

## Overview

**T**HE size of credit markets and the cost of credit and its volatility are closely related to macroeconomic imbalances, the nature of the institutions and regulations that govern credit markets, and the microeconomic structure of the banking system. Weak macroeconomics leads to weak and fragile banks that consequently offer insufficient and expensive credit. Weak institutions cause similar outcomes.

The chapters in this Report explore the main channels through which the macroeconomy, institutions, and the structure of the banking sector affect credit, interest rates, and banking fragility and propose policy recommendations. This overview summarizes many of the findings of the Report.

### A VOLATILE WORLD

To a great extent, the size and volatility of credit markets in Latin America and the Caribbean can be linked to macroeconomic shocks. In fact, the way countries respond to macroeconomic shocks has important implications for the shape of the banking sector. The size of the banking sector and many other characteristics can be linked to the evolution of the macroeconomic environment. For example, the high levels of inflation and macroeconomic uncertainty of the 1980s produced small and/or highly dollarized banking systems in some countries.

There is a two-way relationship between the banking sector and macroeconomic imbalances. On the one hand, banks have often been an important source of instability in the region. On the other, the volatility of bank assets and liabilities reflects a long history of macroeconomic imbalances and a lack of instruments to cope with these imbalances. To the extent that bank portfolios have remained vulnerable to macroeconomic fluctuations, depositors have chosen to stay liquid, typically selecting short deposit maturities, thus being “ready to run” in case some factor, typically external, triggered a crisis.

Many of the most recent banking crises can be linked to external factors leading to liquidity constraints

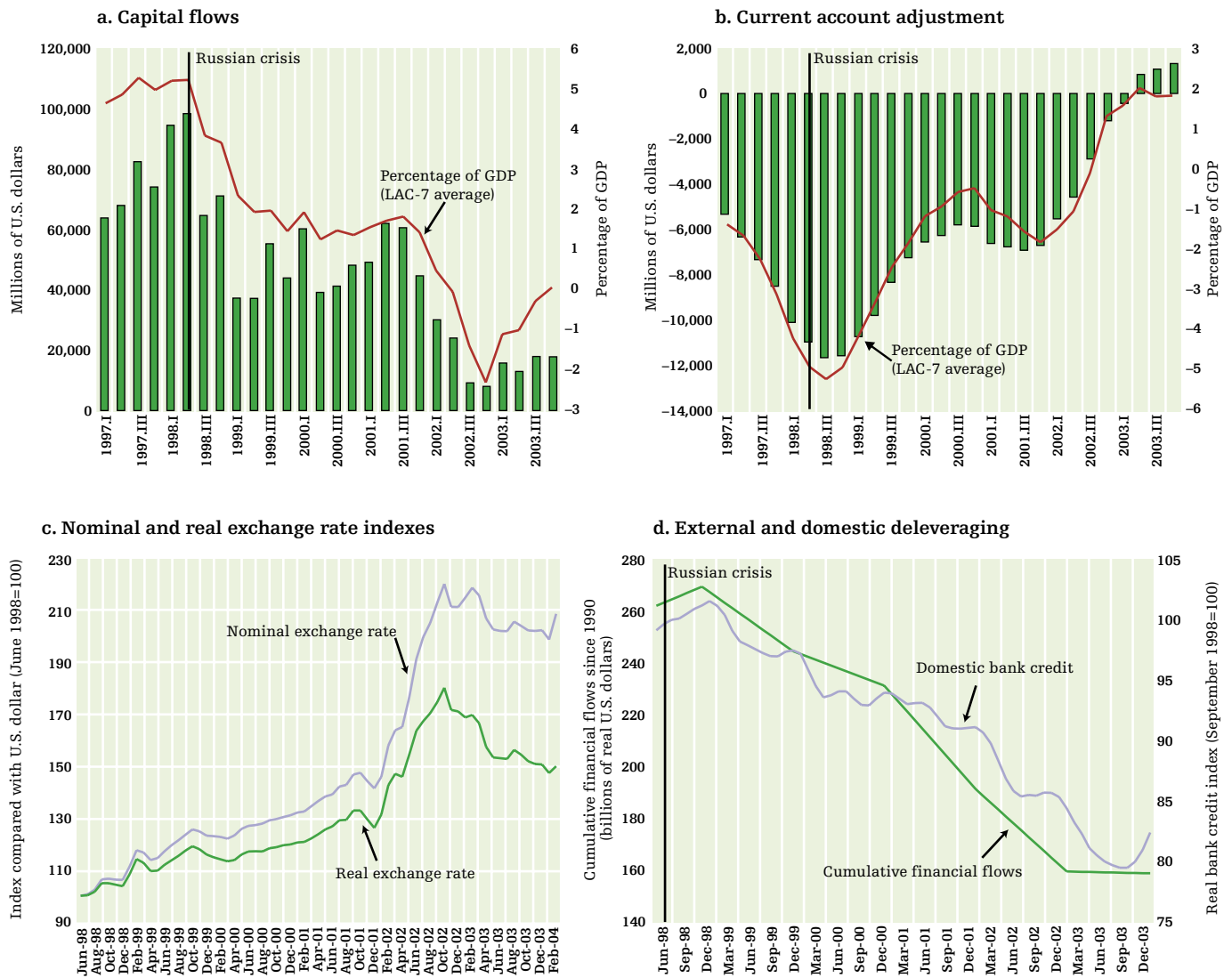
and contagion across capital markets. Sudden stops in capital flows, namely unexpected cuts in the financing of the current account deficit, have had a profound effect in Latin America and the Caribbean. The bunching of banking crises and sudden stops during the 1990s suggests that a common external element may be partly responsible for bank volatility, particularly because countries facing quite different macroeconomic fundamentals were hit at about the same time. In this respect, the Russian crisis of 1998 represented a major volatility factor in the Latin American and Caribbean region and in emerging markets in general. In the case of the seven largest Latin American economies, the sudden stop of 1998 was accompanied by a deleveraging of domestic debt and a contraction in credit (Figure 2.1).<sup>1</sup> Equally dramatic was the reduction in the current account deficit and the real depreciation of the currency. As a result, gross domestic product (GDP) growth fell on average from 7 percent before the crisis to –2 percent after the crisis.

This approach points toward an exogenous coordination element in sudden stops—and it may very well explain developments in economies that were otherwise performing well, such as Chile. However, new evidence suggests that financial dollarization, coupled with large potential changes in relative prices following a sudden stop, may have a substantial effect on the likelihood of a standstill in capital flows, which, in turn, may wreak havoc on the banking system (Calvo, Izquierdo, and Talvi 2003).

These findings suggest that particular banking sector characteristics such as high dollarization may in and of themselves be responsible for macroeconomic volatility. Indeed, sudden stops have typically been accompanied by banking crises, particularly in cases of high liability dollarization. This can be seen in Figure 2.2, which shows that for the case of highly dollarized countries, about 75 percent of sudden stops have materialized together with banking crises (this figure increases to 100 percent when dollarization is accompanied by a

<sup>1</sup> The seven largest economies represent about 90 percent of Latin American purchasing power parity-adjusted GDP.

**FIGURE 2.1** The Sudden Stop of Capital Flows in Latin America in 1998



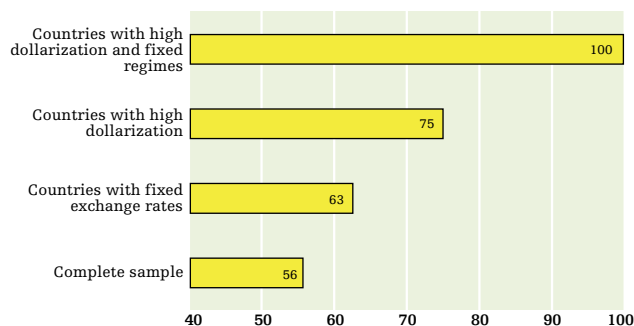
Note: Values are averages for Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.  
 Source: IDB calculations based on data from central banks.

fixed exchange rate regime). These particular characteristics, as discussed in Chapter 3, are mainly the result of poor domestic policies, including high inflation and its effects on currency substitution and eventually liability dollarization, excessive risk-taking on the part of banks leading to excess dollarization, and restrictive trade policies that induce scarce production of tradable goods and potentially lead to significant changes in relative prices following a sudden stop. Excessive risk-taking can be explained by high economic volatility, which weakens the ability of creditors and regulators to properly assess risks, and by moral hazard issues result-

ing from a poor regulatory and supervisory framework and the perception that the government will bail out unsuccessful investments.

In addition to liquidity factors, moral hazard factors, understood as incentives toward excessive risk-taking, have also been extremely relevant in explaining the development of banking crises. Indeed, another key lesson learned from many adverse experiences in emerging countries is that processes of financial and capital account liberalization should be handled with care, taking into consideration the need for the sequencing of reforms. Although financial liberalization may promote

**FIGURE 2.2 Banking Crises and Sudden Stops Worldwide, 1974–2003**  
(Percentage of sudden stop episodes contemporaneous with banking crises)



Source: For banking crises, Caprio and Klingebiel (2003), Kaminsky and Reinhart (1999), and Demirgüç-Kunt and Detragiache (1998); for exchange regime classification, Levy-Yeyati and Sturzenegger (forthcoming); and for sudden stop episodes and dollarization, Calvo, Izquierdo, and Talvi (2003).

savings and improve its allocation, thus having a positive impact on financial depth and economic growth, as the crises of the 1980s and 1990s illustrate, things did not turn out as bright as originally expected.<sup>2</sup>

The standard explanation of these dismal results puts the blame on the remarkably rapid expansion of credit, a factor that created challenges for financial institutions and bank supervisors. Weak financial regulation and supervision and either implicit or explicit government safety nets meant that related lending or fraud and excessive risk-taking on the part of depositors, borrowers, and banks would be the most likely outcome. Excessive risk-taking opened the door for financing bad credit risks and eventually led to the emergence of a substantial amount of nonperforming loans. Given that in many cases financial liberalization coincided with the removal of capital account restrictions, much of the lending boom was financed through foreign capital inflows, sometimes directly mobilized by the banking system through increases in bank liabilities with foreigners. This strategy, in turn, made countries more vulnerable to external liquidity shocks. Thus, in many respects, banking crises were accidents waiting to happen in the context of bank fragility due to excessive risk-taking during lending booms spurred by liberalization.

Avoiding banking crises is extremely relevant because they bring about output volatility and daunting fiscal costs. The disruption of the payments system not only hits short-term economic growth, but also affects growth in the long run. Crisis episodes are typically associated with a dramatic weakening of balance sheets, on the side of both banks and borrowers. To the extent that

banks represent a major source of financing, contractions in credit due to plummeting net worth may lead to a forced reduction of investment and consumption spending. The undermining of depositors' confidence in the banking system may in turn lead to a reduction in saving or to capital outflows. As banks are intervened or closed, valuable information on borrowers is lost.

All these factors contribute to the inability of the banking system to function efficiently, and, as a result, to diversion of a significant amount of resources from the formal financial sector into less efficient uses that reduce bank intermediation. In addition, bank bailouts typically entail high fiscal costs, which, by raising the public debt and debt service cost, may have an impact on consumption and investment decisions. These considerations are much more problematic than they may seem individually because in times of crisis they come together and even interact with each other, leading to a substantial effect on economic growth. Given the short and long-run costs associated with crises, the Report devotes special attention to their determinants, on both moral hazard and liquidity dimensions.

A crucial area of concern that the region still needs to resolve is financial dollarization, which entails a steep trade-off between financial depth and financial volatility. As argued in Chapter 4, restrictions on financial dollarization, by limiting the portfolio choice of depositors, may increase the variance of real returns on savings and damage financial sector development, in particular via placement of deposits offshore. Recent empirical studies looking at the effect of dollarization on financial development confirm this result. De Nicoló, Honohan, and Ize (2003) find that dollarization is associated with deeper financial systems in high-inflation countries. Similarly, findings in Cowan and Do (2003) indicate that restricting dollarization has larger negative effects on financial development when depositors are set to lose more (in terms of a higher variance in the return of their portfolios). The restriction encourages movement from an optimal portfolio consisting of deposits in both domestic and foreign currencies to a portfolio consisting of only domestic currency assets.

This fact and the findings discussed in Chapter 3 on the negative effects of liability dollarization on macroeconomic volatility imply that policymakers may be

<sup>2</sup> Empirical work by Demirgüç-Kunt and Detragiache (1998) stresses the relevance of financial liberalization as a determinant of the probability of a banking crisis. Further work by Galindo, Micco, and Ordóñez (2002b) shows that financial liberalization had a positive growth effect in countries with a well-built institutional setup.

faced with a dilemma when determining whether to impose restrictions on dollar-denominated financial contracts. If depositors are uncertain about future inflation rates, then allowing the establishment of foreign currency deposits will increase financial depth. However, this may come at the cost of a higher likelihood of facing macroeconomic turbulence, as would be the case for sudden stops in capital flows. These trade-offs are fully elaborated in Chapter 4.

Banking crises have been frequent in Latin America and the Caribbean. The recurrent nature of these crises has impaired the development of the region's banking sector and has defined many of the current characteristics of the region's banking systems. In particular, inappropriate crisis resolution may be a cause of disintermediation in financial systems. By looking at crisis resolution episodes in the 1990s and early 2000s, such as those in Argentina (1995 and 2001–02), Mexico (1995), and Uruguay (2002), Chapter 5 provides examples of crisis resolution processes that successfully battled disintermediation and others that did not. In the latter case, by insulating borrowers from the effects of a crisis and hitting depositors instead, one of the key principles of crisis resolution was violated, namely, the principle that those who benefit the most from risk-taking activities should bear the brunt of the cost of restructuring the banking system following a crisis.

### KEY VULNERABILITIES OF BANKING SYSTEMS IN LATIN AMERICA AND THE CARIBBEAN

The Report stresses the crucial vulnerabilities that arise from high dollarization and high concentration of public debt in the asset structure of banks. For a start, high and volatile inflation throughout the 1980s and the beginning of the 1990s led to dollarization processes in several countries in the region. Almost all countries in which dollarization of bank deposits exceeded 50 percent by 2001 had experienced periods of high inflation in the past. High inflation is associated with high-inflation volatility, a characteristic that provides few incentives to save in domestic currency, particularly when the alternative is dollar deposits, which have typically shown less volatility in terms of their purchasing power.

The resulting desire to save in foreign currency assets had two important consequences. For countries that restricted the use of deposits in foreign currency, this may have led to lower intermediation levels because savings were transferred offshore.<sup>3</sup> But for countries that allowed foreign currency deposits, the fact

that regulation required banks to match their assets and liabilities by currency type, coupled with the fact that most dollar deposits were onlent locally rather than abroad, inevitably led to dollar lending to nontradable sectors in those economies in which dollarization of deposits was pervasive. This lending policy basically transferred bank exchange rate risk to borrower credit risk as nontradable sectors now faced mismatches stemming from their income in nontradable goods and their debts in terms of tradable goods (dollars). As a result, a sizable component of bank assets was vulnerable to real exchange rate fluctuations.

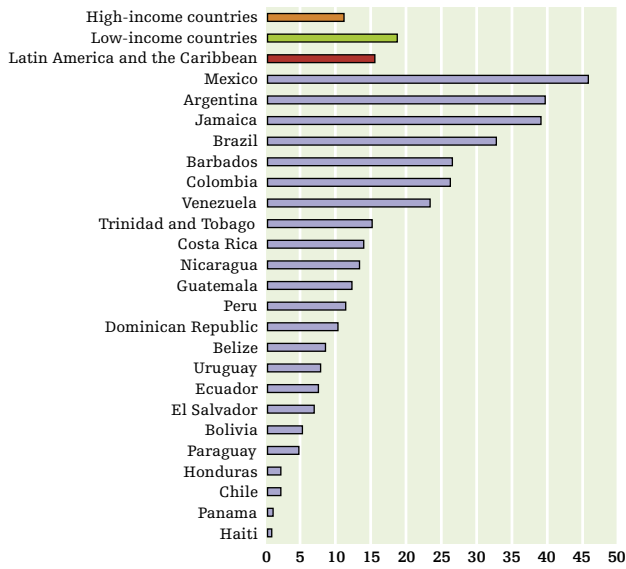
Fiscal behavior has also contributed to the volatility profile of banks, mainly because for many countries the share of public sector debt in total bank claims is high, and the price of such claims is quite volatile in Latin America. Figure 2.3 shows the ratio of public claims to total claims in banks for countries in the region and compares them with averages across other low and high-income economies. Although the average share for the region is not high relative to the other regions shown in the figure, there is substantial variance across countries in the region. On the one hand, public debt is a sizable share of total bank lending in most of the large economies. Argentina, Barbados, Brazil, Colombia, Jamaica, and Mexico all have ratios of public claims to total claims exceeding 25 percent, so that one in every four dollars owed to banks is owed by the government. At the other extreme of the distribution, Bolivia, Chile, Haiti, Honduras, Panama, and Paraguay all have ratios of public claims to total claims of 5 percent or less.

Government borrowing from domestic banks is an issue that has become increasingly relevant in recent years, as shares of public loans in total lending have increased during this recession period. Indeed, the average share of public claims over total claims in the banking sector has followed a “U” shape over the past decade. The share dropped over the period of high growth and capital inflows of 1991–95, and then rose over the second half of the decade and into the early 2000s, as the effects of both the Tequila crisis of 1995 and the East Asian and Russian crises of 1997–98 kicked in (Figure 2.4).

Figure 2.4 also shows that rising shares of public claims on average coincided with rising fiscal deficits in the late 1990s. The pressure of government deficits on bank portfolios is particularly clear for the seven larg-

<sup>3</sup> Indeed, studies such as De Nicoló, Honohan, and Ize (2003) suggest that there has been greater financial intermediation in high-inflation countries that allowed for deposit dollarization.

**FIGURE 2.3 Public Debt in Banks, 2000–01**  
(Percentage of total claims)



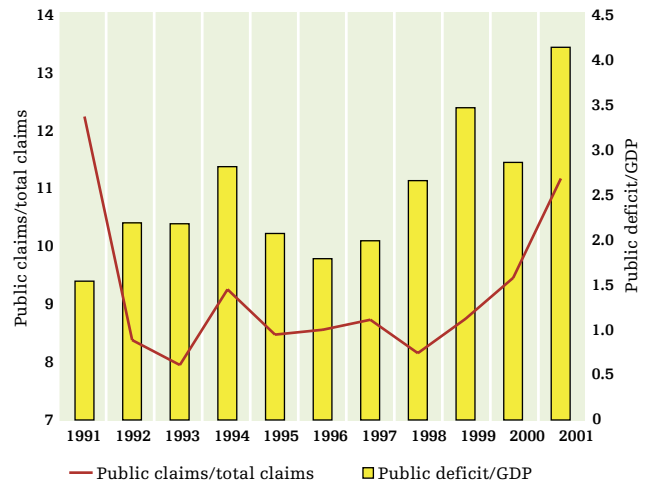
Source: IDB calculations based on IMF data.

est Latin American economies as shown in Figure 2.5. This pattern also hints at the potential crowding-out effects that public sector finances may have over the private sector in times of crisis.

Although public deficits in Latin America and the Caribbean are not particularly high relative to middle or high-income economies when measured as a share of GDP, they are higher than in any other group of economies when measured as a percentage of total bank lending (Table 2.1). As a result, the potential pressure that the public sector could exert on the banking system in Latin America and the Caribbean is high. These pressures may become substantial in times of crisis when deficits are expanding and external funding is limited.

Considering only the seven largest Latin American countries, the share of government claims in total bank claims doubles to almost 26 percent (Figure 2.3). Such a sizable amount of government claims becomes particularly relevant for the volatility of bank portfolios when considering the behavior of government bond prices. Over the period 1994–2003, the average volatility of (log) changes in government bond prices of Latin American countries vis-à-vis that of developed countries was higher by a factor of three. Thus, substantial valuation changes in government debt can easily erode bank capital when bonds are marked to market, which is the only relevant pricing for depositors who bear the risk of bank failure. This factor is not appropriately addressed by existing regulation, which allows banks to

**FIGURE 2.4 Public Claims in Banks and the Public Deficit in Selected Latin American Countries, 1991–2000**  
(Percent)



Note: The countries in the sample are Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.

Source: IDB calculations based on IMF and World Bank data.

price bonds at face value, thus providing an incentive for banks to hold public sector claims. This is yet another reason why banks may accept holding proportionately more government bonds relative to private sector holdings in times of crisis (Chapter 6).

The combination of loans in foreign currency to nontradable sectors and holdings of public sector debt provides a very unstable bank portfolio base for depositors. External shocks, such as sudden stops in capital flows, can bring about spikes in real exchange rate behavior that could drastically erode bank assets and therefore render the banking sector bankrupt. Thus, depositors will want to hold liquid assets that allow them to react swiftly to any indication that a crisis is about to materialize. This is particularly so because crisis resolution processes in many Latin American experiences have typically insulated borrowers from the effects of a crisis and have hit depositors instead.

## AVOIDING CRISES: A FINANCIAL SAFETY NET

A recurrent problem throughout Latin America and the Caribbean has been the proliferation of banking crises or episodes of near crisis. In all countries, the costs of restructuring financial systems have been high, both in terms of the direct fiscal cost and the associated slowdown in economic activity. In order to avoid

**FIGURE 2.5** Public Debt and Fiscal Deficit  
(Percentage of GDP)

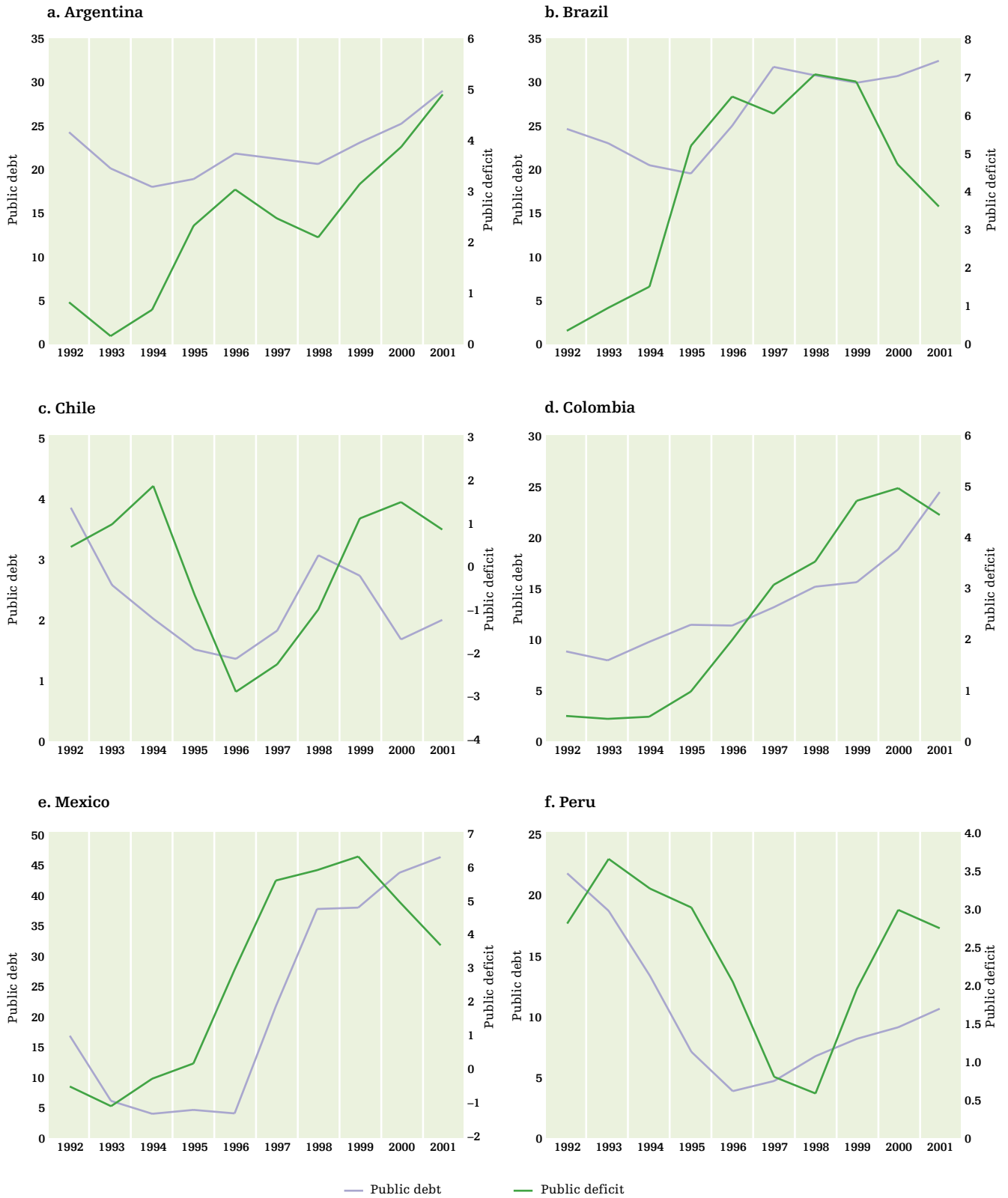
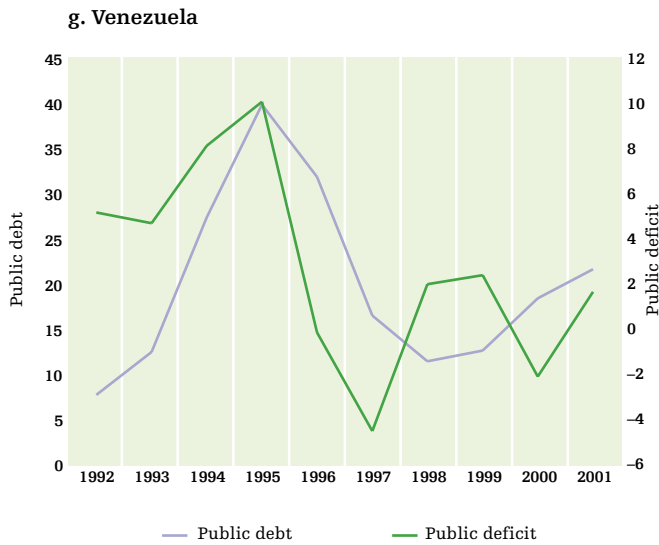


FIGURE 2.5 continued



Source: IDB calculations based on IMF data.

such costs, many countries have placed great effort in strengthening the financial sector and reducing its volatility. In the presence of multiple shocks that can induce tremendous financial volatility and eventually systemic banking crises, policy has been aimed at the development and strengthening of financial safety networks. A financial safety network is a set of rules and institutions designed to reduce financial instability in order to protect financial intermediation and the payments system. It comprises the definition of prudent rules and their strict enforcement, adequate supervision of banks and establishment of institutions such as deposit insurance and a lender of last resort and enables private agents to monitor and discipline banks. Clearly, the recent fragility in Latin American banking markets reveals that there are still many weaknesses in the financial safety net. The evolution of these rules and institutions, their current stance, and possible directions to improve them are discussed in detail in the Report.

A key component of a financial safety net is prudential regulation and supervision of banks. There are at least two classic arguments for banking regulation. The first is the protection of small and unsophisticated depositors. Capital regulation and the requirement to inject new capital when necessary or otherwise face closure are ways to align a bank's risk-taking position with the interest of depositors. The second classic rationale for banking regulation stems from the unavoidable need to protect the payments system and the financial system

more generally. It may be the case that otherwise solvent banks may be subject to pure liquidity runs. Moreover, if some depositors run against a weak bank, other depositors may run against other more healthy banks in the system, fearing actual financial links between these banks or simply selecting a bad or run equilibrium because of lack of information. This is frequently referred to as **contagion**.<sup>4</sup>

One way to prevent such runs is for a central bank to promise liquidity to solvent banks—that is, for the central bank to provide lender of last resort services. However, the promise of such liquidity may weaken banks' incentives to reduce risks. As discussed in Chapter 6, defining the operation of the lender of last resort implies finding a balance between these trade-offs. A second way to prevent such liquidity runs is through the provision of deposit insurance. However, if depositors are insured, then the link between the required rate of return and the underlying risk of the bank is broken and the incentives of bank owners and managers may change. These shifts in incentives are normally referred to as moral hazard. Having a deposit insurance mechanism that allows for greater credibility in the financial system to mitigate bank panics without generating excessive moral hazard makes its design a crucial topic. International evidence has shown that a well-defined deposit insurance scheme can contribute to financial stability, but a deficient one can increase the likelihood of a crisis. Chapter 7 addresses this issue.

Capital regulations may then be seen as an attempt to counteract the moral hazard created by the existence of a safety net. From this perspective, intervening through prudential regulation and supervision is justified on the basis of reducing banking sector risks to avoid the potential negative externalities of crises on the rest of the economy. In this area, there is a long way ahead for Latin American countries. Despite the fact that there have been many reforms throughout the region, especially since the 1990s, there are still severe weaknesses that regulation has not addressed properly. The principal weaknesses are in areas related to the operational independence and resources of the regulatory agency, the existence of a suitable legal framework and

<sup>4</sup> Contagious bank runs may have significant negative externalities on the rest of the economy and hence are generally thought to be costly, especially if they affect otherwise healthy banks or prevent the normal functioning of the payments system. In particular, if otherwise healthy banks fail, then because those banks may hold private information on their clients, there is the possibility that this information will be lost and the economy may suffer a more general credit crunch.

**TABLE 2.1** GENERAL GOVERNMENT DEFICIT BY COUNTRY INCOME GROUP, 1991–2001  
(Percent)

Measure	1991–93	1994–96	1997–99	2000–01	1991–2001
<i>Percentage of GDP</i>					
High-income countries	5	3	0	–1	2
Latin America and the Caribbean	2	2	3	4	3
Middle-income countries	6	4	4	6	5
<i>Percentage of total claims in banks</i>					
High-income countries	5	3	0	–2	2
Latin America and the Caribbean	15	10	10	12	12
Middle-income countries	12	11	9	9	11

*Note:* Public debt in banks was constructed as the sum of claims on central government (IFS line 22a), claims on state and local government (22b), and claims on nonfinancial enterprises (22c). The countries grouped as high-income are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, and the United States. The countries grouped as Latin America and the Caribbean are: Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela. The countries grouped as middle-income are: Bulgaria, Hungary, Malaysia, Morocco, Philippines, Poland, South Africa, Tunisia, Turkey, and Ukraine.

*Source:* IMF and World Bank data.

legal protection for supervisors, remedial measures in case of bank fragility, weak links between capital adequacy requirements and risk, and lack of consolidated supervision. Weaknesses in regulation increase the likelihood and costs of crises. In the Dominican Republic, lack of regulation and enforcement on credit concentration and related lending, among other aspects, led to a large-scale banking collapse in 2003. In Argentina and other highly dollarized countries, weaknesses in addressing the risks associated with financial dollarization also increased the likelihood and costs of the banking crises in 2001 and onward. Another concern in many countries is how to address the risk of holding a high concentration of government debt in banks' balance sheets. All in all, it is clear that prudential regulation and supervision are not tight enough, and further reforms are needed in order to improve banking oversight. Chapter 6 discusses this in detail.

Assuming that supervisors have appropriate powers and that regulations are properly designed, supervisors may still lack the required information to effectively monitor those regulations. There is an unavoidable informational asymmetry between a bank and its supervisor.<sup>5</sup> These regulatory and supervisory failures imply that it will in general be useful to harness the market to discipline banks. Market discipline has typically been viewed as the reaction of bank creditors (depositors and other liability holders) to increases in bank risk. This definition is extended in Chapter 8 to include the sub-

sequent reaction of banks to the actions of creditors as well. Discipline is considered effective when banks take prompt remedial actions to curb any actual or potential negative actions on the part of creditors.

At first sight, market and supervisory discipline may be thought of as substitutes, but, in fact, in the terminology of modern microeconomics, they are strategic complements. This means that appropriate regulations can enhance the disciplining power of markets, and markets may enhance the disciplining power of supervisors. Together they may imply greater discipline than the simple sum of the two components. Chapter 8 provides evidence on how depositors discipline banks in Latin America by lowering deposits when banks become more vulnerable or asking for higher interest rates when bank fundamentals look weak. The chapter also shows how banks in turn increase their capital-asset ratio to compensate for the behavior of depositors. Nonetheless, there is still enough room to increase the scope of market discipline in Latin America in order to increase private sector oversight of the banking system.

<sup>5</sup> Banks may not always truthfully disclose the required information, and, as witnessed recently in major corporate scandals in the United States and Europe, auditors do not always ensure that even fully audited information is 100 percent reliable. Moreover, the supervisor may have access to balance sheet and other hard information but lack the finer information from, say, intraday market transactions.

## THE CHANGING NATURE OF BANKING SYSTEMS: DOES STRUCTURE MATTER?

Advances in information technology, globalization, and deregulation are leading to drastic changes in the structure of the banking industry around the world. Innovations and increased competition reduce margins in traditional banking activities and spur mergers between banks and other financial institutions. Latin America is not an exception to this trend. During the 1990s, the region was characterized by a process of bank consolidation and entry of foreign banks that was mostly triggered by financial crises and regulatory tightening. In Argentina, Brazil, Colombia, Costa Rica, El Salvador, and Peru, more than a quarter of all banks either closed or merged between 1996 and 2002. While this sharp decrease in the number of banks in the region led to an increase in bank concentration in some countries, Latin America as a whole still displayed a low level of bank concentration by 2002 compared with other regions of the world.

This consolidation process was characterized by deep changes in ownership structure in the industry. The entry of foreign banks has been a dominant characteristic, and in many countries foreign-owned banks have become the main players in the domestic financial system. In Latin America and the Caribbean, local currency lending by branches or subsidiaries of foreign banks represents more than 65 percent of total bank lending. In Argentina, Chile, Mexico, and Peru, foreign banks controlled more than 50 percent of assets in 2002. Foreign banks did not control more than 30 percent of assets in any of these countries in 1995. As reported in Chapter 9, the increase in foreign bank participation in Latin America came together with a fall in public sector participation in commercial banking. The changing nature of the ownership structure of Latin American banking systems has raised crucial questions on how such changes affect access to credit and its cost.

One of the major sources of concern regarding the reduction in the number of banks and the increasing presence of large international banks is that these could exploit their market power by paying lower deposit rates and charging higher interest rates on loans. However, the evidence presented in Chapter 9 suggests that this has not been the case. The increase in concentration in Latin American banking was due to technological innovation and financial liberalization that reduced entry barriers and did not lead to greater market power. There is no evidence that higher concentration increased credit costs or lowered credit levels in Latin America.

Concentration and competition may also affect credit volatility over the business cycle. Some theoretical views suggest that when banks' interests collide, it is likely that they will increase mark-ups during bad times, amplifying business cycle fluctuations. By contrast, other views suggest the opposite, that is, that low competition can stabilize credit when bad shocks hit the economy. If there is low competition in the face of bad shocks, banks could avoid the liquidation of some loans that might not be profitable in the short term (because of the shock) but that could be profitable in the long run. With high competition, banks would not be able to take these chances.

Furthermore, an implication of modern portfolio theory is that diversification reduces volatility. In this context, large banks taking advantage of the law of large numbers are likely to be better diversified and hence better able to face shocks than smaller and less diversified banks; therefore, large banks would have more stable credit levels. The evidence presented in Chapter 9 shows that, conditional on the level of financial development and income, countries with greater concentration in the banking industry have less procyclical credit. A similar reaction in credit is observed after an external demand shock hits the economy. These results suggest that a concentrated banking sector, which does not necessarily mean a noncompetitive one, has lower credit volatility.

The rising trend in foreign banking in Latin America has led economists and policymakers to consider its implications. Most economists agree that the presence of foreign-owned banks can play a useful role in developing and modernizing the financial system. As shown in Chapter 10, there is in fact evidence that foreign bank entry plays a useful role in expanding credit, although the evidence suggests that most of this credit expansion is directed toward large firms. Foreign banks also tend to be more efficient than domestic banks and have lower net intermediation margins. They can afford such low margins because they tend to have lower overhead costs. For Latin America, Table 2.2 shows that relative to domestic private banks, foreign institutions have lower overhead costs and interest margins (the deposit rate minus the loan rate).

An area in which the presence of foreign banks represents a mixed blessing is credit stability, which is discussed in Chapter 10. In case of problems, foreign banks have better exit strategies than domestic banks, and hence in times of crisis they can destabilize credit. For example, if an economy is hit by a shock that affects the productivity of overall projects and increases credit risk, most banks might decide to cut back on credit.

**TABLE 2.2** OWNERSHIP AND BANK CHARACTERISTICS IN LATIN AMERICA, 1993–2003  
(Percent)

Bank ownership	Loan rate <sup>a</sup>	Deposit rate <sup>a</sup>	Overhead costs <sup>b</sup>	Loans to public sector <sup>c</sup>	Nonperforming loans <sup>d</sup>	Return on assets <sup>e</sup>
Domestic	4.20	2.68	1.10	12	6	0.28
Public	3.86	1.84	1.40	19	6	0.12
Foreign	4.01	2.74	1.00	13	5	0.28

<sup>a</sup> Rates are in real terms.

<sup>b</sup> Overhead costs over total assets in percentage points.

<sup>c</sup> Loans to the public sector as a share of total assets.

<sup>d</sup> Nonperforming loans over total loans.

<sup>e</sup> Return on assets in percentage points.

*Note:* For domestic banks, the value is the sample median. For public and foreign banks, it is the private domestic value plus the computed deviation using a regression analysis. Countries included in the sample are: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, and Peru.

*Source:* Bank superintendencies.

However, if a bank has the alternative of redirecting its funds toward another economy that was not hit by the shock, this might make its credit more volatile than others. Usually foreign banks face such alternatives and can cut credit by more than domestic banks can.

However, there are also cases in which foreign banks may play a useful role in stabilizing credit. Foreign banks do not suffer as much as domestic banks when there is an overall decline in deposits, given that they usually have access to additional sources of funding, such as deposits from abroad or capital transfers from their parent bank. In addition, foreign banks may also be more stable when there is a run on deposits, due to the fact that depositors may perceive that foreign banks are stronger than domestic banks since they have the support from their parent, usually from a developed country. The empirical analysis presented in Chapter 10 shows that whether foreign banks stabilize or destabilize credit depends on the nature of the shocks that hit the economy. Foreign banks play a useful stabilizing role when shocks come from the deposit availability side. The potentially beneficial role of foreign banks is also likely to depend on the degree of sophistication of the financial system, with foreign banks playing a more useful role in less sophisticated financial systems (Levine 1996).

Traditionally, the public sector has been a large player in Latin American banking systems. Views on this issue are extremely polarized. On the one hand, some economists suggest that the need for public intervention is particularly strong in economies where the

scarcity of capital, general distrust of the public, and endemic fraudulent practices among debtors may fail to generate the sizable financial sector required to facilitate economic development. On the other hand, other economists suggest that there is little economic justification for government ownership of banks and that the latter is only dictated by political goals. Chapter 11 tries to balance these points of view and unveils empirical evidence that tests them. It finds that state-owned banks do not play a useful role in expanding credit availability or directing credit toward small firms or sectors that require it the most. The chapter also shows that much of the existing evidence on the negative development role of state-owned banks is not as strong as previously thought, although there is no strong evidence that the presence of state-owned banks increases credit. Focusing on access to credit by different sectors, the evidence suggests that the credit access gap between large and small firms in countries with high public participation in commercial banks is larger than in countries with low levels of public banking.

There is evidence that public banks reduce borrowing costs for their customers. In fact, the Report shows that interest rates charged by public banks are lower than those charged by domestically-owned private banks (see Table 2.2). These lower rates are due to lower funding costs, which, in turn, are probably due to subsidies in the form of either implicit insurance or public sector deposits that pay low interest rates. It is difficult to say whether these subsidies are justified based on the argument that low-cost credit finances ac-

tivities that produce positive externalities. The presence of public banks neither seems to favor access to credit for small and medium-size enterprises, nor does it favor access to mortgage credit or credit by firms in economic sectors facing problems in tapping credit markets. What is clear is that part of the subsidy seems to be wasted because state-owned banks are characterized by higher net intermediation margins and higher overhead costs (Table 2.2). Moreover, public banks could be a source of instability, given that they are also characterized by a larger share of nonperforming loans.

Whether most banks are privately or publicly owned may also affect the volatility of the banking system. Private bank lending could overreact to recessions and amplify the business cycle. Although this problem could be addressed by government guarantees or subsidies, these actions could take time to materialize because they would likely require some sort of legislative action. Hence, public bank managers that internalize the benefits of increasing credit during recessions may play a useful role in smoothing credit cycles.<sup>6</sup>

The evidence on the stabilizing role of public banks is still extremely limited and somewhat controversial. One view argues that, compared with the behavior of private banks, public bank lending reacts less to macroeconomic shocks, that is, lending decreases less during recessions and increases less during expansions. Another view claims that the effectiveness of monetary policy is reduced (and not enhanced) by the presence of state-owned banks. From a microeconomic perspective, Chapter 11 presents evidence that in the case of Latin America, credit extended by public banks is less procyclical than credit extended by private banks. In addition, the chapter shows that the smoothing effect of public banks is particularly strong in periods characterized by slow growth of domestic deposits and periods when credit grows less than total demand deposits. In fact, empirical evidence also suggests that deposits of public banks are less procyclical than deposits of private domestic banks.

Although these results suggest that public banks may play a useful role in reducing credit procyclicality and hence in reducing business cycle fluctuations, it should be pointed out that this analysis focuses on bank-level variables and not on aggregate credit. If public banks were to crowd out private credit, it would still be possible that their presence could lead to greater credit volatility. Chapter 11 also presents evidence at the aggregate level and finds a negative but weak correlation between the presence of state-owned banks and the elasticity of credit to external shocks. This finding supports the microeconomic evidence that public banks do not amplify, and if anything smooth, credit cycles.

## RULES AND INSTITUTIONS BEYOND THE FINANCIAL SAFETY NET

A properly designed financial safety net is crucial for financial stability. But there are other rules and institutions that also help promote the stability of credit markets and financial institutions. Because of the characteristics of financial contracts, strong institutions are crucial to support deep and stable financial markets. When the ability to enforce loan contracts is imperfect, people are tempted to renege on their loans. Large and impersonal financial markets require not only an appropriate legal framework, but also adequate enforcement of the rights and responsibilities of each of the parties involved in the contract. Otherwise, financial contracts may become infeasible.

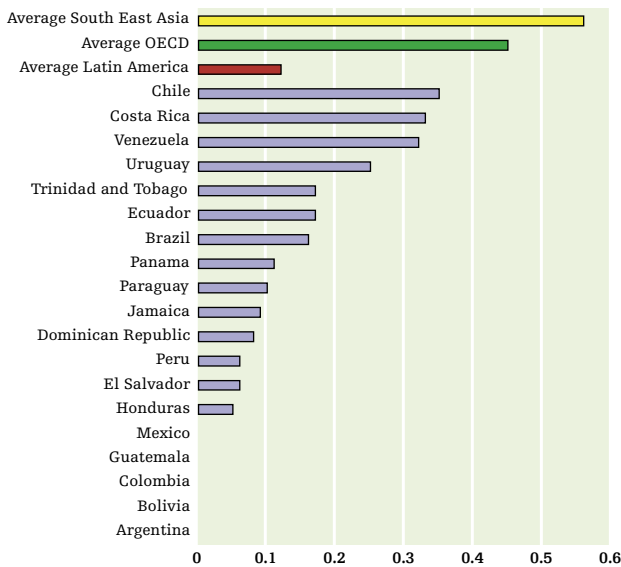
One of the major differences between developed financial markets and underdeveloped ones is the role played by property rights. The latter are crucial in order to exploit the benefits of using collateral in financial contracts. Collateral is an essential mechanism for dealing with several types of uncertainty that inhibit credit expansion. As shown in Figure 2.6, regulations and institutions do not provide sufficient protection of property rights in Latin American countries. In most countries, laws are not designed to protect creditor rights, tend to favor debtors in cases of dispute, and make it excessively costly for creditors to recover collateral in case of borrower default. In addition, the low levels of rule of law and of judiciary efficiency in the region make securing property rights even more difficult, costly, and inefficient.

But inadequate rules, regulation, and economy-wide institutions are not the only limitations for the expansion of credit markets in Latin America. In many countries in the region, the possibility of using collateral fails in several other dimensions. Titling and property registries tend to be weak and poorly managed, which makes it difficult for creditors to establish the priority and seniority of their claims to an asset that has been or will be pledged as collateral. In addition, in some countries property fraud is also a significant problem. This further limits the utility of property as collateral and consequently places serious constraints on access to credit.

The rights of creditors to the assets pledged as collateral and the cost of taking over collateral have a ma-

<sup>6</sup> The idea is similar to the argument that monetary policy has shorter implementation lags than fiscal policy. In this context, a case can be made in favor of contingent guarantees that activate in the event of a crisis.

**FIGURE 2.6 Effective Creditor Rights**  
(Index, 0-1)

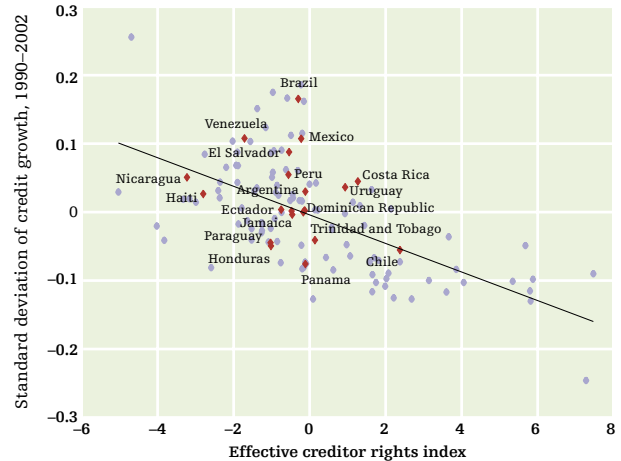


Note: The effective creditor rights index measures legal protection for creditors and the degree of law enforcement. The index ranges from 0 to 1. Higher values measure greater creditor protection.  
Source: La Porta and others (1998); World Bank (2003); Chapter 12 of this Report.

major role in explaining the depth of financial markets. By increasing the value of collateral, stronger creditor protection increases financial breadth and lowers the cost of credit. With low creditor protection, the chances for the borrower to recover collateral in case the borrower defaults are slim, and the value of the residual claim for the lender is likely to be very low. Increasing the value of collateral diminishes risk from the lender's perspective and aligns the lender's and the borrower's incentives to adhere to the credit contract, thereby increasing credit and reducing its cost. Moreover, as discussed in Chapters 12, 14, and 15, stronger institutions that protect creditors also facilitate access to credit for small firms and deepen mortgage markets. In short, better institutions not only increase the size of the pie, but also allow more players to access the pie.

In addition to promoting the depth of credit markets in general and reducing constraints on small and medium-size debtors in particular, creditor protection can also reduce the impact of adverse shocks over the credit cycle. If creditor rights are protected, when the economy faces an adverse shock that increases credit risk, the extent to which credit shrinks will depend on the regulations regarding collateral repossession. If creditors cannot recover the collateral pledged in case borrowers default, it is likely that the overall increase in credit risk experienced during a recession will be exac-

**FIGURE 2.7 Credit Volatility and Protection of Creditor Rights**



Note: The figure controls for the standard deviation of external shocks.  
Source: IDB calculations based on data from La Porta and others (1998) and World Bank data.

erbated by the fact that creditors will not even be able to recover the collateral. In such cases, the credit market overreacts to the exogenous shock, and credit strongly contracts. Figure 2.7 shows how countries with better creditor protection tend to have more stable credit.

Another item on the institutional development agenda that is needed to increase credit and reduce its cost is the improvement of credit bureaus and credit registries. Credit registries that collect standardized historical data on borrowers can create a new kind of collateral: reputation collateral, which can help in lowering the information and moral hazard hurdles that are common in credit contracts. Moreover, credit-scoring technologies that make use of such data greatly reduce loan costs and open up new lending opportunities, especially for relatively opaque clients such as consumers or small and medium-size enterprises.

Credit registries play a substantial role in the development of credit markets. Financial development, measured as the ratio of private credit to GDP, is greater in countries that have either a public or a private credit registry than elsewhere. Chapter 13 discusses how these institutions can be particularly relevant in boosting the performance of less developed financial systems where information and moral hazard problems are more acute.

The use of data from credit registries to assess borrower risk can also have a significant impact on interest rates charged to clients. Lack of specific information about clients leads to charging high average interest rates, punishing good debtors while allowing risky bor-

rowers to obtain credit at interest rates lower than those according to their risk. With better knowledge about clients and their behavior, lenders can more easily attach a default probability to a client and hence assign a more accurate interest rate to the loan. Clearly, this practice tends to favor the best borrowers. Evidence discussed in Chapters 13 and 14 also reveals that small and medium-size enterprises tend to gain greater access to credit markets in countries where credit registries are more developed. Despite the fact that much has been done in the region in the past few years, there is still a long way to go, particularly in developing methods to guarantee the quality of the data in the credit registries and in solving legal issues related to information sharing.

The rising trend in the development of credit registries may also help to diminish financial volatility. In addition to their contribution to the development of financial markets, credit registries can also be used to reduce certain vulnerabilities. Proper use of credit registries can reduce the nonperforming loan ratio of a banking institution by allowing creditors to sort good and bad debtors before granting credit. Chapter 13 shows how the use of credit registries has reduced default rates in Latin American banks. Lower credit risk implies lower volatility. Credit registries might also be used for prudential supervision purposes. As discussed in Chapters 13 and 16, credit registries can play a very important role in assessing whether capital and provisioning regulations match up to actual lending risks.

### **CURRENT AND FUTURE CHALLENGES: THE ROAD AHEAD**

Deepening credit markets, facilitating access to banking services, and lowering the cost of credit and reducing its volatility are undoubtedly issues of great concern in Latin America and the Caribbean, representing important hurdles that need to be crossed. Yet, the region must simultaneously address additional challenges that not only contribute to the objectives laid out above, but also deserve to be treated separately because they are at the center stage of current debate. Among them are the changing environment in international banking standards stemming from the new Basel capital accord (Basel II) and the challenges imposed by money laundering. The final chapters of the Report address these issues.

Chapter 16 discusses how to face current transformations in international regulatory standards. Currently, the Basel accord on banking regulation and

supervision is going through a period of enormous transformation. If and how Latin America and the Caribbean should adopt the new accord known as Basel II are crucial questions for policymakers across the region. The view of the Report is that countries should be extremely careful in the adoption of Basel II and should not hurry in this direction without first guaranteeing stronger compliance with the basic core principles of supervision and regulation. Moreover, as compliance with the core principles advances, some of the issues in Basel II will be covered, and the transition will be much smoother. While the importance of the driving ideas of Basel II are completely acknowledged and recognized, there are several concerns on implementation issues, especially those concerning capital requirements. Clearly, there is a strong need to develop methods that truly link risks with capital requirements; however, the methods proposed in Basel II cannot be easily implemented in Latin America and the Caribbean. Chapter 16 proposes a method for dealing with the transition.

In the context of increased drug trafficking and terrorism finance, there is much concern about money laundering. This is not unfounded, as rough estimates of money laundering in the region show it to be somewhere between 2.5 and 6.3 percent of annual regional GDP. The region has embarked on international cooperation as well as new or updated legislation to deal with this problem. Yet, money laundering is an important threat judging by the fact that some variables that are potentially linked with it are being dealt with only partially. Specific legislative measures deal in part with improved soundness of the banking system or greater development of the financial sector; however, countries should also deal with the issue that law giving is not equal to law abiding; in other words, monitoring and enforcement are crucial.

A successful fight against money laundering in the region requires a comprehensive view of the full picture, for which it is important to understand the true dimension of its pervasiveness. In this context, some of the structural weaknesses in the region contribute to thriving money laundering activities and, as long as such weaknesses are not properly dealt with, purely legislative measures may not suffice. The road map is challenging, as discussed in Chapter 17. Countries in the region should consider at least five challenges in the fight against money laundering: a sound of banking system, greater development of capital markets, improvement in the quality of institutions, good corporate governance, and a reduction in the size of the underground economy.

