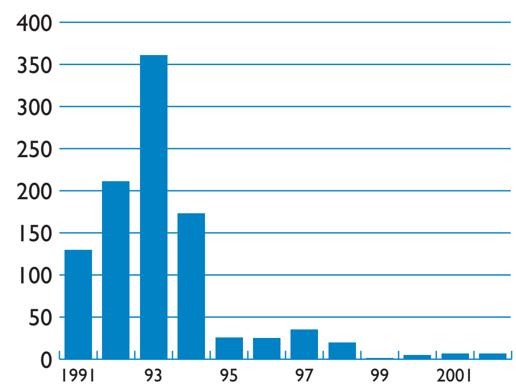
V Latin American Financial Systems: Crises and Reforms

Limited access to bank credit and uncertainty about financial system stability have been serious constraints on Latin America's growth and have contributed to volatility during the past decade. Financial liberalization and the promise of reforms spurred credit growth during the early part of the 1990s, but bank lending slowed after a series of banking crises in the mid-1990s (Figure 5.1). Subsequently, bank restructuring and regulatory reforms were successful in strengthening banking systems in a number of countries. Reforms were less successful in others, however, particularly in addressing the specific vulnerabilities associated with dollarization of banks' assets and liabilities. Another round of pressures hit many Latin American banking systems in the late 1990s and early in the present decade.

This section seeks to explain how these financial sector developments have been related to the structural characteristics of Latin American economies, and to highlight the channels through which financial sector shortcomings may have affected Latin America's macroeconomic performance. The economic literature has long recognized the existence of a close connection between financial development and economic growth, although the long-running debate about the direction of causality of this linkage has yet to be fully resolved.[115] The analysis presented here does not attempt a formal econometric investigation of this relationship, but it provides further evidence that financial systems do matter for economic performance. Hence, a critical element of a strategy to strengthen Latin America's growth going forward must be continued efforts to ensure financial system soundness and promote deeper financial intermediation.

This section opens by presenting the key features of financial intermediation in Latin America today. Banking systems are highly concentrated, intermediation margins are high, and the scale of bank lending is low relative to economic activity. It then discusses how the shape of banking systems in Latin America today is the result of a number of underlying, often structural weaknesses that affected most countries in the region during the 1990s. The following subsection explains how many of these weaknesses were at the source of the banking crises in the 1990s. The section finally draws some lessons from Latin America's experience about the best way to promote financial system stability and intermediation, which are key ingredients for sustained growth.

Figure 5.1. Latin America: Boom and Bust in Credit Growth
(In percent)



Source: IMF, *International Financial Statistics*, various issues.

Key Characteristics of Latin American Financial Systems

Market Structure

Latin American financial systems are still largely bank-based, with security markets mostly small and illiquid. In an environment of uncertainty and economic instability, banks have retained a comparative advantage in the costly collection and processing of

[115]See the recent discussion in Fischer (2003).

Table 5.1. International Comparison: Financial Systems, 2003
(In percent of GDP)

	Banking System[1]			Outstanding Domestic Debt Securities, by Issuer[2]					
	Deposits	Loans	Assets	Total	Corporate	Financial institutions	Public sector	Stock Market Capitalization	Money (M2)
Argentina	25.3	14.2	44.8	25.2	8.4	4.6	12.2	144.4	30.1
Brazil	30.6	21.5	74.6	47.2	0.4	8.8	38.0	41.0	29.7
Chile	38.1	68.5	79.8	52.9	9.9	14.0	29.0	100.0	38.4
Colombia	19.7	19.7	37.9	. . .	. . .	. . .	. . .	12.5	29.1
Ecuador[3]	16.8	15.1	22.0	24.8	2.5	. . .	22.4	15.7	23.4
Mexico	25.5	16.1	52.3	13.9	1.3	0.6	12.0	23.9	29.1
Paraguay	24.6	17.6	31.7	. . .	. . .	. . .	. . .	5.5	31.4
Peru	14.5	13.7	19.2	7.1	2.3	1.6	3.0	23.9	29.6
Uruguay	36.4	64.3	82.6	. . .	. . .	. . .	. . .	1.6	67.7
Venezuela[3]	20.0	8.1	23.9	1.3	. . .	. . .	1.3	9.2	22.1
Memorandum items:									
Advanced economies									
United States	31.7	60.8	67.7	155.3	23.1	89.0	43.2	123.0	66.7
Japan	121.2	122.9	146.5	169.8	18.9	29.1	121.7	67.9	133.5
Euro area	85.4	140.6	303.9	97.1	7.4	32.4	57.3	50.8	92.2
Emerging markets									
Malaysia	96.0	117.7	129.6	86.9	39.9	11.1	35.7	157.0	102.6
Thailand	90.5	90.9	106.2	37.4	5.1	9.4	22.9	76.8	96.7
Korea, Republic of	76.6	98.9	114.0	82.5	29.0	32.8	20.7	53.5	76.7

Sources: National bank supervisory agencies and central banks; Bankscope (industrial countries' banking systems); Bank for International Settlements (outstanding domestic debt securities, except for Chile and Ecuador); Federación Iberoamericana de Bolsas de Valores.
[1]Only deposit-taking commercial banks are considered.
[2]At book value, except for Chile and Ecuador, for which market values are provided. (For these two countries, the corporate figures include financial institutions.)
[3]Domestic debt securities data are as of 2000.

information that is central to financial intermediation. International experience suggests that market-based finance typically develops only after banking systems have matured, information has become more easily available, and financial operations and services have turned more complex.[116] In most Latin American countries, the private sector's use of bond and equity markets to raise finance remains limited, relative to its recourse to banks, although, in some countries, pension reforms have begun to encourage broader capital market development.

Despite their prominence, banking systems remain relatively small compared with GDP, and the depth of intermediation is particularly low (Table 5.1). Deposit-to-GDP ratios are less than 50 percent, compared with typical ratios of 90 percent in East Asian emerging markets. Moreover, bank credit represents only a fraction of bank assets. In most countries, excepting Chile and Ecuador, lending represents no more than a third of bank assets. Again excepting Chile, the ratio of bank credit to economic activity remains much smaller than in the bank-based financial systems of the advanced economies of the euro area and Japan, or of the emerging market economies of Asia.

The pattern of credit growth in Latin America has been marked by boom-bust cycles. Credit growth was particularly rapid in the early 1990s in most countries, but collapsed in many cases after banking crises in the mid-1990s and has since remained subdued (see Figure 5.1). Argentina, Brazil, and Mexico all follow this pattern, although in Mexico the growth of other sources of financial intermediation has partly compensated for the lack of bank activity (Box 5.1). Chile has managed to achieve a more even pattern of credit growth, because of its longer track record of macroeconomic stability and earlier financial sector reform.

Over this period, a rising share of bank balance sheets has been absorbed by government securities. During the second half of the 1990s, many banks in

[116]See, for example, Rojas-Suarez and Weisbrod (1994).

Box 5.1. Finance for Growth: Experiences in Chile and Mexico

Chile and Mexico, the fastest-growing Latin American economies in the 1990s, provide useful case studies of the role of banks in the financing of the economy. The large, developed Chilean banking system has assets about the size of the country's GDP. The rapid adoption of a strong institutional framework following a banking crisis in the early 1980s helped credit to recover quickly and expand by more than a third during the 1990s, to reach 70 percent of GDP in 2000, while financial liberalization and innovation continued. In Mexico, the banking crisis of the mid-1990s cut the size of the banking system by more than half. Credit to the private sector declined drastically, from 45 percent to 14 percent of GDP during 1994–2002, and is only now beginning to recover in the wake of continued financial sector reforms.

In both countries, weak regulatory structures were at the root of banking crises. In Chile (in the mid-1970s) and in Mexico (in the late 1980s and early 1990s), interest rates were liberalized, entry barriers removed, the banking system privatized, and restrictions on capital flows reduced. In each country, financial liberalization was followed by a large jump in bank credit to the private sector. This credit boom, however, occurred in the context of a weak regulatory and supervisory framework, leading to banking crises, in the early 1980s in Chile (at a cost now estimated at 30 percent of GDP) and in the mid-1990s in Mexico (at a cost now estimated at 20 percent of GDP). In both cases, the crises contributed to a decline in bank credit and spurred restructuring and consolidation in the sector, with increasing participation by foreign banks.

Banking crises required an overhaul of banking regulation. Drawing on the lessons learned from mistakes that led to the crisis, Chile adopted a stringent banking law in 1986 that seriously limits risk taking by banks by restricting related lending, requiring banks to rate the quality of their investments, and strengthening capital-adequacy requirements. The law also sets clear workout procedures for the resolution of bank insolvencies and stipulates that lender-of-last-resort facilities will not be used to bail out distressed banks. Market discipline is also encouraged through strong disclosure requirements for banks and a limited deposit-insurance system. In Mexico, the regulatory regime initially focused on measures aimed at averting a collapse of the banking system, including provision of financial assistance to distressed banks and debtor-support programs. Since 1999, Mexico has embarked on a new round of structural reforms, accelerating the resolution of troubled banks and bringing the regulatory framework closer to best international practices.

Structural impediments have delayed the resumption of bank lending in Mexico. The lack of liquidity of the notes issued by the government to banks in exchange for nonperforming loans following the crisis restricted the pool of loanable funds and, thus, credit and economic activity. In addition, the sizable demand for resources from the public sector and the perception of a dearth of creditworthy private clients made it easier and more cost-effective for banks to concentrate on a few clients (the government and large corporations) than to take on additional credit risk via broad-based lending. This has not been the case in Chile, where the low level of public debt ensures that private borrowers do not have to compete with the public sector for bank finance. Finally, institutional factors and judicial procedures have in the past complicated loan recovery in Mexico, hampering lending, especially to lesser-known small and medium-sized enterprises (SMEs). Legislation enacted in early 2003 aims at providing creditors with greater legal certainty by improving their ability to recover collateral. In addition, the resolution of issues related to banks' restructuring of debt in mid-2004 has removed an important source of uncertainty in the financial system.

Strong and tightly regulated Chilean banks are engaged in financing across the corporate sector. In Chile, SMEs have as much access to banks for finance as large firms (see table). This has not been the case in Mexico, where bank credit has so far remained principally reserved for large firms. In Mexico, access to credit is available mainly to high-grade borrowers, with most of the financing short term and, thus, not available for the financing of investment. In Chile as well, short-term lending represents a large share of banks' credit portfolios, mostly as a result of tight prudential regulation to limit maturity mismatches. Banks' high degree of risk aversion limits the access of other segments of the economy to credit in both countries. The availability of mortgage credit from banks in Mexico has fallen short of what is needed to satisfy its acute housing needs. However, mortgage lending (including through specialized institutions) has recently begun to grow rapidly.

Sources of financing other than bank credit have come to play a significant role in the expansion of activity in both countries (see figure). In Mexico, in particular, nonbank institutions—including mutual funds, pension

Chile and Mexico: Beneficiaries of Bank Credit
(In percent of total)

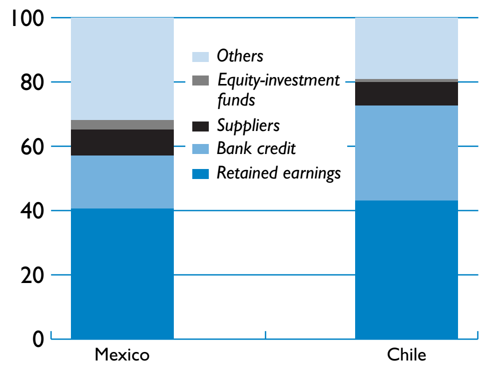
	Chile	Mexico
Large firms	34	44
SMEs	31	13
Consumers	8	15
Mortgage	17	22
Other	10	6

Sources: Central banks of Chile and Mexico.
Note: SMEs denotes small and medium-sized enterprises.

Box 5.1 *(concluded)*

funds, leasing and factoring firms, and savings and loan cooperatives—have grown rapidly in recent years, significantly increasing their shares of credit to the consumer sector and for mortgages. Large exporters rely heavily on foreign financing, including from parent companies. Not surprisingly, the sectors that led growth in the second half of the 1990s were those with access to credit—the export and consumer sectors. In other sectors, suppliers remain the main source of financing for most firms. More than 80 percent of firms granted some type of financing to clients at the start of 2003. In Chile as well, nonbank financial institutions participate significantly in financing activity. Private pension funds are major collectors of savings and now hold assets in excess of 50 percent of GDP. Although large shares of this portfolio are invested in the banking system and in public debt, a small but increasing share is going into bonds issued by Chilean companies. Again, finance remains reserved for large firms in the tradable sectors, leaving whole segments of the economy with limited access to finance for growth. Equity markets represent a larger source of funding for Chilean than for Mexican companies. In both countries, retained earnings still play a major part in the funding of investment.

Mexico and Chile: Sources of Financing
(Percent)



Source: World Bank (2003).

Latin America replaced nonperforming loans with sizable portfolios of government bonds. For public banks, this typically occurred through restructuring, with bad credits being replaced by government securities—for example, in Mexico after the 1994 banking crisis. In the private sector, this shift was often a reaction to experience with high default rates on lending to households and corporations and to a tightening of supervisory standards after setbacks to stabilization and reforms in the mid-1990s. As banks shared in the costs of these crises, they sought to hold significant amounts of high-yielding, apparently safer government bonds. For example, Argentine banks' holdings of such bonds more than doubled in 1995; and in Brazil, about a third of banks' assets were invested in government bonds by 2000.[117]

The process of bank restructuring that occurred during the 1990s led to rising foreign ownership of Latin American banking systems. During this process, legal and regulatory limitations on the activities of foreign banks were relaxed or eliminated in most countries. Foreign banks gained market shares, mostly by taking control of domestic banks in need of fresh capital and new management rather than opening new institutions. In Brazil, for example, foreign banks grew from an insignificant presence in the mid-1990s to hold one-fifth of deposits and provide one-fourth of credit by the end of 2000. In Argentina, Chile, Mexico, Paraguay, Peru, and Venezuela, foreign banks owned more than half of banking-system assets by 2000 (Table 5.2).

A few large banks typically account for the lion's share of the system's assets. Bank restructuring that occurred during the course of the 1990s also led to increasing concentration. Typically, more than two-thirds of bank assets are concentrated in the 10 largest institutions, which hold about 70 percent of deposits and provide 75 percent of credit.

The largest institutions often remain in government hands, however. This is particularly true of Brazil and Argentina, where a few public banks still account for a significant share of banking-system assets and credit, notwithstanding privatization during the 1990s (Table 5.3). As in many banking systems around the world, a long history of government intervention has left traces that are still pervasive today. Many Latin American public banks were endowed with the role of providing credit to targeted segments of the economy, often poorer regions and sectors that had been left outside conventional channels of financing (e.g., housing, regional development, agriculture). Such operations remain impor-

[117]See Catão (1997) for a detailed discussion of the Argentine experience.

Table 5.2. Selected Latin American Countries: Structure of Banking Systems

	Argentina	Brazil	Chile	Colombia	Ecuador	Mexico	Paraguay	Peru	Uruguay	Venezuela
Institutions										
Number of banks	71	135	28	32	40	35	22	15	23	39
					(In percent)					
Concentration—Top 10 banks										
Share of total assets	62	70	76	67	82	95	79	95	87	81
Share of total deposits	71	77	78	68	79	90	79	96	85	36
Share of total credit	66	70	80	65	78	93	59	94	88	64
Foreign bank participation										
Number of banks[1]	28	27	18	11	. . .	20	17	12	16	21
					(In percent)					
Share of total assets	54	28	60	21	. . .	82	81	64	35	68
Share of total deposits	48	21	47	20	. . .	82	86	62	34	67
Share of total credit	46	25	45	21	. . .	77	74	62	35	72

Sources: National central banks and bank supervisory agencies; and IMF staff calculations.
Note: This table considers only deposit-taking universal banks. Data are for 2000, except for Uruguay and Mexico, for which 2002 data are used.
[1]Domestic banks with foreign participation or control. Offshore banks are not included.

tant, although questions have been raised about the cost-effectiveness and governance of such activities, and alternative mechanisms—including community-based microfinance—are being developed to deliver credit to such sectors.

The high degree of concentration suggests that lack of competition among banks may be a concern (Box 5.2). It is generally agreed in the economics literature that banks need to enjoy some degree of market power to earn rents that compensate them for risk taking in the financing of projects on which they have only imperfect information, and that economies of scale are important in containing costs and taking full advantage of new information technologies. A lack of competition, however, may also result in excessively high prices or quantity rationing for customers. In small, advanced economies, too, the banking system is often highly concentrated, but banks typically face strong competition from securities markets and nonbank financial intermediaries, as well as offshore markets. In Latin America, however, financing from securities markets is usually available to only a limited range of top-quality corporate borrowers.

Reforms to introduce private pension systems provided an important impetus to financial system development in Latin America during the 1990s. Chile was the first to replace a state-run, pay-as-you-go pension system with a privately managed, individually funded system in 1981. Its lead was subsequently followed in Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico, and elsewhere. As Chile's experience has demonstrated, such reforms can accelerate the development of domestic equity and corporate bond markets by providing a substantial and growing local investor base. These pension funds can, however, also be highly vulnerable targets for governments looking for financing. For example, Argentina's pension funds have suffered heavy losses after being forced to invest sizable shares of their portfolios in government paper.

Table 5.3. Selected Latin American Countries: Assets and Loans of Public Banks
(In percent of total banking system)

	Assets	Loans
Costa Rica	66	66
Brazil	33	38
Argentina	23	23
Colombia	21	16
Chile	16	12
Mexico	7	9

Source: National bank supervisory agencies.

Bank Profitability

Latin American banks' profitability improved during the 1990s, but their returns on assets and equity

Box 5.2. Do Brazilian Banks Compete?

The Brazilian banking system is large, with the share of its assets in GDP comparable to that in the United States, but it provides less than half the loans in proportion to GDP (see table). Brazilian banks are significant players in capital markets and invest about 30 percent of their assets in securities, which is about the same as the share of loans in their portfolio. Security financing is mainly directed to the public sector, since most of these securities are government debt issues bearing attractively high yields. The number of banks has gradually declined in Brazil, by a quarter since 1995, and market concentration in the provision of credit is high. The 10 largest institutions account for about two-thirds of bank assets and provide three-quarters of all loans, and foreign banks account for about one-fifth of deposits.

Despite the relatively small size of their loan portfolio, banks rely on interest-earning activities as a major source of income. Bank margins relative to assets are high compared with those in other Latin American economies. They are much higher than those in the United States and the euro area, where heightened competition triggered by the globalization of banking services has driven spreads down.

Concentration and the high interest margins in the Brazilian banking sector suggest the possibility that noncompetitive forces are at work. Using panel data, Belaisch (2003) finds that banks' revenues are not particularly sensitive to their costs, suggesting that banks are under limited pressure from competition. Size is found to be an important determinant of bank revenues, a finding that is consistent with the presence of market power. This would make it difficult for small banks to compete and be profitable. There is also evidence of noncompetitive behavior by the system's largest, state-owned banks.

Elements of a noncompetitive market structure in the Brazilian banking system could contribute to explaining why intermediation is relatively low and costly. When banks enjoy market power, their incentives to offer lower interest spreads are small, thus discouraging higher lending volumes.

Bank Profitability, 2000
(In percent of assets)

	Brazil	Latin America[1]	United States	EU-11
Loans	30.00	68.00	68.00	52.00
Net interest margin	5.20	4.20	3.10	1.90
Pretax profit	1.12	1.08	1.83	0.70

Source: Belaisch (2003).
Note: EU-11 denotes the following 11 countries that were members of the European Union in 2000: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain.
[1]Argentina, Chile, Colombia, Mexico, and Peru.

remain below those in industrial countries (Table 5.4). This has occurred despite high interest margins on private lending. Interest spreads on lending to the private sector have declined somewhat during the past decade but remain high by international standards. Intermediation margins—the difference between banks' revenues from lending and the remuneration of deposits—averaged more than 50 percentage points in Brazil, Peru, and Uruguay during the 1990s (Figure 5.2).

In part, the weak profitability performance reflects a continued reliance on interest earnings, both from lending and from large holdings of government bonds as the main source of revenue (see Table 5.4). In industrial countries, heightened competition triggered by the opening of financial systems and the globalization of banking services has driven spreads down on most traditional income-generating activities. Interest margins have also declined relative to other sources of revenue in emerging Asia. To offset the impact of lower intermediation margins on profitability, banks diversified into other sources of income, such as commissions from asset management and fees from securities trading. In most of Latin America, these lines of business remain limited.

Cost inefficiencies have also depressed profitability. In times of high inflation, buoyant bank revenues from holdings of government bonds indexed to the overnight interest rate far exceeded the less frequently adjusted interest rate paid on deposits, providing banks with an easy source of profits. Although incentives for cost reduction have increased since inflation was brought down across the region, banks' operating costs remain high, amounting to more than 90 percent of operating income, about a third higher than in banks in advanced countries. Part of the explanation for higher costs is that banking is labor intensive and labor productivity has been low: in Brazilian banks, for example, productivity was estimated at only about 40 percent of that in U.S. banks.[118] Labor costs absorb a large part of banks' revenues, even compared with

[118]McKinsey and Company (1998).

Table 5.4. International Comparison: Bank Performance Indicators[1]

	Argentina	Brazil	Chile	Colombia	Mexico	Paraguay	Peru	Venezuela	United States	Japan	Europe[2]
					(In percent of operating income)						
Source of revenue[3]											
Net interest margin	110	87	92	97	90	. . .	100	97	82	86	67
Other net income[4]	–10	13	8	3	2	. . .	0	3	18	14	33
Efficiency											
Operating costs	74	76	53	78	92	89	94	99	61	61	67
Personnel costs	68	42	32	36	43	44	42	42	24	7	33
Provisions	26	23	29	43	27	63	66	9	. . .	. . .	. . .
					(In percent of total loans)						
Asset quality											
Nonperforming loans	. . .	9.5	7.8	11.9	5.8	16.2	7.6	2.8	0.9	6.1	1.2
					(In percent)						
Profitability											
Return on assets	0.4	0.0	0.5	–1.4	0.3	1.4	0.4	1.4	1.8	0.1	0.7
Return on equity	3.2	–0.4	. . .	. . .	. . .	12.4	2.8	. . .	22	–30.4	16.8

Sources: National central banks and bank supervisory agencies for Latin American countries; Belaisch and others (2001) for industrial countries; and IMF staff calculations. Data are for 2000.

Note: Selected sample includes only deposit-taking universal banks.

[1]Performance indicators may differ from traditional definitions to improve cross-country comparability. Operating income usually includes extraordinary income, but the latter is not included here to provide a more accurate assessment of bank performance. Operating costs exclude provisions, which are year and bank specific.

[2]The 11 European Union countries included are Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain. Aggregate data are for 1998.

[3]Operating income is defined as the sum of the two items below.

[4]Sum of net commission income (from asset management and other services) and net fee income (from foreign exchange trading and underwriting).

the euro area, where banks have traditionally suffered from high labor costs.

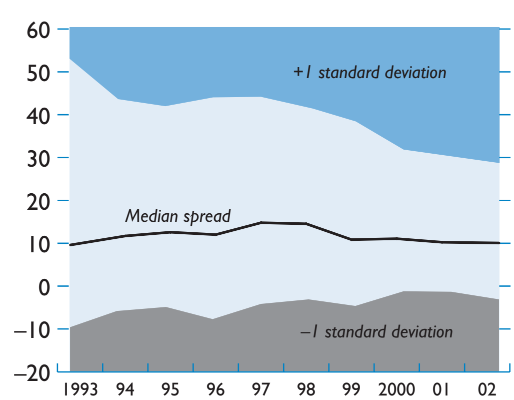
In the uncertain economic environment, nonperforming loans have been an additional burden on bank costs. Although restructuring since the mid-1990s—including by the government swapping bad loans for public securities—improved the quality of bank lending, nonperforming loans continue to represent a much larger share of loan portfolios than is standard in advanced economies. This has required high rates of loan-loss provisioning and the setup of large collection and legal departments to recover collateral, adding to banks' costs.

Dollarization[119]

In a number of countries, a large and rising share of both bank deposits and credits have been denominated in U.S. dollars. Most of these countries have been subject to a market-driven process of currency substitution. For example, in Bolivia, dollar deposits

[119]Section VI addresses issues associated with dollarization in Latin America.

Figure 5.2. Interest Spread in Latin America[1]
(Standard deviation band around mean, in percent)



Source: IMF, *International Financial Statistics*, various issues.
[1]Difference between lending and deposit rates.

ratcheted up from 65 percent of total deposits in 1990 to 74 percent in 2001 and to about 95 percent in 2003. In some countries, formal dollarization was deliberately used to provide a nominal anchor for the economy. In 1991, Argentina adopted a currency board guaranteeing full convertibility between dollars and pesos, and the bulk of intermediation was increasingly denominated in dollars until the collapse of the regime in 2002. Ecuador in 1999 and El Salvador in 2001 chose full dollarization to bolster monetary policy credibility and price stability.

Some countries avoided dollarization altogether or were able to reduce it. Brazil and, to some extent, Mexico have prohibited most holdings of foreign currency deposits for nontransactions purposes, while Chile and Colombia have used strict prudential guidelines to reduce the incentives to hold foreign currency deposits. Placing a ban on foreign currency deposits or discouraging their use, however, also served to encourage the shifting of financial assets offshore. For example, deposits held by Venezuelans in the United States now amount to more than 200 percent of Venezuela's broad money.

Underlying Weaknesses

These key features of the Latin American financial systems today reflect a series of underlying weaknesses common to most countries in the region.

Low Savings

Low saving rates hindered the deepening of domestic financial markets in Latin America in the 1990s. Cross-country data clearly show that in the second half of the last decade, countries with higher saving rates also had larger loan-to-GDP ratios (Figure 5.3). At the same time, however, low bank intermediation coexisted with a wide range of saving rates; and, similarly, loan ratios and saving rates did not seem to be consistently determined by per capita GDP.

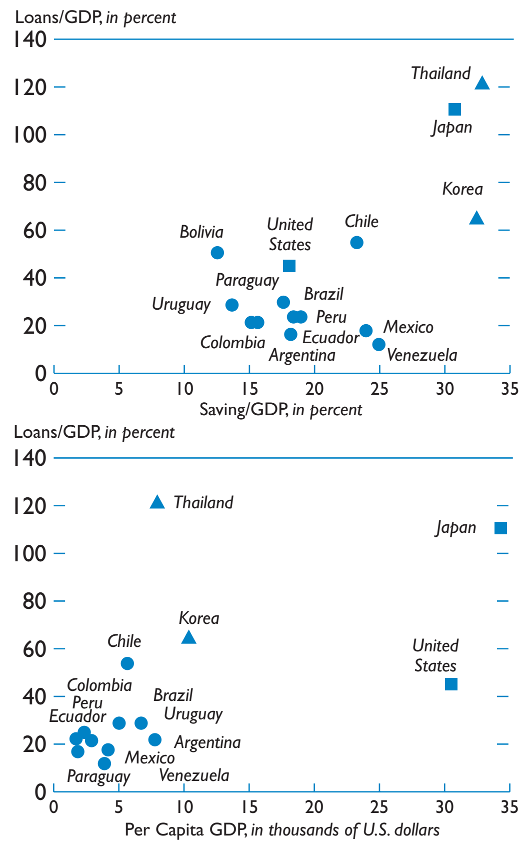
This observation suggests that other variables, both at the macroeconomic and microeconomic levels, have played an important role in determining the depth of bank intermediation.

Macroeconomic Instability

In most Latin American countries, an unstable macroeconomic environment has been a critical factor holding back financial system development. Throughout much of the postwar period, chronic inflation, periodic external crises, and intermittent deposit freezes have imposed heavy losses on holders of financial assets. Even after success in bringing down inflation across Latin America in the early 1990s, strains and vulnerabilities persisted: inflexible exchange rate regimes and excessive fiscal deficits continued to undermine confidence and contributed to the persistence of instability.

Informal dollarization has developed, particularly in countries with histories of hyperinflation. In such countries, confidence in the value of the local currency is severely undermined, and long periods of improved monetary management will be required before it can begin to recover. Indeed, allowing informal dollarization was sometimes seen as a convenient way to remonetize the economy and restore intermediation, which had often contracted sharply

Figure 5.3. Comparative Savings and Loan Ratios in Mid-1990s[1]



Sources: IMF, International Financial Statistics and World Economic Outlook databases; and IMF staff calculations.

Notes: ▲ refers to selected Asian countries.
● refers to selected Latin American countries.
■ refers to selected industrial countries.

[1]Loans are to the private sector. Savings refer to gross national savings. Data are for 1997.

Box 5.3. Taxation of Financial Transactions in Latin America[1]

Financial transactions taxes (FTTs) are currently in place in several Latin American countries: Argentina, Bolivia, Brazil, Colombia, Peru, and Venezuela. The tax has generally been introduced in the context of serious fiscal stress where short-run considerations related to the need for a quick source of revenue and ease of collection outweighed concerns about the efficiency of the tax. Typically, the tax is levied on bank debits at rates below 1 percent (see table).

FTTs are likely to be highly inefficient, inequitable, and subject to diminishing returns, although tax authorities see some advantages in using them to strengthen tax administration.

- *Efficiency*. The cascading nature of the tax can distort the chain of production. It is likely to stimulate inefficient behavior to evade the tax, including interenterprise netting arrangements, increased use of cash, and recourse to offshore transactions. The tax may also lead to disintermediation if the nonbank financial sector is exempted from the tax. Also, if applied to capital and exchange market transactions, the tax can severely reduce trading volumes.
- *Equity*. The tax cascades through the commercial structure, and, therefore, the impact on prices can exceed that suggested by the "low" rate, adversely affecting the poor. Moreover, the tax is relatively easily evaded by larger, more sophisticated firms, owing to their access to offshore operations or complex derivative transactions.
- *Yield*. The yield of FTTs tends to fall over time as tax evasion takes hold. When this occurs, the temptation is to raise rates, which could temporarily recoup revenue collections but, in time, create even more evasion. Eventually, this evasion spills over to the administration of other taxes. For example, value-added-tax (VAT) collections can be affected as transactions move offshore or into the informal sector.

Bank Debit Taxes, 2004
(In percent)

	Tax Rate
Argentina	0.60[1]
Bolivia	0.30[1]
Brazil	0.38
Colombia	0.40
Peru	0.10[1]
Venezuela[2]	0.50[1]

Source: Coelho, Ebrill, and Summers (2001).
[1]On each side of a transaction.
[2]Data for Venezuela are for 1999–2000.

- *Tax administration*. In some countries, however, the authorities have found the financial transactions tax to be a useful tool for the administration of other taxes, in particular income taxes, since it provides information on individual bank account transactions.

Empirical Evidence

- In Colombia, in the two years following the introduction of the FTT in 1999, the yield of the tax fell 28 percent, and the share of M3 in GDP fell from 36 percent to 31 percent. Moreover, the volume of transactions in the interbank and treasury bill markets also fell substantially following introduction of the tax.
- In Brazil, where an FTT is considered by the authorities to have helped tax administration, the ratio of revenues to GDP has increased since the tax was introduced in 1997. However, such gains have come at a cost of bank disintermediation, as bank deposits as a share of GDP fell from 25.6 percent to 24.1 percent during 1998–2001, as investors likely redirected resources toward the tax-exempt mutual fund industry.

[1]Further information is provided in Coelho, Ebrill, and Summers (2001).

after a full-blown crisis. Heavily managed or pegged exchange rate regimes, which obscured the risks of borrowing in foreign currency, also encouraged the development of dollarized financial systems.

The policies required to deal with this macroeconomic instability also affected the efficiency of bank intermediation. High short-term interest rates—reflecting fiscal crowding out and efforts to combat inflation or defend the exchange rate—added to banks' funding costs and increased loan-default rates. Moreover, high unremunerated reserve requirements (amounting, for example, in Brazil to 75 percent on demand deposits during 1997–99) reduced banks' resources available to supply credit, curtailed incentives to mobilize deposits, and added to banks' intermediation margins. Similarly, a number of countries have resorted to financial transaction taxes, which have tended to discourage intermediation through the banking system (Box 5.3).

Risk Perceptions

Latin American banks have also had to cope with a range of structural factors, mostly microeconomic

Table 5.5. Three Latin American Countries: Bankruptcy Frameworks

	Original	Recent Reforms
Argentina	1972	1995, 2002
Brazil	1945	. . .[1]
Mexico	1943	2000

[1]A new bankruptcy law is currently being considered in congress.

and institutional, that increased perceptions of project and country risk, and deterred banks from engaging in lending to the private sector:

- The repeated sequence of crises followed by deep restructuring has resulted in a lack of adequate information on potential borrowers. Many longtime bank customers disappeared; and the new ones who emerged did not have long credit histories, were not able to present sound business plans, or did not have good collateral.[120]
- Inadequate auditing and accounting standards and practices hampered banks' ability to monitor both financial and nonfinancial companies. For example, credit assessment was too often based on valuation of collateral or personal relationships, rather than forward-looking project evaluations. The development of sound accounting practices has been hampered by periods of high inflation, the prevalence of family-owned firms, and the low level of development of securities markets.
- Legislative frameworks typically did not support the enforceability of creditors' rights once loans became overdue. Outmoded bankruptcy laws made the recovery of collateral long and costly (Table 5.5). In some countries, even after laws were reformed, inefficient judiciaries undermined the legal certainties needed to foster financial intermediation.

These structural risk factors increased banks' aversion to lending throughout the region. Although credit demand may have been high, the associated risks have been high, too, so that the supply of loans could not fully satisfy demand. Catão (1997) finds that in Argentina, even though banks restored their deposit bases soon after the Mexican crisis, more cautious lending practices resulted in a credit contraction. Banks' decisions to move away from risky corporate assets into the apparently safer assets of public sector debt is documented in Braun and Levy Yeyati (2000). Berróspide and Dorich (2001) found that, in Peru, credit slowdowns in the second part of the 1990s were supply determined and associated with an increase in banks' risk perceptions. Similar reactions were observed from Asian banks in the aftermath of the 1997–98 crisis (Kim, 1999; Agénor, Aizenman, and Hoffmaister, 2000).

Volatile Capital Flows

Latin American financial systems have had to cope with highly volatile capital inflows. The implementation of exchange rate-based stabilization programs, the introduction of structural reforms, and often high domestic interest rates triggered a rapid buildup of short-term capital inflows to Latin America during the early 1990s.[121] Investors' overshooting optimism drove an increase in private inflows to Latin America up from a yearly average of US$10 billion during 1983–90 to US$22 billion in 1991 and to US$62 billion by 1996 (Burki and Perry, 1997). Increasingly, foreign capital substituted for domestic savings to finance the upsurge in demand associated with exchange rate-based stabilization and the reform process.

Capital inflows were accompanied by rapid expansions of bank credit and consumption booms—and strong contractions and busts when they reversed. The availability of short-term external funding stimulated Latin American financial systems to lend excessive amounts during the first half of the 1990s, inflating the prices of financial assets.[122] Initially, the performance of the region's banks improved, contributing to even higher lending. This process helped, however, to inflate bubbles in the stock and real estate markets, which eventually collapsed in the face of shifts in investor sentiment, with sell-offs triggered by setbacks in domestic policies or external shocks (including fluctuations in international interest rates and contagion from events in other major emerging markets).[123]

[120]Carrasquilla, Galindo, and Vásquez (2000) find that the severe credit contraction observed in Colombia after 1998 was mainly due to banks' inability, rather than their unwillingness, to lend.

[121]Attractive domestic factors were reinforced by the slowdown in industrial countries in the early 1990s and the decline in their interest rates.

[122]Forty percent of all inflows during 1993–96 were in the form of short-term foreign currency lending to banks and equity portfolio flows.

[123]Herrera and Perry (2003) discuss the interaction between excessive credit creation and bubble formation in Latin America.

Banking Crises and Reforms

Over the past ten years, banking-system fragilities have contributed to a series of crises that spurred restructuring and reform efforts. A first wave of crises hit several Latin American countries during the mid-1990s, starting in 1994 with Bolivia, Brazil, Mexico, and Venezuela, followed by Argentina and Paraguay in 1995, and Ecuador in 1996. Banks were restructured and/or recapitalized, often at great fiscal cost, while regulatory systems were overhauled. In many cases, these reforms were successful in strengthening banking systems and averting banking crises when domestic or external shocks hit again. In others, however, reforms were less successful, and a second wave of crises hit several banking systems, including those in Ecuador in 1999, Argentina in 2001, Uruguay in 2002, and the Dominican Republic in 2003. Bolivia has experienced banking-system stress more recently, in 2003–2004, in the context of wider social and political pressures.

The wave of bank failures in Mexico in December 1994 followed a period of financial liberalization and rapidly expanding bank credit in the absence of proper bank regulation and supervision. The situation was further exacerbated by expansionary fiscal policy and an overvalued exchange rate. When the poor quality of Mexican banks' loan portfolios became evident, currency, stock, and real estate prices fell sharply, reducing collateral values and imposing large losses on banks. These losses were exacerbated by the substantial portion of corporate borrowing in foreign currency, both onshore and offshore.

In other countries, too, an unbalanced policy mix of lax fiscal policy and tight monetary policy contributed to banking booms and busts. In Brazil, the sharp reduction in inflation associated with the 1994 *real* plan deprived banks of the inflation tax that had allowed them to support cost inefficiencies, thereby reducing the banking sector's contribution to GDP from 12 percent in 1994 to 7 percent in 1995 (IBGE, 1997). It also accentuated state governments' arrears to public banks. To maintain their profits, banks responded by pumping up credit operations in the context of the fast growth resulting from exchange rate-based stabilization. The slowdown in the pace of economic growth in the second quarter of 1995, following the adoption of a highly restrictive monetary and credit policy after the Mexican crisis, led, however, to a collapse of asset prices and widespread banking distress.

The experience of the mid-1990s clearly demonstrated the potential for rapid contagion across borders. In the wake of the 1994 Mexico crisis, Argentine banks were seen as particularly exposed because of continuing questions about the government's ability to defend the currency board, given technical limits on the central bank's ability to provide emergency credit to illiquid banks under the Convertibility Law, and the political sustainability of tight policies in the face of a systemic bank run. Thus, following the sharp depreciation of the Mexican peso, 18 percent of deposits were withdrawn from Argentine banks in the first three months of 1995. In the end, the authorities tightened fiscal and monetary policies aggressively, and confidence was restored, but at the cost of a sharp recession.

Microeconomic influences, such as poor bank management and weak prudential regulation and bank supervision, were also responsible for bank problems in a number of countries. Banking crises in Venezuela and Bolivia in 1994, Paraguay in 1996, and the Dominican Republic in 2003 can be directly related to such influences. Typical features of poorly managed banks included overextension of credit, poor loan evaluation, excessive loan concentration, cronyism (i.e., connected lending and political interference), maturity and currency mismatches, poor loan recovery, weak internal control, and outright fraud.

Notwithstanding the heavy costs involved, Latin American crises were typically not as expensive to resolve as those that afflicted Asia in 1997–98 (Table 5.6).[124] The most costly crises in Latin America during the 1990s (in Ecuador, Mexico, and Venezuela) cost around 20 percent of GDP to resolve, large amounts to be sure, but still significantly less than the costs of dealing with the crises in Indonesia, Korea, and Thailand.[125] In East Asian emerging markets, the long period of sustained growth and the perception of implicit government guarantees implied by the close relations between the corporate and government sectors encouraged the region's banks to lend excessively (Krugman, 1998). The costs of resolution in the Asian countries were exacerbated by the very high leverage of Asian banks compared with their counterparts in Latin America.[126]

To deal with these banking crises, governments across Latin America implemented a series of banking-system reforms aimed at resolving weak banks and strengthening regulation and supervision (Figure 5.4).

[124]For comprehensive discussions of the costs of banking crises, see Caprio and Klingebiel (2003) and Hoelscher and Quintyn (2003).

[125]The total cost of the Argentina crisis of 2001–2002 has yet to be determined, but it is unlikely to exceed 20 percent of GDP.

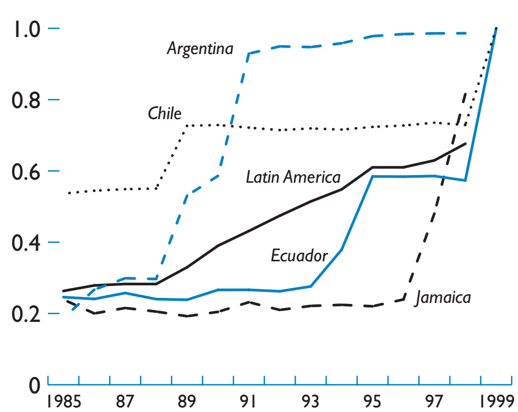
[126]Pimintel Puga (1999) estimates that in the year before the Asian crisis, loans made by Korea's largest banks amounted to more than 800 percent of net equity; those in Indonesia averaged more than 900 percent; and in Thailand, they averaged 1,400 percent. In comparison, the average credit-to-equity ratio for the top five banks in the year before their banking crisis was 480 percent in Brazil and 550 percent in Argentina.

Table 5.6. Latin America: Fiscal Costs of Banking Crises in 1990s
(In percent of GDP)

	Years	Cost
Bolivia	1994	4.2
Brazil	1995	9.3
Venezuela	1994–95	18.0
Mexico	1995	20.0
Argentina	1995	0.3
Paraguay	1996–99	13.0
Ecuador	1998	20.0
Peru	1998	1.6
Memorandum items:		
Indonesia	1997–present	40.0
Korea, Republic of	1997–present	28.0
Thailand	1997–present	34.8

Sources: Caprio and Klingebiel (2003); and IMF staff estimates.

Figure 5.4. Strength of Financial Regulatory Environment in Selected Countries
(Index from 0 to 1)[1]



Source: Lora (2001).
[1]The index takes into account minimum Basle capital requirements, the strength of creditors' rights, reserve requirements, and banks' freedom to set interest rates.

- Many private banks were closed or merged; others were restructured and/or recapitalized at high costs; and state-owned banks were liquidated or privatized.
- The power of central banks and supervisors to deal with problem banks was increased, including by raising significant external credit to provide emergency liquidity if needed (Argentina) or providing them with authority to demand new injections of funds from shareholders or restructuring through incorporation, merger, or split-up (Brazil).
- Prudential regulation was reinforced by raising initial capital requirements for the opening of new banks (Brazil); setting prudential capital ratios above minimum Basel requirements (Argentina, Brazil, and Venezuela); introducing limits on insider lending (Venezuela and Mexico); and requiring banks to implement internal risk-control systems (Brazil and Mexico).
- Bank supervision was strengthened and made more independent (Argentina, Brazil, Mexico, and Venezuela).
- Controls were tightened over offshore operations (Brazil and others; see Box 5.4).
- Deposit-insurance schemes were introduced to protect small depositors (Argentina and Brazil) or enhanced (Mexico).
- The broader institutional framework was strengthened, including by improving accounting standards (Mexico and Venezuela); establishing disclosure requirements (Mexico); imposing strict rotation rules on external auditors (Brazil and Mexico); reforming the legal and regulatory framework for bankruptcy (Argentina and Mexico); and establishing a market for the securitization of credit, facilitating the recovery of nonperforming loans (Brazil).

These reforms played an important role in the consolidation of banking systems. Restructuring was most successful when it included broader measures aimed at improving the profitability of viable banks. In Brazil, for example, the banking business was also reformed: banks were allowed to collect fees for the traditional account-management services they provided, as well as for more sophisticated services. Banks became involved in the trading of currency-derivatives contracts, which were hedged by their holdings of indexed government securities, thereby protecting their customers against oscillations in interest and exchange rates. For public banks, federal assistance was conditional on their liquidation or privatization. The few banks that remained in the public sector were transformed into development agencies or restricted to transparent, arm's-length relationships with state governments.

Banking sectors were also widely opened to foreign participation. In Brazil, the failure of a large domestic bank was resolved through its sale to a foreign bank. Similarly, in Argentina and Mexico, there

Box 5.4. Vulnerabilities from Offshore Banking

In Latin America, as elsewhere, poorly regulated or unregulated offshore financial institutions (OFIs) present a potential risk to the financial systems within which they operate. In some cases, nonregulated OFIs operate effectively as parallel banking structures that are part of larger financial entities. These entities may increase banking system vulnerability by exploiting regulatory arbitrage opportunities by, for example, transferring nonperforming assets from the regulated bank to the unregulated bank. A focus on only the regulated bank could lead to erroneous conclusions about the risk exposure of the banking system. The problem may be exacerbated if a regulator is not aware of the links between two financial entities or does not have the legal capacity to supervise one of them, which could lead to the risk of contagion being seriously underestimated. In Ecuador, for instance, the 1998–99 banking crisis turned out to be more serious than originally envisaged after apparently sound onshore banks were discovered to be much weaker when supervisors performed consolidated supervision that included closely linked but poorly regulated OFIs. In Uruguay, the absence of consolidated supervision and formal information sharing between Uruguayan and Argentine supervisors contributed to an underestimation of the vulnerability of the Uruguayan banking system and, subsequently, to the seriousness of the 2002 crisis.

In order to minimize the risks associated with OFIs, supervisors in Latin America have sought to impose conditions or restrictions on them to facilitate more adequate supervision. A number of jurisdictions have legislation that permits supervisors to refuse authorization to those banks with "unsupervisable" corporate structures or to revoke existing authorizations. For example, in Panama and Brazil, it is very difficult for banks to be granted licenses if they are chartered in jurisdictions where local supervisors are not able to perform consolidated supervision. In Guatemala, where OFIs account for 30 percent of the local private banking sector, new regulations introduced in 2002 will prohibit the operation of OFIs not formally associated with locally licensed financial conglomerates. In addition, OFIs must comply with their home-country prudential regulations or those of Guatemala, whichever are stricter.

There has also been growing consolidated supervision of financial entities and formal information-exchange agreements. Supervisors in Central America are improving the level of communication among themselves. Panama, for example, has exchange-of-information agreements with many other countries in Latin America, and its supervisors perform on-site inspections throughout Central America of banks that are chartered in Panama and have activities in those jurisdictions. In addition, supervisors in the region are moving toward consolidated supervision of conglomerates. Beginning in 2001, Brazil has conducted consolidated supervision of Brazilian banks, including those that have activities in foreign jurisdictions. To further strengthen the supervision of parallel banking structures that operate in several jurisdictions, it would be important for the relevant supervisory bodies to appoint, where possible, a lead supervisor to supervise the multinational structure on a consolidated basis. Alternatively, a supervisor should consider either forcing a group restructuring or limiting as much as possible the exposure of a domestic bank to related parallel banks or members of the corporate group.

was little protection of large domestic banks from foreign ownership, in contrast with the experience in earlier decades or even that in industrial countries. Internationalization was also seen as a way of importing good regulation and supervision as embodied in the business practices of foreign banks operating in developing countries. The high degree of international financial integration in Central America has resulted in part from such considerations, though it has also created new risks (Box 5.5). It was also expected that foreign banks would have better access to external finance than domestic ones when access to capital markets closed.

These reforms were successful in helping most Latin American countries avoid banking crises during the Asian crisis in late 1997 and 1998. The strengthening of prudential regulation, restructurings, and privatizations helped to raise the quality of banks' balance sheets, while a more cautious approach to lending in the wake of the crisis in the mid-1990s also lessened banks' credit exposures. Instead, banks tended to hold government securities, reflecting either their recapitalization or a decision to reallocate loan portfolios toward safer assets. In Brazil, large portfolios of interest rate- and exchange rate-indexed government debt insulated banks against the monetary policy tightening implemented to defend the exchange rate band after the Russian default in 1998, as well as against the large devaluations that accompanied the subsequent float of the currency in 1999, the impact of the Argentina crisis in 2001, and the election-related confidence crisis in 2002.

In a number of countries, however, risks related to dollarization received little attention in these reforms, and several dollarized banking systems eventually suffered a second wave of crises. During 2001, concerns about public debt sustainability and an extended recession in Argentina triggered a systemic bank run and loss of reserves, ended only by the abandonment of the convertibility regime and a comprehensive deposit freeze. The high capitaliza-

Box 5.5. Cross-Border Financial Integration: Banking in Central America

The changing structure and concentration of the banking system in Central America has been accompanied by growing foreign participation. Central American governments opened their banking systems to the entry of foreign banks during the 1990s, removing restrictions on foreign ownership. Although, according to legal criteria, foreign ownership in banking would not appear to be very widespread, extensive cross-border integration has taken place through informal "ownership relations" between local and foreign banks (see table).[1] Banks have also become increasingly intertwined with other financial and nonfinancial institutions, including the in-house financing arms of large conglomerates.

The process of internationalization and consolidation entails important benefits as well as potential risks. Larger, more international banks enjoy economies of scale and scope, and may be able to better diversify risks across asset classes and countries, both of which help enhance profitability and soundness. Risk exposure may initially increase, however, as banks engage in new activities in different countries and under different regulatory regimes. In particular, these risks might arise from

- a lack of comprehensive prudential regulation and oversight, while regulatory and supervisory frameworks adjust to the complexities (not helped by the lack of transparency) and new risks entailed by consolidation, conglomeration, and internationalization;
- heightened contagion created as substantial losses in one country lead banks to change their strategies and operations in other countries where they operate; and
- conflicts of interest, since banks that are part of conglomerates may engage in excessive in-house lending with inadequate risk management.

Given that banking-system vulnerabilities have increased, efforts are needed to ensure benefits from financial integration. Empirical analysis suggests that although consolidation has improved bank profitability in recent years, the probability of individual bankruptcies remains high in some countries.[2] Greater efforts are needed to address and contain the heightened risks associated with cross-border financial integration and to deliver the intended benefits. In particular, legal frameworks need to be strengthened to allow banking supervisors to implement comprehensive consolidated supervision. It is also crucial to increase regional cooperation among supervisors and move toward the harmonization of regulatory and supervisory standards across countries.

Cross-Border Banking Relationships in Central America
(In percent of system assets)

	Foreign Ownership	Foreign Relationship
Panama	59	70
El Salvador	13	89
Costa Rica	19	31
Guatemala	4	82
Honduras	4	35
Nicaragua	4	61

Sources: National bank supervisory agencies; and Bank for International Settlements.

[1]A number of "ownership relationship" indicators signal that a local bank may be part of a parallel banking structure including foreign financial institutions (BIS, 2003): the adoption by a domestic bank of a particular strategy similar to that of a foreign bank; an unusually high level of reciprocal correspondent banking between a domestic bank and a foreign bank; or similar names of a domestic bank and a foreign bank.

[2]Druck and Prat (2003).

tion of Argentine banks, extensive foreign ownership, and earlier regulatory reforms meant that the banking system was able to withstand heavy pressures for an extended period, but, in the end, these could not prevent the crisis.[127] In early 2002, the deposit run spread to Uruguayan banks, where many Argentines held accounts and where Uruguayan residents quickly became concerned about a deposit freeze in their own heavily dollarized banking system. Bolivia and Paraguay also suffered episodes of heavy pressures from deposit withdrawals in the following months. By contrast, the Peruvian banking system was much less affected despite its high dollarization, reflecting the strong macroeconomic framework, including reserve coverage of dollar deposits exceeding 100 percent.

[127]For more details on the unfolding of the crisis and the policy response, see Collyns and Kincaid (2003) and IMF (2003).

Lessons, Policy Responses, and Challenges

Experience since the early 1990s has clearly demonstrated the key importance of achieving sound and resilient financial systems to reduce Latin America's vulnerability to crisis and to support sustained economic growth. Notwithstanding efforts to strengthen financial systems, many countries have sustained major crises that have undermined confidence and precipitated severe economic contractions. Moreover, even after the financial system is stabilized, credit growth has remained limited, seriously constraining investment and economic activity.

Against this background, most Latin American countries are continuing their efforts to strengthen bank supervision and regulation. Often these efforts have drawn on Financial Sector Assessment Programs (FSAPs) prepared by the staffs of the IMF and the World Bank.[128] A key task has been to tighten loan-classification and provisioning standards, which ideally should involve more forward-looking (instead of historical) risk models. Moreover, capital-adequacy guidelines have been tightened, with the aim of achieving Basel standards; and prompt corrective-action frameworks are being introduced to ensure faster responses to emerging problems (e.g., in Argentina, Bolivia, Brazil, and Ecuador). Also, the power and independence of financial regulators are being bolstered, including to provide greater immunities from prosecution in the execution of their duties and to extend their jurisdictions to cover nonbank financial activities and to pay greater attention to tasks related to cross-border financial integration.

At the same time, greater use needs to be made of market mechanisms, complementing the role of the financial regulators, to ensure prudent behavior. Key steps in this regard include limiting coverage of deposit-insurance systems and improving the availability of information on financial institutions through stronger accounting and auditing standards (e.g., in Brazil and Mexico).

Countries that have experienced systemic banking crises in recent years will need to continue their efforts to rehabilitate or resolve weak or failed banks, recover value from the efficient disposal of nonperforming loans (e.g., Argentina, Ecuador, and Uruguay), and thus reduce the high exposure of the public sector (e.g., Argentina). These tasks are often slow, given the complexity of the issues involved, including allocating losses fairly among depositors and creditors, and determining the appropriate role for the public sector in potentially cushioning losses, often in the face of binding fiscal constraints. The uncertainties that linger while such sick financial institutions remain unresolved, however, can hold back the growth of healthier ones as well as delay restructuring by borrowers. Also, in several countries, an important task is to make sure that remaining publicly owned banks are efficiently and transparently run and do not provide a source of future quasi-fiscal losses (for example, in Argentina).

A broader range of initiatives is also needed, and efforts are under way to encourage the expansion of more efficient and longer-term credit intermediation. These include the development of more effective information-sharing mechanisms for credit assessment (in Brazil), strengthening bankruptcy legislation and judicial procedures to enhance recovery of value from bad loans (in Bolivia, Brazil, and Mexico), and encouraging the expansion of microfinancing (in Bolivia, Brazil, and Peru). Another necessary task is to reduce current distortionary taxation of financial intermediation, which will require the development of alternative sources of revenue.

Continuing efforts are needed to deepen capital markets. Important progress is being made in a number of countries (including Brazil, Chile, Colombia, and Mexico). Pension reforms have helped to establish a group of large institutional investors, but it will be important to ensure that pension funds have adequate scope to invest their assets to maximize returns and are not unduly subject to requirements to invest in potentially high-risk government paper. Strides are also being made toward the development of deeper and more efficient government debt markets, which can provide useful benchmarks for corporate debt as well as a stable means of meeting government's financial requirements, especially using local currency-denominated paper.

The particular problems faced by dollarized financial systems may pose the greatest challenges, since such systems are particularly prone to instability. These issues are discussed in detail in the next section.

[128]So far, FSAPs have been completed or planned for in 16 Latin American countries.

References

Agénor, Pierre-Richard, Joshua Aizenman, and Alexander Hoffmaister, 2000, "The Credit Crunch in East Asia: What Can Bank Excess Liquidity Assets Tell Us?" NBER Working Paper No. 7951 (Cambridge, Massachusetts: National Bureau of Economic Research).

Bank for International Settlements, 2003, *Quarterly Review* (June).

Basel Committee on Banking Supervision, 2003, *Parallel-Owned Banking Structures* (Basel, Switzerland: Bank for International Settlements).

Belaisch, Agnès, 2003, "Do Brazilian Banks Compete?" IMF Working Paper 03/113 (Washington: International Monetary Fund).

———, Laura Kodres, Joaquim Levy, and Angel Ubide, 2001, "Euro Area Banking at the Crossroads," IMF Working Paper 01/28 (Washington: International Monetary Fund).

Berróspide, J., and J. Dorich, 2001, "Aspectos Microeconómicos de la Restricción Crediticia en el Perú: 1997–2000" (Lima: Banco Central de Reserva del Perú).

Braun, Miguel, and Eduardo Levy Yeyati, 2000, "The Role of Banks in the Transmission of Shocks: Micro Evidence from Argentina, 1996–1999" (unpublished; Buenos Aires: Universidad Torcuato Di Tella).

Burki, Shahid Javed, and Guillermo E. Perry, 1997, *The Long March: A Reform Agenda for Latin America and the Caribbean in the Next Decade* (Washington: World Bank).

Caprio, Gerard, and Daniela Klingebiel, 2003, "Episodes of Systemic and Borderline Financial Crises" (unpublished; Washington: World Bank).

Carrasquilla, Alberto, A. Galindo, and D. Vásquez, 2000, "El Gran Apretón Crediticio en Colombia: Una Interpretación," *Coyuntura Económica*, Vol. 30 (March), pp. 1–9.

Catão, Luis, 1997, "Bank Credit in Argentina in the Aftermath of the Mexican Crisis: Supply or Demand Constrained?" IMF Working Paper 97/32 (Washington: International Monetary Fund).

Coelho, Isaias, Liam Ebrill, and Victoria Summers, 2001, "Bank Debit Taxes in Latin America: An Analysis of Recent Trends," IMF Working Paper 01/67 (Washington: International Monetary Fund).

Collyns, Charles, and G. Russell Kincaid, 2003, *Managing Financial Crises: Recent Experiences and Lessons from Latin America*, IMF Occasional Paper No. 217 (Washington: International Monetary Fund).

Druck, Pablo, and Jordi Prat, 2003, "Banking System Effects of Financial Integration in Central America" (unpublished; Washington: International Monetary Fund).

Federación Iberoamericana de Bolsas de Valores, 2002, *Estadísticas Anuales* (Buenos Aires).

Fischer, Stanley, 2003, "The Importance of Financial Markets in Economic Growth," paper presented at the International Derivatives and Financial Markets Conference of the Brazilian Mercantile and Futures Exchange, Campos do Jordao, Brazil, August 21.

Herrera, Santiago, and Guillermo Perry, 2003, "Tropical Bubbles: Asset Prices in Latin America," in *Asset Price Bubbles*, ed. by W. Hunter, G. Kaufman, and Michael Pomerleano (Cambridge, Massachusetts: MIT Press), pp. 127–62.

Hoelscher, David, and Marc Quintyn, 2003, *Managing Systemic Banking Crises*, Occasional Paper No. 224 (Washington: International Monetary Fund).

Instituto Brasileiro de Geografia e Estatísticas (IBGE), 1997, "Sistema Financeiro: Uma Análise a Partir das Contas Nacionais—1990/1995" (unpublished; Rio de Janeiro, Brazil).

International Monetary Fund (IMF), 2003, "Lessons from the Crisis in Argentina" (Washington: International Monetary Fund).

Kim, Hyun, 1999, "Was Credit Channel a Key Monetary Transmission Following the Recent Financial Crisis in the Republic of Korea?" World Bank Policy Research Working Paper No. 2103 (Washington: World Bank).

Krugman, Paul, 1998, "What Happened to Asia?" (unpublished; Cambridge, Massachusetts: Massachusetts Institute of Technology, Department of Economics).

Labán, Raúl, and Felipe Larraín, 1998, "The Return of Private Capital to Chile in the 1990s: Causes, Effects, and Policy Reactions," Development Discussion Paper No. 627 (Cambridge, Massachusetts: Harvard Institute for International Development).

Lora, Eduardo, 2001, "Las reformas estructurales en América Latina: Qué se ha Reformado y Cómo Medirlo," IADB Working Paper No. 462 (Washington: Inter-American Development Bank).

McKinsey & Company, 1998, *Productivity—The Key to an Accelerated Development Path for Brazil* (São Paulo, Brazil: McKinsey Global Institute).

Pimintel Puga, F., 1999, "The Brazilian Financial System: Recent Restructuring, International Comparisons, and Vulnerability to the Exchange Rate Crisis" (unpublished; Rio de Janeiro, Brazil: Brazilian Development Bank).

Rojas-Suarez, Liliana, and Steven R. Weisbrod, 1994, "Financial Market Fragilities in Latin America: From Banking Crisis Resolution to Current Policy Challenges," IMF Working Paper 94/117 (Washington: International Monetary Fund).

World Bank, 2003, *Investment Climate Survey* (Washington).