Access to Financial Services: A Review of the Issues and Public Policy Objectives

Stijn Claessens

This article reviews the evidence on the importance of finance for economic well-being. It provides data on the use of basic financial services by households and firms across a sample of countries, assesses the desirability of universal access, and provides an overview of the macroeconomic, legal, and regulatory obstacles to access. Despite the benefits of finance, the data show that use of financial services is far from universal in many countries, especially developing countries. Universal access to financial services has not been a public policy objective in most countries and would likely be difficult to achieve. Countries can, however, facilitate access to financial services by strengthening institutional infrastructure, liberalizing markets and facilitating greater competition, and encouraging innovative use of know-how and technology. Government interventions to directly broaden access to finance, however, are costly and fraught with risks, among others the risk of missing the targeted groups. The article concludes with recommendations for global actions aimed at improving data on access and use and suggestions on areas of further analysis to identify constraints to broadening access.

Finance matters for economic development. There is considerable evidence today for a strong causal relationship between the depth of the financial system (as measured, for example, by the supply of private credit or stock market capitalization) on the one hand and investment, growth, poverty, total factor productivity, and similar indicators on the other hand. Indeed, many empirical cross-country tests have shown initial financial development to be one of the few robust determinants of a country's subsequent growth. Finance also matters for the well-being of people beyond overall economic growth. Finance can help individuals smooth their income, insure against risks, and broaden investment opportunities. Finance can be particularly important for the poor. Recent evidence has shown that a more developed financial system can reduce poverty and income inequality.

Much of this evidence has focused attention on the importance of overall financial development. Yet banking systems and capital markets, especially in developing

countries, are often skewed toward those who are already better-off, catering mainly to large enterprises and wealthier individuals. Many segments of the enterprise and household sectors lack access to finance, likely impeding their growth and reducing their welfare. What are the barriers to wider access to financial services? Should broader availability of financial services be a public goal, and if so what are the best means of achieving it?

This article reviews the evidence on the importance of financial development for economic well-being; examines the concepts of access and use of financial services; provides data on the extent of use for a sample of countries; assesses the desirability of universal access; considers the macroeconomic, legal, and regulatory obstacles to access; and reviews the risks and costs associated with attempts to broader the provision of access to finance. The article is structured around the following questions: Why the recent attention on access? What does access to finance mean? What evidence is there on access, and who has access and who does not? What are the constraints to access, and what can governments do to improve access? And what are possible international actions to improve access?

Importance of Finance for Development

Financial development has received increased attention lately and has become a more important part of the development agenda, for several reasons. Evidence that financial development matters for growth has been accumulating over the last decade. Based on changes in economies and economic production, finance may have moved up in the ranking of barriers to growth. And there is an increasing perception that the distribution of finance has been skewed for households and enterprises. Each of these explanations is reviewed briefly here.

Evidence on Finance and Growth

There is much more evidence today that finance contributes to growth. The empirical evidence is robust and available at the country, sector, and individual firm and household levels using various statistical techniques. Financial deepening has been shown to "cause" growth (Demirgüç-Kunt and Maksimovic 1998; Rajan and Zingales 1998; Beck, Levine, and Loayza 2000; for a review of the evidence see Levine 2005). A doubling of private sector credit to GDP is associated with a 2 percentage point increase in the rate of GDP growth (World Bank 2001).

Finance influences grow through many channels. Finance helps growth by raising and pooling funds, allowing more and more risky investments to be undertaken; by allocating resources to their most productive use; by monitoring the use of funds; and by providing instruments for risk mitigation. It is less the form in which these

services come—whether from banks or capital markets—than that they are being provided efficiently—by a proper institutional and competitive environment—that matters for growth (Demirgüç-Kunt and Levine 2001; see also World Bank 2001). As such, it is difficult to assert that particular types of financial systems are more or less conducive to growth or that one type of system is more or less conducive to facilitating universal access to financial services.

Finance also helps to improve income distribution and poverty reduction through several channels. Foremost, finance helps through economic growth, thus raising overall income levels. Finance can help more specifically by distributing opportunities more fairly. There is evidence, although more recent, that finance matters especially for poor households and smaller firms. Controlling for reverse causality, Beck, Demirgüç-Kunt, and Levine (2004) find in cross-country studies on the link between finance and changes in inequality and poverty that financial development causes less income inequality. Clarke, Xu, and Zou (2003) also find that the level of inequality decreases as finance develops, and since the more concentrated income is the higher poverty is, finance thus helps reduce poverty.

Honohan (2004) shows that financial depth explains the level of poverty (number of people with incomes of less than \$1 or 2 a day). But he also finds that across countries the degree of microfinance penetration, often thought to be specifically useful for the poor, has no special effects on poverty. (Barr 2005 reviews the more general links between microfinance and financial development.) Other evidence, however, such as Morduch and Hayley (2002), finds some specific impact of microfinance on poverty. Microfinance has been found to reduce poverty by alleviating credit constraints, thus reducing child labor and increasing education, and by insuring against shocks (Morduch forthcoming). More generally, with a few exceptions, it is arguable that direct access of poor people to financial services can strongly affect the attainability of the Millennium Development Goals.² Even the goals that chiefly require upgrading public services in health and education also require that poor households be able to afford these services (Littlefield, Morduch, and Hashemi 2003).

Rising Importance of Finance as Economies Change

As economic production changes and countries liberalize their real economies, it has become clearer that the degree of financial development strongly influences the ability of countries, firms, and individuals to make use of new growth opportunities. Finance matters for firms' growth opportunities, especially for small- and medium-size enterprises. Beck, Demirgüç-Kunt, and Levine (2005) show that while successful economies typically have large-, small-, and medium-size enterprise sectors, these sectors do not "cause" growth, alleviate poverty, or decrease income inequality.

Rather, it is the overall business environment—ease of firm entry and exit, sound property rights, and proper contract enforcement—that influences economic

growth. Finance, however, accelerates growth by removing constraints that impede small firms more than large firms.³ Finance allows firms to operate on a larger scale, encourages more efficient asset allocation, and eases the entry of new firms (Klapper, Laeven, and Rajan 2004). Financial—and institutional—development thus helps to level the playing field for firms and countries, especially important in a global economy with rapidly changing growth opportunities.

Skewed Distribution of Finance

While financial development in general is beneficial for growth and poverty, finance may not be available on an equal basis. Although hard to prove for a large sample of countries, there is increasing evidence that finance often benefits the privileged few, especially in developing countries. In normal times this has meant that finance is allocated on the basis of connections and nonmarket criteria, acting as an entry barrier (Rajan and Zingales 2003). In times of crises this has meant that the costs of financial crises are allocated unevenly, with the brunt borne by the poor. Halac and Schmukler (2003) show that financial transfers during crises are large and regressive and expected to increase income inequality. (See also Claessens and Perotti 2005 and references therein for more discussion of the uneven distribution of finance and the impact of financial reform on inequality.)

What Does Access to Financial Services Mean, and How Do Access and Use Differ?

Access to finance is not the same as use of financial services. Access refers to the availability of a supply of reasonable quality financial services at reasonable costs, where reasonable quality and reasonable cost have to be defined relative to some objective standard, with costs reflecting all pecuniary and nonpecuniary costs. Use refers to the actual consumption of financial services. The difference between access and use can be analyzed in a standard demand–supply framework. Access refers to supply, whereas use is the intersection of the supply and demand schedules. Figure 1 shows the categories of use and access on a continuum (in reality some of the categories will overlap). Group A has access and use of financial services. Group B has access but does not want to use financial services (voluntary exclusion). Group C has no access and thus does not use financial services (involuntary exclusion).

Access is thus equal to A + B. Those who use financial services (A) clearly have access. Zero use or voluntary exclusion (B) does not necessarily reflect unavailability of services nor does it necessarily mean rationing. The demand and supply schedules may be such that some households or firms have access to financial services but

Figure 1. Difference between Access and Use

А		В		С				
Current consumers of financial services	Voluntai	y exclusion		Involuntary exclusion ▶ Populati				
•	No need No awareness?	Assumed rejection Inability to use due to price/income	Rejected: High risk / bad credit = No access	Rejected: Discrimination = No access	Excluded due to	Population		
	B1	B2	C1	C2	C3			

Source: Author's analysis.

decide not to use them because they have no need, have no savings, rely on nonfinancial means of transacting (barter), or decide the prices are too high.

Whether demand and supply intersect will depend on the relative costs of providing financial services and the income of consumers. If the relative prices of financial services go down compared with the prices of other goods, some of those who voluntarily excluded themselves may start to demand financial services. Availability of services is a necessary, but not sufficient, condition for use. The supply and demand schedules may fail to intersect, in which case there will be lack of access, so that some households or firms are involuntarily excluded (C). They may lack access because, for example, barriers to access the formal financial system are too high or costs are unreasonably high or because they do not have a credit record.

That use will vary from access is a standard demand and supply result and is well accepted. However, analytical financial research, beginning with Stiglitz and Weiss (1981), has shown that, given information asymmetries, lenders will adjust not only price (interest rates) but also quantity and because of adverse selection and moral hazard concerns may not be willing to provide any financing to some individuals or firms. Depending on the distribution of borrowers' risk and return and other fundamental factors, such as income levels and net worth, the supply curve can be backward bending, leading to quantity rationing. Such rationing means involuntary exclusion on the consumer side but is a rational market response on the supply side. Determining empirically whether an individual or firm has access to financial services but chose not to use them or was rationed out is complex. The effects of adverse selection and moral hazard, for example, are very hard to separate empirically (Karlan and Zinman 2005).

In practice, the borderlines between the three groups are even less precise. Use will vary more from access when there are nonprice barriers. Some individuals will not have access to financing because there are no distribution points of financial institutions in their area—the supply curve is vertical at zero for them. Nonprice barriers can interact with the prices charged for financial services. The costs of financing rise for customers whose credit history is not well known, deterring them from seeking financing or rationing them out of the market. But their lack of a credit history may arise from such barriers as a weak institutional environment, including poorly functioning credit information bureaus. Lack of access because banks do not serve a particular area or charge too much may arise because of a low level of competitiveness in the banking system.

Distinguishing use and access also depends on the aspect of finance being considered—savings mobilization, allocation of loanable funds (credit), payment facilitation, and insurance (see Bodie and Merton 1995 for a review of the functions of finance). For example, some individuals may have access to payments services but not to credit. For measurement purposes it is often hard to distinguish between these functions, as say an account at a bank provides both payment and insurance services and may also be the starting point of credit. This further complicates the access analysis.

Some analysts have tried to provide more specific definitions of access to financial services by categorizing the different dimensions to access. First is the dimension of availability: are financial services available, and if so in what quantity? Second is the question of cost: at what total price are financial services available, including the opportunity costs of having to wait in line for a teller or having to travel a long distance to a bank branch?⁵ Third is the range, type, and quality of financial services being offered. Following Morduch (1999), these dimensions can be identified as reliability, is finance available when needed; convenience, is access easy; continuity, can finance be accessed repeatedly; and flexibility, is the product tailored to individual needs.

Variants of these dimensions are used in other studies.⁶ The point is that there are various dimensions to access, and consequently various dimensions in which access may be deficient. There can be deficient access geographically to branches and outlets; or deficient access socioeconomically. Or access can be deficient in an opportunity sense: the deserving do not have access. All of this makes it (even) more difficult to establish conceptually the degree of access, let alone to measure it.

What Do Data About Use Tell Us?

These analytical questions on access and use indicate the difficulty of defining access. Empirically, documenting access faces the further challenge of limited data

on the degree of use of financial services. Although there is much data on financial sector development, there is very limited data on use of financial services, both for households and for firms, across countries (Emerging Market Economics 2005; Honohan 2005). Data are insufficient in all respects, making judgments on the causes of lack of access more difficult.

For a reasonable number of countries there are data from providers on households' use of basic financial services, such as the number of people with a bank account. These data are often obtained using commercial bank and central bank data or from surveys. Recently, data have been collected on the spread of microfinance services (CGAP 2004) using data from individual microfinance institutions (as collected by the microfinance information exchange). These cover the number of people with access to a savings account. Similarly, Beck, Demirgüç-Kunt, and Martinez Peria (2005) have compiled data from regulators for a sample of countries on the number of accounts and average loan and deposit size at commercial banks.

For some countries there are micro-based data from household surveys, such as the Living Standard Measurement Study coordinated by the World Bank. Some 27 of these have covered some dimensions of households' use of financial services (Gasparini and others 2005). Still, and with the exception of some industrial countries such as the Netherlands and Sweden, much of the data collected in these general household surveys is very basic and limited in the various dimensions of use and access (quantity, costs, and quality). Use of and access to credit have been difficult to document at the household level. Many countries do not even have data on the aggregate level of consumer credit, in part because nonbank financial institutions as well as banks provide credit.

Data on firms' use of and access to financial services are somewhat less limited. Considerable information is available on listed firms' financial structures and their use of external financing. Much less information is available on unlisted firms, especially on the financial structure of small firms' finance. Most data on smaller firms come from surveys, such as those conducted by the World Bank (World Bank Economic Survey and Investment Climate Assessments) or by national agencies such as the U.S. Federal Reserve Boards and the U.K. Bank of England. Some data come from central bank statistics (Central Bank of the East African States, BCEAO, for example, collects data on use) and advocacy groups (U.S. Small Business Administration, chambers of commerce, and equivalents). Again, the data are basic and limited in dimensions of use (quantity, costs, quality). Use of credit dominates data collection efforts, with use of savings services less of an issue, although payment services are important as well for firms. Furthermore, most data are collected on use of banking services, and much less information is available on the use of other financial services, such as insurance, leasing, factoring, and the like.

Although weak and often not comparable, available data show that use by households of banking services varies greatly. Many households in developing countries

do not have a bank account. With the main caveat that data are not easily comparable across countries and some of the numbers are only rough estimates, table 1 provides data on the degree to which households use a basic financial service provided by a formal financial institution (have a checking or savings bank account) across many countries. It shows that in most Organisation for Economic Co-operation and Development countries use is nearly universal, averaging 90 percent; in developing countries use is much lower, averaging 26 percent. The highest use of financial services from formal financial institutions is 59 percent in Jamaica. High use rates in some other countries may not be representative of the whole country as they apply to the population of the capital city only (Mexico) or to specific cities or regions (China, Colombia, and India) or urban areas (Brazil). For most of the other developing countries use of a basic bank account does not exceed 30 percent, and in the lowest income countries use is less than 10 percent of households.

Individuals obtain financial services through other means, including nonfinancial institutions (table 2). The microfinance information exchange data also show that financial services outside the banking system are often used. Thus, these numbers underestimate the degree of access to financial services, but they do show the large differences between industrial and developing countries in use of financial services from formal financial institutions.

The next question then is who are the unbanked households, and how do they differ between industrial and developing countries? Only revealed use and not access is observed. Thus, scenarios of zero transactions in which there is demand cannot be distinguished from those where there is lack of demand, although household and firm surveys provide some insight into the reasons behind the (lack of) demand. To the extent known, the profiles of the unbanked are as expected. Socioeconomic characteristics such as income, wealth, and education play the largest roles in explaining observed use. Financial exclusion is often part of a broader pattern of exclusion that includes education and jobs and other areas of life. Households that use credit have a different profile from those that have bank and savings accounts, and the profile is affected by income and wealth characteristics, as it tends to be the richer who borrow.

A comparison between the United States and Latin American countries shows some similarities between otherwise very different countries in which people do not want to bank (table 3). After banks barriers, convenience, trust, and savings are important considerations for households that do not seek financial services from banks in all countries except Colombia. Macroeconomic factors can play an important role in demand, as when banking and financial crises have undermined the confidence of the public in the formal financial system. Colombia, for example, has had few banking crises, and the percentage of unbanked who cite mistrust as a reason not to use financial services is much lower than in the other two Latin American countries, which have had more crises.

 Table 1. Share of Households with Access to a Bank Account or Using Financial Services

						Share of hous	Share of household (percent)		
Country	Source	Date of survey	Number of households	That saved money in the past 12 months	That used formal financial institutions to save	That used informal finance to save	That borrowed money in the past 12 months	That used formal financial institutions to borrow	That used informal finance to borrow
Developing group									
Armenia	LSMS	1996	4,920	17.1	8.9	0.2			4.5
Bosnia and Herzegovina	LSMS	2001	5,400	1		I	21.8	6.2	15.8
Botswana	FINSCOPE	2003	530	1	47.0	25.7	1	11.7	29.1
Brazil (11 urban areas)	SAFS	2002	2,000		42.7	45.5		1	
Bulgaria	LSMS	2001	2,633			I	5.4	5.4	
China (Hebei and Liaoning)	LSMS	1995–97	787	82.5	41.9	13.3	28.1	5.2	24.7
Colombia (Bogota city)				1	41.2		1	I	1
Côte d'Ivoire	LSMS	1988	1,600	88.1	24.8	I	23.8	3.2	21.1
Ghana	LSMS	1998/99	5,998	12.0		I	39.1^{a}	3.3	32.0
Guatemala	LSMS	2000	7,276	18.1	17.8	0.4	31.8	23.5	7.4
Guyana	LSMS	1992/93	1,819	15.7	13.7	3.6	4.7	1.3	2.5
India	AIDIS	1991	57,031			I	26.9	11.8	19.0
India (Uttar Pradesh and	RFAS	2003	6,000		47.5^{b}	I			
Andhra Pradesh)									
Jamaica	LSMS	1997	2,020	68.1	59.4	17.8	10.5	1.9	5.9
Kenya	Estimate			1	10.0	I	1	1	
Kyrgyz Republic	LSMS	1998	2,979	11.4	1.3	10.1	6.1	0.3	5.3
Lesotho	FINSCOPE	2003	534		17.0	11.0		1	0.9
Mexico (Mexico City)	I				25.0		1	1	
Morocco	LSMS	1990/91	3,323	15.5		I	22.0	3.6	19.3
Namibia	FINSCOPE	2003	810	1	28.4	6.0	1	5.3	15.2
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(Continued)

Table 1. (Continued)									
						Share of hou.	Share of household (percent)		
Country	Source	Date of survey	Number of households	That saved money in the past 12 months	That used formal financial institutions to save	That used informal finance to save	That borrowed money in the past 12 months	That used formal financial institutions to borrow	That used informal finance to borrow
Nepal	LSMS	1996	3,373	ı		1	57.0	12.9	50.0
Nicaragua	LSMS	1998/99	4,209	6.5	4.7	0.2	22.5^{c}	7.6	7.8
Pakistan	LSMS	1991	4,800	23.6	12.2	14.5	30.3	1.1	29.4
Panama	LSMS	1997	4,945			I	1.5	0.8	0.8
Peru	LSMS	1994	3,623	25.2		I	16.6	2.1	14.5
Romania	LSMS	1994/95	$2,4560^{d}$	94.3	22.5	1.4	15.9	0.9	11.4
South Africa	LSMS	1993	000,6			I	44.8	4.9	42.6
South Africa	FINSCOPE	2004	2,988	I	46.0	I			
Swaziland	FINSCOPE	2003	604		35.3	19.5		4.1	16.1
Tanzania	Estimate				5.0	I	1	1	
Uganda	Estimate				۸ د	I		1	
Viet Nam	LSMS	1997/98	6,002	6.68	8.7	12.8	49.1	26.1	30.4
Developed group									
Austria					81.4	I	1	1	
Belgium		I		I	92.7	I			
Denmark					99.1	I		1	
Finland		I		I	2.96	I			
France					96.3	I			
Germany		I		I	96.5	I	1	1	1
Greece					78.9		1		
Ireland					9.62	I	1	1	
Italy					70.4	I	1	1	
Luxembourg		I		I	94.1	I			

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						Share of hous	Share of household (percent)		
		Data of		That saved money in	d That used formal financial	That used informal	That borrowed money in	That used formal financial	That used informal
Country	Source	Survey	households	the pust 12 months	to save	to save		to borrow	to borrow
Netherlands	I		I	l	6.86	I	1	I	
Portugal	I	I			81.6	I			
Spain	1				91.6	I	1		
Sweden	1				0.86	I	1		
United Kingdom	1				87.7	I	1		
United States	SCF	2001	4,449	1	90.9^{e}		75.1^{f}	1	1

—, not available.

mal financial service providers include banks (public or private), cooperatives, and credit unions. For a few countries other financial institutions, such as security firms and postal savings, are also included in formal. Informal includes others that provide financial services, except for savings at home. Microfinance institutions and nongovernmenal organizations are included in informal, as are rotating savings and credit associations, tontines, moneylenders, pawnshops, ususus, and stokvels. For borrowing, the same Note: Definitions of formal and informal financial institution vary greatly among countries due to differences in survey questionnaires. Generally speaking, for savings, fordefinitions are followed, with person to person borrowing included in informal.

^aHouseholds who paid off rents.

^bDeposit accounts only.

^cCredit purchases.

^dBased on number of households in the household roster files.

Family holding some type of transaction acount—a category comprising checkings, savings, money market deposit accounts, money market mutual funds, and call accounts at brokerages.

^fPercentage of family holding any debt.

Sources: The main sources are Living Standard Measurement Study (1.5Ms) surveys, with household responses averaged for each country, and Napier (2005) for many Southern African countries. For the EU countries, Pesaresi and Pilley (2003), For the United States, Board of Governors, U.S. Federal Reserve System (2004). For Brazil, Colombia, India, and Mexico, Kumar and others (2004), Basu and Srivastava (2005), and Caskey, Solo, and Durán (2004), except that early data for India are from the regular Indian household surveys. For Kenya, Tanzania, and Uganda, Peachey and Roe (2004).

Table 2. Distribution of Savings Deposits in Four Countries (percent of total)

		-		
	Brazil	India	Colombia	Mexico
Banks	95 (54 private; 41 public)	90 (30 rural regional banks)	85	96
Cooperatives	0	7	14	
Post office	_	2	_	
Family and friends	4	_	_	
Others	1	1	1	4

^{—,} not available.

Note: Response to question: What other savings and deposit facilities are being used?

Source: Kumar and others 2004.

Table 3. Reasons the Unbanked Do Not Use Banks: A Comparison of Five Countries (percent of total)

	United States	Mexico	Colombia	Brazil	India
Demand limitations					
No need, no savings	53	7	16		75
No awareness					18
Supply limitations (bank barriers: high costs, minimum balances, documentation)	45	70	78	42	
Perceptions of service					
Safety, mistrust	18	16	3	25	
Lack of documentation	10	3			
Privacy	22	2			
Inconvenience (location and hours)	10	2			
Other reasons			3	33	

^{—,} not available.

Source: Kumar and others 2004.

Unbanked households in the United States and Mexico, two countries at different levels of development, also display very similar characteristics, with the exception of home ownership (table 4). The costs of being unbanked vary considerably, however, as alternatives are much fewer and more costly in Mexico. In the lowest income segment the costs of being unbanked are estimated at 2.5 percent of median income in the United States and 5 percent in Mexico (Caskey, Durán, and Solo 2004; see also Solo 2005).

Although weak and often not comparable, some data on firm's access to financing have more recently become available from the World Bank Investment Climate Assessments that have been conducted in the last few years. About a quarter of the firms on average complain that lack of access to external financing is a main or severe obstacle to the operation or growth of their business (table 5). There are large variations; from less than 7 percent for Latvia and Lithuania to more than 50 percent

Table 4. Who are the Unbanked? Comparison of the United States and Mexico (percent)

	United States	Mexico
Similarities		
Below median income	79	90
Less than high school	56	51
Maginalized in socioeconomic terms	90^{a}	60 ^b
Differences		
Percentage of total	9.1	75 ^c
Home ownership	7.8	63 ^c

^aLatino and African American.

Source: Solo, Caskey, and Durán 2004.

for several countries and a high of 60 percent for Brazil. Of course, these raw scores on firms' complaints about financing availability cannot be taken as an indicator of lack of access. They are heavily affected, for example, by short-term conditions in financial markets and macroeconomic policies, as shown by the comparison between Estonia, where real interest rates are in the low single digits, and Brazil, where real interest rates are more than 10 percent.

Somewhat similar to the question of unbanked households is that about unbanked firms. To the extent that we know, profiles are as expected, with the size of the firm (and, related, its age) especially important. Table 5 suggests this, as the share of large firms with complaints is less than the share of the smallest firms—on average some 8 percentage points difference but sometimes as much as 10-20 percentage points. Across a large sample of countries and controlling for other factors, it has also been found that size has the strongest effects on access to credit (Beck, Demirgüç-Kunt, and Maksimovic 2005; see also Beck and others 2005). For Brazil size was found to be more important than performance and other variables, suggesting quantitative limitations to credit access (Francisco and Kumar 2005). The impact of size on credit was found to be greater for long-term loans in Brazil and in many other countries.

However, size may reflect not only profitability and financial and legal collateral but also political collateral. This is particularly so in developing countries, where lending is often on the basis of relationships and connections, which are often political. In countries with well-developed financial systems, size constraints can be overcome. Many banks in industrial countries lend to small single proprietor firms, sometimes without requiring collateral, financial statements, or other requirements. Thanks to the spread of technological advances such as automated credit scoring, and banks in developing countries are also becoming active in these forms of financing.

^bInformal sector.

^cIn Mexico City.

 Table 5. Complaints by Firms about Lack of Access to External Financing (percentage of firms)

Country	Year	Country average	Small (1–49 employees)	Medium (50–249 employees)	Large (250 + employees)
Albania	2002	14.3	16.0	14.8	0.0
Algeria	2002	53.1	55.8	45.4	44.0
Armenia	2002	21.8	23.0	19.1	18.2
Azerbaijan	2002	13.0	12.6	24.0	4.2
Bangladesh	2002	41.6	42.5	45.8	36.4
Belarus	2002	25.8	30.7	12.5	18.9
Bosnia and Herzegovina	2002	22.5	23.2	19.4	25.0
Brazil	2003	60.5	61.9	60.6	51.9
Bulgaria	2002	38.5	45.2	18.4	29.7
Cambodia	2003	9.4	9.3	5.3	12.2
China	2002	22.8	16.9	20.9	30.2
Croatia	2002	24.9	26.9	24.2	19.2
Czech Republic	2002	25.1	28.8	25.6	7.0
Ecuador	2003	44.9	49.0	36.0	50.0
El Salvador	2003	31.0	36.5	19.6	19.5
Eritrea	2002	52.3	55.0	52.6	33.3
Estonia	2002	12.1	11.8	16.7	9.1
Ethiopia	2002	42.8	43.5	48.0	27.9
Georgia	2002	10.5	10.1	15.4	5.9
Guatemala	2003	34.1	36.4	33.3	22.0
Honduras	2003	50.8	56.2	51.4	20.7
Hungary	2002	21.6	26.1	16.7	9.5
India	2002	18.3	_	_	_
Indonesia	2003	17.5	16.0	16.6	19.5
Kazakhstan	2002	11.7	9.9	11.4	20.6
Kenya	2003	44.1	60.5	30.6	39.3
Kyrgyz Republic	2002	16.0	15.1	20.5	5.9
Latvia	2002	6.1	5.2	4.2	12.0
Lithuania	2002	6.7	5.7	12.1	4.6
Macedonia, FYR	2002	13.3	13.2	8.7	22.2
Moldova	2002	25.2	27.1	15.2	30.0
Nicaragua	2003	54.4	57.2	47.2	12.5
Pakistan	2002	37.6	38.6	34.6	27.5
Peru	2002	50.2	50.7	62.5	66.7
Philippines	2003	13.5	15.0	14.4	8.9
Poland	2002	32.7	36.5	22.6	32.2
Romania	2002	29.7	32.9	25.4	24.3
Russian Federation	2002	20.3	21.0	18.0	20.7
Serbia and Montenegro	2001	33.6	30.8	33.3	42.9
Slovak Republic	2002	29.6	32.7	27.3	20.8
Slovenia	2002	8.2	9.9	4.0	0.0
Tajikistan	2002	22.5	24.5	15.6	25.0
Tanzania	2003	48.3	54.8	38.2	27.3

Table 5. (Continued)					
Country	Year	Country average	Small (1–49 employees)	Medium (50–249 employees)	Large (250 + employees)
Turkey	2002	17.3	16.1	25.7	9.8
Uganda	2003	45.0	47.3	39.0	33.3
Ukraine	2002	26.4	31.1	16.3	18.2
Uzbekistan	2002	26.5	26.0	21.4	35.3
Zambia	2002	53.7	65.2	51.6	37.1
Percentage of firms		28.78	31.06	26.43	23.22
that say access to					
financing presents					
main or severe					
obstacles to the					
operation and growth					
of their business					
		48	47	47	47

^{—,} not available.

Source: World Bank Investment Climate Assessments (www.rru.worldbank.org) downloaded on February 4, 2005.

And in the most developed financial markets, universal access to basic financial services, including some forms of credit, is essentially ensured for households.

That use is not universal may reflect lack of demand rather than lack of access: many households and firms may not use financial services, despite having access to some financial services. But with use so low in many countries, the question naturally arises whether this is because the supply of financial services is limited. And if supply is limited, is it because financial service providers consider some households and firms as less attractive customers and are therefore unwilling to extend financial services? Or is it because there are barriers to supply? If there are barriers, the policy question is whether these can be removed without creating other economic costs or risks. If the lack of supply is due to some market failure, does there still remain a need for government intervention?

Institutional Barriers to Access

Institutional or supply barriers to access include specific constraints of financial institutions and barriers arising from the overall institutional environment, which can include a weak legal system, weak information infrastructure, and lack of competitiveness in the banking system. In the terminology of Beck and de la Torre (2005), options to expand supply would thus include moving toward the country's

Note: Percentage of firms that say access to financing presents main or severe obstacles to the operation and growth of their business.

access possibilities frontier through individual financial institution solutions and expanding the country's access possibilities frontier though country actions.

Individual Financial Institution Constraints

Households and firms often state that they do not use financial services because the services are too costly or not the right type. Households often mention problems of high minimum deposits and high administrative burdens and fees. Many small borrowers are deterred by the high fixed costs of applying for loans and the often-high rejection rates. Financial institutions may demand collateral, which poor borrowers typically lack. Formal financial services may also entail nonpecuniary barriers, such as high literacy requirements.

Households and firms may instead seek financial services from informal sources. Individuals needing funds for investment may rely on family and friends. People wanting to transmit payments, whether domestic or international, may rely on informal networks, although at higher costs. This is most obvious in the transmission of international remittances, where unit costs of informal mechanisms can be very high. To wire \$100 from New York to Mexico costs \$9 for the banked and \$19 for the unbanked, plus an unknown exchange rate spread in both cases (Caskey, Durán, and Solo 2004). Yet these informal mechanisms are often preferred because of other, nonpecuniary barriers.

When the environment is sufficiently competitive, financial institutions can be expected to adjust product features and costs as much as possible, given their costs structures. Yet financial service providers commonly respond that they do not serve poor households and small firms because the risk and costs are too high. Financial institutions do not find it profitable enough to offer appropriate financial services to some segments.

There may be variety of reasons for the lack of provision of appropriate products and services. Banks may have problems offering financial services to all households. It may be too costly to provide the physical infrastructure in areas of low population density or where there is a lack of security. High transaction costs for small volumes are often mentioned as constraining financial service providers from broadening access. Small borrowers borrow frequently, for example, and repay in small installments. They consequently do not want financial products with high per unit costs, yet for banks costs are often similar regardless of transaction size. Households and firms in developing countries may seek financing or insurance for specific purposes (important life events such as marriage, healthcare, or specific crop insurance) for which contracts are difficult to design. Firms may be underserved for the same reasons. Small firms seek different products than large enterprises, such as payment services for small amounts, and banks may not consider these firms attractive as clients. Small markets may make it more difficult to develop or roll out new products specifically useful for these markets.

The fixed costs in financial intermediation thus make providing services for small clients, by small institutions, and in small markets hard. At the same time economies of scale lead to decreasing unit costs as transaction volumes increase, making some specialization attractive. Although better cost management can lower unit costs, there are limits to cost management at the level of an individual institution, as evidence on the economies of scale for banks in mature financial markets shows (see Berger and Humphrey 1997 for a survey). Evidence on microfinance institutions also reveals economies of scale (Honohan 2004). The proliferation of microfinance institutions in many countries has not necessarily benefited final clients as much as possible, because few institutions have reached the scale necessary for efficient financial services provision. Similar constraints arise at the country level, where many financial systems are very small (less than a few billion dollars equivalent, smaller than a very small bank in most industrial countries), hindering effective financial services provision (Hanson, Honohan, and Majnoni 2003). Scale for effective financial services provision may not exist in all countries, at least not using traditional, local financial services providers.

Banks and other financial institutions can move closer to the "access frontier," however, through innovation. Sometimes prodded by government and public opinion, they can make their products more suited to low-income households. In South Africa in 2004 the country's principal banks launched a low-cost bank account aimed at extending banking services to the black majority. The country's four big retail banks along with the post office's Postbank launched the Mzansi account. Set up under a financial sector charter agreed on by the industry in 2003, the account requires a minimum deposit of 20 rands (about \$4) and is aimed at providing access to financial services to some 13 million low-income South Africans without prior access to bank accounts. Whether this will be profitable and sustainable is to be seen, but the initial take-up has been promising (Napier 2005). The sharp drop in the costs of international remittances (Orozco 2004, Maimbo and Ratha 2005) also suggests that there is still room for moving closer to the frontier. De la Torre, Gozzi, and Schmukler (2005) provide other examples of innovative approaches for enhancing access for small firms.

Some of these recent innovative and low-cost solutions in delivering financial services suggest that the limits to adapting products to the needs of a broader class of borrowers have not yet been reached. For many of the mismatches between potential demand and supply, it is thus not clear whether there is a market failure and if so what the source is. Time will tell whether financial institutions will offer the right products, properly priced, and whether financial institutions operating at the right scale and with the right technology will enter certain markets. The fact that they do not yet do so may mean that it is not profitable, given the institutional environment they face in a particular market and given current technology.

Institutional Environment Constraints

Although there is much analysis of what affects financial sector development and what role the institutional environment plays (World Bank 2001), evidence on what affects households' and firms' access to financial services is very limited. What evidence exists though gives some insights on the most binding constraints.

Across countries it is clear that there are some elements of overall development, including greater use of advanced technology, that allow banks in more industrial countries to offer financial services profitably to lower income segments (Beck, Demirgüç-Kunt, and Martinez Peria 2005). Of course, the incomes of the lower income segments in these more industrial countries are higher than the incomes of the lower income segments in developing countries, so it does not mean that the same technology can also reach the lower income segments in developing countries.

For microfinance it appears that access for the poor or the near-poor is worse in countries with higher GDP per capita, in countries with poorer institutional quality, and in countries with a smaller market (Honohan 2004). This suggests that good country institutions and a large potential market help the microfinance industry to grow. The same analysis shows that a poorer quality in the main banking system discourages the spread of microfinance institutions. Specifically, countries with higher spreads and higher profitability in their main banking system have fewer microfinance institutions. This suggests that more competition in the banking system can foster greater access to financial services, including those from microfinance institutions.

The use of savings and payments services also appears to be a function of distribution networks, including those of postal systems, saving banks, and other specialized financial institutions. In Brazil for example, the size and scope of branch networks, as well as the split between public and private banks and domestic and foreign banks, play a role in the degree of use of financial services (Kumar and others 2004; see also Kumar 2005). In other markets more specialized financial institutions such as savings banks and other proximity banks that have, besides profitability, the objective of providing financial services have broadened usage (Peachey and Roe 2004). For a sample of 91 countries Beck, Demirgüç-Kunt, and Martinez Peria (2005) show that countries with better developed financial systems and more efficient banks have wider branch and automated teller machine penetration and that the use of deposit and loan services is more evenly distributed among banking clients. These findings suggest that what is driving use is not purely the scope for profitable banking but also the overall institutional environment and level of development.

There has been more analysis of the access of small firms to financial services, and evidence suggests that the institutional environment matters even more than for households (see Berger and Udell 2005 for a review of the conceptual issues). This is

particularly so on the credit side. The absence of credit information, difficulty in registering and recovering collateral, and problems with contract design and enforcement can make lending especially difficult. Credit services may consequently be limited to entrepreneurs with credit history, (political) connections, or immovable collateral, such as real estate. Even when a business is viable, there may be little reliance on past records or expected future performance. In many countries there are problems of uncertain repayment capacity arising from volatile income and expenditures. Especially, new and smaller firms often have high exposures to these systemic risks (for example, macroeconomic volatility, financial crises, defaults by governments, and arbitrary taxation).

There is empirical evidence on the importance of these barriers. The quality of legal systems, property rights, and mechanisms for reliable information have been found to be especially important for small firms (Beck and others, 2004; Beck, Demirgüç-Kunt, and Maksimovic 2005). Small firms and firms in countries with poor institutions use less external finance, especially bank finance. Better protection of property rights increases use of external finance by small firms significantly more than by large firms, mainly because of more bank and equity finance. It also appears that substitutes for bank finance are imperfect; for example, small firms do not use disproportionately more leasing or trade finance compared with larger firms. Beck, Demirgüç-Kunt, and Martinez Peria (2005) find that firms in countries with higher levels of financial system development and greater outreach report lower financing obstacles, with the association stronger in less economically industrial countries. This impact of outreach on financing obstacles does not vary with the degree to which the banking system is government-owned—government-owned banks do not "solve" this access problem.

Analysis at the country level has been more limited, but it provides some insights into what may be driving use. Government interference can distort risk-return signals, making it hard for formal financial institutions to offer attractive products. Interest rate regulations can interfere with the abilities of financial service providers to offer saving or lending instruments profitably. Administrative regulations and procedures can create high transaction costs and barriers for dealing with formal financial institutions. Many countries have customer identification requirements, the so-called Know your customer rules, which limit the ability to offer simple banking products. The recent focus on antimoney laundering and counterterrorism financing has led to laws that can adversely affect the provision of financial services, as it has threatened to do in South Africa (Napier 2005).

In addition to hindering the activity of existing financial services providers, regulation can discourage the emergence of financial institutions more suited to the needs of lower-income households or smaller firms. Rigidity in chartering rules, high minimum capital adequacy requirements, restrictions on funding structures, excessive regulation and supervision, and overly strict accounting requirements and

other rules can prevent microfinance institutions and smaller financial institutions from emerging. In South Africa bank regulation and supervision were being extended to microfinance institutions, which reduced their capacity to offer financial services profitably to the lower-income segments of the populations (Glaessner and others 2004). Separate charters may be useful, with the required structures depending on such factors as whether the institution borrows, takes deposits, or is owned by its members (Christen, Lyman, and Rosenberg 2003).

With these and other regulatory and supervisory requirements, tradeoffs arise, however, as the requirements are meant to serve other public policy purposes, such as financial stability and integrity. There are also tradeoffs in facilitating the mainstreaming of microfinance institutions. Jansson, Rosales, and Westley (2004) argue, for example, that new institutional forms should not be created for microfinance institutions unless there are several mature and well-managed nonprofit organizations ready to transform into such financial intermediaries and the existing institutional forms—such as banks or finance companies—are unusable (due to high minimum capital requirements, for instance) or too limited because of operational restrictions (such as the inability to mobilize deposits).

There is consequently a need to evaluate the value of regulatory approaches from an overall welfare point of view. Although approaches have to strike the right balance, they can be adjusted to enhance the supply of financial services. In many countries, for example, antipredatory lending laws are needed rather than usury laws, which prevent small borrowers from getting access to credit at all, even at high interest rates. Also, simplifying truth in lending requirements for small-scale lending, rather than applying the extensive small-print type regulations many countries have, can be useful to facilitate the supply of financial services. Adapting regulations can also mean facilitating multiple forms of financial services provision. That may involve considering savings mobilization separately from credit extension. Many households are interested in savings and payment services only, not in credit services. These types of financial services provision may require different forms of regulation and supervision.

Finally, much regulation is aimed at protecting savers and borrowers against misuse and risks, yet it may not be effective in developing countries given the lack of supervisory capacity, independence, and effective checks and balances and may end up impeding access (Barth, Caprio, and Levine 2005). The general level of financial literacy may need to be increased, as is actively being done in some countries. Consideration also needs to be given to educating people on the risks of (new) financial services and different types of financial service providers, so that people can strike the right balance between risks and benefits.

Improvement in institutional infrastructure is an area where progress can clearly be made in furthering access in many developing countries. Better legal, information, payments, distribution, and other infrastructure are needed. Such work is already under way by many governments, multilateral financial institutions, and others, but it will take time. Other policy steps can be useful to increase access. The evidence reviewed by Honohan (2004) suggests that an important way to enhance access is by improving competition in the banking system. This is often easier to do than improving the institutional environment.

Increased competition can be applied to all segments of the financial sector. Smaller and nonbank financial institutions can be allowed greater use of existing networks, for example. In many countries access to the payments system is limited to a club of large banks. Information sharing is restricted in many countries to incumbent banks and formal financial institutions. This together with the limited existence of (private) credit bureaus is making it difficult for other financial institutions to provide financial services (Miller 2001). Few countries, for example, allow nonbank financial institutions and entities such as department stores access to bank information, making it more difficult for them to provide financial services to low-income households. Yet, lower-income people often get their credit from these non-financial institutions. In Mexico, for example, close to 50 percent of credit for those with no banking relationship comes from department stores (Caskey, Durán, and Solo, 2004).

Although some of these changes are technically easy to adopt, competition policy is complex, especially in small markets with little institutional capacity, and political economy factors can prevent progress. A credible competition agency is required, for which the institutional requirements are quite high. Unchecked competition may not be the first-best choice. Allowing any new party to open a credit bureau can undermine the incentive structure for entities to provide accurate information while requiring financial institutions to disclose all types of information can undermine their willingness to enter relationships with their clients out of fear that competitors will take away their business. Furthermore, even in industrial countries questions arise on how best to address the many networks that exist in financial services (payments system, credit bureaus, and distribution networks), which raise special competition policy issues. Answers here are not obvious.

In addition to the general view that competition can help with access, there is specific evidence that allowing greater entry by foreign banks can enhance access (Clarke and others 2003 review the evidence). A study on borrowers' perceptions across 36 countries found that reported financing obstacles were lower in countries with high levels of foreign bank penetration (Clarke, Cull, and Martinez Peria 2001). The same study found strong evidence that even small enterprises benefited and no evidence that they were harmed by the presence of foreign banks. The channels appear both competitive pressures of foreign banks on the domestic banking system, forcing local banks to lend to smaller firms, and direct provision of financial services by foreign banks. A Latin American study found that foreign banks with small local presence do not appear to lend much to small businesses but that large foreign banks

in many cases surpass large domestic banks in such lending (Sánchez and others 2005).

There are also many examples of the effects of foreign bank entry. In Mongolia, with an income per capita of less than \$500 and a very rural-based economy, the government-owned Agricultural Bank of Mongolia (Khan Bank) was placed in receivership in 1999 after many years of operating deficits, loan losses, and a failed attempt at privatization. In March 2003 Hs Securities of Japan bought Khan Bank for \$6.85 million. Khan Bank now operates a network with 379 points of service throughout Mongolia, greater than any of the other 16 banks operating in the country (and up from 269 when new management took office). Today, one of two Mongolian households is reportedly a client of Khan Bank, and it seems to continue to expand its branch network and services (World Bank 2006).

In addition to the direct provision of financial services, foreign bank entry has indirect effects on the overall banking system, such as greater financial stability and improved efficiency of financial intermediation (Clarke and others 2003). These two effects can make the local banking environment more conducive to lending, including to lower-income segments, and can put pressures on local banks to engage more in lending to lower-income segments as profitability in other segments declines.

The impact on access of foreign competition in securities markets is less obvious. Globalization has meant that large firms have been accessing international financial markets. In some developing countries this has reduced domestic stock market liquidity, possibly hurting access to finance by smaller firms. At the same time relaxing the financing constraints of large firms through access to international markets can ease the financing constraints of small firms that benefit indirectly, such as through trade credit arrangements. On net it is not yet clear whether small firms lose or gain from globalization and increased competition in securities markets.

Role of Specific Interventions and Technological Improvements

Recent country experiences have shown that specific interventions besides the removal of barriers and improvements in the institutional environment can enhance access. In India, for example, discussions are under way to use existing networks (for example, the postal system) for the delivery of new financial services by other public and private providers. The idea is that use of the technology and information backbone of existing public or other networks need not be limited to one provider. Many countries have large networks of post offices that could be used to allow various financial institutions to offer electronic finance services. In Brazil where the post office has a presence in 1,738 of the more than 5,000 municipalities without a bank outlet, the government auctioned the exclusive right to distribute financial services

through the post offices in 2001. Although this may quickly improve access, it does carry some risk of local monopolies.

New technology, including the Internet, smart cards, and the use of mobile phones, can help to broaden access, although it does not necessarily address the underlying distortions limiting access (see BIS 2004, for a general overview of e-finance developments). On one end of the income spectrum, in Vienna payments for parking fees and in Finland payments at vending machines can be made by mobile phone. In many industrial countries electronic payments can be made through voice access, text messaging (SMS), or wireless application protocol (as a gateway to the Internet). Another arrangement in industrial countries allows customers to pay using the prepaid value stored on their mobile phone as a direct debit or to pay later, with charges for goods or services placed on the customer's phone bill. Use of mobile phones for financial services provision might facilitate access in developing countries, where mobile phones are often more widespread than fixed lines and can have a lower threshold for many users than banks do.

In some developing and transition countries (Bolivia, Brazil, China, Ghana, India, Lithuania, Malawi, Malaysia, Mexico, Nigeria, the Philippines, Russia, Turkey, and Venezuela; BIS 2004), banks have offered prepaid cards that can facilitate payment services for low-income households. Often, though, this requires regulatory changes. Technology can help in other ways. Hand-held remote transaction tools are being used by several microfinance institutions to process on the spot loan applications and approvals. In Uganda Hewlett-Packard and other technology firms active in the microfinance industry have been working to increase the scale of microfinance. They have developed a remote transaction system using hand-held devices to capture transaction data and transmit it back to management information systems on head office servers. (See www.microsave.org for other examples.)

In Mexico, in a program developed by Nafin, a government development bank, many small suppliers use their receivables from large creditworthy buyers, including foreign multinationals, to receive working capital financing. By effectively transferring the creditworthiness of large firms to small firms, the program allows small firms to access more and cheaper financing. Nafin operates an Internet-based platform, reducing costs, increasing transparency, and improving security. In the short run overhead costs are being subsidized, but by lowering costs for working capital for small firms, the program expects to generate more business and become sustainable (Klapper 2004).

Standard Bank of South Africa has also tried new ways of meeting the needs of an unbanked population (Paulson and McAndrews 1998). In 1993 Standard Bank set up E-Bank, offering card-only access to a simple savings product. It was supported by a dedicated staff speaking a mix of local languages and operating out of dedicated outlets to help overcome problems of illiteracy and concerns about security in a high crime environment. It had high start-up costs but provided financial services to a

low-income segment of the population. E-bank has since been absorbed in the bank's more general provision of financial services to low-income households.

Many other examples could be cited of specific market approaches and government interventions to enhance access. More generally, there has been much emphasis recently on facilitating the mainstreaming of microfinance institutions using traditional banking approaches and scaling up new initiatives on access. These initiatives can be implemented through specific interventions, as the above examples and work under way in India (Ananth and Mor 2005; Basu and Srivastava 2005) and other places show, but how to generalize is still a lesson to be drawn.

Government Interventions to Broaden Access

The discussion so far has shown that it is not easy to determine how much of the failure to achieve universal use of financial services is due to lack of demand and how much to lack of supply. As with other goods and services, so for financial services demand may not exist even when access does. Many households choose not to have a bank account as they write no checks, collect their wages in cash, and transact their finances in cash. So, while they likely have access, they may not be burdened by lack of use. Firms that do not use external credit may choose not to do so because their rates of return on capital are too low to justify formal finance or because they are not willing to provide the necessary information about their business to banks and by implication to others, including the tax authorities. Equally important, and even in the best financial systems, financial service providers may not wish to supply financial services to all customers because it is not profitable or sustainable to do so. This does not reflect any market failures, but rather that finance, like other services, has its own demand and supply forces. This may simply mean that a country requires a certain overall level of development before more universal use is a viable proposition.

More generally, the poor and disenfranchised do not use financial services may be more a problem of poverty than of access. Although data are weak and do not allow definitive assessment, there are likely many people among the group with no access in developing countries who have no demand for financial services. Consequently, the share of those with potential demand for financial services but no access in developing economies may well be small and similar in size to that in industrial countries. Because there is evidence that use rises with per capita income and wealth, although with complex causality links, arguably the focus should primarily be on poverty-reducing growth and programs to enhance overall inclusion (jobs, education, and social participation), with greater use of financial services to follow as a corollary.

To determine whether there is a case for universal provision of financial services, more needs to be known about the benefits of access, about why households and firms demand (or do not) financial services, about why financial service providers provide (or do not) financial services, and about the costs to society of providing greater access.

Much remains unknown. We do not know at the microlevel sufficiently well what the benefits and impacts of finance are. The gains of access to basic health care services such as immunization are much easier to document than the gains from access to financial services. There is also evidence that, from a social point of view, people invest too little in primary health care or education, thus justifying government intervention. We do not know systemically, however, whether individuals underuse basic (formal) financial services even when they have access at a reasonable cost. Furthermore, access to credit may be a problem when it leads to impoverishing indebtedness from overborrowing. There is plenty of anecdotal evidence that some households may have difficulty managing access to credit, suggesting that some restraint in the use of financial services, say until financial literacy is more adequate, may well be welfare enhancing.

More generally, little is known about whether there is a public goods argument to be made in favor of extending access more broadly. There is a general poverty trap literature that highlights the key role of critical thresholds of consumption and investment in perpetuating poverty in the absence of functioning financial markets (see Azariadis 2005 for a review). This strand of analytical work, however, has not yet focused on the issue of desirable government interventions in financial services provision. There is work on other services, notably telecommunications and postal services, which have some closer parallels. As with these services, financial services display some properties of network industries (Claessens and others 2003). There are fixed costs on investment in branches and externalities of use as in payment systems and stock markets, where additional use lowers the unit costs. Payment systems, branches, and automated teller machines and other points of sale are distribution networks, similar to telecommunication networks and post offices, and may have parallels to these industries in arguments for and against government intervention. Also, as these industries typically have universal service objectives, there may be lessons on the preferred ways in which government can intervene to broaden access (for example, by subsidizing the user or the provider or through universal service obligations).¹¹

Trying to broaden access, as will be clear by now, should not necessarily be a public policy goal. Public interventions, if any, will need to be carefully considered. Given political economy factors, broadening access may not relax credit and savings constraints when there is selection bias—when households or firms with good prospects and possible already having access apply for credit. Subsidies not only distort markets, but evidence is mounting that subsidies are captured by the relatively well off, who often already have access. Priority lending requirements can also divert resources from the lowest-income segments. For example, interventions to improve

the supply of housing finance often end up being a subsidy for the middle class. In Brazil the cost of the housing finance program is an important factor behind the generally high financial intermediation spreads, hurting borrowers and depositors through higher lending rates and lower deposit rates, especially those less well off. In the end enhancing access can hurt those truly in need.

Another example of possibly perverse interventions relates to microfinance institutions. Multilateral financial institutions and bilateral donors have given much emphasis to microfinance institutions, including providing subsidies for setting up such institutions. These subsidies can work perversely, leading to higher subsequent spreads to recover fixed costs (Hoff and Stiglitz 1998). Thus, direct and indirect subsidies should remain minimal, and cost and risk cosharing with the private sector are important market tests. And even where there is a case to try to extend financial services provision to a larger segment of the population, it may be that the costs of such provision outweigh its benefits, as when the means to raise the necessary fiscal revenues are very distortive.

There is some evidence that the demand for and supply of financial services may be stimulated in other, less costly ways. Many employers prefer to deposit their payroll and wages electronically and would be willing to provide some form of subsidy to encourage use of formal bank services by employees (for example, facilitating branching within the premises, encouraging the establishment of a credit union, or facilitating private savings schemes). Governments can also do this. They can, for example, try to expand electronic transfers of social security, tax, and other individual-oriented payments to encourage more bank access.

For example, in 1999 the U.S. Treasury Department initiated a program to pay all federal benefits, such as social security payments, by electronic transfer accounts. One impediment was the large number of recipients without bank accounts who cashed their checks instead of depositing them in a bank account. Subsidies were used to encourage banks to open accounts and recipients to switch to electronic payments. The Treasury offered to pay banks \$12.60 for each electronic transfer account established for benefit recipients and specified a minimum set of characteristics that these accounts must meet (the accounts could not cost account owners more than \$3 a month and banks could not levy a fee for electronic deposits coming in). The switch would benefit the government as supplier (lower costs) and could also help recipients by inducing them to use financial services. In the end the take-up was less than expected, suggesting again that lack of use reflects lack of demand rather than lack of access and is part of a broader issue of social exclusion.

There are other options open for governments to stimulate use of banking and other basic financial services by households. For one, the regulatory system can be used to direct, but not mandate, banks to address the problem. This might be described as the Community Reinvestment Act (CRA) approach, following the model used in the United States. Second, authorities can mandate all banks to provide

minimum banking services (basic accounts) for otherwise excluded segments of the market. Third, governments can rely on banks with a social commitment (in the legal form of public banks, cooperatives, foundations, the postal network, or proximity banks such as local savings banks) to offer very restricted retail services. Each approach has advantages and disadvantages. ¹²

The U.S. Cra, enacted in 1977 and revised in 1995, aims to help meet the credit requirements of the communities in which banks operate, including low- to moderate-income neighborhoods. Each bank is rated every three years on its performance in making loans to low- and moderate-income people, allowing the public to apply pressure for noncompliance. Ratings focus on lending, services, and investment, with lending carrying the most weight. Claims for its success are contested, with neither side establishing a strong position. The CRA model is very specific and has not been followed elsewhere, which suggest that its replicability is limited. The CRA should not be seen in isolation but within the broader, political economy context of exclusion.

France, Ireland, Sweden, and the United Kingdom, among others, have tried to broaden access by legal means. In France anyone who applies to open a bank account but is rejected can contact the Bank of France, which will provide a bank (often the postal bank) that will be obligated to open an account. In some countries postal banks (often government owned) are required to provide basic cash and banking services. There is little review of the effects and efficiency of these schemes, however. Peachey and Roe (2004) review experience with proximity banks and find some support for a positive effect on access from a greater presence of such banks. Also, credit unions and other not for profit financial institutions can make a difference in access.

Credit extension programs, especially for small and medium-size enterprises, have been plentiful in both industrial and developing countries, suggesting a large public need to provide these forms. The efficacy of these interventions is doubtful, however, and the need seems to have arisen largely from political economy pressures (for a general review of credit lines, see Caprio and Demirgüç-Kunt 1997; World Bank 2005c that provide some empirical evidence on subsidies and review general experiences). The means of distributing credit under these programs is generally distortive, credit often does not reach the intended target group but rather the well-connected, and institutional development is undermined, as banks do not develop their credit analysis skills. The case for direct and indirect intervention in access to credit is therefore less clear than the case for access to basic savings, payments, and transaction services.

Conclusions

Over the last decade finance has been recognized as an important driver of economic growth. More recently, access to financial services has been recognized as an important

aspect of development, and more emphasis is being given to extending financial services to low-income households. Although analysis is just beginning, there is some evidence that access is improving. On the household side there are some data on the use of microfinance that suggest an expansion of use by households. Data have to be interpreted carefully, however, as increases may represent better data coverage over time rather than expansion. There is also evidence of more mainstreaming of financial service provision by commercial banks as competitive forces and technology allow them to reach lower-income segments of the population. Examples in developing countries are icici bank and the SHG Bank Linkage program in India and commercial banks in South Africa that have made it a priority to reach out to lower-income groups.

For firms the evidence on access to credit is more mixed. It appears to be increasing in some countries, but mostly in consumer finance forms, and less so on the small- and medium-size enterprise credit side. Some analysts have argued that recent trends in banking systems may have adverse consequences. Consolidation of the banking system in many countries increases the distance between borrower and lender, so that lending is based more on hard information, reducing the role of relationships, which can be especially useful for new and small firms. Yet part of this increased consolidation is a consequence of increased competition, which in general helps to increase access. Indeed, while there is cross-country evidence that more concentrated banking systems could increase financing obstacles, this is more so if the system is not competitive and is dominated by public banks.

A more definite interpretation of the factors affecting access will have to await better data on access and use at both the micro and the macrolevel. This will require actions by national and international agencies to develop more comparable data on use and access barriers. At the microlevel there has already been more emphasis in recent years on monitoring and evaluation using impact data, including on access to financial services, by donors, the Consultative Group to Assist the Poor, the International Finance Corporation, and others. These data are often not comparable, however. Furthermore, as policy moves away from specific lending and other interventions and emphasizes the general policy and institutional environment, there is more need to measure access to financial services at the system level as well.

Data on use will have to come from different sources: providers of financial services (directly and from national statistics), users of financial services (from surveys), and experts (to identify constraints). Each of these data sources has tradeoffs—in quality, costs, and coverage—so simultaneous actions will be needed. Without better data, however, little progress can be made on policy recommendations (Honohan 2005; World Bank 2005b). In addition, data can be collected across countries on the terms and conditions under which financial services are being provided—costs, type of services, requirements—to provide some insights into barriers to access. With better data and benchmarking systems

(across and over time), more analysis on what is driving use and better identification of the barriers to access will be possible.

In addition, analysis of the success of different models aimed at enhancing access and rigorous empirical evaluations of government interventions are needed. Controlled "experiments," such as those by Karlan and Zinman (2005), in which consumers were randomly offered different terms on possible loans, can provide good insights into the functioning of credit markets. By applying different treatments to different forms of financial service provision (for example, by introducing new technology "randomly" at the branch level), it may be possible to better distinguish which reforms aimed at enhancing access are most successful in what circumstances (the Centre for Micro Finance Research in India, the Poverty Action Lab at MIT, and others are pioneering research in this area). This type of analysis will help private financial institutions deliver financial services profitably and guide national and international policy interventions. It might also be useful for international and national agencies to continue to develop "models" on various new aspects of access, such as advice on regulations of microfinance institutions and their activities as the new Basle Accord is being implemented, and rules for some aspects such as consumer protection, know your customer rules, and anti-money laundering and counterterrorism financing. And, finally, guidance on what data to collect, how and from whom will be necessary. 13

Notes

Stijn Claessens is a senior adviser in the Operations and Policy Department, Financial Sector Vice Presidency, at the World Bank. The author can be reached via e-mail at sclaessens@worldbank.org. This article is based on a paper presented at the Fifth Services Experts Meeting on Universal Access, Paris, February 3–4, 2005, organized by the Organisation for Economic Co-operation and Development and the World Bank and at the Centre for Economic Policy Research Economic Policy Roundtable, London, July 15, 2005. It draws on material by Stephen Peachey and Alan Roe and presentations by Priya Basu, Thorsten Beck, Aslı Demirgüç-Kunt, Patrick Honohan, Anjali Kumar, Tova Solo, and others at the World Bank working on access to financial services. The author thanks Thorsten Beck, Antonio Estache, Aslı Demirgüç-Kunt, Aaditya Mattoo, meeting participants, the two referees, and the editor for helpful comments and Ying Lin for research assistance.

- 1. Although many empirical studies of growth find a positive role for financial development, not all do. Some questions remain on causality and on missing or omitted variables. For example, Bosworth and Collins (2003) do not find a statistically significant relationship between financial sector development and growth. Of course, these and other regression results depend on what is included as explanatory variables, and although extensive robustness tests have been conducted, definite answers may remain elusive.
 - 2. See IMF and World Bank (2005) on the Millennium Development Goals and progress in achieving them.
- 3. Beck, Demirgüç-Kunt, and Maksimovic (2004) investigate the use of different financing sources across countries and find that financial and institutional development are associated with higher of formal external financing sources, especially for small firms. See also Beck and others 2005 and Ayyagari, Demirgüç-Kunt, and Maksimovic 2005.

- 4. This group of those with no access could be further split into (a) those who want to use financial services and have no access and (b) those who do not want to use financial services and have no access.
- 5. This requires answering the question of what constitutes "reasonable cost," where reasonable has to be defined relative to some objective standard, and costs have to reflect all forms of pecuniary and nonpecuniary costs. In an application to South African countries a cutoff level of a maximum cost of 2 percent of income was used to deem financial services to be accessible (G:enesis Analytics 2004; see also Napier 2005).
 - 6. For example, Kempson and others 2000 distinguish five types of exclusion from financial services.
- 7. These two works used the World Bank Economic Survey data; the World Bank Investment Climate Assessment data are currently being analyzed to further determine what drives lack of access to external financing for firms across countries.
- 8. See some of the papers presented at a recent World Bank conference on small- and medium-size enterprises, www.worldbank.org/research/projects/sme_conference.htm.
- 9. This is not to say that there should be a free flow of information. Concerns about privacy warrant some restrictions in the sharing of financial information about households across different types of institutions and even within a single financial institution. Furthermore, if institutions do not obtain some return from their information, their incentives to collect reliable information will be limited.
- 10. There is evidence, however, that people do not save sufficiently for their old age, but that refers more to a quantity dimension. And there is the evidence that some people prefer to use informal financial services even when these are more costly because of other, nonprice barriers for formal services.
- 11. Work by Jean Tirole, Jacques Cremers, and others at the University of Toulouse has started to address the issue of regulation of networks such as in payments system and credit cards; see Claessens and others (2003) for a review.
 - 12. The following sections draw extensively on Peachey and Roe, 2004.
 - 13. See World Bank (2005a) for a first attempt to develop core indicators in household surveys.

References

- Ananth, Bindu, and Nachklet Mor. 2005. "Financial Services Case Study: India." Paper presented at the Organisation for Economic Co-operation and Development and World Bank's Fifth Services Experts Meeting on Universal Access, February 3–4, Paris.
- Ayyagari, Meghana, Aslı Demirgüç-Kunt, and Vojislav Maksimovic. 2005. "How Important Are Financing Constraints? The Role of Finance in the Business Environment." Policy Research Working Paper 3820. World Bank, Washington, D.C.
- Azariadis, Costas. 2005. "Poverty Traps." In Steven Durlauf and Phillipe Aghion, eds., *Handbook of Economic Growth*. Amsterdam: North-Holland Elsevier Publishers.
- Barr, Michael. 2005. Microfinance and Financial Development. *Michigan Journal of International Law* 26(1): 271–96.
- Barth, James, Gerard Caprio, Jr., and Ross Levine. 2005. *Rethinking Bank Regulation and Supervision: Till Angels Govern*. New York: World Bank and Cambridge University Press.
- Basu, Priya, and Pradeep Srivastava. 2005. "Scaling-up Access to Finance for India's Rural Poor." Policy Research Working Paper 3646. World Bank, South Asia Region, Finance and Private Sector Development Unit, Washington, D.C.
- Beck, Thorsten, and Augusto de la Torre. 2005. "Broadening Access to Financial Services: Risks and Costs." PowerPoint Presentation. World Bank, Washington, D.C.
- Beck, Thorsten, Aslı Demirgüç-Kunt, and Maria Soledad Martinez Peria. 2005. "Reaching Out: Access To and Use of Banking Services Across Countries." Policy Research Working Paper 3754. World Bank, Washington, D.C.

- Beck, Thorsten, Aslı Demirgüç-Kunt, and Ross Levine. 2004. "Finance, Inequality and Poverty: Cross-Country Evidence." Policy Research Working Paper 3338. World Bank, Washington, D.C.
- ——. 2005. "smes, Growth, and Poverty: Cross-Country Evidence." *Journal of Economic Growth* 10(3): 199–229.
- Beck, Thorsten, Aslı Demirgüç-Kunt, and Vojislav Maksimovic. 2004. "Financing Around the World: Are Small Firms Different?" Policy Research Working Paper 2905. World Bank, Washington, D.C.
- ——. 2005. "Financial and Legal Constraints to Firm Growth: Does Firm Size Matter?" *Journal of Finance* 60(1): 137–77.
- Beck, Thorsten, Ross Levine, and Norman Loayza. 2000. "Finance and the Sources of Growth." *Journal of Financial Economics* 58(1–2): 261–300.
- Beck, Thorsten, Aslı Demirgüç-Kunt, Luc Laeven, and Ross Levine. 2005. "Finance, Firm Size, and Growth." Policy Research Working Paper 3485. World Bank, Washington, D.C.
- Beck, Thorsten, Aslı Demirgüç-Kunt, Luc Laeven, and Vojislav Maksimovic. 2004. "The Determinants of Financing Obstacles." Policy Research Working Paper 3204. World Bank, Washington, D.C.
- Berger, Allen, and David Humphrey. 1997. "Efficiency of Financial Institutions: International Survey and Directions for Future Research." *European Journal of Operational Research* 98(2): 175–212.
- Berger, Allen, and Greg Udell. 2005. "A More Complete Conceptual Framework for SME Financing." Policy Research Working Paper 3795. World Bank, Washington, D.C.
- BIS (Bank for International Settlements). 2004. "Survey of Developments in Electronic Money and Internet and Mobile Payments: Information on Current and New Innovative Products." Consultative Report. Bank for International Settlements, Basle.
- Board of Governors, U.S. Federal Reserve System. 2004. Survey of Consumer Confidence 2004. Federal Reserve Board, Washington, D.C.
- Bodie, Zvi, and Robert Merton. 1995. "A Conceptual Framework for Analyzing the Financial Environment." In Dwight B. Crane, Zvi Bodie, Kenneth A. Froot, Andre F. Perold, and Robert C. Merton, eds., *The Global Financial System: A Functional Perspective*. Boston, Mass.: Harvard Business School Press.
- Bosworth, Barry, and Susan Collins. 2003. "The Empirics of Growth: An Update." *Brookings Papers on Economic Activity* 2: 113–206.
- Caprio, Gerard, Jr., and Aslı Demirgüç-Kunt. 1997. "The Role of Long Term Finance: Theory and Evidence." Policy Research Working Paper 1746. World Bank, Washington, D.C.
- Caskey, John, Clemente Ruíz Durán, and Tova Solo. 2004. "The Unbanked in Mexico and the United States." Paper presented at the International Conference on Access to Finance, World Savings Banks Institute in association with the World Bank, October 28–29, Brussels.
- CGAP (Consultative Group to Assist the Poor). 2004. "Financial Institutions with a 'Double Bottom Line': Implications for the Future of Microfinance." Occasional Paper 8. Consultative Group to Assist the Poor, Washington, D.C.
- Christen, Robert Peck, Timothy R. Lyman, and Richard Rosenberg. 2003. *Microfinance Consensus Guidelines: Guiding Principles on Regulation and Supervision of Microfinance Institutions*. Washington, D.C.: Consultative Group to Assist the Poor.
- Claessens, Stijn, and Enrico Perotti. 2005. "The Links between Finance and Inequality: Channels and Evidence." Background paper for *World Development Report 2006*. World Bank, Washington, D.C.
- Claessens, Stijn, Gergely Dobos, Daniela Klingebiel, and Luc Laeven. 2003. "The Growing Importance of Networks in Finance and Its Effects on Competition." In Anna Nagurney, ed., *Innovations in Financial and Economic Networks*. Northampton, Mass.: Edward Elgar Publishers.
- Clarke, George, Lixin Colin Xu, and Heng-fu Zou. 2003. "Finance and Income Inequality: Test of Alternative Theories." Policy Research Working Paper 2984. World Bank, Washington, D.C.

- Clarke, George, Robert Cull, and Maria Soledad Martinez Peria. 2001. "Does Foreign Bank Penetration Reduce Access to Credit in Developing Countries? Evidence from Asking Borrowers." Policy Research Working Paper 2716. World Bank, Washington, D.C.
- Clarke, George, Robert Cull, Maria Soledad Martinez Peria, and Susana M. Sánchez. 2003. "Foreign Bank Entry: Experience, Implications for Developing Economies, and Agenda for Further Research." World Bank Research Observer 18(1): 25–59.
- De la Torre, Augusto, Juan Carlos Gozzi, and Sergio Schmukler. 2005. "Innovative Experiences in Access to Finance: Market Friendly Roles for the Visible Hand?" Latin America Regional Studies Series. World Bank, Washington, D.C.
- Demirgüç-Kunt, Aslı, and Ross Levine, eds. 2001. Financial Structure and Economic Growth: A Cross-Country Comparison of Banks, Markets, and Development. Cambridge, Mass.: MIT Press.
- Demirgüç-Kunt, Aslı, and Vojislav Maksimovic. 1998. "Law, Finance, and Firm Growth." *Journal of Finance* 53(6) 2107–37.
- Emerging Market Economics. 2005. "Financial Access Indicators Stocktake." Prepared for the Department for International Development. London.
- Francisco, Manuela, and Anjali Kumar. 2005. Enterprise Size, Financing Patterns, and Credit Constraints in Brazil: Analysis of Data from the Investment Climate Assessment Survey. Washington, D.C.: World Bank.
- Gasparini, Leonardo, Alejandro Támola, Federico Gutiérrez, Leopoldo Tornarolli, and Guido Porto. 2005. "Finance and Credit Variables in Household Surveys Of Developing Countries." World Bank, Washington, D.C.
- G:enesis Analytics. 2004. "A Survey of the SADC Region: South African Financial Institutions, Regional Policies and Issues of Access." G:enesis Analytics, Johannesburg, South Africa.
- Glaessner, Thomas, Nagavelli Anamali, Stijn Claessens, Karen Furst, Daniela Klingebiel, Leora Klapper, and Robert Schware. 2004. "South Africa: Technology and Access to Financial Services: Lessons from Experience." World Bank, Washington, D.C.
- Halac, Marina, and Sergio Schmukler. 2003. "Distributional Effects of Crises: The Role of Financial Transfers." Policy Research Working Paper 3173. World Bank, Washington, D.C.
- Hanson, James, Patrick Honohan, and Giovanni Majnoni. 2003. *Globalization and National Financial Systems*. Washington, D.C.: World Bank and Oxford University Press.
- Hoff, Karla, and Joseph E. Stiglitz. 1998. "Moneylenders and Bankers: Price-increasing Subsidies in a Monopolistically Competitive Market." *Journal of Development Economics* 55(2): 485–518.
- Honohan, Patrick. 2004. "Financial Sector Policy and the Poor: Selected Findings and Issues." World Bank Working Paper 43. Washington, D.C.
- ———. 2005. "Measuring Microfinance Access: Building on Existing Cross-Country Data." Policy Research Working Paper 3606. World Bank, Washington, D.C.
- IMF (International Monetary Fund) and World Bank. 2005. *Global Monitoring Report: From Consensus to Momentum*. Washington, D.C.
- Jansson, Tor, Ramón Rosales, and Glenn D. Westley. 2004. Principles and Practices for Regulating and Supervising Microfinance. Washington, D.C.: Inter-American Development Bank.
- Karlan, Dean S., and Zinman, Jonathan. 2005. "Observing Unobservables: Identifying Information Asymmetries with a Consumer Credit Field Experiment." Working Paper 911. Economic Growth Center, Yale University, New Haven.
- Kempson, Elaine, Claire Whyley, John Caskey, and Sharon Collard. 2000. "In or out? Financial Exclusion: A Literature and Research Review." Consumer Research Report 3. Financial Services Authority, London.
- Klapper, Leora. 2004. "The Role of Reverse Factoring in Supplier Financing of Small and Medium Sized Enterprises." Policy Research Working Paper 3593. World Bank, Washington, D.C.

- Klapper, Leora, Luc Laeven, and Raghuram Rajan. 2004. "Business Environment and Firm Entry: Evidence from International Data." Policy Research Working Paper 3232. World Bank, Washington, D.C.
- Kumar, Anjali. 2005. Access to Financial Services in Brazil: A Study. Directions in Development. Washington, D.C.: World Bank.
- Kumar, Anjali, Thorsten Beck, Cristine Campos, and Soumya Chattopadhyay. 2004. "Assessing Financial Access in Brazil." World Bank Working Paper 50. Washington, D.C.
- Levine, Ross. 2005. "Finance and Growth: Theory, Evidence, and Mechanisms." In P. Aghion and S. Durlauf, eds., *Handbook of Economic Growth*. Amsterdam: North-Holland Elsevier Publishers.
- Littlefield, Elizabeth, Jonathan Morduch, and Syed Hashemi. 2003. "Is Microfinance an Effective Strategy to Reach the Millennium Development Goals?" CGAP Focus Note 24. Consultative Group to Assist the Poor, Washington, D.C.
- Maimbo, Samuel Munzele, and Dilip Ratha, eds. 2005. Remittances, Development Impact and Future Prospects. Washington, D.C.: World Bank.
- Miller, Margaret. 2001. Credit Reporting Systems and the International Economy. Cambridge, Mass.: MIT Press.
- Morduch, Jonathan. 1999. "The Microfinance Promise." Journal of Economic Literature 37(4): 1569–1614.
- Forthcoming. "Microinsurance: The Next Revolution?" In Abhijit Banerjee, Roland Benabou, and Dilip Mookherjee, eds., What Have We Learned About Poverty? New York: Oxford University Press.
- Morduch, Jonathan, and Barbara Hayley. 2002. "Analysis of the Effects of Microfinance on Poverty Reduction." NYU Wagner Working Paper 1014. New York University, New York.
- Napier, Mark. 2005. "Provision of Financial Services in South Africa." Paper presented at the Organisation for Economic Co-operation and Development and World Bank's Fifth Services Experts Meeting on Universal Access, February 3–4, Paris.
- Orozco, Manuel. 2004. Remittances to Latin America and the Caribbean: Issues and Perspectives on Development. Washington, D.C.: Organization of American States.
- Paulson, Joanne, and Jaime McAndrews. 1998. "Financial Services for the Urban Poor—South Africa's E Plan." Working Paper 449. World Bank, Washington, D.C.
- Peachey, Stephen, and Alan Roe. 2004. "Access to Finance." A Study for the World Savings Banks Institute, Oxford.
- Pesaresi, Nicola and Odile Pilley. 2003. "Retail Banking, Social Exclusion, and Public Service." *EU Competition Policy Newsletter* 1: 14–20.
- Rajan, Raghuram, and Luigi Zingales. 1998. "Financial Development and Growth." *The American Economic Review* 88(3): 559–86.
- ———. 2003. Saving Capitalism from the Capitalists: Unleashing the Power of Financial Markets to Create Wealth and Spread Opportunity. New York: Crown Business.
- Sánchez, Susana M., George Clarke, Robert Cull, and Maria Soledad Martinez Peria. 2005. "Bank Lending to Small Businesses in Latin America: Does Bank Origin Matter?" *Journal of Money Credit and Banking* 37(1):83–118.
- Solo, T. M. 2005. "Broadening Access to Financial Services Among the Urban Population: Mexico City's Unbanked." Sector Report 32418. Washington, D.C.: World Bank.
- Stiglitz, J. E., and A. Weiss. 1981. "Credit Rationing in Markets with Imperfect Information." *American Economic Review* 71(3): 393–410.
- World Bank. 2001. Finance for Growth, Policy Choices in a Volatile World. New York: Oxford University Press.

- 2005a. "Core Concepts and Definitions for Measuring Financial Access in Households Surveys." Report of a Working Group on Harmonizing Households Surveys on Access to Finance. Office of the Vice President, Financial Sector, Washington, D.C.
- ——. 2005b. "Measuring Financial Access, Outlining the Scope of Current Data Collection Efforts." Report of a Working Group. Office of the Vice President, Financial Sector, Washington, D.C.
- ———. 2005c. "Review of Bank Lending for Lines of Credit." Report of a Working Group. Operations Evaluation Department, Washington, D.C.
- 2006. "Provision of Financial Services to the Rural Poor: What Can Be Done When Services Aren't Available?" Version 1.6. In *Scaling Up Poverty Reduction: Case Studies and Global Learning Process.* Proceedings of May 25–27, 2004, Shanghai Conference, Washington, D.C.