

# Credit accessibility and corporate social responsibility in financial institutions: the case of microfinance

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*What are financial institutions' social responsibilities in developing countries? On the one hand, these institutions share the generic responsibilities of all human organizations and business enterprises. However, their specific social responsibility is the performance of the social function of financial intermediaries, which, in the case of emerging countries, consists mainly of contributing to economic growth and solving the problem of poverty. This paper describes a number of technical-economic and moral problems that take us to a consideration of the performance of banking operations in microfinancing, with special reference to Latin America. The paper also provides a series of recommendations that, in addition to contributing to solving the development and poverty problems in emerging countries, help define financial institutions' social responsibility in such countries.*

## Introduction

In October 2006, Muhammad Yunus and the *Grameen Bank* he created were awarded the Nobel Peace Prize 'for their efforts to create economic and social development from below. (...) Yunus has, first and foremost through *Grameen Bank*, developed microcredit into an ever more important instrument in the struggle against poverty. *Grameen Bank* has been a source of ideas and models for the many institutions in the field of microcredit that have sprung up around the world'.<sup>1</sup>

*Grameen Bank* was not the origin of microfinance, given that parallel or even earlier

experiences were implemented. Nevertheless, since the Bank's creation in 1976, microcredit has become a means for promoting economic growth and eradicating poverty in developing countries by providing a means for many micro-businesses and small companies to gain access to regular financing and enabling many people with low incomes to benefit from banking services (Yunus 1999).

In this paper, we will address some of the technical-economic and ethical problems related to the 'bankization' of the lower-income citizens of emerging countries, their access to credit and the creation and development of solvent, self-sustaining and socially responsible financial institutions. We will first consider the relationship between financial development and economic development, which will take us to a discussion of financial institutions' social functions, how these functions manifest in developing countries

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and how this defines these institutions' social responsibility. We will then address the problems that hamper access to credit in these countries and, in the conclusions, we will propose a model for creating and developing a microfinance market that is both economically sustainable and socially responsible. The experiences implicit in this article are mainly, but not exclusively, related to Latin America.

## Economic development and financial development

Many empirical studies have shown the close relationship between a country's economic development (gross domestic product growth per capita) and the development of its financial system, measured, for example, by the percentage of credit with respect to the gross domestic product (Banco Interamericano de Desarrollo 2005) or by the number of loans per capita (Global Insight 2003, Beck *et al.* 2005).

A significant proportion of these studies have looked at the impact of the development of the banking sector and, consequently, of bank credit on economic growth (King & Levine 1993, Demirguç-Kunt & Maksimovic 1996, Rajan & Zingales 1998, Beck *et al.* 2000), particularly in emerging countries, where capital markets are still relatively undeveloped. In countries with higher levels of development and penetration of the financial system, the impact of the development of the capital market is also a contributing factor to

economic growth. However, the studies performed by Levine & Zervos (1998), Levine (1991), Bencivenga & Smith (1991) and Rojas-Suárez & Weisbrod (1994) show that the impact of capital markets on the economic growth of developing countries is more limited, as markets need a fully developed banking sector to function efficiently.

The developing countries have low levels of penetration of the financial system, which hampers their economic development. According to statistics published by the World Bank (Beck *et al.* 1999), between 1990 and 1999, lending to the private sector as a percentage of the gross domestic product averaged 84% for the planet's 24 most developed countries, while the average for the 79 developing countries analyzed was only 33.6% (Table 1). The problem in some developing countries is not just that the credit markets are small but that, in some cases, the financial sector does not have the size that it should have considering the level of economic development of the country in question.

The lack of financial penetration is not only seen in the macroeconomic indicators that measure the importance of lending with respect to the gross domestic product. A study performed by the World Bank (Beck *et al.* 2005) shows that, while the 10 West European countries analyzed have a mean of 470 loans and 2,197 deposits for every 1,000 inhabitants, the five African countries analyzed only average 30 loans and 146 deposits for every 1,000 inhabitants.

Table 1: Financial development by regions, 1990–1999

Region	Number of countries	Private sector lending (% GDP)	Lending and market capitalization (% GDP)	GDP per capita, 1995 (in US\$)
Developed countries	24	84	149	23,815
East Asia and Pacific Rim	10	72	150	2,867
Middle East and North Africa	12	43	80	4,416
Latin America and Caribbean	20	28	48	2,632
East Europe and Central Asia	18	26	38	2,430
Sub-Saharan Africa	13	21	44	791
South Asia	6	20	34	407

Source: Banco Interamericano de Desarrollo (2005).

While acknowledging the considerable importance of the problem of access to credit and financial services as an instrument for the financial development of developing countries, in this paper, we shall analyze it through the prism of the social responsibility of the financial institutions operating in those countries. This responsibility arises directly from the financial institutions' social function and their responsibility in economic development, in reducing poverty and in creating economic and social opportunities for the respective countries' populations.

### **The social function of financial institutions**

A firm's social responsibility is often defined from a list of obligations to society and to its stakeholders: owners, employees, trade unions, customers, suppliers, local community, society in general, government, regulatory authorities, etc.

How are these obligations defined? First of all, these are moral duties that are common to all individuals who perform actions and, therefore, incur moral and social responsibilities arising from such actions (or omissions), and from the actions' consequences for themselves and for others (Argandoña 2006). When the concept of moral responsibility is applied to organizations, it is also possible to state the obligations that arise from their actions and that must be addressed by the people who manage them.

In the case of firms, a definition of their social responsibility must take into account its nature as an economic institution that is bound by a certain social duty to be efficient, understood in a broad sense. Therefore, a firm's social responsibility will have the generic moral and social content that is intrinsic to any organization and, in addition, the specific content that arises from its social function: satisfaction of market needs, value creation, job creation, the human development of its stakeholders, etc.

All of this leads us to conclude that a financial institution's specific social responsibility will be defined, first of all, by this type of institution's social function and, after that, by the particular

features of the environment in which it operates. And this specific responsibility combines with the generic responsibilities that derive from its status as a moral agent (the moral and legal responsibility for the actions performed and their consequences), as a human organization (the responsibilities arising from the organization's goals, its structure, its incentives and control system, etc.), and as a profit-making business (efficiency, social and private value creation). Instead of resorting to a particular ethical theory, we let the activities of the financial institutions define their responsibilities.

The main social function of a financial institution is to provide intermediary services that facilitate the flow of savings towards investment (Argandoña 1995, De la Cuesta-González *et al.* 2006). A financial intermediary issues liabilities (e.g. deposits), which it places among savers (or among other intermediaries), and buys assets from (grants credit to) those planning to execute an investment or to buy an asset, in such a way that both liabilities and assets are more attractive to its customers than would be the case if the parties had to deal with each other directly. And, being an economic institution, it must perform this task efficiently, that is, requiring the least possible use of resources.

Attached to this central function, there are other secondary but nevertheless important functions. On the one hand, financial institutions offer savers a broad range of assets with different features as regards maturity, liquidity, yield, currency in which they are denominated, risk, etc., to enable savers to place their wealth in the most suitable manner. This function also includes access to suitable payment systems that reduce transaction costs. It is therefore obvious that this function contributes significantly to the well-being of families, enabling them to adequately manage their wealth, with an acceptable level of return, liquidity and risk.

From the other side of their intermediary function, financial institutions make the resources received from savers available to those who wish to make investments, also offering a broad range of features matched to their customers' needs. Thus, they provide finance for such varied

operations as buying a house or a consumer durable, starting up a business, ensuring availability of financial resources during the production process, sale and collection of payment for goods and services or maintaining a family's standard of living or a firm's business under adverse circumstances.

On the basis of these social functions, it is possible to list a series of specific responsibilities of financial institutions:

- (1) The maturity transformation of assets and liabilities: savers usually prefer to have their assets readily available, often at sight, while potential borrowers usually need to hold the assets for long periods, often amounting to many years. Banks 'borrow short and lend long'.
- (2) As a result, there is availability of liquidity, so that savers can readily and quickly withdraw their funds, without cost.
- (3) The reduction and adequate distribution of savers' risk. This task is performed by every financial institution (through the management of its assets and liabilities: diversification, specialist management, scale of operations, customer monitoring, etc.) but also by certain specialized organizations, such as insurance and reinsurance companies, financial derivatives markets, rating agencies, central banks, financial regulators, etc. This function is made up of four tasks (Ghatak & Guinnane 1999):
  - (a) The adequate ascertainment and management of borrowers' risk (to solve the problem of adverse selection).
  - (b) Ensuring that the borrower will use the loan in a prudent manner, so as to maximize the probability of repayment (the problem of moral hazard).
  - (c) Monitoring the degree of success of the borrower's project (the auditing problem).
  - (d) Enforcing the repayment of the loan when the borrower (strategically) attempts to default (the enforcement problem).
- (4) Low search and transaction costs, through economies of scale, standardization of operations and the specialization of financial intermediaries.

- (5) As a consequence of the previous functions, the promotion of saving, not so much directly as through the fact that financial intermediaries can offer high returns with a low risk and moderate transaction costs.
- (6) And the promotion of investment by means of low financing charges, adapting the availability of funds to each customer's needs.
- (7) Moreover, an efficient payment system to which all the institutions and the government regulators contribute.
- (8) Asset management and advisory services, through the human capital accumulated by the institutions in their field of business.
- (9) And the consequence of all of the above is the financial institutions' contribution to economic growth, alleviation of poverty and the welfare of society.

Note that these responsibilities have a technical-financial content, both because of their goals (they fulfill what is expected from them as economic institutions) and because of the resources used (all of them of a technical and financial nature). However, they are also moral (they are part of a good manager's ethical duties) and social responsibilities (insofar as they are demanded by society and, above all, because the institutions themselves take on a commitment to society to develop all of these functions, including the duties of transparency, information, etc.). And it is this combination of technical knowledge and expertise, on the one hand, and moral and social attitudes, on the other, that creates the trust on which any lasting relationship between financial institutions, their customers and the society in which they operate must be based.

In short, the primary social responsibility of a financial institution is to perform its social function, which will be specified in the above-mentioned list of responsibilities. To this must be added, as is logical, the responsibilities that arise from its nature as a business (profitability, self-continuity, social efficiency) and as an organization (care for the interests and needs of its internal stakeholders), and from any social, philanthropic and patronage activities it wishes to engage in.

## The corporate social responsibility of financial institutions in developing countries

What are the specific social responsibilities of financial institutions in a developing country? What is expected from them is that they fulfill their social function, through which they will contribute to economic growth and solving the poverty problem.

In advanced economies, the social function we describe here is carried out both by financial institutions (commercial banks, savings banks, credit cooperatives, insurance companies, specialized credit companies, securities brokers, leasing firms, etc.) and by the financial markets. However, financial markets are not well developed in emerging countries, which means that the social responsibility we are talking about here falls on the financial institutions.

Thus, this social responsibility in developing economies can be summarized as providing access for the population to financial services ('bankization'): access to current or savings accounts, loans, payment and transfer methods, financial advice, etc., under the best conditions of return, cost and risk. This access is usually possible for people who offer the potential of being profitable customers for these institutions, because of their income or wealth (they have a relatively high level of income in the formal economy; they offer sufficient guarantees and a known financial track record that can be used to assess their solvency; they are members of equity networks that facilitate access to financial services, etc.) and because they live in cities or areas with a high population density, where financial institutions consider it profitable to open branch offices. However, this access is not possible for many segments of the population,<sup>2</sup> hence the potential significance of the models that provide microfinance and, in particular, microcredit services: first, because they give access to credit for people or small businesses that would otherwise be excluded from it, either because they are too small, they are unable to offer formal guarantees or they live too far away from the financial networks, and second, because they are usually a resource that enables access to

other financial services and, therefore, to the 'bankization' of a large percentage of the population (Prior & Argandoña 2007).

Although many forms of microcredit have been developed, almost all of them share certain common features. They are loans granted to individuals or families who cannot offer collateral (e.g. peasant farmers who cannot prove ownership of the land they farm)<sup>3</sup> or provide a financial track record that enables their risks to be identified, and who often do not have a regular income (they work in the informal economy or receive remittances from emigrants). For this reason, the collateral usually consists of the endorsement of people from the same social group or village. They are usually very small loans granted at high interest rates<sup>4</sup> for very short terms and sometimes subject to a rigid schedule for the payment of interest and principal; successfully following this schedule is often a necessary condition for granting further loans for larger amounts. Within the institution, the credit rating is usually determined from the borrower's payment record and direct inspections and risk management is usually very much a 'hands-on' process, based on models that are very different from those used in studying other credits.<sup>5</sup>

The experience with microcredits in developing countries has often been very positive, thanks to the monitoring and the enforcement of the loan repayment by the group of endorsers, to the monitoring by the lending institution and their active policy of seeking customers and setting high standards, especially at the beginning (Evers 2000), in spite of the well-known free riding and collusion risks that this type of operation can entail (Ghatak 1999, Wydick 1999, Armendáriz de Aghion & Morduch 2000).

However, above all, for the purposes of this paper, microcredits may provide a means for financial institutions to put into practice their social responsibility, a tool for 'integrating people in the active population and combating the cause of social and financial exclusion' (Lacalle-Calderón & Rico-Garrido 2006), and a means for eradicating poverty, although it is also argued that they only reach the 'moderately' poor population, while still excluding the poorest (Goggin 2006).

The entitlement to credit can be approached from an efficiency viewpoint, that is, maximizing the loan's social impact by means of a careful selection of projects, or from a fairness viewpoint, as a dimension of human rights, with the goal of facilitating inclusion of the poorest population groups in the developing countries (Dembinski 2006).

From the efficiency viewpoint, the emphasis is placed on the impact on the population as a whole: self-continuity of the financial institutions, without any need for public or private subsidies or aid, and the efficient use of the scarce resources available. This demands careful analysis of the projects to ensure that they are profitable and self-sustaining, at least from the financial viewpoint. Even so, the existence of market failures would also justify some public policy actions, even with pure economic efficiency criteria: for example, the creation of public risk centers that go beyond the limitations on the financial institutions' collective action.

From the fairness viewpoint, the existence of social and ethical goals justifies the existence of aid schemes that would enable financial operators to reach population strata where the operations would not be profitable under market conditions.

In practice, both viewpoints are important: financial institutions in developing countries must be able to apply both efficiency (sustainability) and fairness (outreach) principles in order to address the problem of the lack of access to basic financial services (Zeller & Meyer 2002). The main limitations are to be found on the supply side, that is, in the financial institutions' ability to operate efficiently in the microfinance market, going beyond the level of self-sustainability.<sup>6</sup>

There are basically two types of organization involved in microfinance in the emerging markets: the banks (private as well as public, commercial banks, savings banks, credit cooperatives, etc.) that perform the full range of traditional operations (deposits and credits) and specialized organizations that often originate from subsidized credit and non-governmental organizations that started by offering microcredits targeting the poorest segments of the population, and, if the national legislation allows it, often try to broaden

their scope towards non-specialized banking.<sup>7</sup> In this paper, we will be concerned mainly with the former because the latter usually have a distinctive vision of their social responsibility, arising from their origin as non-profit-making institutions. However, the recommendations given here will be applicable to both types of organization, because the self-sustainability conditions tied to economic efficiency, the creation of economies of scale and scope, etc., are applicable to all of them. The principle of economic sufficiency should be considered, at least as an ideal, by all institutions.

### **Access to (micro)credit in developing countries**

As we have already said, the lack of access to financial services in emerging countries is mainly due to a supply problem: the business models used by the financial institutions operating in these countries are inadequate and inefficient, as they are unable to profitably serve the low-income segments. To solve this supply problem, it is necessary to develop business models for the distribution of efficient, low-cost microfinancial services that can profitably serve low-income population segments and small- or medium-sized firms. Our thesis is that these models exist and can be applied to emerging countries. Indeed, there are already organizations in these countries that apply them in full or in part (Prior & Garrido 2007, Prior & Santomá 2007b). And, as we have said earlier, the implementation of such models would be an important contribution by these organizations to the fulfillment of their social function and, therefore, to the performance of their specific social responsibility.

The supply mismatch is due to excessively high prices for financial services, marketing by non-capillary distribution networks that are not cost-effective and the use of risk methodologies that do not factor in the situation in developing countries. In addition, the regulatory frameworks we have seen in most emerging countries do not facilitate the development of efficient models for the distribution of microfinancial services.

This analysis of the supply problems does not imply that other factors, such as the level of education or wealth, also explain a given society's level of access to financial services. However, these demand factors – and others, such as the lack of confidence in the financial system – have traditionally been viewed as the main factors that account for this problem. In this paper, we adopt the view that such factors related to the demand for financial services are less important than those that affect the supply, because the potential demand for financial services exists, irrespective of the population's profile in terms of education, socioeconomic level, age, etc. The challenge of providing access to banking services to the population on a massive scale therefore consists of offering financial services adapted to the demand existing in each society.

In the following pages, we will briefly review the four points mentioned previously as obstacles that hamper adequate development of microfinance in developing countries: (1) the high costs and prices of financial services, related to the inefficiency of these countries' banking systems; (2) the geographical location of prospective customers and the scope of the network of branch offices; (3) the use of unsuitable methodologies for analyzing the credit risks of poor populations; and (4) the existence of an inadequate regulatory framework. This last problem is beyond the direct responsibility of microcredit banking but has an input in the solution of the problems mentioned previously and should be included as part of the tasks of these organizations' management.

### High prices of financial services and inefficiency of banking systems

The lack of financial penetration is closely correlated with the financial margin that banks charge their customers. This margin, calculated from the ratio between interest income and the average loan portfolio during the period 1995–2002, is highest in those countries where the contribution of private sector lending to the gross domestic product is lowest (Table 2).

The main factor accounting for this high financial margin is probably the low level of the financial institutions' operating efficiency (operating costs divided by total assets) in developing countries (Mathieson & Schinasi 2001).

Table 2 shows that the problem of the financial systems' inefficiency is common to all developing countries, although more so in sub-Saharan Africa, East Europe and Latin America. The ratio in the Middle East and North Africa is comparable to that of the developed countries, although there are significant differences between countries in this region. The high cost of financial services is also explained by the lack of competition in the national financial systems.

Furthermore, the short-term value strategy followed by financial institutions in developing countries creates selection criteria that discriminate against the low-income segments of the population (Ruiz-Durán 2004). This strategy defines the level of service received by the customer on the basis of the economic value that he generates for the financial institution.<sup>8</sup> In

**Table 2: Interest rate spreads and efficiency by region, 1995–2002**

Region	Number of countries	Interest rate spread (%)	Operating costs (percentage of assets)	Private sector lending (percentage of GDP)
Sub-Saharan Africa	32	10.6	5.1	15
East Europe and Central Asia	23	8.8	5.0	26
Latin America and Caribbean	26	8.5	4.8	37
East Asia and Pacific Rim	16	5.1	2.3	57
South Asia	5	4.6	2.7	23
Middle East and North Africa	13	4.0	1.8	38
Developed countries	30	2.9	1.8	89

Source: Banco Interamericano de Desarrollo (2005).

developing countries, the customer's value is determined from the margins generated by the assets and liabilities managed by the financial institution for each customer.<sup>9</sup> As a result of the implementation of this customer value strategy in developing countries, only a very small percentage of the population offers a positive potential return and enables profitable provision of financial services. The negative return of the low-income population is basically due to the low levels of assets and liabilities held by customers in these countries but also by the banks' high operating costs.

### Geographical location

The low density of bank branches is also a cause of the low level of 'bankization' among the population of developing countries, because most of the financial institutions' potential customers do not generate enough income to cover the costs of traditional bank branches (Table 3). Furthermore, bank branch management costs are higher in developing countries than in developed countries due to the security problems and the relative lack of infrastructures that prevail in these countries.

The high percentage of population covered per branch in developing countries can be explained by the low average value that this population has for the financial system. The value segmentation strategy mentioned previously is not only applied at customer level but also at the branch level: if the number of customers served by a branch does not generate sufficient revenues to justify its costs, the branch is closed.

The number of branches per square kilometer is also lower in the developing countries than in West European countries. These low figures are a proof of the lack of bank coverage in rural areas, which, in turn, reflects the lack of communication infrastructures in these areas and, which, combined with the security problems, hampers their economic development.

Within the developing countries themselves, there are significant inequalities in branch density between regions or areas with a higher or a lower purchasing power. These differences are seen in both rural and urban areas, and so it can be maintained that there is a high correlation between the income level of a given area and the density of bank branches in that area (Condusef 2004).

### Inappropriate methodologies for analyzing credit risks

The systems for analyzing bank credit risk in developing countries are based on an analysis of the forecast cash flows of the customer asking for the loan. Financial institutions also include other variables in their risk analysis that enable them to refine the default expectations for their customers, namely, variables concerning their relationship with the institution and socio-demographic variables, but the use of such variables is marginal. The cash flow forecasts are calculated from the net income of the customer asking for the loan, which is compared with the expected loan repayment instalments to determine his ability to pay.

For salaried customers, the professional data are based on the paylips received and, for self-employed customers, on income tax returns.

**Table 3: Density of bank branches and financial penetration**

Geographical area	Number of countries	Bank branches per 100,000 inhabitants	Bank branches per 1,000 km <sup>2</sup>	Number of loans per 1,000 inhabitants	Number of deposits per 1,000 inhabitants
West Europe	10	44.66	61.25	470	2,197
Asia	10	8.13	18.57	110	715
East Europe	9	7.39	6.83	87	1,040
Latin America	17	7.02	5.20	120	490
Africa	5	2.06	0.57	30	146

Given the importance of the informal sector in these countries (De Soto 2000), basing the loan decision on these data implies excluding most of the population who obtain their income from the informal sector, as they cannot prove their ability to pay and, therefore, cannot substantiate their eligibility for the loan.

The second type of variable used in the loan analysis process are the relationship variables, which measure the customer's relationship with the institution, using as indicators the number of financial products contracted, the value of the customer's business with the institution, the customer's profitability and the customer's payments and defaults record. The relationship variables are meaningful in highly 'bankized' societies, where institutions have full information on their customers. However, in developing countries, where the level of 'bankization' is very low, this information is only applicable to a very small percentage of the population, while the rest of the population is barred from access to credit when the risk analysis is based on such variables.

The third type of variable analyzed in risk analysis is the socio-demographic variables, such as age, marital status, place of abode and number of children. As such data are more readily accessible, allocating a greater weight to such data in the risk analysis increases accessibility to credit, without this entailing an increase in loan defaults, provided that the socio-demographic data are correctly weighted and validated with public databases that measure the loan experience accumulated with this type of customer.<sup>10</sup>

The low level of loan access in developing countries is therefore due to the excessive weighting of professional and relationship variables. Because such data only refer to a small percentage of the population, the outcome of the risk analysis is negative for the vast majority of potential customers due to the structural features of the country's economy. It would therefore be necessary to reanalyze the sources of professional data so that it would be possible to include the vast informal economy that exists in all developing countries. Another alternative would be to increase the weight of socio-demographic data in designing the risk analysis, although such a

change would entail developing internal and external default monitoring mechanisms – monitoring by socio-demographic profile and credit bureaus, respectively – which would enable credit access to be increased while keeping the default ratios under control.

### Inappropriate regulatory framework

The regulatory framework governing the popular savings and lending sector in developing countries is highly fragmented and difficult to grasp, which leaves a large number of institutions operating outside of the current legal system. Such a situation hampers the development of networks that could benefit from operating synergies, which are a basic factor for efficient development of the sector.

There have been initiatives to formalize the sector in developing countries, especially in micro and rural finance, but these initiatives are not yet developed enough to enable any evaluation to be made of their impact; for example, the bankization policies implemented in Mexico (Bansefi) and Colombia (Banca de las Oportunidades) are still too recent.<sup>11</sup> However, in the developed countries where such initiatives have been implemented with much greater force, such as in Canada, Germany, Spain or the United States, they have had a considerable impact in increasing the provision of financial services to lower income segments of the population.

The problem of high regulatory costs also stands out as one of the reasons why the traditional commercial banks that operate in developing countries have such low efficiency ratios. The requirements in terms of provisions, reserves, security requirements and other conditions make it very expensive for these institutions to offer basic financial services to the population segments with a lower purchasing power. This regulatory cost also prevents many microfinancial institutions from being appropriately regulated (Consultative Group on Assisting the Poor 2005).

Another important factor in the inappropriateness of the regulatory context is the low enforceability of property rights. Table 4 provides a comparison by geographical area of the average

**Table 4: Property right guarantees and financial penetration**

Region	Property rights index	Private sector lending/GDP (%)
Developed countries (OECD)	6.3	84
East Asia and Pacific	5	72
Middle East and North Africa	3.9	43
Latin America and Caribbean	4.5	28
East Europe and Central Asia	5.5	26
Sub-Saharan Africa	4.2	21
South Asia	3.8	20

Source: World Bank (2006).

index assigned by the World Bank to legal property guarantees and the degree of financial penetration. The relationship between the two variables is very clear and shows how the countries with a greater degree of financial penetration also have a better property rights index.

## Conclusions and recommendations

The low levels of bank penetration in the developing countries require solutions that solve the problems of the high prices of financial services, low branch density, risk methodologies that are not matched to the country's economic reality and inadequate legislation.

Countering the low branch density and the high prices for financial services will require a strategy that generates new business models in the distribution of low-cost financial services, thereby increasing competition within the industry. And the reduced efficiency of the risk methodologies must be countered by creating systems that take into account the vast informal economy existing in developing countries.

The model proposed in this paper is based on five points: (1) the development of low-cost financial products, (2) the creation of low-cost intermediary networks, (3) the use of alternative risk analysis methodologies, (4) optimization of the impact of emigrants' remittances and (5) the development of a networked nodal structure.

- (1) Implementation of low-cost financial products through the generalized use of electronic payment methods, which enable financial institutions to improve their efficiency ratios, facilitate the use of low-cost distribution channels and enable application of credit risk monitoring systems that decrease the default rate.<sup>12</sup> In addition, the technology platform that manages electronic banking products generates significant synergies with the remittance transfer business, and the economies of scale generated by the use of electronic banking products facilitate the creation of networked nodal systems. Thus, these products enable a number of the financial institutions' basic functions to be developed, particularly in emerging markets: increase access to the payment system, generate liquidity for their users (because of their two-fold purpose, as means of payment and as savings and lending products) and provide access to financial services for low-income populations, even in those places where bank branches are not profitable. Unfortunately, the generalized use of the electronic payment methods is feasible only in certain countries, for example, in Latin America.
- (2) Use of alternative distribution networks to bank branches, generating economies of scope and decreasing transaction costs. The model proposed enhances such synergies through the use of alternatives such as cash dispensers, remittance distribution networks or alliances with shopping centers.<sup>13</sup> The operational synergies that the model shows between the remittance distribution networks and the bank networks are particularly important, not only in terms of their location in areas with a low level of economic development but also in terms of the technology infrastructure required and market management tools.
- (3) Use of alternative risk methodologies to those used by banks in developed countries. These alternative methodologies are based on the analysis not only of economic variables but also of socio-demographic variables, which in turn requires a considerable information processing and analysis capacity (Schreiner

2000). The model proposed uses highly effective credit risk monitoring systems, made possible thanks to the use of electronic payment systems, such as behavioral scoring or publicly or privately owned reporting bodies (credit bureaus). Such systems improve the level of customer monitoring and, consequently, decrease the moral risk inherent in the financial asset transformation process.<sup>14</sup>

- (4) Optimization of the use of emigrants' remittances. The growing importance of emigrant remittances in developing countries, particularly for the low-income segments of the population, requires an efficient, low-cost services distribution model that includes mechanisms for optimizing remittance impact (Orozco 2004a, b, Robinson 2004, Orozco & Fedewa 2006, Prior & Santomá 2007a). Remittances offer major opportunities to lending institutions in emerging countries; they provide funds and confer greater liquidity to the system, they enable exploitation of basic economies of scale and scope to decrease transaction costs, they open the bank system to population groups that, until then, did not use it and they enable alliances to be formed with institutions in the developed countries, incorporating the latter's knowledge and techniques into their practice. The operational synergies generated by these economies are particularly important, because they are based on elements that are common to both businesses' value chain, such as distribution networks and information processing capacity. There are several operating examples of the use of remittances to stimulate the 'bankization' of developing economies.
- (5) Creation of a networked nodal system to exploit the economies of scale required to lower transaction costs. This scale, in the popular savings and lending sector, can be obtained through networked structures, with a coordinating node that provides central services.<sup>15</sup> This shares a lot of common ground with microeconomic theory, which highlights the need not only for economies of scale but also for effective multiple agency financial systems that solve the cost problems

without transgressing the limits of free competition (Gale 1993). However, the theory also shows that financial institutions will not choose to share all their technology infrastructures, in spite of the savings this would generate (Matutes & Padilla 1994), with the result that, in a second stage, the increased competition arising from network compatibility will lead to diminished revenues. Because of this, government intervention in creating networked nodal systems may be vital to assure cost efficiency. Government intervention may be aimed at creating a publicly owned node or creating incentives to encourage membership of a network.

These five points interact among themselves, increasing the efficiency of the model proposed. The use of alternative networks needs electronic banking products if they are to be used effectively in marketing and promoting the transactionality of financial services. Use of automated risk monitoring mechanisms benefits from the use of electronic banking products, as the information on the transactions made is suitably stored on a database. The 'bankization' of remittances also requires the use of electronic banking platforms and alternative networks – for example, those of shopping centers which, being more capillary, are better able to distribute remittances in areas with low bank penetration levels. Thus, these five points are interrelated and mutually reinforcing, comprising an efficient model for distributing microfinancial services while at the same time being a socially responsible model because banks will carry out the functions that are expected from them, in their capacity as financial institutions.

Recently, the growth of the microfinance sector in Latin America has begun to address the supply problem relative to the low levels of access to basic financial services in this part of the world. The emergence of microfinance in Colombia, Mexico, Ecuador and Peru is led by two types of financial institutions: banks specialized in microfinance and the leading banking institutions in each country.

Banks specialized in this market segment have been able to create sustainable and profitable

Table 5: Best practices used by banks to increase access to finance in Latin America

Best practices	Mexico	Ecuador	Peru	Colombia
Low-cost financial services	Banorte	Pichincha	Mibanco/Banco de Crédito	Caja social
Alternative distribution networks	Banco Azteca	Pichincha	Interbank	Bancolombia
Risk analysis methodologies	Compartamos	Banco Solidario	Mibanco	Bancolombia
Banking remittances	Banco Azteca	Banco Solidario	NA	Bancolombia
Economies of scale	Bansefi	Pichincha	Cajas	Banca oportunidades

business models that serve the segments of the population without access to finance. Table 5 show several best practices used by banks to increase credit access in Latin America.

However, this type of banking institution still faces great hurdles in its effort to massively provide basic financial services to the unbanked segment of the population in these countries. Because they are small, these institutions lack the investment capacity required to develop the infrastructures needed to massively serve the unbanked. However, a second type of banking institution is emerging as the new leader of microfinance markets in Latin America. These institutions, the leading domestic commercial banks, leverage their existing infrastructures in order to use best practices in the distribution of low-cost financial services. Owing to their size, they have the financial capacity required to create the infrastructures that apply best practices in terms of products, credit risk analysis, alternative channels and the optimization of the impact of remittances. Banco del Pichincha-Credife (Ecuador), Bancolombia (Colombia), Banco de Crédito (Peru) and Banorte (Mexico) are implementing 'downscaling' strategies that solve supply-related problems to access to finance.

Nonetheless, other experiences that have yielded good results in countries such as Canada, France, Germany or Spain, where there are highly inclusive financial systems, show that public policies that promote the necessary scale for institutions specialized in microfinance are needed to massively provide financial services to the population. The Colombian government moved in this direction with an initiative called 'Bank of Opportunities', which aims to apply international

best practices through the creation of a technical association of financial services that could provide these services to cooperative, financial or banking institutions whose small size prevents them from individual access to these technologies.<sup>16</sup>

Neither Ecuador nor Peru has come up with a policy similar to Colombia's 'Bank of Opportunities', which was based on the experience of Bansefi in Mexico. Even though Ecuador and Peru have more appropriate regulation than Colombia or Mexico to foster microfinance, there is no public policy to promote economies of scale that could solve the supply problems that prevent access to financial services for large segments of the population.

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## Notes

1. Cf. [http://nobelprize.org/nobel\\_prizes/peace/laureates/2006/press.html](http://nobelprize.org/nobel_prizes/peace/laureates/2006/press.html).
2. In order to solve this problem, subsidized credit programs were designed and implemented through traditional banks or public bodies created specifically for this purpose. However, the results have not been very encouraging; see, for example, the

- experience of Bangladesh in Sharma & Zeller (1997); cf. also Morduch (1999).
3. In some microcredit contracts some form of collateral is required.
  4. Because of the high-risk premium. Nevertheless, these high interest rates should be compared with the prevailing rates in the (not easily accessible) market or the informal market.
  5. In many countries, the organizations specializing in microfinance operate under the aegis of international associations such as WWB – Women's World Bank, Acción Internacional, KfW or The SEEP Network. The services they offer often have many features in common with those of the networked nodal system proposed further on.
  6. On the measurement of the performance of microfinance models, see Hartarska (2005), Flücker & Vassiliev (2006), Ferro-Luzzi & Weber (2006). On the empirical evidence concerning the determinants of the success of group lending schemes, see Guttman (2006).
  7. Of course, there are also a variety of middle organizations, as permitted by each country's legislation, its business and financial culture, the level of development of microcredit, etc. For some specific examples, see Prior & Garrido (2007) and Prior & Santomá (2007b). And finally, the informal and semi-formal financial institutions, which play a large role in many countries.
  8. This strategy provides the basis for sales strategies based on customer relationship management (CRM).
  9. In developed countries, future flows are taken into account by the more advanced institutions, which use their CRM to model customers' behavior based on their age and personal and professional situation.
  10. The credit registers or credit bureaus are publicly or privately owned databases with public access.
  11. The formalization of informal finance is considered by a large part of the literature, as well as for practical experiences, a difficult issue, because informal does not mean illegal, and sometimes it operates efficiently.
  12. On the use of electronic payment methods to provide for low-cost financial products, see Furst *et al.* (2000) and UNCTAD (2001, 2002).
  13. Again, this solution is not available in certain areas, for example, in rural Africa. Other solutions have been adopted, like mobile branches or apex institutions (wholesale mechanisms that channel funds, with or without supporting technical services).
  14. On traditional credit scoring, see Lewis (1990). For a broad credit scoring model, including more qualitative and behavioral variables, see Viganò (1993).
  15. This system is similar to that existing in Spain in the context of the Confederación Española de Cajas de Ahorros (Spanish Savings Banks Confederation). See Gardener *et al.* (2001).
  16. 'Bank of Opportunities' (Banca de las Oportunidades) is not a financial institution, but the set of tools designed to provide the access to credit, saving, payment instruments, remittances and insurance to low income citizens that do not have easy access to financial services. It is a network of banks, finance companies, cooperatives, NGOs and other institutions that carry out the services, under the sponsorship of the Colombian government.

## References

- Argandoña, A. 1995. 'The treatment of ethical problems in financial institutions and markets'. In Argandoña, A. (Ed.), *The Ethical Dimension of Financial Institutions and Markets*: 1–26. Berlin: Springer.
- Argandoña, A. 2006. 'From ethical responsibility to corporate social responsibility'. Paper presented at the 6th International Symposium on Catholic Social Thought and Management Education, 'The Good Company. Catholic Social Thought and Corporate Social Responsibility in Dialogue', 5–7 October 2006. Rome.
- Armendáriz de Aghion, B. and Morduch, J. 2000. 'Microfinance beyond group lending'. *Economics of Transition*, 8:2, 401–420.
- Banco Interamericano de Desarrollo 2005. *Desencadenar el crédito. Como ampliar y estabilizar la banca. Informe 2005. Progreso económico y social en América Latina*. Washington, DC: BID.
- Beck, T., Demirgüç-Kunt, A. and Levine, R. 1999. *A New Database on Financial Development and Structure*. Washington, DC: World Bank.
- Beck, T., Levine, R. and Loayza, N. 2000. 'Finance and the sources of growth'. *Journal of Financial Economics*, 58:1–2, 261–300.
- Beck, T., Demirgüç-Kunt, A. and Martínez-Peira, M.S. 2005. *Reaching Out: Access and Use of Banking Services across Countries*. Washington, DC: World Bank.

- Bencivenga, V.R. and Smith, B.D. 1991. 'Financial intermediation and endogenous growth'. *Review of Economic Studies*, 58:2, 195–209.
- Condusef (Comisión Nacional para la Protección y Defensa de los Usuarios de los Servicios Financieros) 2004. *Comisiones bancarias*. México: Condusef.
- Consultative Group on Assisting the Poor (CGAP) 2005. *Mexico: Country-level Savings Assessment*. Washington, DC: CGAP.
- De la Cuesta-González, M., Muñoz-Torres, M.J. and Fernández-Izquierdo, M.A. 2006. 'Analysis of social performance in the Spanish financial industry through public data: a proposal'. *Journal of Business Ethics*, 69:3, 289–304.
- De Soto, H. 2000. *El misterio del capital: ¿Por qué el capitalismo triunfa en occidente y fracasa en el resto del mundo?* Barcelona: Ediciones Península.
- Dembinski, P.H. 2006. 'Get man back on his own feet'. *Finance and Common Good*, 25, 5–10.
- Demirgüç-Kunt, A. and Maksimovic, V. 1996. *Financial Constraints, Uses of Funds and Firm Growth: An International Comparison*. Washington, DC: World Bank.
- Evers, J. 2000. 'Micro-credit as a model for efficient commercial small-scale lending and its application in banks'. *Finance and the Common Good*, 5, 14–26.
- Ferro-Luzzi, G. and Weber, S. 2006. *Measuring the Performance of Microfinance Institutions*. Genève: Haute École de Gestion, 06/3/1.
- Flückiger, Y. and Vassiliev, A. 2006. 'Evaluation of microfinance institutions in Peru: an application of data development analysis'. In Balkenhol, B. (Ed.), *Microfinance and Public Policy: The Case for Subsidies*. London: Macmillan.
- Furst, K., Lang, W. and Nolle, D. 2000. *Working Paper: Internet Banking: Developments and Prospects*. Washington, DC: Office of the Comptroller of the Currency.
- Gale, D. 1993. *Branch Banking, Unitary Banking and Competition*. Department of Economics, Boston University Mimeograph.
- Gardener, E., Molyneux, P., Bisoni, C., Cosma, S., Carbó, S., López del Paso, R. and Rodríguez Fernández, F. 2001. *Tres análisis sobre Cajas de Ahorros y sistema financiero*. Madrid: Fundación de las Cajas de Ahorros Confederadas.
- Ghatak, M. 1999. 'Group lending, local information and peer selection'. *Journal of Development Economics*, 60:1, 27–50.
- Ghatak, M. and Guinnane, T.W. 1999. 'The economics of lending with joint liability: theory and practice'. *Journal of Development Economics*, 60:1, 195–228.
- Global Insight 2003. *The Virtuous Circle: Electronic Payments and Economic Growth*. San Francisco, CA: Global Insight.
- Goggin, N. 2006. 'Ideology, mission or just a technique?'. *Finance and the Common Good*, 25, 30–36.
- Guttman, J.M. 2006. *Working Paper 2006-WP-01: Repayment Performance in Group Lending Programs: A Survey*. Indianapolis, IN: Networks Financial Institute.
- Hartarska, V. 2005. 'Governance and performance of microfinance institutions in Central and Eastern Europe and the newly independent states'. *World Development*, 33:10, 1627–1643.
- King, R. and Levine, R. 1993. 'Finance and growth. Schumpeter might be right'. *Quarterly Journal of Economics*, 108:3, 717–737.
- Lacalle-Calderón, M. and Rico-Garrido, S. 2006. 'Los microcréditos: una oportunidad de inclusión laboral'. *Finance and the Common Good*, 25, 94–100.
- Levine, R. 1991. 'Stock markets, growth and tax policy'. *Journal of Finance*, 46:4, 1445–1465.
- Levine, R. and Zervos, S. 1998. 'Stock markets, banks, and economic growth'. *American Economic Review*, 88:3, 537–558.
- Lewis, E.M. 1990. *An Introduction to Credit Scoring*. San Rafael, CA: Athena Press.
- Mathieson, D.J. and Schinasi, G. (Eds.) 2001. *International Capital Markets: Developments, Prospect and Key Policy Issues*. Washington, DC: International Monetary Fund.
- Matutes, C. and Padilla, J. 1994. 'Shared ATM networks and banking competition'. *European Economic Review*, 38:5, 1113–1138.
- Morduch, J. 1999. 'The microfinance schism'. *World Development*, 28:4, 617–629.
- Orozco, M. 2004a. *The Remittance Marketplace: Prices, Policy and Financial Institutions*. Washington, DC: Pew Hispanic Center.
- Orozco, M. 2004b. *International Financial Flows and Worker Remittances: A Best Practices Report*. United Nations: Population and Mortality Division.
- Orozco, M. and Fedewa, R. 2006. *Working Paper 24: Leveraging Efforts on Remittances and Financial Intermediation*. Washington, DC: Inter-American Development Bank.
- Prior, F. and Argandoña, A. 2007. 'Best practices in credit accessibility and corporate social responsibility in financial institutions'. Paper presented at the 2nd

- International Conference, 'Globalization and the Good Corporation', 26–28 June, New York.
- Prior, F. and Garrido, C. 2007. 'Desarrollo empresarial y acceso a servicios financieros en México. Desafíos y posibilidades en perspectiva latinoamericana.' Summit of the Americas Center, Florida International University – UAM Azcapotzalco.
- Prior, F. and Santomá, J. 2007a. 'La bancarización de las remesas y la creación de sinergias financieras'. *Harvard Deusto Finanzas y Contabilidad*, 77, 70–80.
- Prior, F. and Santomá, J. 2007b. 'Solutions to the problem of low access to financial services in Colombia, Ecuador and Perú'. *ESR Review*, Center for Economic Self Reliance, Marriott School of Management, 9:1, 40–46.
- Rajan, R.G. and Zingales, L. 1998. 'Financial dependence and growth'. *American Economic Review*, 88: 3, 559–586.
- Robinson, S. 2004. 'Remittances, microfinance and community informatics. Development and governance issues'. Paper presented at the Remittances, Microfinance and Technology Conference, 'Leveraging Development Impact for Pacific States', June, Brisbane.
- Rojas-Suárez, L. and Weisbrod, S.R. 1994. *Working Paper 94/117: Financial Market Fragilities in Latin America. From Banking Crisis Resolution to Current Policy Challenges*. Washington, DC: IMF.
- Ruiz-Durán, C. 2004. *Los desbancarizados y el problema de los mercados financieros segmentados*. México, DF: Comercio Exterior.
- Schreiner, M. 2000. 'Credit scoring for microfinance: can it work?'. *Journal of Microfinance*, 2:2, 105–118.
- Sharma, M. and Zeller, M. 1997. 'Repayment performance in group-based credit programs in Bangladesh: an empirical analysis'. *World Development*, 25, 1731–1742.
- UNCTAD 2001. *E-Commerce and Development Report 2001*. New York: UNCTAD.
- UNCTAD 2002. *E-Commerce and Development Report 2002*. New York: UNCTAD.
- Viganò, L. 1993. 'A credit scoring model for development banks: an African case study'. *Savings and Development*, 17:4, 441–482.
- World Bank. 2006. *Getting Credit 2006*. Available at <http://www.worldbank.org> (accessed 5 May 2007).
- Wydick, B. 1999. 'Can social cohesion be harnessed to repair market failures? Evidence from group lending in Guatemala'. *Economic Journal*, 109, 463–475.
- Yunus, M. 1999. *Banker to the Poor*. New York: Public Affairs.
- Zeller, M. and Meyer, R.L. (Eds.). 2002. *The Triangle of Microfinance: Financial Sustainability, Outreach and Impact*. London: The Johns Hopkins University Press.