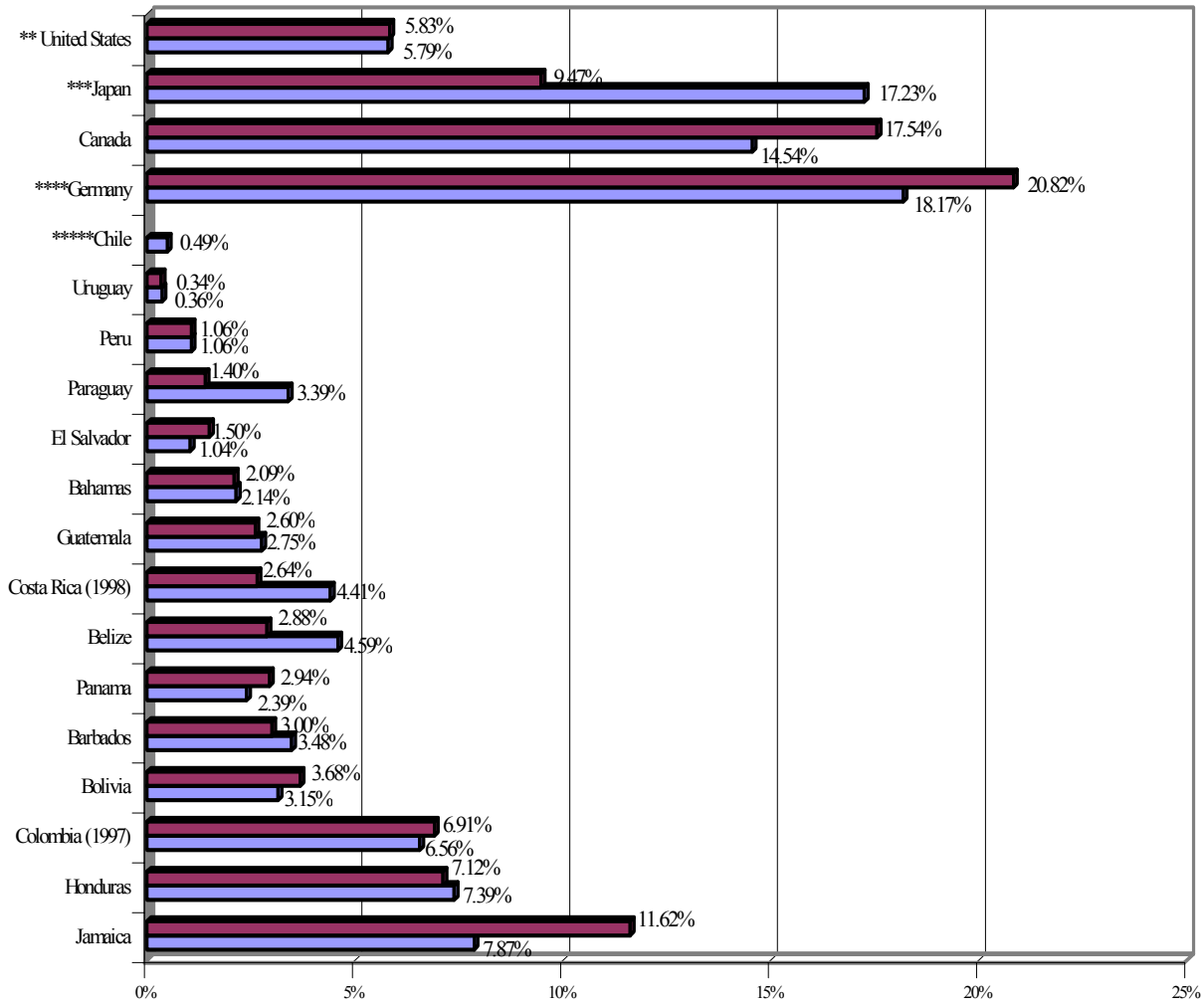
How can credit unions be turned around? Strengthening programs have great potential for improving the performance, including the sustainability and outreach, of credit unions in Latin America. Strengthening programs begun in the mid to late 1980s in Guatemala and the Dominican Republic and in the mid 1990s in Ecuador have produced excellent results in this regard, while those in Honduras and Bolivia have made substantial strides. Box 5 presents highlights of the Guatemala case.

Strengthening programs must, of course, be tailored to the particular weaknesses and needs of the credit unions being assisted. Among the major defects in credit union policies and practices that are commonly encountered and addressed in these programs are low deposit rates and weak deposit mobilization, low loan rates and little earning or capitalization of profits, opaque financial information and undisciplined financial practices, inade-

[39] As discussed in Part I, housing and consumer loans can facilitate important physical and human capital investments. Housing loans can go to improve or expand space that doubles as a work area. Consumption loans may be used to purchase basic health and education services and maintain nutrition levels. They also permit households to smooth consumption and cope with shocks and economic stress events, actions that can greatly enhance household welfare.

quate risk management, low salary levels and difficulties retaining adequate quality of labor, and

Figure 1
Credit Union Market Penetration: Loans and Deposits, 1999*



* For each country, the upper bar gives the ratio of credit union deposits to total money plus quasi-money. (Unless otherwise noted, the latter is taken from the IMF's *International Financial Statistics*, line 34 plus line 35.) The lower bar gives the ratio of credit union loans to private sector loans by the commercial banking system. (The latter are taken from line 22d of the *International Financial Statistics* except as noted.) Credit union data are from WOCCU (2000) and refer to 1999 unless another year is noted next to the country name.

** For the U.S., thrifts are included with the commercial banking system.

*** All data for Japan are taken from Bank of Japan (2000).

**** For Germany, credit union data are taken from Deutsche Bundesbank (2000), while the data for money, quasi-money, and private sector loans by the commercial banking system are taken from *International Financial Statistics.*

***** Data for deposits are not available for Chile.

Box 4
Credit Union Policies and Practices: Common Failings

- ***Low Deposit Rates.*** Deposit rates are frequently set quite low, often well below commercial bank rates. Because credit unions are typically riskier institutions in which to deposit funds than banks, a competitive credit union deposit rate would normally exceed the bank rate. In the past, when credit unions have raised deposit rates to this level, deposit mobilization has often increased sharply, greatly expanding the outreach of the credit unions and their capacity to offer loans.

- ***Low Loan Rates and Little Capitalization of Profits.*** Loan rates in Latin American credit unions are typically set so that very little or no profit is earned. Moreover, a large proportion of any profits that are earned is frequently paid out in dividends to members. Consequently, credit unions typically have very little institutional capital to serve as a base for future expansion or to buffer negative shocks and thus help ensure their long-run sustainability.

- ***Opaque Financial Information and Undisciplined Financial Practices.*** Problems in this area include underreporting of loan delinquency, failure to write off loans that are more than one or even several years overdue, inadequate provisioning for loan losses, and overstatement of current year profits and capital by such accounting gimmicks as deferring operating expenses or amortizing them over several years, and overstating asset values. As a consequence of these practices, financial statements lose their meaning and good financial management of the credit union is made far more difficult. Inadequate provisioning also poses a threat to the credit union's often-small capital base and thus to its sustainability.

- ***Inadequate Risk Management.*** Many credit unions in Latin America are of the traditional type that take the view that their members have a right to borrow up to a certain multiple of (e.g., three times) their share capital. A single brief form suffices for all loan types: consumer, housing, business, etc. Loan collection efforts are often weak. Modern credit unions greatly relax or eliminate these share-multiple ceilings. They also solicit appropriate, detailed information about borrowers in order to properly assess risks, grant loans based on risk-return criteria similar to those used in banks, and push hard for loan repayment.

- ***Low Salary Levels.*** A chronic problem in Latin American credit unions is that salary levels are often held down by a membership that compares their own incomes to those of the credit union officials. Credit union salary levels typically are set well below those paid elsewhere in the financial sector, which often results in low effort and morale, high turnover, and a general inability to recruit and retain high quality staff. This frequently undercuts credit union performance and financial health.

- ***Poor Public Image.*** Many credit unions are in great need of upgrading their physical facilities, instituting a professional dress code and launching a marketing and promotional campaign.

Box 5
Credit Union Strengthening in Guatemala

When the technical assistance team from the World Council of Credit Unions (WOCCU) arrived in Guatemala, they found that credit unions there suffered from all of the problems described in this section and more: low deposit and loan rates, little institutional capital, erratic provisioning, poor quality of financial information, weak risk management practices, uncompetitive salary levels, and so forth. Working with a group of 20 of the largest and most promising credit unions, the WOCCU team overhauled key prices, policies, and practices and put into place improved auditing and control, strategic planning, marketing, information, and other systems. The effort was highly successful by nearly any measure.

From program initiation in 1985 until its end in 1993, the delinquency rate on the consolidated, 20 credit union portfolio fell from 30 percent to 8.1 percent. Provisioning of loans overdue more than one year increased from 36 percent to 100 percent during the same period. Institutional capital rose from 4.5 percent of assets to 10.7 percent, while total assets in real terms increased at an average compounded rate of 17 percent per year. The total number of credit union members nearly doubled. With the strengthening program having created a base of financially-solid, well-managed credit unions, growth then further accelerated.

In the next six years (1994-99), the number of members tripled and real assets nearly quadrupled. At the same time, financial solidity was maintained, with the delinquency rate on the consolidated portfolio falling slightly to 7.4 percent and the consolidated capital/asset ratio increasing somewhat to 12.6 percent.

a poor public image. (Box 4 provides additional details.) Obviously, such major failings seriously jeopardize the performance and sustainability of credit unions, and their ability to provide quality financial services to large numbers of microenterprises and households, including many poor ones. In addition to putting these major building blocks into place, strengthening programs often attempt to improve other important areas of credit union operations and management, including strategic business planning, internal auditing and controls, general personnel and incentive policies, and information systems.

Strengthening MFIs

Whether it be Banco Sol and other group lenders affiliated with Accion International or Caja los Andes and other individual lenders associated with IPC or any other of the 205 leading Latin American microfinance institutions listed in Christen (2000), the success story of the region's MFIs is well known. A number of Latin American MFIs have maintained delinquency rates below the levels typically found in commercial banks and a few have reached profitability rates achieved by only a few banks (see, for example, Jansson and Taborga, 2000; Kahn and Jansson, 2001; and Jansson, 2001). Large infusions of government and donor money for institutional strengthening (as well as for on-lending and equity investment) have contributed much to making possible these achievements. Despite these substantial accomplishments, most MFIs still suffer from important deficiencies and continue to face serious challenges.

It is useful to divide the discussion of MFI strengthening into two parts, by type of MFI. The first type consists of the large number of unregulated MFIs (the NGOs) plus the relatively smaller number of regulated entities into which NGOs have transformed themselves (the "upgrades"). The second type consists of an also relatively smaller number of commercial banks and other, similar banking institutions such as *financieras*

that have added microlending to their traditional banking activities (the "downscales").[40] The inherent strengths of each of these two types of institutions and the challenges they face are normally quite different.

The great strength of the NGOs and upgrades, particularly in relation to the goal of reducing income inequality, is that most of these institutions are deeply committed to reaching and improving the lives of lower-income microentrepreneurs. The great weakness of these institutions, particularly the NGOs but also the upgrades to some extent, is that most are not run by professional bankers, but instead by people with a social mission. Hence, they must learn many of the same financial disciplines described earlier for credit unions, such as: keeping loan rates up (despite the high costs this imposes on the group they are trying to assist); boosting productivity and containing costs so as to earn and capitalize profits (to help ensure sustainability and underwrite future growth); controlling credit risks and keeping loan delinquency down; provisioning adequately; and rapidly expanding outreach while maintaining portfolio quality and profitability. Those that become regulated (the upgrades) and go on to take deposits must also become proficient at looking after the vastly more complex liabilities side of their operations: liquidity management, asset/liability matching, selection and pricing of appropriate deposit instruments, and so forth. The leverage provided by deposit-taking, however, allows the former NGO to greatly expand its credit outreach, as well as provide valuable savings services to its target population. In this way, its impact on the income distribution may be multiplied many times over.

Downscales normally have the opposite set of problems and advantages. Although they are run by professional bankers, many lack the social commitment to serve low-income microentrepreneurs. We first discuss the strengths of downscales and then describe their weaknesses, the latter being the subject of strengthening programs.

Banks and *financieras* are attractive platforms from which to begin offering services to a large number of microfinance clients for several reasons:[41]

- They are regulated institutions, fulfilling the conditions of ownership, financial disclosure, and capital adequacy that help ensure prudent management.
- They have the physical infrastructure, including branch networks, from which to reach out to a substantial number of microfinance clients.
- They have well-established internal controls and administrative and accounting systems to keep track of a large number of transactions.
- Their private capital ownership structures tend to encourage sound governance, cost-effectiveness, and profitability, all of which lead to sustainability.
- They offer deposit services as well as loans.

NGOs enjoy few, if any, of these advantages, while upgrades typically acquire many, though not all, of them. For example, most upgrades continue to be owned primarily by NGOs and development organizations. These NGOs and development organizations typically do not push as hard for cost effectiveness and profitability as do the downscales' for-profit investors. Upgrades often do not offer extensive, or in some cases, any, deposit services. And, reflecting the fact that upgrades are generally newer institutions, they may not have as extensive a branch network from which to offer financial products to microenterprises as do many downscales.

A disadvantage of working with downscales is that often they may have little positive impact on income inequality, at least at first. Banks, especially, may not reach down to many low-income microentrepreneurs. They may choose instead to serve the larger, wealthier microentrepreneurs, finding this to be profit maximizing if there is little competition as yet in this market segment. Over

[40] In Christen's (2000) inventory, there are approximately 25 upgrades, 25 downscales, and 155 NGOs.

[41] This discussion is taken from Baydas, Graham, and Valenzuela (1997).

time, of course, additional competition may appear, and some banks may find it profitable to lend to lower-income firm owners.[42] Not all downscales fit this pattern, however. For example, in Paraguay, it appears that a significant share of the initial microcredit clients of the *financiera* downscales were poor.

Downscales, and programs meant to strengthen them as providers of microfinance services, face a number of challenges:

- Downscales must adapt to a very different credit technology (Box 2). They must recruit and train a different type of loan officer from those they are accustomed to, and they must ensure that these loan officers achieve and maintain high productivity levels in order to reduce cost margins and generate profits.
- The bonus system normally used to motivate and reward loan officers for good performance may cause jealousies and morale problems for loan officers in the rest of the bank or *financiera*, who typically are not eligible to earn such bonuses.
- The kind of management information system needed for microlending differs from that required by traditional banking, and there are often substantial challenges to be overcome in integrating the two.
- It may be a problem, particularly in larger banks, to attract good managers to run the microlending program. This is because, by its size and profitability, the microlending program will often be considered a second class assignment, especially in the crucial first years of the program's existence.
- Downscales must overcome the cultural challenge of working with and providing service to a much poorer clientele, living in poorer areas, than the downscales and downscale staffs are accustomed to.
- As discussed in the sections on regulation and supervision, the superintendency may not understand microfinance very well. It may apply usury ceilings and other inappropriate and burdensome regulations and supervisory practices to MFIs, including downscales, which are always regulated and therefore always subjected to these inappropriate regulations and practices.
- Several years of hard work overcoming all of the above difficulties may be required to build a sizable portfolio of solid loans that will have any meaningful impact on a downscale's overall profits. Expectations must be brought into line with this reality, and the will must be found to persevere in solving difficult problems despite the absence of any substantial short-run payoff.

Most of these challenges are very different from those faced in programs to strengthen credit unions, NGOs, and even upgrades. Committed leadership is required within the downscale in order to see these many challenges through. Experience has shown, however, that this commitment can be fragile, as it is often supplied by only one or two visionary board members. The provision of expertise through donor or government technical assistance programs can be of great help in overcoming these problems and assisting a bank or *financiera* to extend financial services to unserved and low-income microenterprises.

[42] Even the wealthier microentrepreneurs, however, may hire low-income workers, which could have beneficial impacts on the income distribution.

REFERENCES

Accion International. 1997. *1996 Annual Report*. Somerville, Massachusetts.

Agabin, Meliza and Jorge Daly. 1996. *An Alternative Approach to Rural Financial Intermediation: The Philippine Experience*. Washington, D.C.: Chemonics International, Inc.

Arzbach, Matthias and Alvaro Durán. 2000. Regulación y supervisión de cooperativas de ahorro y crédito en América Latina (Credit Union Regulation and Supervision in Latin America). Web site of DGRV. http://www.dgrv.org

Bank of Japan. 2000. *Economic Statistics Monthly* 12(4), April. Tokyo.

Barham, Bradford, Stephen Boucher, and Michael Carter. 1996. Credit Constraints, Credit Unions, and Small-Scale Producers in Guatemala. *World Development* 24(5):793-806.

Baydas, Mayada, Douglas Graham, and Liza Valenzuela. 1997. Commercial Banks in Microfinance: New Actors in the Microfinance World. Microenterprises Best Practices Working Paper. Washington, D.C.: USAID and Development Alternatives, Inc.

Berenbach, Shari and Craig Churchill. 1997. Regulation and Supervision of Microfinance Institutions: Experience from Latin America, Asia and Africa. Occasional Paper No. 1. Washington, D.C.: The MicroFinance Network.

Branch, Brian and Christopher Baker. Overcoming Credit Union Governance Problems. In *Safe Money: Building Effective Credit Unions in Latin America,* eds. Glenn D. Westley and Brian Branch. Washington, D.C.: Inter-American Development Bank.

Bresnyan, Jr., Edward. 1996. The Microenterprise Sector in Guyana. Regional Operations Department 3 Working Paper. Washington, D.C.: Inter-American Development Bank.

CGAP. 1998. *External Audits of Microfinance Institutions: A Handbook.* Washington, D.C.: Consultative Group to Assist the Poorest.

Chickering, A. and M. Salahdine. 1991. Introduction and The Informal Sector Search for Self-Governance. In *The Silent Revolution*, eds. A. Chickering and M. Salahdine. San Francisco: International Center for Economic Growth.

Christen, Robert. 2000. Commercialization and Mission Drift: The Transformation of Microfinance in Latin America. Occasional Paper No. 5. Washington, D.C.: Consultative Group to Assist the Poorest.

_____ . 1997. Issues in the Regulation and Supervision of Microfinance. In *From Margin to Mainstream: The Regulation and Supervision of Microfinance,* eds. Rachel Rock and María Otero. Monograph Series No. 11. Somerville, Mass.: Accion International.

Christen, Robert, Elisabeth Rhyne, and Robert Vogel. 1995. Maximizing the Outreach of Microenterprise Finance: The Emerging Lessons of Successful Programs. Cambridge, Mass. and Washington, D.C.: Harvard Institute for International Development and USAID.

Christen, Robert and Richard Rosenberg. 2000. The Rush to Regulate: Legal Frameworks for Microfinance. Occasional Paper 4. Washington, D.C.: Consultative Group to Assist the Poorest.

de Soto, Hernando. 2000. *The Mystery of Capital.* New York: Basic Books.

_____. 1989. *The Other Path: The Invisible Revolution in the Third World*. New York: Harper & Row.

Deutsche Bundesbank. 2000. *Monthly Report* 52(1), January. Frankfurt.

Dowla, Asif. 1998. Micro Leasing: The Grameen Bank Experience. St. Mary's City, Maryland: St. Mary's College of Maryland.

Dunn, Elizabeth. 1999. Microfinance Clients in Lima, Peru: Baseline Report for AIMS Core Impact Assessment. AIMS Project Working Paper. Washington, D.C.: USAID Office of Microenterprise Development.

EIM/International. 1996. *Characteristics and Constraints of Small Businesses in Trinidad and Tobago: Final Report National Baseline Survey, A Sample Survey among 2104 Businesses*. Port of Spain/Zoetermeer: Small Business Development Company and EU.

ESA Consultores. 1996. *Estudio de la Pequeña y Micro Empresa en Honduras (A Study of Micro and Small Enterprises in Honduras).* Tegucigalpa, Honduras: USAID.

Fleisig, Heywood. 1995a. The Power of Collateral. Private Sector Department Note No. 43. Washington, D.C.: World Bank.

_____. 1995b. The Right to Borrow. Private Sector Department Note No. 44. Washington, D.C.: World Bank.

_____, Juan Carlos Aguilar, and Nuria de la Peña. 1994. *How Legal Restrictions on Collateral Limit Access to Credit in Bolivia*. Report 13873-BO. Office of the Chief Economist, Latin America and the Caribbean Region. Washington, D.C.: World Bank.

Gadway, John and Michael O'Donnell. 1995. Rural Finance and Small Farmer Liquidity. Washington, D.C.: Inter-American Development Bank.

Gallardo, Joselito. 1997. Leasing to Support Micro and Small Enterprises. Policy Research Working Paper 1857. Washington, D.C.: World Bank.

Ghani, Ejaz. 1992. How Financial Markets Affect Long-Run Growth: A Cross-Country Study. PRE Working Paper 843. Washington, D.C.: World Bank.

Hulme, David and Paul Mosley. 1996. *Finance against Poverty*. New York: Routledge Publishers.

IDB. 2001. *Manual de principios y prácticas para la regulación y supervisión del microcrédito y de las entidades financieras que otorgan microcrédito (Manual of Principles and Practices for the*

Regulation and Supervision of Microcredit and the Financial Institutions that Grant Microcredit). Washington, D.C.: Inter-American Development Bank.

_____. 1998. *Economic and Social Progress in Latin America: 1998-1999 Report*. Washington, D.C.: Inter-American Development Bank.

_____. 1996. *Economic and Social Progress in Latin America: 1996 Report*. Washington, D.C.: Inter-American Development Bank.

Jansson, Tor. 2001. Microfinance: From Village to Wall Street. Micro, Small and Medium Enterprise Division Working Paper. Washington, D.C.: Inter-American Development Bank.

_____ and Miguel Taborga. 2000. The Latin American Microfinance Industry: How Does It Measure Up? Microenterprise Unit Working Paper. Washington, D.C.: Inter-American Development Bank.

Jansson, Tor and Mark Wenner. 1997. Financial Regulation and Its Significance for Microfinance in Latin America and the Caribbean. Microenterprise Unit Working Paper. Washington, D.C.: Inter-American Development Bank.

Jaramillo, Fidel, Fabio Schiantarelli, and Andrew Weiss. 1996. Capital Market Imperfections before and after Financial Liberalization: An Euler Equation Approach to Panel Data for Ecuadorian Firms. *Journal of Development Economics* 51:367-386.

Kahn, Benjamin and Tor Jansson. 2001. How Tough Is Microfinance? Facing Down Recession in Latin America and Asia. *Microenterprise*, October. Washington, D.C.: Inter-American Development Bank.

King, Robert and Ross Levine. 1993. Finance and Growth: Schumpeter Might Be Right. *The Quarterly Journal of Economics* 108(3):717-37.

Li, Hongyi, Lyn Squire, and Heng fu Zou. 1998. Explaining International and Intertemporal Variations in Income Inequality. *The Economic Journal* 108:26-43.

Loayza, Norman. 1996. The Economics of the Informal Sector: A Simple Model and Some Empirical Evidence from Latin America. Washington, D.C.: World Bank.

Magill, John and Donald Swanson. 1991. *Ecuador Micro-Enterprise Sector Assessment: Summary Report*. GEMINI Technical Report No. 8. Washington, D.C.: USAID.

McKinnon, Ronald. 1973. *Money and Capital in Economic Development.* Washington, D.C.: Brookings.

McPherson, Michael and Carl Liedholm. 1996. Determinants of Small and Micro Enterprise Registration: Results from Surveys in Niger and Swaziland. *World Development* 24(3):481-87.

Mesbah, Dina. 1998. *The Role of Credit Unions in Salvadoran Financial Markets: Expanding and Improving the Delivery of Financial Services to the Rural Poor.* Madison, Wisconsin: World Council of Credit Unions.

_____. 1997. *The Role of Credit Unions in Ecuadoran Financial Markets: A Case Study of 11 Credit Unions*. Madison, Wisconsin: World Council of Credit Unions.

_____. 1997a. *The Role of Credit Unions in Nicaraguan Financial Markets: Improving the Financial Access of Small Savers and Borrowers.* Madison, Wisconsin: World Council of Credit Unions.

Morduch, Jonathan. 1999. The Microfinance Promise. *Journal of Economic Literature* 37:1569-1614.

Mushinski, David. 1995. Credit Unions and Business Enterprise Access to Credit in Guatemala. Williamsburg, Viriginia: The College of William and Mary.

Navajas, Sergio, Richard Meyer, Claudio Gonzalez-Vega, Mark Schreiner, and Jorge Rodríguez-Meza. 1996. Poverty and Microfinance in Bolivia. Rural Finance Program Working Paper. Columbus, Ohio: The Ohio State University.

Orlando, María Beatriz. 1998. How Informal Are Microenterprises? The Role of Human and Physical Capital on Institutional Participation in Urban Mexico. Department of Economics. New Orleans, Louisiana: Tulane University.

Pons, Frank Moya and Marina Ortiz. 1994. *Indicadores de las microempresas en la República Dominicana 1993-1994 (Microenterprise Indicators for the Dominican Republic, 1993-1994)*. Santo Domingo, Domincan Republic: Fondomicro.

Portocarrero, Felipe and Juan Nunura. 1999. Diagnóstico de las cajas rurales de ahorro y crédito del Perú (Diagnosis of the Rural Banks of Peru). Prepared for ACDI/VOCA. Washington, D.C.

Psacharopoulos, George. 1993. *Poverty and Income Distribution in Latin America: The Story of the 1980s*. Latin America and the Caribbean Technical Department. Washington, D.C.: World Bank.

Richardson, David. 2000. Five Myths of Credit Union Regulation and Supervision. Presented at the CO-LAC conference, Content, Impact, and Method of Credit Union Supervision in Latin America, 29-30 May, Panama.

Rock, Rachel and María Otero, eds. 1997. *From Margin to Mainstream: The Regulation and Supervision of Microfinance*. Monograph Series No. 11. Somerville, Mass.: Accion International.

Rutherford, Stuart. 2000. *The Poor and Their Money*. New Dehli: Oxford University Press.

Sebstad, Jennefer and Gregory Chen. 1996. Overview of Studies on the Impact of Microenterprise Credit. AIMS Project Working Paper. Washington, D.C.: USAID Office of Microenterprise Development.

Sebstad, Jennefer and Monique Cohen. 2000. Microfinance, Risk Management, and Poverty. AIMS Project Working Paper. Washington, D.C.: USAID Office of Microenterprise Development.

Tokman, V. 1992. The Informal Sector in Latin America: From Underground to Legal. In *Beyond Regulation: The Informal Economy in Latin America*, ed. V. Tokman. Boulder, Colorado: Lynne Rienner.

Tucker, William. 1999. Cajas rurales y municipales del Perú (The Rural and Municipal Banks of Peru). Prepared for the Inter-American Development Bank. Washington, D.C.

Vallejos, Efren Jacome. 1999. *Statistical Study of Savings and Credits to Micro-Entrepreneurs.* Quito, Ecuador: World Council of Credit Unions.

Westley, Glenn D. 1994. Financial Liberalization: Does It Work? The Case of Latin America. DES Working Paper 194. Washington, D.C.: Inter-American Development Bank.

_____ and Brian Branch, eds. 2000. *Safe Money: Building Effective Credit Unions in Latin America*. Washington, D.C.: Inter-American Development Bank.

Westley, Glenn D. and Sherrill Shaffer. 1999. Credit Union Policies and Performance in Latin America. *Journal of Banking & Finance* 13(9):1303-29.

WOCCU. 2000. *1999 Statistical Report*. Madison, Wisconsin: World Council of Credit Unions.

_____. 1999. *1998 Statistical Report*. Madison, Wisconsin: World Council of Credit Unions.

_____. 1998. *1997 Statistical Report*. Madison, Wisconsin: World Council of Credit Unions.

Wolff, Edward. 1991. The Distribution of Household Wealth: Methodological Issues, Time Trends, and Cross-Sectional Comparisons. In *Economic Inequality and Poverty: International Perspectives*, ed. Lars Osberg. Armonk, New York: M.E. Sharpe Publishers.

TECHNICAL ANNEX

Table A1 Financial Depth Measures in the Gini Regressions					
Variable	**Reg. 1**	**Reg. 2**	**Reg. 3**	**Reg. 4**	**Reg. 5**
M2/GDP	-15.4 (3.87)	-11.5 (2.59)	-12.6 (2.49)		
Pvt. Credit/GDP				-10.4 (3.97)	-2.87 (1.17)
Constant	50.3 (29.3)	48.1 (9.48)	35.3 (4.98)	45.4 (35.6)	40.1 (8.15)
EXPSURVEY	-3.69 (2.50)	-5.44 (3.85)	-5.71 (3.87)	-2.33 (1.54)	-5.78 (4.78)
COMM	-13.8 (4.45)	-10.7 (3.17)	-14.3 (4.71)	-12.3 (3.55)	-12.6 (3.28)
MEANAGE		-.69 (3.97)	-.18 (.81)		-.38 (2.57)
URBANPOP		3.53 (.98)			
URBAN2		41.4 (3.60)	52.5 (4.17)		47.3 (4.44)
XNFUELY		8.79 (.99)			
LLAND		1.48 (2.28)	4.41 (5.22)		3.82 (6.00)
LATLAND			-6.79 (2.73)		-8.49 (4.86)
RGDPSTD		61.6 (2.20)	67.0 (2.29)		69.8 (3.02)
OPO		.049 (2.04)			
OPEN			.109 (4.67)		.078 (4.08)
MEANSCHOOL			-.29 (.62)		
STDSCHOOL			.70 (.62)		
R^2	.399	.588	.607	.154	.573

The table reports regression coefficient estimates, with t-statistics in parentheses.
Coded Explanatory Variables: EXPSURVEY, MEANAGE, MEANSCHOOL—see Table A2; COMM =1 for Communist countries, =0 otherwise; URBANPOP—share of the population living in urban areas; URBAN2 = URBANPOP*(1-URBANPOP); XNFUELY = non-fuel primary exports/GDP; LLAND=ln (agricultural land per capita); LATLAND = LLAND*(distance to equator), to capture differences between land in tropical and temperate climates; RGDPSTD—standard deviation of real GDP growth rates, a measure of volatility; OPO = (Exports + Imports)/GDP, a measure of openness; OPEN—the residuals of a regression of OPO on ln(population), to net out the tendency for large countries to be closed; STDSCHOOL—standard deviation of the number of years of schooling completed for the population aged 25-64.

Table A2 Gini Regressions for 14 Latin American Countries Using Loayza's Informality Measure[a]			
Variable	**Regression 1**	**Regression 2**	**Regression 3**
INFORMAL	0.45 (2.00)	0.41 (1.63)	0.50 (1.73)
Constant	30.15 (2.73)	37.9 (1.68)	28.6 (1.06)
EXPSURVEY	-6.66 (3.97)	-7.06 (1.66)	-7.41 (1.69)
MEANAGE		-0.22 (.40)	-0.28 (.47)
MEANSCHOOL			1.18 (.68)
R^2	0.32	0.36	0.44

[a] The countries covered by the regression are Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Panama, Peru, Uruguay, and Venezuela. The table reports regression coefficient estimates, with t-statistics in parentheses.
Explanatory variables: INFORMAL—Loayza's informality measure; EXPSURVEY—dummy variable, = 1 if the Gini coefficient is based on a household expenditure survey, =0 if based on a household income survey; MEANAGE—mean age of the population; MEANSCHOOL—mean number of years of schooling completed for the population aged 25-64.

file=IPESPaperFinalWPfor SDS2001.doc
(10/2/01, disk 11)