Latin America's Banking Systems in the 1980s

A Cross-Country Comparison

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Felipe Morris
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ABSTRACT

This study compares the financial sectors of 12 Latin American countries, using a common methodology to gather and process the data, and to analyze the issues. The following 12 countries were studied: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guatemala, Honduras, Mexico, Peru, Uruguay, and Venezuela. The main objective of the study is to better understand the role and performance of the banking systems of the countries selected. The study has two specific objectives: (i) to improve our knowledge of the banking sectors of specific countries, through individual country surveys done on the 12 selected countries; and (ii) to identify what lessons can be learned from a cross-country comparison of the information drawn from these country-specific studies. To a large extent these objectives were accomplished. The study made a cross-country comparison of trends and issues based on individual country studies, highlighting similarities and differences. The study followed trends over time within countries and looked at common trends, similarities or differences across countries.

The report is composed of six chapters. Chapter I describes the structure, size and evolution of Latin American financial systems in the period between 1980 and 1987, and examines financial deepening and deposit mobilization. Chapter 2 analyzes the impact of macroeconomic policies on the financial system, and summarizes the effects of the 1981-83 recession and the foreign debt problem on the savings-investment process in Latin America. Chapter III reviews the financial condition of banking systems in Latin America. Chapter IV studies the main economic regulations which affect Latin American banking and financial systems, highlighting their main effects and making recommendations for improvement. The main regulations studied are: interest rate policies, directed credit guidelines, reserve requirement policies, and the role of the Central Bank. Chapter V analyzes prudential regulation and supervision. Finally, Chapter VI examines banking crises in selected Latin American countries and studies the mechanisms which countries have used to resolve them. Deposit insurance is also reviewed in this chapter.

The report has only been able to partially achieve its objectives because of the difficulties in obtaining comparable data. Nonetheless, by providing a cross-country description of banking sector issues in Latin America and of the experience of various Governments in trying to resolve them, it will likely be useful to policy makers, regulators, and other readers interested in Latin America's banking sectors. It provides a wealth of systematic information on a large number of banking sector topics. The report covers the main issues which affect the development of banking and financial systems in Latin American countries: the importance of adequate macroeconomic environments, the negative effects of misusing the banking systems to finance Government deficits, the perverse effects of interest rate controls, the misallocation possibilities of directed credit policies, the high costs of mishandling banking crises, and the crucial importance of an adequate framework of prudential regulations and supervision.
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SUMMARY AND CONCLUSIONS

Background

1. Since the early 1980s, the World Bank has substantially increased its work on the financial sector, reflecting the need to better understand countries' financial systems and their contribution to investment and growth. The LAC Region has sponsored various comprehensive and less ambitious financial sector studies for specific countries. Among the comprehensive reports were: Brazil (1983, 1989), Peru (1984), Argentina (1986), Ecuador (1986), Bolivia (1988), Costa Rica (1987), Venezuela (1989) and Guatemala (1989). Less extensive reports were produced for Chile (1983), Colombia (1983), and Uruguay (1985). These reports have enriched our understanding of financial sector issues. However, they are not contemporaneous and have used different techniques and methodologies, making cross-country comparison difficult. This study compares the banking systems of 12 LAC countries, using a common methodology to gather and process the data, and to analyze the issues. This broader cross-country perspective facilitates a superior comparison of trends, patterns and issues across Latin American countries.

2. The main objective of the study is to better understand the role and performance of the banking systems of the countries selected. The study has two specific objectives: (i) to improve our knowledge of the banking sectors of specific countries, through individual country surveys done on the 12 selected countries; and (ii) to identify what lessons can be learned from a cross-country comparison of the information drawn from these country-specific studies. To a large extent these objectives were accomplished. The study made a cross-country comparison of trends and issues based on individual country studies, highlighting similarities and differences. The study followed trends over time within countries and looked at common trends, similarities or differences across countries.

Country Selection

3. The following 12 Latin American countries were selected for the study: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guatemala, Honduras, Mexico, Peru, Uruguay, and Venezuela. The criteria used for country selection were: (i) size of the country; (ii) importance of recent financial sector experience; (iii) recent Bank involvement in the sector; and (iv) possible future involvement of the Bank in sector work or lending. It should be noted that when referred to the "region", it comprises the 12 countries previously mentioned, unless otherwise specified.

Structure of the Report

4. The report is composed of six chapters. Chapter I describes the structure, size and evolution of Latin American financial systems in the period between 1980 and 1987, and examines financial deepening and deposit mobilization. It includes a "regional" analysis of financial depth and a comparative review of country experiences. Chapter II analyzes the impact of macroeconomic policies on the financial system, and summarizes the effects of
the 1981-83 recession and the foreign debt problem on the savings-investment process in Latin America. Chapter III reviews the financial condition of banking systems in Latin America, analyzing changes in assets, liabilities and equity, profitability, liquidity, spread analysis and asset quality. The analysis in the chapter is heavily constrained by the poor quality of the information available in the various countries and the lack of comparability of the data across countries. Poor information is not only due to lack of appropriate disclosure, but also to inadequate regulatory standards which result in financial statements which do not reflect the real financial condition of banking institutions. Chapter IV studies the main economic regulations which affect Latin American banking and financial systems, highlighting their main effects and making recommendations for improvement. The main regulations studied are: interest rate policies, directed credit guidelines, reserve requirement policies, and the role of the Central Bank. Chapter V analyzes prudential regulation and supervision. Finally, Chapter VI examines banking crises in selected Latin American countries and studies the mechanisms which countries have used to resolve them. Deposit insurance is also reviewed in this chapter.

The report has only been able to partially achieve its objectives because of the difficulties in obtaining comparable data. While we knew from the outset that the task would be difficult, we underestimated the magnitude of the data problems. Furthermore unstable exchange rate policies followed by countries across time reduced the value of a common numeraire when comparing cross-country data converted from local currencies into the numeraire (the US dollar). In addition, since countries have specific legal environments and institutional histories, each country was found to have significant differences in accounting rules, authority structures for Central Banks and Superintendencies, types of institutional experience in financial intermediation, political forces to contend with, and approaches to economic policy. Nonetheless, by providing a cross-country description of banking sector issues in Latin America and of the experience of various Governments in trying to resolve them, the report will likely be useful to policy makers, regulators, and other readers interested in Latin America's banking sectors. The study also pointed out: (i) how a comparative methodology explains as much the differences between countries' banking systems as the similarities, and (ii) while comparative experience is helpful, banking sector reform has to be tailored to the economic, political and institutional characteristics of each country individually.

Main Findings

6. **Financial Deepening.** Cross-country data presented in the report showed that the overall context of macroeconomic instability in the region coupled with poor prospects for investment and savings has dramatically affected the development of Latin America's financial systems and halted the process of financial deepening in many of the countries. The report also found that financial deepening, measured as M1/GDP and M2/GDP, vary tremendously between countries and across time. On average, Peru, Brazil and Bolivia had the lowest M2/GDP ratios of the region during 1980-87. On the other side of the spectrum, Venezuela, Honduras and Colombia, had the highest average M2/GDP ratios of the 12 countries studied. Venezuela'sler ratio averaged 38% while Bolivia's ratio averaged 11%. The level of financial intermediation was very much linked to the level and stability of inflation and to the positivity of interest rates. Low level and volatility of
inflation and positive deposit rates implied higher levels of financial intermediation.

7. **Financial Condition of Banks.** The assessment of the real financial condition of banks was hampered by inadequate accounting and prudential regulations and weak supervision. The cross-country comparison of the condition of banks was further affected to a significant degree by cross-country differences in accounting and valuation rules and enforcement. Despite these limitations an attempt was made to study the financial condition of banks in the 12 countries studied. The average ratio of capital and reserves to assets for the 12 countries studied increased from 6.4% in 1980 to 7.5% in 1987. When Argentina and Bolivia are excluded from the average, the ratio decreased. When one factors in inadequate provisioning for non-performing loans and inadequate institutional supervision, capital adequacy has indeed declined from 1980 to 1987. Data on asset quality also shows an important deterioration. For the 12 countries studied, the average non-performing loans as a percentage of total loans increased dramatically from 5.8% in 1981 to 10.9% in 1983, and jumped to 13.7% in 1987. Loan quality deteriorated during the 1980s as a result of: (i) macroeconomic difficulties, (ii) poor lending practices, and (iii) improvements in supervisory practices in a few of the 12 countries. Another indicator of asset quality is loan-loss-coverage, the ratio of provisions to non-performing loans. Figures showed an improvement during the 1980s since coverage increased from 45% in 1980 to 78% in 1987. A critical issue was the extent to which doubtful loans were covered by provisions. Unfortunately in several Latin American countries, banks are not required to provision for doubtful loans.

8. Conclusions on bank profitability should be treated cautiously because of the major difficulties with the data which are detailed in Chapter III. Returns on average assets have been erratic from 1981 to 1987 and have varied significantly across countries. On average, return on assets deteriorated almost steadily throughout the period. Returns on average equity also vary considerably across countries and are highly erratic within. Furthermore, some countries show huge ROEs, not consistent with developments in their real sectors. Returns on average equity also showed a deterioration between 1981 and 1987. Data on average spreads (the difference between the average real deposit and lending rates) show high levels in most countries, indicating important inefficiencies in the financial intermediation of these countries. Average annual spreads increased from 5.2% in 1981 to 7.5% in 1987, reflecting higher intermediation costs in the "region".

9. **Economic Regulations.** The banking systems of Latin American countries have been affected by a large number of economic-type regulations which in most cases increased financial intermediation costs, encouraged capital flight and reduced deposit mobilization. Economic-type regulations include interest rate controls, directed credit guidelines, barriers to entry, and exchange rate policies. Many financial systems were overburdened by economic regulations. In addition, in most countries the Central Bank plays a very large role in financial intermediation, introducing serious distortions in the financial system of their countries, and hindering the achievement of its main objective which is fostering economic growth with price stability.

10. **Interest Rate Policies.** During the 1960s and most of the 1970s, in most Latin American countries, interest rates in the institutionalized credit markets were subject to administered ceilings which hampered the growth
of financial intermediation. In the 1980s many countries freed term deposit and lending rates but there remain an important segmentation between free markets and markets with controlled rates for directed credits. In other countries, however, continuing interest rate ceilings on the most important type of bank deposits (savings and current accounts) have limited the size and efficiency of intermediation, and increased banking spreads in most countries in Latin America.

11. For the "region" as a whole, average real interest rates for deposits have been negative in most years, with the exception of 1982 and 1983. They became highly negative from then until 1986, and moderately negative in 1987. The overall picture includes tremendous variations between countries, adding the elements of uncertainty and instability to already weakened financial systems, in some cases resulting in a substantial decrease of real bank deposits. Negative real interest rates were not always the result of conscious policy decisions, but followed from overall fiscal policies, including the way deficits were financed, monetary policies and exchange rate policies. Nonetheless, the report shows a positive trend: in 1987 only four countries had negative deposit rates compared to seven in 1980. There seems to be a recognition that interest rates should not be used as a means to provide subsidies and that negative rates discouraged financial savings.

12. The average real lending rate for the 12 countries over the 1980-87 period was 4.8% per year. Rates vary significantly between countries and across time. In December 1987, Bolivia, Argentina and Uruguay had real lending rates above 20% p.a., while Peru and Venezuela had negative lending rates. Of the 12 countries, Peru is the only one which has had negative lending rates throughout the period. Bolivia had negative rates through mid-1985, and positive thereafter. While it is encouraging that most countries have positive rates, it is worrisome that in several countries real lending rates are extremely positive, at levels far above the marginal efficiency of capital of their economies. If rates remain at these high levels they could produce widespread insolvency of private borrowers and financial institutions and reduce real investment significantly.

13. High Reserve Requirements. Faced with strong variations in foreign capital flows, sporadic interventions to bail out banks in distress, and the need to finance budget deficits, Central Banks in many Latin American countries have resorted to high reserve requirements as the basic tool to reduce the inflationary impact of expansionary fiscal policies. In most countries, and especially in the smaller ones, the stock of outstanding liquid government securities is too small to be used to influence reserves through open market operations. As a result, only direct intervening measures, such as rediscounts and the imposition of reserve requirements, are available to central bankers to influence the quantity of money. Until such time as adequate open market operations are developed, Latin American countries will continue to depend on second best instruments to affect monetary aggregates.

14. While governments may find some uses for reserve requirements, high reserve requirements have negative effects on the financial system. High levels of immobilized deposits place an unusual proportion of the inflation tax on the financial sector, which is either passed on to depositors in the form of lower deposit rates, resulting in lower intermediation, or to borrowers in the form of higher interest rates. The most likely result of high reserve requirements is that bank reduce deposit rates, encouraging
savers to shift their deposits toward financial institutions and instruments that are not subject to such a cost, particularly the informal and some over-the-counter markets. Thus, it leads to the underutilization of banking services. Differential reserve requirements by type of deposits or institutions have a similar effect.

15. **Credit Allocation and Directed Credit Guidelines.** All Latin American countries direct a portion of total credit for specific uses. Some, like Brazil and Colombia, use directed credit policies extensively, while others, like Chile, use them very little. In Latin American countries, as in many other developing countries, governments direct the allocation of credit through various mechanisms. The most common means of directing credit to preferred activities are: (i) Central Bank rediscounting of commercial bank loans, (ii) specific lending by government-owned financial intermediaries, such as development banks; (iii) regulations mandating banks to lend certain share of their loan portfolios to specific purposes; and (iv) requiring lower reserve requirements from financial institutions which dedicate certain shares of their loan portfolio to lending to "priority" sectors or geographic areas.

16. Elimination of the directed credit system is desirable not only from the standpoint of efficient resource allocation, but also to reduce the incentive to create ownership linkages between financial institutions and their borrowers, a major cause of the recent portfolio problems of the financial sectors in most countries in Latin America. The interest rate subsidies usually involved in directed credits encourage bankers to lend these resources to related parties which do not necessarily have the projects with the highest returns.

17. **Large Intermediation Role of the Central Bank.** Central bank operations in many Latin American countries largely exceed the typical function of monetary authorities—that is the control of the money supply and aggregate credit to a level leading to the maintenance of an adequate international reserves position. Governments in Latin America have added functions to those typical of central banks, to use them as instruments to channel funds to priority sectors and activities in an attempt to correct perceived market imperfections.

18. The report underscores the tremendous relative importance of central banks in Latin American economies. The ratio of Central Bank assets to GDP for the sample of countries studied, increased steadily from 35.8% in 1980 to 60.3% in 1984, the last year for which we have data for all countries. In contrast, the US Central Bank (Fed) in 1987 had total assets representing only 5.2% of GDP, almost all in claims on the central government.

19. The large role of the central banks in financial intermediation in many countries, resulting in financial repression, market segmentation and inefficiencies, calls for a restructuring of their functions and operations. Several Latin American countries, including Chile and Bolivia, have carried out studies of their Central Banking functions aimed at their restructuring. Chile has just passed a Law which provides to its Central Bank a level of autonomy similar to that of the Federal Reserve of the United States. Bolivia, Venezuela and Argentina are currently studying their regulatory frameworks to streamline the functions of their central banks, among other corrections.
20. **Banking Supervision and Prudential Regulations.** The report assessed the capacity of the Supervisory agencies to stay abreast of banking system developments and reviews the main prudential regulations in the various Latin American countries, commenting on their effectiveness. The following prudential regulations were reviewed: (i) existing guidelines for a system of loan portfolio classification and provisioning, (ii) rules with regards to rollover of loans, (iii) policies on accrual of interest on non-performing loans, (iv) limits to loan concentration, (v) minimum capital requirements, and (vi) information disclosure and external auditing requirements. This list by no means exhausts the list of areas which need to be regulated or supervised. Supervisors need to require bankers to pay attention to foreign exchange risk, liquidity, and interest rate risk. Paras 21 to 26 summarize the main findings on some of these regulations, and on the quality of supervision.

21. **Quality of Supervision.** Since 1979 several Latin American countries have made efforts to strengthen banking supervision with technical assistance from abroad. Important efforts have been carried out in Ecuador, Peru, Colombia, Chile and Bolivia to overhaul their banking regulatory frameworks and to modernize their Superintendencies of Banks. Mexico is currently preparing a program for modernization of its regulatory framework and banking supervision. Nonetheless, Latin American countries still have major deficiencies in the area of banking supervision and in their regulatory frameworks. In addition to the inadequacies in regulations highlighted in Chapter V, there are major deficiencies in the way bank supervisors carry out their functions. As a result of lack of resources or unclear mandates, financial analysis of banks is usually inadequate and bank examinations are infrequent and ineffective.

22. **Loan Classification.** About one-half of the countries covered in the study have adequate guidelines for the classification of the loan portfolios of banks. The following Latin American countries have mandatory guidelines on a uniform loan portfolio classification system based on risk of default: Chile, Argentina, Colombia, Peru, Ecuador, Honduras and Bolivia. Venezuela has a system but is only for internal use by bank examiners. Banks are not obliged to classify their loans or base their provisions on such a system. Other countries have unsatisfactory systems.

23. It is not only important to have an adequate system to classify the loan portfolio, but also to be able to monitor its implementation. In a large number of countries, the Superintendency of Banks or the agency which supervises the commercial banking system does not have the ability or the authority to ensure that banks are classifying their loans appropriately.

24. **Provisioning for Possible Bad Debts.** Provisioning is related to the loan classification system and institutional capacity of banks and regulators. Thus, in general those countries which have a strong loan classification system also have good provisioning policies. In several Latin American countries such as Brazil and Mexico, provisions are only required for overdue loans, and in many cases these provisions are quite insignificant. In other countries such as Venezuela and Guatemala, officials seem to be more concerned about the possibility of banks' provisioning too much to avoid taxes rather than about requiring banks to provision in accordance with the real status of the loan portfolio. There are some countries such as Venezuela which do not have an established policy for provisioning for possible bad debts.
loans. The Superintendency mandates the provisions on a case by case basis, frequently long-overdue. In Honduras loan provisioning is not linked to the loan classification system.

25. **Information Disclosure.** In most Latin American countries, banks are not obliged to publicly distribute their income statements. Some supervisory agencies argue that if banks publish weak financial results it could lead to runs. The counter argument is that regulators can use all the assistance they can get in ensuring that banks are well managed, and forcing banks to disclose their income statements would result in better managed banks. Chile has a very liberal information disclosure. The Superintendency of Banks publishes a summary of the financial statements of banks including their financial results, a summary of the status of the loan portfolio, lending to related parties and loan provisioning. Other countries, such as Argentina, Guatemala and Honduras do not require banks to publish their income statements.

26. **External Audit Requirements.** Most Latin American countries require external audits of banks' financial statements, but have not established precise guidelines on how these audits have to be carried out. Furthermore, only in a few countries the supervisory agencies pay for audits. Several Latin American countries have recently strengthened their audit requirements and increased information disclosure. Bolivia, for instance, requires two annual audits by external auditors, one of which is paid for by the Superintendency of Banks.

27. **Banking Crises and their Resolution.** In the 1980s, several Latin American countries experienced significant banking crises which can be classified as systemic. By this we mean that a significant proportion of the banking system became insolvent and that these insolvencies were at least partially motivated by macroeconomic (system-wide) events. In order to prevent public panic resulting in a run on the banking system as a whole, the governments of the various countries had to resort to different means to allay fears of lenders and restore public confidence. The most noteworthy cases in the 1980s were the banking crises of Argentina, Chile, Colombia and Uruguay. The financial systems of Ecuador, Bolivia and Mexico also experienced distress during this period. Other countries also faced isolated bank failures, which were dealt with in different ways.

28. In most Latin American countries banking crises emerged from four important causes: (i) macroeconomic instability, (ii) mismanagement, (iii) fraud, (iv) and banking failures in other countries which affected local banks which were either foreign subsidiaries or branches. Mismanagement and fraud were possible due to weak supervision and insufficient prudential regulations. Adequate prudential regulation and supervision can reduce banking failures due to mismanagement and fraud, but are less effective in preventing banking crises caused by macroeconomic instability stemming from, or at least aggravated by, inept public policies. Nonetheless, even in cases of macroeconomic instability, banking regulators should be able to inform the authorities in charge of economic policy of the negative impact of their policies on the financial system.

29. At the time when major crises developed, none of the countries had mechanisms to deal effectively with banking sector problems. Thus, solutions were implemented by trial and error, in many cases at a high cost to the
countries. A diversity of instruments was used in Latin America to handle banking crises. These include (i) requiring the development of rehabilitation and recovery plans of institutions whose solvency or liquidity is impaired, (ii) promotion of mergers, (iii) liquidation, and (iv) nationalization. In order to facilitate the rehabilitation process of failing banks, central banks in most countries granted provisional exceptions to certain regulations such as credit limits and capital adequacy ratios. To assist the problem banks, central banks provided new capital through loans and exempted banks from repayment or allowed them to defer payments. These mechanisms in many cases were used in an inconsistent, crisis-led fashion. Some countries established Deposit Guarantee Funds to insure deposits up to certain limit and serve as a mechanism to deal with bank insolvencies. Others, such as Chile decided to provide deposit insurance to small depositors, but not to link deposit insurance to bank rehabilitation or liquidation. Still others have yet to decide whether or not to provide deposit insurance and how to deal with bank insolvencies. In spite of the significant diversity in approaches to handle banking crisis, most of the countries studied have developed or are in the process of developing these mechanisms.

30. Guidelines for Handling Ailing Institutions. In most countries in the region, the banking law and regulations do not encourage the concerned Government agencies to take swift action for either the intervention, rehabilitation or liquidation of ailing financial institutions. In many countries the Superintendent requires approvals from the Minister of Finance and the President of the Central Bank before intervening a distressed financial institution. Past experience also shows that in many countries political pressures have prevailed and bank interventions have sometimes taken place either months or years after the Superintendency's petition. As a result, the losses were magnified. The common denominator of successful bank interventions is their timeliness. In Latin America former owners and managers have emptied the banks of their good assets by the time of intervention, thus leaving no possibility for recovery. This was possible due to lenient criminal penalties. Thus the importance of clear and simple guidelines which permit swift action and clear and enforceable legal penalties cannot be overemphasized.

31. Usefulness of Deposit Insurance/Deposit Guarantee Schemes. The study found that deposit insurance per se does not guarantee an appropriate solution to financial crises. This was the case of FOGADE in Venezuela and to a lesser extent of FOGAFIN in Colombia. Their laws did not give them an adequate mandate and the appropriate mechanisms to rehabilitate or liquidate insolvent banks.

32. A well functioning deposit insurance needs to be equitable and have credibility. These characteristics have been missing in most systems established in Latin America. There are several operating principles which should characterize any deposit insurance system which attempts to be successful: (i) to act in a decisive and timely manner to resolve bank failures, (ii) to only administer or provide financial support to institutions in which it holds majority ownership, (iii) to require all institutions with the same characteristics and faculties to offer the same deposit protection, (iv) it should enjoy full financial backing from the Government and be adequately funded from the outset, (v) its finances should be transparent with clear accounting and disclosure of costs and income, (vi) it should have decision-making authority, (vii) it should have private sector participation
in decision-making and management, and (viii) should only offer partial deposit insurance.

33. None of the explicit deposit insurance systems in Latin American countries studied have all these operating principles, or even the majority of them, in place. As a result, unless major modifications are made in their by-laws or in their procedural rules, it is very likely that they will not be able to carry out the purpose of their creation: to promote banking stability in order to increase financial savings through the development and growth of financial intermediation.

Conclusions

34. The report does not provide entire new approaches to financial sector issues but, rather, provides a cross-country empirical description of these issues. It covers the main issues which affect the development of banking systems in Latin American countries: the importance of adequate macroeconomic environments, the negative effects of misusing the banking systems to finance Government deficits, the perverse effects of interest rate controls, the misallocation possibilities of directed credit policies, the high costs of mishandling banking crises, and the crucial importance of an adequate framework of prudential regulations and supervision.

35. The report shows that while it is not always possible to make cross-country or regional generalizations, in most of the countries studied there has been or continues to be a combination of excessive economic regulation with insufficient supervision and inadequate prudential regulation. Economic regulations include interest rate controls, policies resulting in high reserves, directed credit, barriers to entry, and exchange rate policies which have introduced major inefficiencies in the financial intermediation process and have encouraged capital flight and disintermediation.

36. The inadequacy of their prudential regulatory frameworks was particularly evident in the southern cone countries (Argentina, Chile, and Uruguay), which carried out broad based programs to deregulate their financial systems in the second half of the 1970s, and were faced with financial crises of major proportions in the early 1980s. These crises were prompted by financial liberalization in the context of macroeconomic instability, aggravated by errors in policies (such as the utilization of overvalued exchange rates to combat inflation), and inadequate supervision and prudential regulations. These disastrous liberalization experiences, have in the recent past, and continue to be used, by politicians and economists in the region to discourage financial liberalization per se. If sequenced properly, and in a context of relative macroeconomic stability, financial liberalization is not only feasible but also necessary for the resumption of growth and reduction of capital flight. Full liberalization of the system should follow the strengthening of the regulatory and supervisory framework and the re-establishment of sustainable macroeconomic stability.

37. The report also shows that many countries are aware of the importance of balanced regulations to the health of their financial systems and as a result have either overhauled their regulatory frameworks or are in the process of doing so. Several countries such as Chile, Bolivia, Ecuador and Colombia have also made important efforts at strengthening and modernizing banking supervision. Nonetheless, most countries still have a long way to go.
While it is clear that the "debt crisis" had been building for years, it is now customary to date the crisis from Mexico's August 1982 announcement that it could not maintain its amortization payments. In the two or three years following Mexico's announcement, it was believed that, if they adjusted their economies appropriately, indebted developing countries, including Latin American, could return to world financial markets and resume growth. It is now clear that this outcome was unlikely. The wrenching adjustments of the 1980s have established the foundation with which Latin American countries will grow or fail to grow in the 1990s. It is accepted that external finance and direct and portfolio investments are likely to remain virtually nonexistent or extremely limited in each of the countries studied. It is essential, therefore, that they increase the international competitiveness of their economies, limit their public-sector borrowing requirements, and mobilize domestic resources and allocate them more efficiently.

In order to do so, these countries must strengthen their financial systems. Only if financial systems are capable of mobilizing resources efficiently at internationally competitive rates of return can these resources then be applied to finance genuinely productive activity. Further, financial resources cannot be used to support unproductive public-sector financing needs or inefficient private investment. At a minimum, policy-makers must refrain from the self-defeating policies that have often prevented financial systems from contributing to stabilization. These policies have included high reserve requirements to finance budget deficits, interest rates policies resulting in negative deposit rates, directed credit guidelines which misallocated resources in the economy, and overvalued exchange rates. Better yet, they must implement strategies to encourage the rehabilitation and recapitalization of their banking systems to be able to grow efficiently in the tough environments of the 1990s.
I. STRUCTURE AND SIZE OF FINANCIAL SYSTEMS IN LATIN AMERICA

A. Principal Institutions

1.01 Financial intermediaries in the countries studied consist primarily of public and private (domestic and foreign) commercial banks as well as other financial institutions. These other financial institutions consist of development finance institutions (DFIs), savings and loans, provident and pension funds, investment companies, and insurance companies. Also included are stock exchanges, investment banks, trusts, mutual funds and brokerage houses.

1.02 While most financing in Latin America is short-term due to macroeconomic difficulties and loss of confidence, even before these difficulties, commercial banks traditionally served primarily as sources of short-term finance. Other intermediaries such as credit unions, credit cooperatives, and finance companies often also make short-term loans for private consumption and working capital of small- and medium-size enterprises.

1.03 Institutions traditionally catering to longer term financial instruments have been mortgage banks, savings and loans, and development finance institutions (DFIs). Further, provident and pension funds, insurance companies, venture capital companies, mutual funds, and brokerage houses have all invested in long-term projects.

1.04 Central banks in Latin America are at a minimum responsible for the formulation, execution and supervision of monetary policy. This includes control over the monetary base, open market operations, interest rates, legal reserve requirements, foreign exchange rates and levels of rediscounted credit. In addition, the Central Bank may establish lines of discounted credit for targeted sectors or rules by which private banks are forced to lend to these sectors; as well as portfolio ceilings to banks' lending capacity. The Central Bank is also often the lender of last resort that has the power to work with the Superintendency in forcing bank changes. In several instances in the countries studied, Central Banks have used lines of credit as a means to target development in specified sectors. The large intermediation role that Central Banks by and large have played in Latin America is covered in Chapter II.

Commercial Banks

1.05 As Table 1.1 indicates, Commercial banks hold the vast majority of financial institution assets for the countries studied. Only in Mexico and Peru do commercial banks hold less than 50% of total assets. Indeed in Chile, Ecuador, and Uruguay, commercial banks hold over 85% of such assets. Commercial banking has a large role in Latin American countries because they are the institutions which typically engage in short-term financing, and the Latin

1/ It is important to note that total assets include non-financial assets and non-performing assets. This overestimates the significance of the more leveraged institutions, namely commercial banks.
American financial systems, due to a combination of factors which are analyzed elsewhere in the report, are currently only able to mobilize short-term resources domestically.

Table 1.1: ASSETS OF FINANCIAL INSTITUTIONS, 1987
(As % of Total, Not Including Central Bank Assets)

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Argen-</th>
<th>Brazil</th>
<th>Bolivia</th>
<th>Chile</th>
<th>Colombia</th>
<th>Ecuador</th>
<th>Guatemala</th>
<th>Honduras</th>
<th>Mexico</th>
<th>Peru</th>
<th>Uruguay</th>
<th>Venezuela</th>
<th>Avg.</th>
<th>Std. avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>25.0</td>
<td>48.5</td>
<td>28.3</td>
<td>13.2</td>
<td>43.7</td>
<td>6.5</td>
<td>24.0</td>
<td>36.9</td>
<td>53.6</td>
<td>66.1</td>
<td>7.8</td>
<td>28.3</td>
<td>31.7</td>
<td>17.8</td>
</tr>
<tr>
<td>Foreign</td>
<td>22.6</td>
<td>47.7</td>
<td>28.3</td>
<td>12.4</td>
<td>36.6</td>
<td>6.5</td>
<td>24.0</td>
<td>35.7</td>
<td>53.4</td>
<td>66.1</td>
<td>14.1</td>
<td>31.6</td>
<td>17.6</td>
<td>55.8</td>
</tr>
<tr>
<td>Public</td>
<td>20.7</td>
<td>7.4</td>
<td>21.2</td>
<td>1.3</td>
<td>8.4</td>
<td>4.0</td>
<td>14.2</td>
<td>12.6</td>
<td>50.5</td>
<td>47.1</td>
<td>2.6</td>
<td>17.3</td>
<td>16.2</td>
<td>93.7</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
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<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total no. of bank. inst.</td>
<td>167</td>
<td>133</td>
<td>16</td>
<td>37</td>
<td>26</td>
<td>40</td>
<td>18</td>
<td>16</td>
<td>21</td>
<td>24</td>
<td>23</td>
<td>39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total no. of non-bank fin. inst.</td>
<td>83</td>
<td>322</td>
<td>34</td>
<td>87</td>
<td>206</td>
<td>22</td>
<td>21</td>
<td>42</td>
<td>74</td>
<td>52</td>
<td>32</td>
<td>124</td>
<td></td>
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</tr>
</tbody>
</table>

Source: IBRD staff estimates based on country studies.

1.06 Private commercial banking may be both domestic or foreign owned, depending on restrictions on foreign ownership (see Barriers to Entry in Chapter V). Many foreign owned banks or branches have their roots in providing trade financing or foreign exchange transactions for external companies. Of the 12 countries studied, all except three had foreign owned banks representing less than 5% of assets. Only Argentina (14.9%), Chile (17.5%) and Uruguay (33.3%) had greater amounts. In the Uruguayan case, foreigners held all private commercial banks and in Argentina over half. Regional banks also play an important role in several countries, including Mexico, Brazil, Venezuela, and Peru.

1.07 Government owned commercial banks supply a large portion of credit in several of the countries studied including Argentina (37.6%), Brazil (38.6%), Ecuador (55.8%), Mexico (46.4%) and Uruguay (59%). In Guatemala and Honduras, public commercial banks supply very low levels of overall credit. Since many of these public commercial banks have specific developmental objectives, they are indeed very similar to development finance institutions indicated below. In Mexico for example, development banks exist devoted to industry, public works, agriculture, fisheries, armed forces personnel and export financing. In addition
to these development banks, in Mexico there are also development funds which channel financial support for development through financial institutions.

1.08 While most Latin American countries have public ownership or equity participation in commercial banking, control is often exerted through the legal and supervisory structure as much as through direct ownership. In many cases, direct ownership of commercial banks by the Government came about because of bail outs of banks in financial crisis rather than through a specific program of nationalization.

1.09 It should be noted that different countries studied have placed varying degrees of restrictions on the operations and services banks can perform. In a majority of countries, activities other than short-term lending are restricted in order to minimize the risk to a bank's portfolio presented by these other operations. Mexico, in accordance with its long tradition of close association between bankers and industrial groups, has a universal banking system in which banks underwrite, issue and trade in corporate securities. In Argentina, Bolivia, Chile and Uruguay, banks are able to supply limited related services such as credit cards, trade financing and trust management. Further, banks in these countries can lend at any length of maturity, intermediate in foreign exchange and trade public securities (bonds and bills).

Development Banks

1.10 In several of the countries studied, an important share of the financial system consist of development finance institutions (DFIs). DFIs are mostly government-owned although there are countries, such as Colombia, where successful private DFIs coexist with some government-owned. According to a recent study by ALIDE, 75% of DFIs in the region are either totally or mostly owned by governments. These DFIs account for 96% of the asset base and 98% of total capital of all DFIs in the region. Argentina, Bolivia, Guatemala, Mexico and Peru are examples of countries with large public sector DFIs. DFIs can either have multisectoral or sectoral responsibilities. Over 60% of total assets of DFIs are held by institutions which have multisectoral activities. In the twelve countries studied the public sector owns development banks which have sectoral responsibility. The sectors typically covered are: agriculture, industry, housing and mining. Most were created by the governments in order to channel resources to priority sectors. DFIs receive public funds and have in general held a privileged position as one of the remaining recipients of continuing flows of funds into Latin America from multilateral institutions. DFIs also often provide technical assistance.

1.11 DFIs' credit in most cases has been given at preferential rates, and unfortunately in the majority of the studied countries, continue to be provided at below-market rates. ALIDE's study shows that at least 75% of the loan portfolios of more than one-third of development banks in the region has been lent at preferential rates. Preferential lending is even more prevalent in the case of public sector DFIs (41% of DFIs have provided more than 75% of their loans at preferential rates). Although preferential lending continues to

be a main characteristic of DFIs lending in LAC countries, there has been a trend in recent years to lend at positive real interest rates. ALIDE's study reports that while in 1984 the maximum real lending rates of DFIs was negative in 10 countries, in 1986 it was negative in only 6 countries. This is a positive development.

1.12 The weak financial condition of DFIs continues to be a major problem. This is partly the result of high operating costs but also due to the high proportion of non-performing loans. In 1986, more than 40% of DFIs in the region had at least 20% of their portfolio in arrears. In the case of publicly-owned DFIs, 7 out of 80 reporting DFIs had arrears ranging from 50 to 100% of their loan portfolios. This high levels of arrears, in spite of being provided at preferential rates in many cases, point to inadequate credit and project evaluation. Because DFIs generally have developmental objectives, many have been reluctant to enforce asset seizures for non-performing loans in those sectors they were supposed to support. As a result, directed credits have often become non-performing and DFIs became insolvent.

Savings and Loans

1.13 Other non-bank financial institutions include savings banks (S&Ls) also known in Latin America as "mutuales". S&Ls in Latin America, as in other countries, are institutions for the most part established to finance housing. S&Ls range in importance from 43% of total assets of the financial system in Mexico to 0.2% in Uruguay. The S&L system in most of Latin America is privately-owned. As is the case with the S&L system in the United States, the S&L system in many Latin American countries is undergoing a tremendous crisis. While this report concentrates on banking in Latin America, it is important to provide a brief description of the reasons for the maladies of the S&L system in Latin America. These problems include: (i) an uncertain function in a marketplace which has strong preference for short-term liabilities and strong competition for loans and deposits, (ii) structural mismatch between assets and liabilities which make them very vulnerable to liquidity crises, (iii) inadequate capital due to the small or non-existent capital base which is generic of an S&L institution, and (iv) dependency on government subsidies to survive, in a context in which most Latin American countries are experiencing significant budget constraints.

Capital Markets

1.14 The development of securities markets throughout LAC countries has been mainly affected by economic stagnation and government intervention. Without economic growth, profits are not high enough to cause the appreciation of shares and firms have problems raising equity capital and servicing their debts. On the other hand, in many countries Government policies hamper the development of capital markets because they lead to instability and repress financial intermediation. Furthermore, tax systems tend to impose heavy burdens on capital market instruments. Situations of high stamp taxes and double taxation of dividends are very common throughout Latin America.

1.15 All the 12 countries studied have stock exchanges. Some of them have just been established recently, such as: Guatemala (1986), Bolivia (1989) and Honduras (1989). Short-term instruments are traded extensively in LAC stock exchanges, probably due to the short-term nature of financial markets in these
countries. For instance, in Montevideo TBs are the securities mostly traded, while in Mexico the CETES (CDs), banker's acceptances and commercial paper are the main instruments traded. Transactions in equity stock are almost insignificant due to high instability in price and volume. Markets are not very liquid.

1.16 The recent evolution of capital markets in Latin America, particularly of the stock markets, reflects a lackluster performance and their tremendous growth potential if countries can overcome their macroeconomic problems. Table 1.2 shows the evolution of market capitalization of the main stock markets in Latin America. Figures show that several Latin American markets are shrinking, probably as a result of a deterioration in the price of stock coupled with a reduction in the number of listed companies. Figures show the significant reduction in market capitalization in the Chilean, Argentine, Colombian and Venezuelan markets. The data also show the large fluctuations experienced by stock markets in Latin America, including the Sao Paulo Exchange, the largest in the region. Finally, Table 1.2 also shows the recovery of the Chilean, Mexican and Venezuelan markets since 1986.

Table 1.2: MARKET CAPITALIZATION
(In US$ Millions)

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>3,864</td>
<td>2,056</td>
<td>974</td>
<td>1,386</td>
<td>1,171</td>
<td>2,037</td>
<td>1,591</td>
<td>1,519</td>
<td>2,025</td>
</tr>
<tr>
<td>Brazil (Sao Paolo)</td>
<td>9,160</td>
<td>12,598</td>
<td>10,249</td>
<td>15,102</td>
<td>28,995</td>
<td>42,768</td>
<td>42,096</td>
<td>16,900</td>
<td>32,149</td>
</tr>
<tr>
<td>Chile</td>
<td>9,400</td>
<td>7,050</td>
<td>4,395</td>
<td>2,599</td>
<td>2,106</td>
<td>2,012</td>
<td>4,062</td>
<td>5,341</td>
<td>6,849</td>
</tr>
<tr>
<td>Colombia</td>
<td>1,605</td>
<td>1,399</td>
<td>1,322</td>
<td>857</td>
<td>762</td>
<td>416</td>
<td>822</td>
<td>1,255</td>
<td>1,145</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>118</td>
<td>156</td>
<td>195</td>
<td>246</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mexico</td>
<td>12,994</td>
<td>10,100</td>
<td>1,719</td>
<td>3,004</td>
<td>3,661</td>
<td>4,163</td>
<td>5,952</td>
<td>12,674</td>
<td>23,630</td>
</tr>
<tr>
<td>Peru</td>
<td>-</td>
<td>1,371</td>
<td>685</td>
<td>546</td>
<td>397</td>
<td>760</td>
<td>2,322</td>
<td>831</td>
<td>-</td>
</tr>
<tr>
<td>Venezuela</td>
<td>2,657</td>
<td>2,441</td>
<td>2,415</td>
<td>2,762</td>
<td>-</td>
<td>1,128</td>
<td>1,510</td>
<td>2,278</td>
<td>1,816</td>
</tr>
</tbody>
</table>


Pension Funds

1.17 As opposed to the experience of developed countries, pension funds in Latin America have not become important institutional investors. Nonetheless, provident and pension funds play some role in mobilizing funds in some Latin American countries, principally in Honduras, Chile, Brazil and Peru. In most countries, pension funding is reserved to the state. State mandated pension contributions are a means of forced saving—mobilizing deposits and therefore financing specific lending objectives such as long-term housing. The experience of state-owned pension fund systems in Latin America has been mostly negative. Most of the countries operate "pay-as-you go systems" as opposed to capitalization systems. These systems have not worked because the ratios of contributors to pensioners are small and deteriorating, resulting in high
economic cost to contributors. In Chile, since 1981 pension savings have been regulated but in privately managed pension funds which operate through capitalization. Employees contribute 10% of their salaries into the plan of their choice. In 1988, total Chilean pension system assets represented 18% of GDP. These funds were in turn invested in government securities, mortgage bonds and other investments. Thus, they have had an important role in creating a market for long-term capital issues. Other countries, such as Argentina, have changed their legislation in recent years to allow the establishment of private pension funds to complement the public system. However, in order for these funds to grow, countries need to establish macroeconomic policies which lead to stability and promote confidence for long-term savings.

Other Financial Institutions

1.18 In addition to commercial and development banks, S&Ls, and pension funds, the financial systems of Latin America have the following institutions: insurance companies, consumer credit companies, mutual funds (slightly developed), warehouses, and incipient investment banks and brokerage firms (excluding Brazil and Mexico).

1.19 In the case of repressed financial markets, informal financial intermediaries are vital to ensure that credit flows from savers to investors or consumers. They also play a critical role in rural areas. Thus, informal finance also serves as a means of mobilizing capital. Informal finance is an area which deserves a study in its own right. It will not be analyzed in this report.

B. Evolution of the Structure of the Financial System

1.20 Table 1.3 shows the growth of assets of financial institutions in the 12 countries studied for the 1980-1987 period. Unfortunately actual changes in assets are heavily distorted because controlled exchange rates make the representation in dollars biased. Further, it should be noted that Brazil holds the lion's share of bank assets and thus heavily biases the results for the 12 countries studied. Bearing these caveats in mind, commercial bank assets as a percentage of total financial system assets declined from 66.1% from 1980 to 56.4% in 1987. Two-thirds of commercial banks assets belonged to public sector banks. Further, the share of public sector banks of total system assets increased from 29.5% in 1980 to 36.6% in 1987.

1.21 Partly reflecting the distress of financial markets, the total number of financial institutions fell 11.7% between 1980 and 1987 (Table 1.4), but the distribution between banks and non-banking institutions was maintained, with banks comprising around one third of total financial institutions. It is important to indicate here that as a result of entry liberalization in the late 1970s in several countries (particularly in the southern cone) coupled with lax prudential regulations the number of banks increased substantially and a situation of "overbanking" developed. Thus, the decline in the number of institutions in the 1980s is not surprising.
Table 1.3: ASSETS OF FINANCIAL INSTITUTIONS AND THEIR RELATIVE IMPORTANCE, 1980-87

<table>
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<tbody>
<tr>
<td>USS Millions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>208,965</td>
<td>203,006</td>
<td>113,992</td>
<td>129,675</td>
<td>121,509</td>
<td>109,863</td>
<td>118,339</td>
<td>122,053</td>
</tr>
<tr>
<td>Domestic(^g)</td>
<td>185,817</td>
<td>173,389</td>
<td>86,239</td>
<td>103,239</td>
<td>100,917</td>
<td>90,047</td>
<td>99,678</td>
<td>98,304</td>
</tr>
<tr>
<td>Foreign</td>
<td>23,148</td>
<td>29,617</td>
<td>25,753</td>
<td>26,436</td>
<td>20,592</td>
<td>19,817</td>
<td>18,661</td>
<td>23,750</td>
</tr>
<tr>
<td>Public</td>
<td>164,666</td>
<td>168,213</td>
<td>185,148</td>
<td>185,862</td>
<td>181,254</td>
<td>187,527</td>
<td>215,627</td>
<td>224,664</td>
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<tr>
<td>Other financial institutions (^f)</td>
<td>193,904</td>
<td>223,276</td>
<td>221,262</td>
<td>193,616</td>
<td>192,606</td>
<td>233,148</td>
<td>277,162</td>
<td>267,703</td>
</tr>
<tr>
<td>Money markets(^g)</td>
<td>17,452</td>
<td>12,053</td>
<td>10,846</td>
<td>7,109</td>
<td>6,536</td>
<td>9,814</td>
<td>9,675</td>
<td>9,021</td>
</tr>
<tr>
<td>Capital markets(^g)</td>
<td>176,451</td>
<td>211,222</td>
<td>210,415</td>
<td>186,507</td>
<td>186,070</td>
<td>223,335</td>
<td>267,487</td>
<td>257,882</td>
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<tr>
<td>O.w. DFIs</td>
<td>85,457</td>
<td>94,573</td>
<td>70,985</td>
<td>69,750</td>
<td>74,949</td>
<td>69,391</td>
<td>81,501</td>
<td>83,978</td>
</tr>
<tr>
<td>Total</td>
<td>571,335</td>
<td>594,495</td>
<td>520,401</td>
<td>498,114</td>
<td>489,769</td>
<td>524,265</td>
<td>611,128</td>
<td>614,421</td>
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<tr>
<td>As % of Total</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial banks</td>
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<td>62.4</td>
<td>57.5</td>
<td>60.4</td>
<td>55.5</td>
<td>54.6</td>
<td>56.4</td>
<td>59.2</td>
</tr>
<tr>
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<td>24.8</td>
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<td>19.4</td>
<td>25.5</td>
</tr>
<tr>
<td>Domestic(^g)</td>
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<tr>
<td>Public</td>
<td>29.5</td>
<td>28.3</td>
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<td>33.9</td>
<td>34.6</td>
<td>36.5</td>
<td>38.6</td>
<td>35.3</td>
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<tr>
<td>Other financial institutions (^f)</td>
<td>33.9</td>
<td>37.6</td>
<td>42.5</td>
<td>39.6</td>
<td>39.3</td>
<td>44.5</td>
<td>45.4</td>
<td>43.6</td>
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<tr>
<td>Money markets(^g)</td>
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<td>2.0</td>
<td>2.1</td>
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<td>1.3</td>
<td>1.9</td>
<td>1.6</td>
<td>1.9</td>
</tr>
<tr>
<td>Capital markets(^g)</td>
<td>30.9</td>
<td>35.5</td>
<td>40.4</td>
<td>38.1</td>
<td>38.0</td>
<td>42.6</td>
<td>43.8</td>
<td>42.0</td>
</tr>
<tr>
<td>O.w. DFIs</td>
<td>15.0</td>
<td>13.9</td>
<td>13.6</td>
<td>14.3</td>
<td>15.3</td>
<td>13.2</td>
<td>13.3</td>
<td>14.3</td>
</tr>
<tr>
<td>Total</td>
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<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: IBRD staff estimates based on country studies.

\(^a\) Incomplete data for Chile from 1980-82.

\(^b\) Includes consumer credit and short-term lending institutions to corporations. Data not available for Bolivia, Ecuador, Guatemala, and Peru. Incomplete data for Venezuela.

\(^c\) Includes development financial institutions, savings and loans, pension and mutual funds, and insurance companies. Figures not available for Uruguay.

---

Table 1.4: NUMBER OF FINANCIAL INSTITUTIONS 1980-87

<table>
<thead>
<tr>
<th>Year</th>
<th>Banking</th>
<th>Non-banking</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>619</td>
<td>1,182</td>
<td>1,801</td>
</tr>
<tr>
<td>1981</td>
<td>646</td>
<td>1,337</td>
<td>1,983</td>
</tr>
<tr>
<td>1982</td>
<td>611</td>
<td>1,304</td>
<td>1,915</td>
</tr>
<tr>
<td>1983</td>
<td>608</td>
<td>1,240</td>
<td>1,848</td>
</tr>
<tr>
<td>1984</td>
<td>607</td>
<td>1,177</td>
<td>1,784</td>
</tr>
<tr>
<td>1985</td>
<td>593</td>
<td>1,140</td>
<td>1,733</td>
</tr>
<tr>
<td>1986</td>
<td>582</td>
<td>1,129</td>
<td>1,711</td>
</tr>
<tr>
<td>1987</td>
<td>560</td>
<td>1,123</td>
<td>1,683</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>As % of Total</th>
<th>Banking</th>
<th>Non-banking</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>34.4</td>
<td>65.6</td>
<td>100.0</td>
</tr>
<tr>
<td>1981</td>
<td>32.6</td>
<td>67.4</td>
<td>100.0</td>
</tr>
<tr>
<td>1982</td>
<td>31.9</td>
<td>68.1</td>
<td>100.0</td>
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<tr>
<td>1983</td>
<td>32.9</td>
<td>67.1</td>
<td>100.0</td>
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<tr>
<td>1984</td>
<td>34.0</td>
<td>66.0</td>
<td>100.0</td>
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<tr>
<td>1985</td>
<td>34.2</td>
<td>65.8</td>
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</tr>
<tr>
<td>1986</td>
<td>34.0</td>
<td>66.0</td>
<td>100.0</td>
</tr>
<tr>
<td>1987</td>
<td>33.3</td>
<td>66.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: IBRD staff estimates based on country studies.
1.22 During the 1980s, commercial banking in Latin America suffered extensively, as is documented in the chapter on banking crises. The number of commercial banks fell 9.5% in 1980-87 to a total of 560. The fall would have been greater without the assistance, intervention, or nationalization of many failing banks. Many intervened banks even several years after their initial intervention remain under the temporary management of central banks, public banks or other government agencies, in many cases continuing to accumulate losses. In other countries, insolvent banks were promptly liquidated (Bolivia) or resold to the private sector after cleaning their loan portfolios (Chile).

C. Financial Deepening by Countries

1.23 This section examines the evolution of financial deepening in Latin American countries during 1980-87. Financial deepening or the ability of a country's formal financial system to mobilize resources can be measured by the evolution of monetary aggregates relative to GDP, or by analyzing trends in the evolution of real monetary aggregates over time. M1 and M2 are used in this section to quantify financial depth. Broader aggregates such as M3 or M4 were not used due to difficulties in obtaining comparable series for all countries. M1 includes currency and demand deposits, while M2 is composed of M1 plus time and savings deposits. US dollar-denominated deposits were included in M2 in those countries which permit them (Bolivia, Chile, Honduras and Uruguay).

1.24 Financial deepening, measured as M1/GDP and M2/GDP, vary tremendously between countries and across time. Peru, Bolivia and Brazil had the lowest M2/GDP ratios of the region, during 1980-87. M2/GDP in Peru and Brazil fluctuated slightly around 12% during the period, while Bolivia's ratio averaged 11.1%, with a valley of 5.3% in 1985 and 1986, and a peak of 17.1% in 1981. Peru's low financial deepening is explained by consistently negative deposit rates throughout the period. Bolivia's disintermediation in the mid-1980s was caused by macroeconomic instability resulting in hyperinflation. In the case of Brazil the low level of financial intermediation is not explained by negative deposit rates since rates were positive, but perhaps by the volatility of inflation and a general distrust on the ability of the government to carry out necessary economic reforms.

1.25 On the other side of the spectrum, Venezuela, Honduras and Colombia had the highest average M2/GDP ratios of the 12 countries studied in 1980-87. Venezuela's M2/GDP averaged 38%, Honduras' 30.1% and Colombia's 26.8%. Colombia had the most stable M2/GDP ratio of the three countries. High financial intermediation in these countries, relative to other countries in the region, is probably explained by lower and more stable inflation rates; and in the case of Colombia and Honduras, also by positive real deposit rates throughout the period (Graph 1.1 and Table 1.5).
There was a large variability in the ratio of M2/GDP in several countries across time (see Table 1.5 below). Bolivia's M2/GDP was the most unstable of all countries, fluctuating between 5.3% in 1985 and 1986 and 17.1% in 1987. Large variability was also observed in Venezuela (31.5% in 1980 and 42.3% in 1986), Argentina (22.6% in 1980 and 11.5% in 1985), and Uruguay (25.3% in 1982 and 14.7% in 1987). As mentioned earlier, Colombia, Peru and Brazil had the more stable M2/GDP ratios.

None of the countries show steady upward or downward trends during the period. On the contrary, many countries experienced large fluctuations in M2/GDP. M2/GDP in Chile, Colombia, Honduras, Guatemala, Mexico and Venezuela was higher at the end of 1987 than at the end of 1980. All other countries experienced a decline in M2/GDP. Changes in monetary aggregates mirror the volume of transactions handled by the financial systems in these countries. Large fluctuations, in the context of rigidities in the structure of the system (number of institutions, branches and staffing), can affect costs and profitability significantly.

In addition to following M2/GDP trends, it is also interesting to analyze the evolution of M1 versus M2. In a context of high and fluctuating inflation is reasonable to expect a reduction in M1 relative to M2 because the opportunity cost of maintaining non-interest earning monetary balances (M1) increases. In Chile and Colombia the money supply decreased in relation to GDP, but strong real increases in quasi-money resulted in substantially higher M2/GDP in 1987 in relation to the beginning of the period studied. Finally, Honduras, Guatemala and Venezuela were the only countries where both M1 and M2 increased in relation to GDP, with Honduras and Venezuela having the highest ratios.
Table 1.5: FINANCIAL DEEPENING BY COUNTRY
AND REGIONAL AVERAGES, 1980-87
(M2/GDP, %)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Argentina</strong></td>
<td>22.6</td>
<td>22.2</td>
<td>18.5</td>
<td>16.1</td>
<td>13.4</td>
<td>11.5</td>
<td>16.3</td>
<td>16.8</td>
<td>17.2</td>
</tr>
<tr>
<td><strong>Bolivia</strong></td>
<td>15.5</td>
<td>17.1</td>
<td>15.3</td>
<td>12.1</td>
<td>9.9</td>
<td>5.3</td>
<td>5.3</td>
<td>8.4</td>
<td>11.1</td>
</tr>
<tr>
<td><strong>Brazil</strong></td>
<td>13.1</td>
<td>12.8</td>
<td>12.3</td>
<td>11.0</td>
<td>11.0</td>
<td>11.6</td>
<td>13.2</td>
<td>10.5</td>
<td>11.9</td>
</tr>
<tr>
<td><strong>Chile</strong></td>
<td>15.0</td>
<td>20.0</td>
<td>25.0</td>
<td>19.9</td>
<td>18.3</td>
<td>17.6</td>
<td>17.9</td>
<td>19.2</td>
<td>19.1</td>
</tr>
<tr>
<td><strong>Colombia</strong></td>
<td>22.9</td>
<td>25.8</td>
<td>26.8</td>
<td>28.0</td>
<td>28.1</td>
<td>28.3</td>
<td>27.5</td>
<td>27.0</td>
<td>26.8</td>
</tr>
<tr>
<td><strong>Ecuador</strong></td>
<td>19.3</td>
<td>18.6</td>
<td>18.3</td>
<td>17.1</td>
<td>16.5</td>
<td>18.6</td>
<td>20.9</td>
<td>15.5</td>
<td>18.1</td>
</tr>
<tr>
<td><strong>Guatemala</strong></td>
<td>20.5</td>
<td>20.9</td>
<td>23.5</td>
<td>24.0</td>
<td>24.0</td>
<td>25.0</td>
<td>22.3</td>
<td>22.9</td>
<td>22.9</td>
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<tr>
<td><strong>Honduras</strong></td>
<td>26.1</td>
<td>25.6</td>
<td>27.7</td>
<td>30.6</td>
<td>32.4</td>
<td>32.1</td>
<td>31.7</td>
<td>34.1</td>
<td>30.1</td>
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<td><strong>Mexico</strong></td>
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<td>25.7</td>
<td>26.4</td>
<td>23.9</td>
<td>24.2</td>
<td>23.3</td>
<td>24.3</td>
<td>22.6</td>
<td>24.2</td>
</tr>
<tr>
<td><strong>Peru</strong></td>
<td>12.7</td>
<td>12.7</td>
<td>12.5</td>
<td>11.6</td>
<td>10.0</td>
<td>9.9</td>
<td>12.0</td>
<td>12.8</td>
<td>11.8</td>
</tr>
<tr>
<td><strong>Uruguay</strong></td>
<td>20.3</td>
<td>22.4</td>
<td>25.2</td>
<td>20.3</td>
<td>17.3</td>
<td>16.6</td>
<td>15.8</td>
<td>14.7</td>
<td>19.1</td>
</tr>
<tr>
<td><strong>Venezuela</strong></td>
<td>31.5</td>
<td>34.1</td>
<td>37.3</td>
<td>41.9</td>
<td>41.6</td>
<td>39.8</td>
<td>42.3</td>
<td>35.2</td>
<td>38.0</td>
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<tr>
<td><strong>Average</strong></td>
<td>20.3</td>
<td>21.5</td>
<td>22.4</td>
<td>21.4</td>
<td>20.5</td>
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<tr>
<td><strong>Std. deviation</strong></td>
<td>5.4</td>
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<td>8.7</td>
<td>9.4</td>
<td>9.7</td>
<td>9.4</td>
<td>8.3</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Source: IBRD staff estimates.

Note: Calculated by using stocks at the end of the period for M2. The formula used is: ((M2t + M2t-1)/2)/GDPt.

1.29 The impact of interest rates on deposit mobilization can be measured by comparing trends in real deposit rates with those of monetary aggregates. For the Region, average real interest rates for deposits have been negative every year except 1982/83. They became highly negative from then until 1986, and moderately negative in 1987. The overall picture includes tremendous variations between countries, adding the elements of uncertainty and instability to already weakened financial systems, resulting in a substantial decrease of real bank deposits (Graph 1.2).

1.30 Financial systems in Latin America have not only suffered from macroeconomic instability and lack of confidence, but also have been affected by high real deposit rates in the United States. This means that in order to reduce capital flight domestic financial institutions need to pay very high real rates that compensate for country risk. Unregulated domestic real interest rates in many Latin American countries rose significantly in the 1980s, providing investors with high returns on their financial savings to compensate for risk. In many cases even these high returns were not high enough to forestall capital flight.
D. Aggregate Financial Deepening Indicators

1.31 This section attempts to analyze the evolution of financial deepening on an aggregate basis for the twelve countries studied. Aggregate "regional" data has been put together based on individual country data. The results have to be taken cautiously, however, because when aggregating data, opposing trends offset each other. Furthermore, to aggregate some of the information denominated in local currencies, it was necessary to convert data into dollars, causing distortions in the results since real exchange rates were not used for lack of consistent data.

1.32 Table 1.6 below shows indicators of financial depth on an aggregate basis for the countries studied. Measured by the arithmetic mean of the M1/GDP ratio for the twelve countries, the M1/GDP for the region decreased slightly from 10% in 1980 to 8% in 1987. M2/GDP, measured in a similar way, was more stable, hovering around 20% throughout the period. A possible reason for the greater stability of M2/GDP may be the fact that a portion of quasi-money in the region includes financial instruments which provide hedges against loss in purchasing power, such as indexed deposits or dollar denominated deposits.
### Table 1.6: FINANCIAL DEPTH, 1980-87
(Yearly averages, %)

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</thead>
<tbody>
<tr>
<td><strong>In Arithmetic Avgs.</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>M1/GDP</td>
<td>10.0</td>
<td>9.6</td>
<td>9.4</td>
<td>8.8</td>
<td>8.5</td>
<td>8.0</td>
<td>8.3</td>
<td>8.0</td>
</tr>
<tr>
<td>M2/GDP</td>
<td>20.3</td>
<td>21.5</td>
<td>22.4</td>
<td>21.4</td>
<td>20.5</td>
<td>20.0</td>
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<td><strong>In Weighted averages</strong></td>
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<td></td>
</tr>
<tr>
<td>M1/GDP</td>
<td>9.1</td>
<td>8.8</td>
<td>8.7</td>
<td>7.8</td>
<td>5.8</td>
<td>6.7</td>
<td>7.8</td>
<td>6.9</td>
</tr>
<tr>
<td>M2/GDP</td>
<td>19.3</td>
<td>20.4</td>
<td>20.8</td>
<td>19.1</td>
<td>15.4</td>
<td>17.9</td>
<td>19.0</td>
<td>16.3</td>
</tr>
<tr>
<td><strong>In 1980 US$ Million</strong></td>
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<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>M1 Growth Rate</td>
<td>8.3</td>
<td>-13.2</td>
<td>-35.6</td>
<td>-10.9</td>
<td>-6.4</td>
<td>-9.8</td>
<td>36.1</td>
<td>-29.5</td>
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<tr>
<td>M2 Growth Rate</td>
<td>15.2</td>
<td>-3.7</td>
<td>-39.0</td>
<td>1.1</td>
<td>-3.3</td>
<td>-10.9</td>
<td>14.7</td>
<td>-20.0</td>
</tr>
</tbody>
</table>

Source: IBRD staff estimates.

a/ Weighted averages using the implicit weights obtained by adding dollar figures for all countries.
b/ Deflated by CPI; end of period.

1.33 "Regional" average M1/GDP and M2/GDP ratios were also obtained by weighting the relative importance of the various countries (based on the implicit weights obtained from converting M1, M2, and GDP figures into dollars and adding them for all countries). When weighted averages were used, M1/GDP decreased from 9.2% to 7.1% and M2 from 19.9% to 16.8%, thus disintermediation became more evident. Intuitively these figures would make more sense since large countries like Brazil and Argentina, experienced financial disintermediation during the period. Not only "regional" M1/GDP and M2/GDP ratios fell, but also the real, level of the monetary aggregates (M1 and M2) fell during most of the 1980-87 period. Real M1 fell on average by 12.2% and real M2 by 10.3%.

1.34 As in the case of individual countries, the "regional" M2/GDP ratio in relative terms was more stable than the M1/GDP ratio. This is explained by the importance of quasi-money in M2. Quasi-money includes financial instruments which are protected against inflation, either because they were indexed to some prices or were dollar denominated. Graph 1.3 illustrates this.
II. THE IMPACT OF MACROECONOMIC POLICIES ON THE FINANCIAL SYSTEM

2.01 This chapter analyzes the impact of exchange rate policies, monetary and fiscal policies, and Central Bank intermediation activities on the financial system. As background to the analysis, this section also summarizes the effects of the 1981-83 recession and the foreign debt problem on the savings-investment process in Latin America. The approach used here is not to list the macroeconomic factors that can generate financial distress, but rather to examine how inappropriate macroeconomic policies can have repercussions on the financial system. This is done for two reasons: first, because there is ample evidence in the literature on the macro causes of financial distress; and second, because a section on macro policies would be a good complement to the other chapters on economic, regulatory, and supervisory policies affecting banks. Interest rate policies, while macroeconomic in nature, are analyzed in Chapter IV on "Economic Regulations" since in most Latin American countries they have been used to achieve economic goals, other than monetary or macroeconomic stability.

A. Savings, Investments and External Flows

2.02 At least since the early 1980s, Latin American governments have confronted a difficult situation in their external sector. In the 1970s, foreign credit at low, although variable, interest rates was available to most Latin American countries. In the early 1980s, as a result of the payment crisis

---

of Mexico, and the restrictive monetary policies applied by the US to fight domestic inflation, the availability of foreign credit diminished while its cost increased dramatically. The demand for commodities, which is generally affected significantly by contractionary policies, lessened and remained weak during most of the 1980s, with the exception of a few products, resulting in lower prices for most commodities and a reduction in the terms of trade of Latin American countries. Thus, Latin American countries were hit by less access to credit, higher cost, and a deterioration in their terms of trade.

2.03 Beginning in 1980, world interest rates surged dramatically. This set an incentive for developing nations to reduce external borrowing, but they could not respond quickly, and on the contrary they already were over-indebted. Further, their external debt was largely at floating rates. They were in no position to amortize it, and so their existing interest obligations rose sharply. Servicing this debt placed heavy pressure on public budgets, since much of it was government debt. This pressure increased further because governments assumed private-sector external obligations. This problem was compounded by the inability of the governments to mobilize resources either through higher taxes or from domestic financial systems. To maintain capital formation and growth, developing nations needed to increase domestic savings to compensate for diminished external flows. Since many were unable to do so, the result was a decline in capital formation and lower economic growth.

2.04 The twin impact of sharp increases in the service of their debts and the deterioration of their terms of trade placed Latin American countries in a difficult payments situation. When international banks were faced with the potential default of Mexico in 1982, voluntary loans to Latin American countries started to dry up, and these countries were faced with the need to restructure their debts, extending principal payments and refinancing portions of overdue interest. The amount of credit provided by official and international institutions did not fill the balance of payment gaps, and external flows became negative for countries that are essentially capital importers. The adjustment period has been long and painful for most countries. It became necessary to obtain current account surpluses in order to cover the external payments and to mobilize domestic resources to finance a level of investment capable of sustaining economic growth.

2.05 Their efforts were not enough, and GDP growth slackened considerably relative to previous years. Average annual GDP growth for the 12 countries of the study reached only 1% during 1980-87 (Table 2.1), significantly below population growth, thus resulting in lower per-capita incomes. Domestic savings were also insufficient to supply enough resources for investment and external payments. Graph 2.1 shows the evolution of gross investments and savings. Since 1982 Latin America became a net exporter of resources. These negative transfers had strong deflationary effects on Latin American economies.

/ Other than interest payments.
Table 2.1: GROSS DOMESTIC PRODUCT, COUNTRY BY COUNTRY, 1980-87  
(Growth Rate, %)

<table>
<thead>
<tr>
<th></th>
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<td>8.4</td>
<td>8.0</td>
<td>2.9</td>
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<td>1.0</td>
<td>1.6</td>
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<td>5.1</td>
<td>5.4</td>
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<td>3.2</td>
<td>2.7</td>
<td>4.2</td>
<td>1.7</td>
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<td>8.8</td>
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<td>0.3</td>
<td>6.6</td>
<td>4.9</td>
<td>-0.6</td>
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<tr>
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<td>0.7</td>
<td>-5.6</td>
<td>-1.4</td>
<td>0.3</td>
<td>5.2</td>
<td>3.0</td>
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<tr>
<td>Average</td>
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<td>1.8</td>
<td>3.7</td>
<td>3.0</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Source: IBRD staff estimates.

2.06 Faced with foreign exchange shortages, countries in the region looked for alternative ways of dealing with foreign creditors. Some countries, such as Chile, Colombia, Guatemala, Honduras, Uzbek, Uruguay and Venezuela, remained current in their payments of interest, at least initially. Chile and Colombia were the only countries that also paid a significant portion of principal. Chile also used a successful debt-for-equity swap program to reduce its foreign indebtedness. Other countries opted for a more confrontational attitude, giving priority to domestic expenditures over servicing their foreign debts, and declared partial moratoriums or limitation of interest payments to predetermined shares of their export earnings. The strategy failed because the "saved" foreign resources were not used for economic adjustment but to finance expansionary policies which resulted in overheated economies, high rates of inflation, foreign currency scarcities and, finally, deep recessions.

2.07 In general, however, most highly-indebted countries in the region were unable to sustain economic growth, mainly because domestic savings were not enough to finance investment requirements and foreign transfers. This suggests the vital need to: (i) restructure their economies and financial sectors to obtain a higher degree of efficiency in the allocation and utilization of resources; and (ii) establish an effective international system to alleviate the heavy burden of external debt.

2.08 Chile and Colombia appear to be the only exceptions to the rule of economic and monetary instability, insufficient domestic savings and low investment rates. The case of Chile is particularly important because of the

5/ Guatemala and Honduras are not considered highly indebted countries.
structural character of many of its reforms. In addition to its innovative financial reforms, such as privatization of the pension funds system and the institutional and financial reorganization of commercial banking, the Chilean Government has issued a new Central Bank Law which limits Government intervention over the monetary authority, thus eliminating a potential source of deficit financing. Furthermore, its policy framework stimulated the export sector and private foreign investment, both direct and financial. This is perhaps the most important lesson other countries could learn from the Chilean experience: without a positive flow of foreign investments and technology transfers, economic development will be slow and difficult. For this reason, any solution to the external debt problem would have to promote a macro environment conducive to the normalization of international credit through market mechanisms, the expansion of direct foreign investment and the repatriation of capital. Peru also experienced very high rates of investment, but these proved to be unsustainable. For instance, the high investment rates of 1986-1987 were supported by an overvalued exchange rate and resulted in a massive loss of foreign exchange reserves.

2.09 Investment and future growth are the principal casualties of the deteriorating situation, as gross total investment fell from 22.1% of GDP in 1980 to 14.5% of GDP in 1985, then recovered somewhat to 15.6% in 1987. This reduced investment after depreciation allowances left limited resources for net additions to the stock of machinery, equipment, construction and inventories. At constant prices, the aggregate gross domestic investment of the countries studies in 1987 was equivalent to only about 65% of their investment in 1980.

2.10 Total savings also fell in relation to GDP, but at a much lower rate of decline than in the case of investment. This highlights the major and continuing effort made in many Latin American countries to reduce aggregate demand. An indicator of the efforts undertaken is the level of net payments abroad, which averaged 2.6% of total GDP for 1983-87.

2.11 Shifting from regional aggregates to individual country figures, important differences between countries become striking. For instance, the economies of Brazil and Chile grew at 2.8% and 1.3%, respectively, in 1980-87, while following different macroeconomic policies. The Brazilian financial market is quite fragmented, with an inflationary environment and limited flexibility of fund allocation due to extensive credit and foreign exchange controls. These constraints did not impede a satisfactory evolution of domestic savings, which represented 21% of a growing GDP in 1987. In Chile, a market-oriented policy liberalized controls and privatized financial intermediaries that had been nationalized during the 1981-83 crisis. Helped by a monetary system moving toward stability, Chilean gross savings increased from 16.8% of GDP in 1980 to 22.1% in 1986. Colombia attained the highest economic growth (3.1% yearly) while sustaining its savings ratios and maintaining a stable set of macro variables.

2.12 Among the countries which experienced little or no growth between 1980 and 1987, Mexico and Uruguay deserve special attention. Mexico began dismantling an array of economic regulations toward the middle of the period studied and was able to sustain the highest rate of savings, 25.7% in 1980-87. Uruguay, hard-hit by the 1981-83 crisis, undertook significant measures to adjust its economy, including the restructuring of important economic sectors, and resumed growth in 1985.
2.13 Graph 2.1 compares the evolution of savings and investment for the "region" as a whole. The graph shows clearly the significant decline in investment, which since 1982 has been below domestic savings, highlighting the fact that the "region" has become a net exporter of capital.

GRAPH 2.1

Trends in Savings and Investment
(1980 US $=100)

2.14 The ability of the financial markets and institutions to mobilize resources depends heavily on the macroeconomic environment in which they operate. As will be seen in the next section, the overall context of macroeconomic instability in the region coupled with poor prospects for external savings and low investment rates has dramatically affected the development of Latin America's financial systems and halted the process of financial deepening in many of its countries.

B. The Impact of Exchange Rate Policies

2.15 External shocks have in many cases been responsible for disequilibria in Latin American countries. These shocks (i.e. deterioration of terms of trade, drying up of international capital flows, or rise in world interest rates, among others) generate external imbalances which can affect the financial sector quite severely. Unless handled effectively with adequate exchange rate and other adjustment policies, these shocks can in fact become pervasive. In Latin America, exchange rate policies have been notably inflexible, and hence have not served as a mechanism to insulate the domestic economy from foreign shocks. In fact, in several countries, the very nature of exchange rate policies has only served to induce distortions that have been building over time.

2.16 All Latin American countries have some form of control over their exchange rates. Exchange controls and dirty floatings have been used to set rates many times at overvalued levels which have discouraged exports, encouraged capital flight and resulted in inadequate levels of international reserves. Exchange-rate management has had important consequences in the complex mix of macroeconomic and financial policies in Latin American countries. In the early 1980s, once it became clear that the terms of trade would deteriorate and that external finance would no longer be available, exchange rates came under
devaluation pressure. Table 2.2 shows the evolution of the exchange rates of the Latin American countries studied. Exchange rates in the countries studied were deflated by the ratio of the price levels in the US and the country in question. Consumer price indices were used for deflating the exchange rates. At the risk of oversimplification, the figures show the significant fluctuations in the real exchange rates of several countries during the 1980s. With these large fluctuations it is difficult to have a healthy financial system. Uncertainty on exchange rate policy and overvaluation of the domestic currency results in: (i) capital flight; (ii) distorted relative prices (in favor of non-tradables), worsening the balance of payments and misallocating real resources; (iii) concentration of bank activity on speculation rather than lending for productive purposes; (iv) deterioration of bank portfolio after each discrete devaluation; and chronic expectation of further devaluations and price increases which reinforce all of the above and can lead to very high real interest rates.

Table 2.2: REAL EXCHANGE RATES VIS-A-VIS US DOLLAR
(Index: 1980 = 100)

<table>
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<td>95</td>
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<td>125</td>
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<td>91</td>
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<td>101</td>
<td>102</td>
<td>89</td>
<td>65</td>
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<tr>
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<td>96</td>
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<td>91</td>
<td>91</td>
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<td>82</td>
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<tr>
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<td>58</td>
<td>65</td>
<td>53</td>
<td>96</td>
<td>67</td>
</tr>
<tr>
<td>Uruguay</td>
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<td>93</td>
<td>96</td>
<td>85</td>
<td>140</td>
<td>135</td>
<td>139</td>
<td>131</td>
</tr>
<tr>
<td>Venezuela</td>
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<td>87</td>
<td>80</td>
<td>130</td>
<td>118</td>
<td>185</td>
</tr>
</tbody>
</table>

Source: IBRD staff estimates.

Note: An increase in the index is a devaluation.

2.17 Producers have not been subject to clear signals with respect to the evolution of exchange rates. The overvalued exchange rates in the late 1970s and early 1980s favored production of nontradable goods and encouraged reliance on imported inputs. Domestic financial systems tended naturally to provide finance to the nontradable activities favored by the appreciated exchange rate. When currencies devalued, relative prices shifted, and the financial systems found that they had lent to firms which suddenly became unprofitable. Their first reaction was to continue lending to these firms to keep them solvent.
and forestall their own failure. Such an allocation of credit tends to crowd out the efficient firms and delays economic recovery.\(^6\)

2.18 These devaluations and expectations of further devaluations combined with controlled interest rates tended to stimulate private capital outflows. These outflows were illegal in nations with currency controls, but once the incentives became irresistible the authorities lacked the means to control it. Estimation of capital-flight flows poses difficult methodological questions. Nevertheless, the large discrepancies between increases in nations' external debt and the uses of finance recorded in balance-of-payments accounts in many Latin American nations in the early 1980s, undoubtedly reflects voluminous capital flight.

2.19 Capital flight poses troubling dilemmas for exchange-rate policies. Although some capital flight occurs because people want to place assets beyond the reach of taxes or confiscation, the voluminous flows that have taken place since the early 1980s have unquestionably resulted from the perception that risk-adjusted rates of return were likely to be higher outside than within developing nations, particularly when anticipated devaluation was taken into account. Since the early 1980s, all of the relevant considerations have encouraged wealth-holders to place their funds overseas: (i) rates of return on deposits in developed nations have been relatively high; (ii) rates of return available from applications in developing nations have sometimes been low, but even when they have been high they have been subject to considerable volatility and uncertainty. The recessions and general uncertainty characteristic of Latin American economies in the 1980s has further discouraged risk capital from remaining at home; (iii) in most heavily indebted nations of Latin America, the risk of real devaluation has remained permanently high. Governments have found that failure to devalue sufficiently meant that people expected further devaluation, and continued their capital flight; but devaluation itself often induced expectations that there would be further devaluation, thereby encouraging more capital flight.

2.20 Inevitable as they were, these devaluations in the early 1980s had devastating domestic financial consequences. The domestic-currency equivalent of external debt rose sharply with the devaluation and the rise in world interest rates. This prompted governments to assume private debt to relieve private financial distress; moreover, lack of foreign exchange effectively meant that the central bank had to assume some debt. At the same time, enterprises that had developed through the 1970s on the basis of appreciated exchange rates and availability of external finance now found that they were no longer profitable, sometimes to the point of effectively impairing the value of their obligations to domestic financial institutions.

2.21 Going back to Table 2.2, if we assume that 1980's exchange rates were appropriate, another oversimplification, the currencies of several countries appear largely overvalued at the end of the period relative to the US dollar. This is the case of Brazil, Peru, Mexico, and Honduras. In Bolivia, fixed exchange rates combined with very high inflation resulted in an extraordinary overvaluation in 1984 and 1985 when the ratio of the parallel (illegal) rate to the official rate was over 100:1. This was corrected in the second half of 1985.

\(^6\) Hinds (op. cit.).
Honduras, the only Latin American country which managed to keep a constant fixed rate of exchange during the period, was able to do it because its inflation was not much different from that prevalent in the USA, especially in 1983-87. Nonetheless, at the end of 1987, the lempira was clearly overvalued vis-a-vis the US dollar. Guatemala also experienced low inflation in the early part of the 1980s, allowing it to maintain its exchange rate vis-a-vis the US dollar, but large increases in prices in 1985 and 1986, forced it to devalue its currency in 1987. The rest of the countries had undervalued currencies at the end of the period, relative to 1980, reflecting efforts to make their economies more competitive and to reduce capital flight.

C. The Impact of Fiscal and Monetary Policies

One common source of disequilibrium is the domestic fiscal imbalance. This imbalance can arise from problems in tax collection, an inordinate volume of subsidies, the lack of adequate expenditure programming, or from inefficient loss-making parastatals. Financing of the deficit often results in: (i) crowding out of private sector, either by the imposition of credit restrictions on banks or raising interest rates. This leads to private sector illiquidity, high interest rates, poor performance and distressed portfolios of commercial banks; (ii) need for forced investments or confiscatory implicit taxation of banks, leading to higher spreads and disintermediation; and (iii) monetary expansion leading to high inflation and its further negative effects on the financial system. These effects are compounded by those stemming from external imbalances.

The analysis also shows that a major issue affecting financial systems in several Latin American countries is the accumulation of public domestic debt. In some countries (Brazil, Argentina, and Peru), this debt is piling up to levels which are clearly unsustainable. An indication of the substantial increase in the stock of debt of the public sector is the continuous increase in the share of credit to the Government in total domestic credit. In Brazil this ratio jumped from 19% in 1980 to 45% in 1988. In Argentina it increased from 40% in 1984 to 53% by mid-1989, and in Peru from 33% in 1982 to 40% in late 1988. In the case of Argentina and Brazil a key factor in the accumulation of this debt is the increasing real interest rate it accrues. Peru is one step removed from the process, and debt is being accumulated not because of positive real interest rates but just to cover public sector deficits. Once the country embarks in a stabilization effort, real rates are likely to increase and Peru may fall into the vicious circle in which debt accumulation feeds-back into the system by adding to the fiscal deficit through the accrual of interest, resulting in higher inflation, higher real interest rates and financial distress.

Large public sector debt affects the financial system in various ways. First, as mentioned earlier it tends to increase the overall level of interest rates, since the Government pays high interest rates in order to lure investors, which over time become less willing to hold this debt. High real rates encourage the Government to attempt to engage in additional monetary financing of its debt rather than through debt issues. Second, the public sector debt has become so large relative to the economy's willingness to hold it, that it crowds out the private sector almost completely. Thus, the banking system basically becomes a mechanism to finance the public sector. This financing is done either directly, through the purchase of Government paper, or indirectly through forced investments or remunerated reserves at the Central Bank which are imposed to neutralize the monetary expansion needed to finance the public
deficits. Third, if monetary policy (and the financial system) must carry the burden of fiscal imbalances in the form of tight credit and high interest rates, this is likely to affect the productive sectors, whose credit will be expensive and rationed, and result in financial distress.

2.26 Countries with high debt should study ways of reducing their current stock of debt. Transferring it from the public sector accounts to the Central Bank's accounts, which has been the mechanism widely used, only hides the problem, and delays the ultimate resolution of the problem. The liberalization of interest rates in the context of high public domestic debt will contribute to the fiscal imbalance. Governments need to face the reality that expenditures were financed through the equivalent of a tax on the capital markets and that liberalization has the effect of eliminating that tax. In addition to fiscal adjustment, the stock of debt could be reduced by: (i) swaps of debt for equity in real public assets, (ii) swaps of debt for other financial assets which can not be use as means of payment, or (iii) debt restructuring. Governments should avoid falling into the trap of continuing refinancing these debts at the new rates because sooner or later it will lead to an explosive situation in which the domestic public debt grows out of control.

Inflation and Financial Savings

2.27 The general perception about inflationary effects on financial instruments is the reduction of real yields. Another and more important consequence is the erosion in the value of principal. From the saver's point of view, inflation is a risk, implicitly included in the cost of capital. High spreads and extremely high lending rates can cause distress among borrowers, while savers do not receive, even in market-oriented systems, enough yield to cover capital losses. This is precisely the case in Latin America.

2.28 Countries that have maintained low and stable inflation rates have generally managed satisfactory financial-sector growth, even where financial rates were regulated, as long as the regulation was sensible. This was certainly the case in Latin America. Countries with low and stable inflation, such as Colombia and Venezuela had deeper financial systems than the rest of Latin America. On the other hand, Argentina, which has long experienced high and variable inflation, has suffered a decline in financial depth from 55% in 1928/29 to 16% in 1986. Bolivia has also lost financial depth on account of inflation. It can be generalized in Latin America that countries with the highest inflation rates have had the lowest financial depth and the slowest real growth rates. Brazil will be the exception to the rule since it has grown significantly in spite of high inflation and low financial depth (see Table 2.3 below).

### Table 2.3: INFLATION RATES, 1980-87

(Period Average, %)

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<thead>
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<td>344.2</td>
<td>626.7</td>
<td>672.2</td>
<td>90.1</td>
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| Average* & Avg. w/o Bolivia* | 42.0   | 39.7   | 50.6   | 94.3   | 202.0  | 1,107.4| 72.2   | 64.0   | 209.0  |

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<td>41.5</td>
<td>40.7</td>
<td>43.1</td>
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</table>

Source: IBRD staff estimates.

*a/ Arithmetic averages.

2.29 In Latin America, the adjustment problem manifested itself partly through significantly higher inflation rates. Faced with large public deficits and with poor and costly access to external and domestic financial markets, governments found themselves compelled to resort to borrowing from the central bank, i.e., inflationary finance. In some cases governments issued obligations, while in others, they issued money to finance acquisition of government obligations. If the central bank issues a larger quantity of money than the economy is willing to hold at the current array of prices and interest rates, the purchasing-power value of money outstanding tends to fall, like any asset that becomes too abundant. Such a purchasing-power loss on a society's money-denominated assets amounts to a kind of tax payment, and economists accordingly describe it as the "inflation tax." Not surprisingly, one of the consequences of this tax is that people try to avoid it: they hold less money and money-denominated assets than they otherwise would. This, in turn, has several unfortunate consequences. One is that, by trying to hold less money, the society bids down the value of the money, adding to inflationary pressure. Another consequence is that, since money-holding is the way in which the public provides resources to the banking system, a smaller quantity of real credit resources is available to the banking system. In any event, inflation is a dangerous form of public-sector financing because it can spiral out of control and cause widespread economic disruption.

2.30 If reserve requirements are high, commercial banks pay a large share of the inflationary tax for the currency balances they have to maintain in their
vaults and in the central banks. The amounts of inflation tax collected in
developed countries is not significant due to their very small monetary base and
their generally low inflation. On the other hand, it can represent one third
of total government revenues for some Latin American countries. The 1989 World
Development Report estimates that the inflation tax (defined as the decline in
real value of average reserve money) in 1987 as a percentage of GDP was 4.8% in
Peru, 4.0% in Argentina, 3.7% in Mexico and 2.0% in Ecuador. Besides its
negative effects on the efficiency of the financial sector and in consequence,
on the whole economy, the acceleration of prices caused by the continuing and
abusive utilization of the inflation tax creates conditions leading to
hyperinflation. This was the case of Bolivia in the early 1980s, of Peru since
1988, and Argentina since February 1989.

D. Central Banks' Intermediation Policies

2.31 This section overlaps somewhat with the discussion on reserve
requirements and directed credit, but is so critical to the way that Latin
America's financial systems have developed, that merits separate treatment.
Central bank operations in many Latin American countries largely exceed the
typical function of monetary authorities--that is the control of the money supply
and aggregate credit to a level leading to the maintenance of an adequate
international reserves position. Governments in Latin America have added
functions to those typical of Central Banks, to use them as instruments to
channel funds to priority sectors and activities in an attempt to correct
perceived market imperfections, and to use of them as important sources of
deficit financing. As a result, Central Banks in many Latin American countries
are loss makers. These losses, however, are difficult to measure because of
inconsistencies between the accounting of Central Banks and of the nonfinancial
public sector, which in many cases permit the accumulation of huge hidden losses
in Central Banks. The Central Banks of several Latin American countries have
very large, mostly hidden, losses.\footnote{For a more detailed treatment of Central Bank Losses refer to: Mario O.
Tejeiro, "Central Bank Losses: Origins, Conceptual Issues and
Measurement Problems", PPR Working Paper, WPS 293, The World Bank,
October 1989.}

2.32 Most central banks in the countries studied in this survey are not
only responsible for the formulation and execution of monetary, credit and
foreign exchange policies but carry out a larger set of functions. In addition
to typical central banking functions they: (i) act as government's financial
agents, managing international reserves and external payments and financing
budget deficits, (ii) play major roles as allocators of financial resources,
keeping the cost of credit low, directing credit selectively, managing
development funds and becoming direct lenders to DFIs and other financial
institutions, (iii) are in charge of banking supervision and (iv) are responsible
for the intervention and liquidation of financial institutions, in many cases
bearing the full cost of them. As a result of this expansion of functions,
financial systems became distorted and central banks grew almost out of control.
Their primary functions--managing foreign exchange and the money supply got lost
in the myriad of functions, some of which were contradictory.
2.33 The central banks' functions as lender of last resort, deficit financier and helper to distressed financial institutions were stepped up as a result of the debt crisis and its consequences, the most important of which were: large increases in internal and external debt and the acceleration of inflationary trends. Acting as guarantor for foreign loans to public sector entities, central banks inherited the liabilities of insolvent borrowers. In certain cases they also received government mandates to pay the foreign debt of private sector institutions, mostly commercial banks. The burden of external payments plus the granting of subsidized loans to ailing banks and the inability of central bankers to manage the failing banks under their intervention has produced large deficits for the monetary authorities (quasi-fiscal deficits), which for some countries exceeded the budget deficit of the non-financial public sector. Table 2.4 shows the evolution of the ratio of Central Bank Assets to GDP in the countries studied.

Table 2.4: RATIO OF ASSETS OF CENTRAL BANK TO GDP 1980-87
(In percentages)

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Average      | 35.8 | 35.4 | 45.0 | 52.9 | 60.3 |      |      |      |

Source: International Financial Statistics, IMF.

Note: Data includes foreign and domestic assets. Domestic assets include credit to the government, commercial banks, other financial institutions, and to others.

a/ Incomplete data for 1985-87.
b/ Incomplete data for 1986/87.
c/ Not available for 1985-87.
d/ Not available for 1987.

2.34 The figures underscore the tremendous relative importance of central banks in Latin American economies. The ratio of Central Bank assets to GDP for the sample of countries studied, increased steadily from 35.8% in 1980 to 60.3% in 1984, the last year for which we have data for all countries. In contrast,
the US Central Bank (Fed) in 1987 had total assets representing only 5.2% of GDP, almost all in claims on the central government.

2.35 The large role of Central Banks in financial intermediation in many countries, resulting in financial repression, market segmentation and inefficiencies, calls for a restructuring of their functions and operations. Several Latin American countries, including Chile and Bolivia, have carried out studies of their Central Banking functions aimed at their restructuring. Chile has recently passed a Law which provides to its Central Bank a level of autonomy similar to that of the Federal Reserve of the United States, and introduces strong limitations to the ability of the Central Bank to provide credit to the Government. In the case of Bolivia, there is a need to reassess the results of the restructuring effort of 1985-1987. Major improvements are necessary. Other countries, such as Peru and Argentina, should also consider a major restructuring of their Central Banks.

2.36 The need for the following changes should be analyzed: (i) the restructuring of central bank functions to a leaner set of basic functions such as the control, especially through market operations, of money, credit and international reserves; (ii) the reorganization of their legal setting to give central bankers more independence from government authorities; (iii) the implementation of further limitations on the use of money creation to finance fiscal deficits or on the ability to set high reserve requirements; (iv) the separation of central bank functions from the supervision of commercial banks; and (v) increasing the transparency of central bank operations by having their financial statements published on a timely basis and audited by external auditors.

III. FINANCIAL CONDITION OF BANKING INSTITUTIONS

3.01 The financial condition of banking institutions has important implications for the ability of financial systems to effectively intermediate funds competitively and at low cost. Similarly, since banks depend on the confidence of their depositors, most are fearful of exposing any inadequate performance. Large volumes of non-performing assets make it more difficult for banks to offer new funds at low cost and still remain profitable. Capital must be sufficient to serve as a cushion for potentially lost loans and risks. Inadequate liquidity can also bring even healthy financial institutions to a loss of confidence. Profitability determines the long-term ability of an institution to survive and grow in the marketplace. Finally, the attitudes and ability of management to respond to market needs has an important impact both on banks and banking systems.

3.02 This section examines the financial condition of banking institutions in the 12 countries studied. After first examining changes in the asset, liability and equity position of banks, it analyzes capital adequacy, asset quality, liquidity, profitability, and management issues. The assessment of the real financial condition of banks is hampered by inadequate accounting and prudential regulations and weak supervision. The cross-country comparison of the condition of banks is further affected to a significant degree by cross-country differences in accounting and valuation rules and enforcement.
A. Changes in the Growth and Composition of Assets, Liabilities and Equity -- Capital Adequacy

3.03 An adequate cross-country representation of banking system assets is hampered to a significant degree by cross-country differences in accounting and valuation rules and enforcement. Banks in most countries studied have varying mechanisms for recognizing non-performing assets on their balance sheets. Further, the amount of provisions also varies, as does the recognition of interest income and write-off procedures. Procedures for asset revaluation also vary between countries. Even minor differences in the methods used for asset revaluation, particularly in highly inflationary economies, can have dramatic effects on asset size. Finally, accounting for other assets including investments, fixed assets, "off-balance sheet" accounts and adjustment accounts can radically alter the levels of assets of banks both within and between countries.

3.04 Despite the caveats above, some trends can be seen in bank assets. Assets remain primarily short-term loans. While banks have been involved in other forms of financial intermediation, loans remain almost half of bank assets. As Table 3.1 indicates, the average of loans as a percentage of total assets for the countries studied decreased from 55.9% in 1980 to 48.0% in 1984 then remained relatively stable since then. This decline partially reflected the increase in importance of loans from countries' central banks in order to rehabilitate banks after the 1982 economic crisis in the region and higher reserve requirements and bad debts. Loans as a percentage of assets declined in 7 out of 12 countries from 1982 to 1983 and in 8 of 12 from 1982 to 1987.

Table 3.1: ASSET COMPOSITION - TOTAL LOANS/TOTAL ASSETS

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<td>62.7</td>
<td>65.9</td>
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</tbody>
</table>

Arithmetic avg. | 55.9 | 53.1 | 53.1 | 49.5 | 48.0 | 49.0 | 49.9 | 49.9 | 51.0 | 2.5 |
Std. deviation   | 15.1 | 9.3  | 10.0 | 10.4 | 9.8  | 11.8 | 8.9  | 9.8  | 10.6 | 1.9 |

Source: IBRD staff estimates and country studies.

3.05 Significant variance also existed between countries in loans as a percentage of assets -- 9.8% standard deviation in 1987 (20% of the arithmetic
average). While countries such as Colombia, Mexico, Uruguay and Venezuela had a large percentage of loans as a percentage of assets (above 59% in 1987), Argentina, Brazil, Bolivia, Chile, Honduras and Peru were below 45%. The reasons for these differences reflect the importance of instruments other than loans. Most important, investments in Government or Central Bank bonds absorb an important portion of the assets of several countries. This can have disastrous implications on the financial health of banks if they pay below market rates and are non-marketable, which is generally the case. Further, banks have limited holdings of corporate and interbank securities. Depending on investment regulations, banks may hold investments in affiliates or related firms. Banks also hold fixed assets--particularly after asset seizures stemming from loan defaults.

3.06 It is also important to note that approximately half of the countries studied have some form of indexed loans. The stocks of these assets are heavily influenced by revaluation or inflation indices. Similarly, assets not indexed can severely fluctuate due to erosion from high inflation.

3.07 Examining liabilities in the USA, total deposits as a proportion of total liabilities is generally indicative of the degree to which a bank depends on "retail" sources of funds. In Latin America, however, several other factors influence the funding profile of most banks. First, in several cases large volumes of liabilities to foreign sources remain from borrowings before 1982. In some cases such as Ecuador and Chile, this foreign debt has been replaced by obligations to the Central Bank of each country. Second, measures taken to rehabilitate banks has also resulted in large obligations to Central Banks. Third, in some countries the Central Bank has played a major role in the funding the lending activities of some banks through extensive use of rediscounts (i.e. Peru and Argentina). Fourth, alternative sources of funds such as interbank markets are small in virtually every Latin American country. As a result, limited sources of funding such as deposits constrain asset growth. Without these alternative sources of funding, banks cannot increase their leverage through purchased funds and thus have limited flexibility in adjusting their book profile of assets and liabilities.

3.08 As Table 3.2 indicates, deposits as a proportion of total liabilities for the "region" remained relatively stable from 1980 to 1987. However, the ratio fluctuated severely within some countries and varied significantly across countries. During the period studied, sources of funding fluctuated significantly as (i) external new liabilities dried up and old ones were renegotiated and, in some cases assumed by Central Banks in exchange for domestic liabilities, (ii) Central Banks and governments provided sources of funds to assist the banking system, and (iii) savings mobilization decreased (see Chapter II) due to macroeconomic instability, negative real rates of return, and capital flight.
Table 3.2: LIABILITY COMPOSITION - TOTAL DEPOSITS/TOTAL LIABILITIES

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Source: IBRD staff estimates and country studies.

. . Not available.

3.09 Table 3.2 shows the trends in the ratio of deposits to total liabilities in the various countries. Deposits as a percentage of total liabilities in Argentina increased from 1983 to 1987. In Brazil, the ratio remained relatively constant from 1980 to 1987, increasing significantly in 1986 then returning in 1987 to a lower level. In Chile, deposits decreased dramatically from 1980 to 1981, continuing to decline until 1985 when they increased in 1986 and 1987. In Colombia, Mexico, Uruguay and Venezuela these levels remained quite high and stable from 1980 to 1987. Finally, Peru has had dramatic and erratic fluctuations. By computing the ratio of the standard deviation of deposits to total liabilities as a percentage of the average, one sees that Argentina, Brazil, Chile, Ecuador and Honduras have had the greatest year-to-year fluctuations. Other liabilities includes any other source of funds such as foreign obligations, loans from the Central Bank and interbank obligations.

3.10 As with assets and liabilities above, an adequate cross-country representation of bank equity, capital and reserves is hampered by cross-country differences in accounting standards. Just as cross-country differences in rules and enforcement of provisioning and write-off procedures affects assets, so it affects equity. Increases in provisions not only decrease assets, they increase leverage. As a result, those countries with inadequate rules and supervisory agencies which could enforce adequate portfolio classification and provisioning, would likely find much higher leverage in their banking systems if appropriately adjusted. Further, for those countries with significant volumes of bad assets, were they to institute more stringent write-off procedures, many would find many banks and the banking system with much higher leverage.
3.11 Other accounting procedures also hamper cross-country comparison. Some countries add retained earnings to capital and reserves while others keep it as a separate equity account. Further, in highly inflationary countries, differences in the revaluation of assets and liabilities can have dramatic effects on net income and retained earnings.

3.12 Capital adequacy of banks in Latin America should be analyzed closely keeping in mind the following three ideas: (i) banking leverage is primarily determined by capital adequacy regulations for debt-to-capital ratios. Since, in general shares of banks in Latin America are not actively traded, the effects of increases in risk created by such leverage are not necessarily reflected in the share price in the marketplace. (ii) difficulties in mobilizing savings instruments also profoundly affect capital/asset ratios since most countries do not have a wealth of alternative financing instruments that banks can use to fine-tune their leverage. (iii) debt-to-capital or equity/asset ratios observed in particular countries may not indeed be a strong indicator of the risk associated with leverage. Reserve requirements, deposit insurance, government support and accounting issues indicated above may also exert strong influences limiting the utility of this measure.

3.13 Nonetheless, given the disclaimers and caveats above, some trends can be observed. As Table 3.3 and Graph 3.1 indicate, the average ratio of capital and reserves to assets for the 12 countries studied increased from 6.4% in 1980 to 7.5% in 1987. By contrast, when Argentina and Bolivia are excluded from the average, the average ratio of capital and reserves to assets decreased. When one factors in inadequate provisioning for non-performing loans and inadequate institutional supervision, capital adequacy indeed declined from 1980 to 1987. Unfortunately the case studies did not provide detailed explanations for the changes in leverage in the various countries and reasons which support these changes cannot therefore be listed.

Table 3.3: CAPITAL ADEQUACY - CAPITAL AND RESERVES/ASSETS

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Source: IBRD staff estimates and country studies.

Note: Comparability of date is suspect.

.. Not available.
B. Asset Quality

3.14 Data on asset quality is likely to be the least reliable because the implications of disclosure of large volumes of non-performing assets can be disastrous to individual banks and to entire banking systems. Accurate calculations can only be achieved with an information reporting system and analytical supervision which many countries are lacking. Finally, the definition of "non-performing" loans varies across countries.

3.15 As Table 3.4 indicates, for the 12 countries studied average non-performing loans as a percentage of total loans increased dramatically from 5.8% in 1981 to 10.9% in 1983 due to the financial crisis. This percentage continued to increase through the 1980s to 13.7% in 1987, propelled by Argentina, Bolivia, Honduras and Uruguay which all had very large proportions of non-performing loans (over 20%). Loan quality deteriorated during the 1980s as (i) macroeconomic difficulties made it more difficult for borrowers to prosper and thus repay their loans, (ii) loans made with inadequate credit analysis (particularly before 1982) began to deteriorate and (iii) some improvement in institutional capabilities made estimates of non-performing loans increase. It is highly likely that the 1987 estimates for Brazil (1.2%), Mexico (0.6%), and Venezuela (7.0%) are severely underestimated. Peru's estimates are also likely understated. The poor level of asset quality in Latin America is highlighted when compared to similar figures for the US banking system. In 1987, less than 2% of the loan portfolio of American banks were non-performing. Even in Texas, experiencing an energy crisis, in 1987 non-performing loans represented 5.9% of total loans of banks in the state.
Table 3.4: ASSET QUALITY - NON-PERFORMING LOANS/TOTAL LOANS

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Source: IBRD staff estimates and country studies.

.. Not available.

3.16 Asset quality varies significantly across countries mainly because:
(i) accounting and prudential regulations vary significantly so that the
definition of non-performing loans is not unified; (ii) regulations vary as to
when and under what conditions loans must be written off; (iii) institutional
authority and capacity varies so that in some countries the incentives for good
asset quality are significant, while not in others; and (iv) economic and
political conditions have varied so that the measures taken to resolve problems
of bad loans change dramatically from one country to another.

3.17 Another indicator of asset quality is loan-loss-coverage, the ratio
of provisions to non-performing loans. Table 3.5 shows this ratio for the
"region" for the period 1980-87. This table suggests that coverage has indeed
improved during the 1980s, increasing from an average of 45% in 1980 to 78% in
1987. This average improvement was propelled primarily by improvements in
coverage in Chile and Mexico. In both cases, the improvements reflect increasing
institutional capacity and more stringent regulations for Bank supervision.
Colombia and Peru also improved its coverage this period. In 1987, Argentina,
Brazil, Honduras and Uruguay each had very low coverage, with Uruguay's
practically nonexistent. It is important to note that with Uruguay's very low
loan loss coverage and high estimated losses, the effects of write-offs would
be very severe. Assuming the estimates are correct, the same would largely be
true for Argentina and Honduras. As indicated in the chapter on prudential
regulations and supervision, a critical regulatory issue is not only to assess
non-performing loans but the quality of guarantees. Furthermore, a critical issue
is the extent to which doubtful loans are covered by provisions. A good
regulatory system would require provisioning not only non-performing loans but
also doubtful loans. Information is not available on the extent to which doubtful loans are provisioned.

Table 3.5: ASSET QUALITY - PROVISIONS/NON-PERFORMING LOANS

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</tr>
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</table>

Arithmetic avg. 44.9 49.7 55.5 56.6 75.5 87.5 96.9 78.0 68.1 17.8
Std. deviation 37.1 58.2 57.6 40.3 69.3 76.5 80.4 72.5 61.5 15.1

Source: IBRD staff estimates and country studies.

.. Not available.

C. Liquidity

3.18 The principal variables which indicate the susceptibility of banking systems to liquidity shortfalls are the following: (i) the mismatch in maturities between assets and liabilities which exposes banks to the possibility of withdrawals without resources to cover them. This is often analyzed by examining the ratio of loans to deposits as well as their average maturities; (ii) access to liquidity windows which can mitigate the effects of exposure to liquidity shortfalls; (iii) countries may have informal mechanisms to support liquidity needs of banks or informal support in case a liquidity crisis develops, and (iv) cash management techniques and the ratio of readily available assets including cash as compared with readily callable liabilities. Reliable comparable data was not available in order to analyze these variables. Information on maturity matching of assets and liabilities is not readily available, and it appears that techniques of asset-liability management are just starting to be implemented in these countries.

D. Profitability and Spread Analysis

3.19 Caveats and disclaimers similar to those for assets and equity are applicable to income: (i) provisioning procedures and requirements dramatically affect income; (ii) income from non-performing assets is recognized differently across countries; (iii) monetary correction is treated differently in each country; (iv) profitability measures, such as return on assets, suffer both from
distortions on income reporting as well as overvaluation of assets; (v) several countries force portions of infusions of new capital to be recognized as income; (vi) impact of inflation on financial results may be reported differently between countries; and (vii) measures taken by Central Banks and bank superintendencies to rehabilitate banking systems in various countries have had important income effects for banks. Further, profitability isn't even the objective for a number of public banks. The next few paragraphs attempt to shed some light on bank profitability in some of the 12 countries studied; conclusions should be treated cautiously.

3.20 As Table 3.6 indicates, returns on average assets have been erratic from 1981 to 1987 and have varied significantly across countries. Argentina, Colombia and Uruguay in particular had dramatic year-to-year fluctuations. In highly inflationary environments the scope for errors in profitability data is enhanced (inflation causes big fluctuations in earnings). Argentina had very high returns on assets in 1983 and 1984, declining in 1985 and 1986, and becoming negative in 1987, which makes this data highly suspect. Nonetheless, the data shows that the trend of profits in the Argentine banking system has been downward, which would be consistent with a worsening of the quality of the loan portfolio and the high operating costs faced by many institutions. Brazil also has suspect data with high rates of return on average assets. Colombia's profitability ratios also show sharp fluctuations but within reasonable limits. Low profitability in Colombia is explained by high operating costs coupled with high levels of non-performing assets (at the end of 1987 earning assets accounted for only 66.4% of total bank assets and non-performing loans made up 11.3% of total loans). Uruguay's ROE and ROA indicators are also very low, which is partly explained by a decline in earning assets (from 86.9% of total assets in 1979 to 66.8% in 1987), high operating costs, and interest rate controls. Venezuela's profitability data suggests that returns on equity increased from 1983 to 1988, and in particular from 1985 to 1987. However, in real terms they declined tremendously since 1986.

3.21 Data indicating rates of return on average equity is less valid than returns on average assets because distortions caused by data not comparable across countries for capital adequacy is then compounded with similarly not comparable profitability data. This makes for severely distorted and exaggerated results. As a result, returns on average equity indicated in Table 3.7 vary considerably across countries and are highly erratic within. Indeed in most countries the standard deviation of the return on average equity for 1980-87 represented over half of the return on average equity. The table shows huge ROEs for Brazil, Mexico, Peru and Argentina in several years, which is not consistent with developments in their real sectors.
### Table 3.6: PROFITABILITY - RETURN ON AVERAGE ASSETS

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<td>(0.58)</td>
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<td>0.79</td>
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<td>(1.99)</td>
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<td>(0.11)</td>
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<td>0.25</td>
<td>0.29</td>
<td>0.48</td>
<td>0.88</td>
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</table>

Arithmetic avg. 1.3 1.0 1.5 1.7 1.2 0.6 0.6 1.13 0.4
Std. deviation 1.0 1.1 2.4 2.4 2.0 1.3 2.0 1.75 0.6

Source: IBRD staff estimates and country studies.

.. Not available.

### Table 3.7: PROFITABILITY - RETURN ON AVERAGE EQUITY

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<td>7.0</td>
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</table>

Average 22.7 17.1 21.3 22.7 2.5 13.9 15.3 16.5 6.6
Std. Dev. 18.1 16.2 30.8 22.7 58.8 23.5 27.3 28.2 13.3

Source: IBRD staff estimates and country studies.

.. Not available.
Table 3.8 indicates interest income as a percentage of average assets. As one would expect, interest income as a percentage of assets is significantly above overall returns on assets. Once overhead costs are deducted, these returns become much smaller. In Brazil in 1987 for example, net interest income as a percentage of average assets was 43% while return on average assets was a mere 4.9%. It is interesting to note that in Uruguay, net interest income has been negative since 1983. The explanation for this negative margin could be the extensive use of commissions and other charges for services rendered by banks, and the distortions introduced in aggregate data for the system by the poor financial results of the four intervened banks. Excluding Brazil, net interest income as a percentage of average assets declined from 4.1% in 1981 to 3.5% in 1987.

Table 3.8: PROFITABILITY - INTEREST INCOME/AVERAGE ASSETS

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<td>22.96</td>
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<td>1.63</td>
<td>2.00</td>
<td>1.4</td>
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<td>7.1</td>
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<tr>
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<td>..</td>
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<td>2.77</td>
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<td>3.81</td>
<td>3.95</td>
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<td>3.28</td>
<td>2.90</td>
<td>2.97</td>
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<td>3.51</td>
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<td>7.93</td>
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<td>(1.26)</td>
<td>(1.31)</td>
<td>(1.34)</td>
<td>(1.25)</td>
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<td>2.84</td>
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<td>5.6</td>
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<td>12.3</td>
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</table>

Source: IBRD staff estimates based on country studies.

.. Not available.

Table 3.9 shows the evolution of spreads, between the average real deposit and lending rates in 11 of the 12 countries studied. Figures for Brazil were not included due to difficulties in obtaining a comparable series of data. A recent World Bank internal report on Brazil9 showed that spreads in Brazil increased tremendously between 1986 and 1987. It indicated that during the second quarter of 1987 the spread soared to 20%, mainly as a result of an increase in inflation which increased the banks' share of the inflation tax. Average spreads for the "region" are large, indicating important inefficiencies in the financial intermediation of these countries.

Table 3.9 REAL SPREADS, BY COUNTRY AND REGION, 1980-87 (%)

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<td>8.9</td>
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<td>13.7</td>
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<td>1.9</td>
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<td>1.7</td>
<td>3.6</td>
<td>3.6</td>
<td>3.0</td>
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<td>7.0</td>
<td>8.6</td>
<td>6.9</td>
<td>7.3</td>
<td>9.8</td>
<td>9.6</td>
</tr>
</tbody>
</table>

Source: IBRD staff estimates.

/a/ Average annual interest rates.

3.24 The large spreads prevalent in several countries of the survey are the consequence of: (a) high reserve requirements and substantial forced investments; (b) the large proportion of non-performing loans in relation to total assets; and (c) high operating costs of financial intermediaries.

E. Management

3.25 After careful examination of both quantitative and qualitative indicators of efficiency and management quality in the 12 countries studied, the following conclusions were reached: (i) in most countries studied, banking generally remains as a conduit to finance real sector investments of parties related to bank owners rather than as profit centers in their own right. As a result, few incentives have existed for active competition. In this way, measures such as automation, active cash management and new product development and marketing have only grown slowly during the 1980s; (ii) operating costs of banks and other financial institutions remain high, in part due to the lingering large staff and overhead costs that have not been sufficiently curtailed since the decrease in financial intermediation in real terms since the early 1980s. This is particularly true for public banks. Many countries studied remain "overbanked" as bank owners have been reticent to close and sell unprofitable branches; (iii) in several countries studied, the banking sector enjoys significant state support both from direct and indirect credits as well as by implicit collaboration in hiding bank losses. Further, as indicated elsewhere in this report, banks have been saddled with large reserve requirements, directed credit requirements and other obligations by the State. As a result of this intervention, open disclosure of the financial soundness of institutions has been rare in the region.
IV. ECONOMIC REGULATIONS AFFECTING BANKING ACTIVITIES

4.01 The financial systems of Latin American countries have been affected by a large number of economic-type regulations which in most cases increased financial intermediation costs, encouraged capital flight and reduced deposit mobilization. Economic regulations, as opposed to prudential regulations, are those regulations which have economic goals. Economic-type regulations include interest rate controls, reserve requirement policies, directed credit guidelines, and taxes on financial intermediation. Many of these financial systems are overburdened by economic regulations. In addition, in most countries the Central Bank plays a very large role in financial intermediation, introducing serious distortions in the financial system of their countries, and hindering the achievement of its main objective which is fostering economic growth with price stability.

A. Interest Rate Policies

4.02 Empirical Evidence in Latin America. During the 1960s and most of the 1970s, in most Latin American countries, interest rates in the institutionalized credit markets were subject to administered ceilings which hampered the growth of financial intermediation. In the 1980s many countries freed term deposit and lending rates but with fluctuations between market determined rates and extreme controls in credit allocation. Thus, continuing interest rate ceilings on the most important type of bank deposits (savings and current accounts) have limited the size and efficiency of intermediation, and increased banking spreads in most countries in Latin America.

4.03 Table 4.1 shows figures for real deposit rates in selected Latin American countries. The calculation of real interest rates should ideally be based on expected inflation (an immeasurable variable), and not on short-run changes of any particular price index. A simple solution is to estimate real interest rates by using current inflation to deflate nominal rates (the perfect foresight assumption). This approach was used to obtain real interest rates in Latin American countries. For the region as a whole, average real interest rates for deposits have been negative in most years, with the exception of 1981. They became highly negative from then until 1985, and moderately negative in 1986 and 1987. The overall picture includes tremendous variations between countries, adding the elements of uncertainty and instability to already weakened financial systems, in some cases resulting in a substantial decrease of real bank deposits. Negative real interest rates were not always the result of conscious policy decisions, but followed from overall fiscal policies, including the way deficits were financed, monetary policies and exchange rate policies. Nonetheless, the table shows a positive trend: in 1987 only four countries had negative deposit rates compared to seven in 1980. There seems to be a recognition that interest rates should not be used as a means to provide subsidies.
Table 4.1: ANNUALIZED REAL DEPOSIT INTEREST RATES, 1980-87
(End of Period, %)

<table>
<thead>
<tr>
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<td>11.6</td>
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<td>6.3</td>
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<td>-1.2</td>
<td>-1.1</td>
<td>-2.5</td>
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</tr>
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</table>

Source: IBRD staff estimates.

Note: Free interest rates were used for Argentina, Colombia, Brazil, Chile and Uruguay. Regulated interest rates were used for Bolivia, Guatemala, Honduras, Mexico, Peru and Venezuela. Rates apply to marginal operations (in most cases one-month time deposits).

a/ Yearly average rates.

4.04 Table 4.1, however, fails to provide an indication of the segmentation of markets (and interest rates) which exist in many of the countries studied. Controlled rates for directed lending and free rates for other lending coexist in most countries. In others, illegal free rates compete with regulated rates which are negative in real terms. Policies vary from country to country. In Venezuela, for example, interest rate policy has fluctuated between strict controls on rates and free market determined rates. Since 1984, after a short period of free determination of interest rates, lending and deposit rates have been determined administratively by the Central Bank. Argentina in the 1980s has a long history of policy shifts between administered controls, a mix system, and freely determined market rates.

4.05 In Colombia free lending and borrowing rates have been positive in real terms throughout the 1980s, while regulated rates have been mostly negative, thus causing significant distortions in the allocation of credit. Concerned with the high level of free real interest rates, in August 1988 the Government issued a decree imposing interest rate ceilings on deposits with maturity below 18 months (the bulk of deposits) and on loans. Demonetization of the system accelerated making this move an important step backward in financial sector policy. Interest rate limits were lifted early 1989 when injections of new
liquidity had lowered market interest rates below their ceilings. These examples illustrate what has been the rule in Latin American countries with respect to interest rate policy: its instability. Other countries like Bolivia, Brazil, Uruguay, Ecuador, and Mexico have faced similar instability in interest rate policy.

4.06 Table 4.2 shows the evolution of lending interest rates in the countries studied. The average lending rate for the 12 countries over the 1980-87 period was 4.8% per year. Rates vary significantly between countries and across time. In December 1987, Bolivia, Argentina and Uruguay had real lending rates above 20% p.a., while Peru and Venezuela had negative lending rates. Of the 12 countries, Peru is the only one which has had negative lending rates throughout the period. Bolivia had negative rates through mid-1985, and positive thereafter. While it is encouraging that most countries have positive rates, it is worrisome that in several countries real lending rates are extremely positive, at levels far above the marginal efficiency of capital of their economies. If rates remain at these high levels they could produce widespread insolvency of private borrowers and financial institutions. On highly leveraged economies, high real rates cause corporate distress and public sector distress, but in many cases the distress of borrowers, either public or private, causes the high levels of interest rates. Once countries fall into this vicious circle it is very difficult to get out, as the Argentine experience in late 1989 indicate. It should be noted that in the cases of Uruguay and especially Chile, lending rates were very high in the first years of the 1980s due to the collapse of the "tablita", and rates declined significantly after 1983.

4.07 High real lending rates result from high deposit rates and high operating costs (spreads) of financial intermediaries. The comparison of lending and deposit rates, as expected, show a high correlation between them. Figures also show that spreads, the difference between deposit and lending rates, are high in most countries. Spreads are analyzed in Chapter III. In order to reduce lending rates it will be necessary not only to reduce banking operating costs, but most important to undertake economic policies which are credible enough to augment the public's confidence on the country and in its financial system. In some countries, governments' borrowing requirements cause them to bid up rates in the economy, leading to high real deposit rates. These high rates contribute to the fiscal deficits and weaken the financial condition of leveraged firms. Unless they are controlled, they could result in a generalized situation of financial distress, characterized by widespread bankruptcies.
Table 4.2: REAL LENDING INTEREST RATES, BY COUNTRY AND REGION, 1980-87
(End of Period, %)

<table>
<thead>
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<tr>
<td>Venezuela</td>
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<td>0.9</td>
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<td>10.6</td>
<td>3.0</td>
<td>2.2</td>
<td>1.9</td>
<td>-11.3</td>
<td>1.3</td>
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</tbody>
</table>

Average 2.7 10.8 6.7 2.3 4.1 -2.5 6.5 7.9 4.8

Source: IBRD staff estimates.

Note: Free interest rates were used for Argentina, Colombia, Brazil, Chile and Uruguay. Regulated interest rates were used for Bolivia, Guatemala, Honduras, Mexico, Peru and Venezuela. Rates apply to marginal operations and do not represent weighted average rates.

\(a/\) Yearly average rates.

4.08 The development of Liquid Asset Funds (LAFs) in Venezuela is a good example of the distortions created by excessive regulation on interest rates. Faced with interest rate controls, banks and other financial institutions created LAFs which were able to offer higher returns to depositors than more traditional deposit instruments. LAFs then lent these funds through banks and other financial institutions which controlled them. These financial institutions lent the funds at rates above "ceilings" through the use of commissions compensating balances, and other non-interest charges. In 1988, deposits by LAFs in commercial banks accounted for about 67% of their time deposits. In terms of financial instruments, investments by LAFs, as of March 1988, accounted for 53% of total time deposits, for 30% of mortgage bonds, and 60% of bonds issued by financial institutions; compared to 25.3% of time deposits, 23% of mortgage bonds and 45% of other financial sector bonds at the end of 1986. Financial groups use LAFs to avoid controls. If it were not for the funds mobilized by LAFs, the Venezuelan financial system would have experienced a very important disintermediation in the last couple of years. In short, LAFs were created as a reaction of the market to a limiting regulation.

4.09 All Latin American countries decided at various times in the 1980s to set interest rate ceilings. As will be seen, some countries used interest rate ceilings more persistently than others. Interest rate ceilings usually were accompanied by two important government policies which have had perverse effects
in various countries: (i) fixing the exchange rate, with or without preannounced devaluations, and opening the capital account; and (ii) carrying out open market operations in order to stabilize interest rates, and consequently losing control over the money supply. The twelve countries studied had some form of interest rate ceiling at some time during the 1980s.

4.10 Other countries have also chosen at various times to set a floor on deposit rates. Governments opted to place a floor on deposit rates in an attempt to control the interest rate spread of banks. In many countries actual deposit rates were above the floor because: (i) the domestic financing of the large public sector deficits has crowded out resources available to the private sector and set a very high floor on domestic interest rates; (ii) the public's lack of confidence in economic performance over the medium and long-term resulted in additional pressures on interest rates in the form of risk premia; and (iii) the financial system's weak financial condition, where banks' liquidity needs lead them to pay higher rates to attract deposits (this also implies depositors will demand a risk premium leading to still higher rates). Thus, mandated floors on deposit rates do not appear to have constrained the flexibility of banks to remunerate depositors. The constraints arose in those countries in which ceilings on lending rates were too low.

4.11 Bolivia is a good example of erratic interest rate policies. Its interest rate policy during the first half of the 1980s was characterized by controls imposed by the Government on lending and deposit rates. Both deposit and lending rates were strongly negative in real terms. The tremendous inflationary pressures which started in 1982, and subsequently accelerated in 1984 and early 1985 led the Government to lift controls on lending rates and to set a floor on deposit rates. Finally, in late 1985 all interest rates were freed. Real interest rates have risen to very high levels since then. The Government is undertaking a study to determine the causes of high rates. The following factors will be studied: the cost structure and levels, the degree of competition in the system, and the foreign exchange and domestic credit policies.

4.12 Effects of these Policies. As shown in Chapter I, interest rate controls, combined with high inflation rates and directed-credit programs under which financial institutions were required to lend to specific borrowers, repressed financial-sector development in many Latin American countries during the period under review. Governments instituted controls for various reasons: (i) to relieve the pressure of high interest rates on government deficits, (ii) to encourage particular sectors to borrow-sectors expected to increase employment, develop essential activities, or increase exports, or (iii) to redistribute income.

4.13 Controlled lending interest rates, were sometimes set at levels which were too low to provide adequate profits to financial institutions. In some instances, governments set controls on deposit rates, reasoning that deposit rates would not significantly influence private saving behavior. Experience suggests that interest-rate controls often failed to achieve governments' aims, and sometimes caused significant damage when pushed to extremes. While it is true that empirical studies have tended not to find significant correlations in time-series analysis between financial-saving flows and real interest rate levels, it is clear that countries whose real interest rates have been persistently negative have also had inadequate financial savings. Inadequate
financial savings have implied inadequate resource availability for commercial, working-capital and capital-formation loans, which has inevitably affected real output. Furthermore, as indicated in Chapter I, evidence shows the close relationship between deposit mobilization and interest rates in Latin American countries.

4.14 In addition to discouraging deposit mobilization, interest rate policies have had other adverse consequences: (i) since interest rate controls cause "rationing", financial institutions have tended to favor wealthier persons and enterprises whose loans were safer and easier to administer; and (ii) they encourage "capital flight." Here, of course, expectations regarding devaluation matter as much or more than interest rates, but combined they encourage capital flight. Particularly in the inflationary economies of Latin America, people have learned to keep track of real effective exchange rates and to speculate by purchasing or selling foreign currency on parallel currency markets. When they perceive that exchange rates are lagging behind the values required to maintain the current-account objectives, they tend to speculate on devaluation. Monetary authorities may resist this tendency in the short term by forcing up interest rates, but this policy approach may eventually prove more costly than devaluation. The experience of several Latin American countries which attempted to raise interest rates to prevent devaluations illustrate the dangers of this policy: interest rates rose significantly, causing large fiscal or quasi-fiscal losses which made more elusive the adjustment effort, and crowded out private investment. This is one more reason why policy-makers must endeavor to keep their exchange-rate policy on as steady a course as they can manage.

4.15 Low interest rates were sometimes the result of deliberate policy, but sometimes inadvertent when governments failed to adjust administered rates by sufficient amounts or with sufficient frequency. Even in countries whose interest rates were deregulated, movements in real interest rates have often depended strongly on the level of and changes in inflation rates. In Chile and Argentina volatile inflation rates have caused interest rates to fluctuate markedly from highly negative to highly positive, depending on whether they are free or regulated rates. Graph 4.1 shows that real deposit interest rates for some countries in the "region" tended to fluctuate at a different pace than inflation, in most cases nominal rates overshoot inflation rather than fail to adjust to it.

4.16 At the same time, however, recent experience suggests that excessively high interest rate levels have dangers. In several Latin American countries, interest rates rose sharply when deregulated, and this contributed to the financial distress discussed in Chapter VI. In some countries they also contributed to swelling government deficits. In some instances, they attracted financial-saving flows in excess of the amounts that financial institutions could safely lend, and so contributed to financial-sector decapitalization—either because financial institutions had to pay interest on deposits they could not lend, or because they lent to enterprises that proved unable to meet their obligations. There has been a discernible tendency in some nations in recent years for high interest charges to be financed through mechanisms that, directly or indirectly, force inflation. Indeed, some countries have found that restrictive monetary policy has backfired disastrously: the tight money supply forced interest rates up, but then, when the high interest rates were credited to deposit accounts, the resulting growth of the deposit balances exceeded the economy's willingness to hold them, with inflationary consequences.
4.17 In short, in Latin America interest rates have not been able to perform the basic functions they are meant to: (i) act as the price which influences the choice between present and future consumption, and (ii) act as efficient rationing devices for the allocation of scarce resources between alternative investments. As a result, the system's ability to mobilize resources and to assign credit efficiently has been hindered with perverse consequences on the behavior and financial performance of banks. Interest rate controls have resulted in important distortions, but attempts by the financial system to circumvent them, although by "bending" laws and regulations, reduced the negative effect of these controls and allowed them to continue in business.

4.18 **Recommendations.** Policy-makers in Latin America, particularly in the heavily indebted nations faced profound dilemmas as they tried to manage interest rates and exchange rates through the crises of the mid-1980s. At times they tried to follow advice to maintain depreciated currencies, to ensure high export surpluses and a capacity to service external debt but these resulted in inflationary pressures, and high external resource transfers implying sharply reduced capital-formation capacities and reduced real growth rates. On the other hand, when Latin American countries attempted to stabilize by reverting to fixed exchange rates they have run into renewed crises. Monetary authorities have found that they could defend fixed exchange rates only by sharply increasing interest rates. Unfortunately, high real interest rates have not only caused intense damage to the financial systems in question; in a number of instances they were self-defeating, for once the interest was capitalized into asset stocks it dramatically increased the supplies of domestic assets and destabilized the economy again. This calls for a liberalization of interest rates only in the context of a coherent macroeconomic program.
4.19 Governments should rationalize their interest rate structures aimed at reducing subsidies and market segmentation. If countries maintain forced investments and directed credits, the following adjustments should be made: (i) rates paid by central banks to financial institutions on forced investments should be increased to levels close to a market reference rate; (ii) the rediscount rate paid by financial intermediaries to the central bank on directed credit lines should be adjusted to approximately market levels, allowing a fee to cover the costs of the central bank; (iii) rates paid by final borrowers should approximate that rate which allows financial institutions to pay average market deposit rates and to obtain adequate spreads to cover fully their operating costs, loan losses, and a normal profit.

4.20 Given the current oligopolistic structure of the financial system in many countries in Latin America, and uncertainties over the ability of governments to carry out consistent economic policies, there is a legitimate concern that a full liberalization of interest rates, unless timed properly, may not be the best recommendation in many countries. These countries should, however, carry out programs to improve the property structure of the financial system, thus encouraging more competition, which will allow an elimination of interest rate controls without destabilizing upswings in rates. Governments should analyze the reasons for the existence of oligopolistic structures. Entry deregulation may be the answer in some countries.

B. Reserve Requirement Policies

4.21 Introduction. Faced with strong variations in foreign capital flows, sporadic interventions to bail out banks in distress, and the need to finance budget deficits, Central Banks in many Latin American countries have resorted to high reserve requirements as the basic tool to reduce the inflationary impact of expansionary fiscal policies. In most countries, and especially in the smaller ones, the stock of outstanding liquid government securities is too small to be used to influence reserves through open market operations. Then, until such time as adequate open-market operations are developed, only direct intervening measures, such as credit ceilings, rediscounts and the imposition of reserve requirements, are available to central bankers to influence monetary aggregates.

4.22 General Considerations. Reserve requirements have various uses, not all of which are directly related to their traditional role as monetary instruments. Reserve requirements in developing countries have been used to: (i) affect the liquidity of the banking system; (ii) help control the quantity of money and credit; (iii) tax financial intermediation; and (iv) provide resources to finance the lending activities of specialized development finance institutions.

4.23 Manipulating the target for free reserves and the discount rate can ostensibly serve as a means to control monetary expansion. As in the case of credit policy, available data cannot verify the usefulness of reserve requirements in reaching this objective. In most of the countries studied, fluctuations in reserve requirements created dramatic uncertainty and increased risk which had to be compensated for by spreads even higher than those imposed by merely high reserve requirements. In Brazil for example, from 1983 to 1987, legal reserve ratios on time deposits were changed 14 times. Controlling the monetary base through open market operations is a much more effective tool.
4.24 Another possible use for reserve requirements is as a tax to financial intermediation. While this is generally not an explicit objective of reserve requirements, they can indeed serve both as a rapid, hidden and consistent means of generating revenues. Increases in reserve requirements can be a much more speedy means of generating revenues than changes in taxation. Further, since in Latin America the infrastructure for collecting taxes is not highly developed, reserve requirements are a relatively easy means of collecting revenues in spite of their distortionary effects. It is important to note that reserve requirements, if not abused, may serve as an efficient means of capturing seignorage and inflation tax tied to the banking system's capacity to create money. Nonetheless, it should be mentioned that reserve requirements are a far "nth-best" alternative as a source of taxation relative to other more traditional taxes. It has to be kept in mind that reserve requirements, unlike any other tax, are temporary. If the deposit base of the financial intermediary declines, it has the right to reduce its reserves at the Central Bank. Thus, its use as a tax, particularly in unstable economies, may be dangerous because it may result in reducing the Central Bank's ability to control the money supply. In some countries reserve requirements have been placed on commercial bank deposits in order to finance lending by development banks. Considering the poor performance of development banks in many countries, if repayment to the Central Bank slackens this use of reserve requirements could also reduce the ability of the Central Bank to control money developments.

4.25 While reserve requirements have some uses, high reserve requirements have negative effects on the financial system. High levels of immobilized deposits place an unusual proportion of the inflation tax on the financial sector, which is either passed on to depositors in the form of lower deposit rates, resulting in lower intermediation, or to borrowers in the form of higher spreads. The most likely result of high reserve requirements is that banks reduce deposit rates, encouraging savers to shift their deposits toward financial institutions and instruments that are not subject to such a cost, particularly the informal and some over-the-counter markets. Thus, it leads to the underutilization of banking services\(^\text{10}\) (and to the depletion of the source of the reserve requirement tax itself). Differential reserve requirements by type of deposits or institutions have a similar effect: they affect the allocation of deposits because through time deposits will move from the high to the low reserve requirement banks.

4.26 **Empirical Evidence In Latin America.** As Table 4.3 indicates, in the "region" demand deposits are typically subject to higher reserve requirements than time and saving deposits with the rationale that these deposits are most vulnerable to liquidity shortfalls. Some countries also require lower levels of reserves on dollar-denominated deposits (where permitted) than on domestic currency deposits. This is true in Honduras, for example. It is presumed that dollar denomination will eliminate a degree of uncertainty and thus the vulnerability to liquidity shortfalls. The most common form of reserve requirement is that which a bank must hold a fixed percentage of its deposits in an account with the Central Bank. In general this account does not receive

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10/ For more details refer to the article by Warren Coats Jr. entitled "The Use of Reserve Requirements in Developing Countries" listed in the bibliography.
interest, although in some cases total reserves or portions of the funds are remunerated.

<table>
<thead>
<tr>
<th>Demand deposits</th>
<th>Time deposits</th>
<th>Savings deposits</th>
<th>Remunerated?</th>
<th>Compul. invest.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>89.5</td>
<td>3%</td>
<td>n.a.</td>
<td>Both%</td>
</tr>
<tr>
<td>Bolivia</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>Both%</td>
</tr>
<tr>
<td>Brazil</td>
<td>8-43%</td>
<td>0%</td>
<td>0%</td>
<td>Both%</td>
</tr>
<tr>
<td>Chile</td>
<td>10</td>
<td>4</td>
<td>g/</td>
<td>No/</td>
</tr>
<tr>
<td>Colombia</td>
<td>15.2%</td>
<td>15.2%</td>
<td>15.2%</td>
<td>Both%</td>
</tr>
<tr>
<td>Ecuador</td>
<td>32</td>
<td>14</td>
<td>14</td>
<td>n.a.</td>
</tr>
<tr>
<td>Guatemala</td>
<td>41</td>
<td>13</td>
<td>13</td>
<td>n.a.</td>
</tr>
<tr>
<td>Honduras</td>
<td>35%</td>
<td>35%</td>
<td>35%</td>
<td>Yes</td>
</tr>
<tr>
<td>Mexico</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>Yes</td>
</tr>
<tr>
<td>Peru</td>
<td>58%</td>
<td>58%</td>
<td>58%</td>
<td>n.a.</td>
</tr>
<tr>
<td>Uruguay</td>
<td>24</td>
<td>11%</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Venezuela</td>
<td>15</td>
<td>8</td>
<td>10</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: IBRD staff summary based on individual country studies.

a/ For deposits from 7 to 29 days. Rates for deposits for 30 to 89 days were 1.5%. Rates were zero for those with maturities over 89 days.
b/ Both remunerated and non-remunerated.
c/ As of March 31, 1987, for all banks including public, foreign, S&Ls, finance and credit companies.
d/ The rates are the same for dollar deposits.
e/ One half can be filled by purchase of negotiable CDs from the Central Bank.
f/ There were 42 different rates for demand deposits depending on a bank's size and location. Rates are as of the end of 1988.
g/ Estimated. Rates are as of the end of 1988.
h/ Reserves have to be established for 100% of demand deposits over two and one half times capital and (other) reserves. These reserves do bear interest while others do not.
i/ Brazil has an extensive system of directed credit allocating the vast majority of deposits.
j/ Average for all deposits.
k/ Special instruments enable banks to mobilize resources for agriculture and housing at lower reserve requirements (11%). Dollar deposits have reserve requirements between 20% and 30% depending on amount.
l/ The government dictates the distribution of assets associated with virtually all short-term bank liabilities.
m/ Less than 180 days. Deposits of more than 180 days, 5%.
n/ Based on all peso deposits only. Forced investments are also 9% of dollar demand deposits and 14% of all dollar time deposits.
4.27 Some countries also require different levels of reserves depending on the geographic location of the bank. Reserve requirements may be greater for urban than for rural banks or greater for banks in one region than for another. The rationale for this is as follows: First, consistent with the liquidity rationale indicated below, the more central a bank's position in the financial system, the more reserves it should hold. Second, in several Latin American countries, the central government feel that lower reserve requirements for rural banks or banks in specific locations can create a comparative advantage for project financing in these areas. In Brazil for example, the government seeks to increase the flow of credit to poor regions by requiring lower reserve ratios in these areas. It also requires smaller percentages of reserves for smaller banks. In Peru, legal reserves also vary according to district. The problem with regional differentials in reserve requirements is that since it is difficult to control domestic capital flows, credit will quickly flow from one "priority" area to another "non-priority" area. In other words, these policies are self-defeating and result in the opposite effect since deposits flow from the institution with higher reserves to those with lower reserve requirements.

4.28 Some countries also subject development banks or special deposits dedicated to development finance to lower reserve requirements. In Honduras for example, special instruments enable banks to mobilize resources for agriculture and housing with lower reserve requirements. Development banks in Peru are also subject to lower reserve requirements than commercial banks.

4.29 Reserve requirements may also be greater for large institutions than for small ones. The rationale for this is that reserve requirements place a higher fixed overhead expense burden on smaller banks than larger ones and thus create a comparative disadvantage. Many believe however, that there really are no important economies of scale in banking and that a differential between reserve requirements for large and small banks would just be a disguised subsidy in any case. In Brazil, smaller banks have much lower required reserves on demand deposits than do large banks.

4.30 In addition to required reserves, Latin American governments also very often have requirements that banks invest a percentage of their deposits in bonds issued by the Government or Central Bank or in loans to specified sectors at below-market rates. These "forced investments" in many cases have an effect similar to reserve requirements, albeit the forced investments may well be even more illiquid than reserves. In Colombia for example, commercial banks must make forced investments to specified priority borrowers (in agriculture and low income housing and special industrial activities) or to the Central Bank to then be rediscounted to priority borrowers. Similarly, in Ecuador banks must place 5% of deposits in bonds issued by a national housing bank. In Mexico, the government dictates that 31% of deposits must be held in government bonds, 16.2% for "development activities", 10% lent to development banks, 10% lent for housing, 1.2% for exporters and so forth.

4.31 In Argentina, reserve requirements of financial institutions constituted an average 15.8% of total deposits on March 31, 1987, and forced investments reached 50.0% of deposits, thus limiting funds for lending to a total of 24% of deposits. Provincial and municipal banks, with 10.3% of total deposits, were not subject to reserve requirements and were not obliged to have compulsory investments.
4.32 As Table 4.3 indicates, required reserves for demand deposits vary from 10% of deposits in Bolivia and Chile to over 58% in Peru. Time and savings deposits also vary from 4% in Chile to 58% in Peru. From the rates indicated, we can safely say that in the cases of Bolivia, Chile and Venezuela, reserve requirements are sufficiently low so as not to create massive distortions in their respective economies. In the other countries, reserves have been used as cheap sources of funds for financing government deficits. Unfortunately, as in the case of Argentina, over time as people's willingness to hold deposits diminishes, Government's are forced to increase the remuneration of reserves to levels which can become prohibitively expensive, thereby generating unsustainable quasi fiscal losses to the Central Bank.

4.33 It would have been useful to provide a table showing the net tax of reserve requirements on the banking system. Unfortunately, the figures were not available. This kind of exercise would imply calculating the cost of reserves to the banking system by subtracting the operating costs and the average return on reserves at the Central Bank (if any) from the average return on loans. The figures would have been useful to compare how different is the impact of reserve requirements on the various Latin American countries, and their impact on profitability.

4.34 Recommendations. Considerable disagreements exist between monetary theorists on the optimal reserve requirement policy. Nonetheless, some suggestions can be made on the basis of those aspects in which there appears to be agreement. It is currently recognized that the main purpose of legal reserves is to serve as a means of adjusting the stock of money in the hands of the public. Other possible uses such as: ensuring a minimum level of liquidity, being a source of tax, or acting as instrument of prudential control should not be pursued with reserve requirements so as not to weaken their monetary control function. Another policy recommendation widely agreed upon is the convenience of adopting a system of uniform legal reserve requirements in order to reduce inequities between financial institutions and instruments. Differential reserve requirements across types of accounts and types of institutions could also cause shifts of funds from one type of account to another or from one institution to another and have monetary implications.

C. Credit Allocation and Directed Credit Guidelines

4.35 General Features. In Latin American countries, as in many other developing countries, governments direct the allocation of credit through various mechanisms. The most common means of directing credit to preferred activities are: (i) Central Bank rediscounting of commercial bank loans, (ii) specific lending by government-owned financial intermediaries, such as development banks; (iii) regulations mandating banks to lend certain share of their loan portfolios to specific purposes; and (iv) requiring lower reserve requirements from financial institutions which dedicate certain shares of their loan portfolio to lending to "priority" sectors or geographic areas. Table 4.4 shows the extent to which these four mechanisms are used by Latin American countries.
Table 4.4: CREDIT ALLOCATION AND DIRECTED CREDIT GUIDELINES

<table>
<thead>
<tr>
<th></th>
<th>Directs commercial banks to lend to specific sectors</th>
<th>Provides rediscouts to direct credit</th>
<th>Makes use of specialized credit institutions</th>
<th>Requires lower reserve requirements for banks that engage in &quot;priority&quot; sector lending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Bolivia</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Brazil</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Colombia</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Chile</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Ecuador</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Guatemala</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Honduras</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Mexico</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Peru</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Uruguay</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Venezuela</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

a/ Eliminated in April 1989.
b/ Only for external credits, generally only used by public banks.

4.36 A significant proportion of the funds comes from external sources, generally from international agencies, although some countries make heavy use of reserve requirements to fund their rediscount programs. These rediscouts are typically denominated in local currency (with the exception of Bolivía), provide long-term funds to banks, and in most cases are given at interest rates lower than market deposit rates. Exchange rate risk (when the original funds come from external sources) is usually borne by the Central Bank, although in some countries it is passed on to the final borrowers.

4.37 Most of these credits are channelled through the Central Bank by rediscounting through commercial banks and development banks. In some cases, funds are provided through an "APEX" or second-tier institutions (other that the Central Bank which then onlend the funds to first-tier public and private financial institutions. In Mexico's case for instance, development funds are trust funds which function as second-tier or discount operations, lending through the public commercial banks or private brokers and cooperatives, the trustees being the Central Bank or the public development banks. Directed credit is funded through: forced investments, placement of Central Bank paper in the market, foreign credit, budget appropriations, or outright expansion of the monetary base.

4.38 Development banks and funds and trusts are usually the type of institutions used to channel directed credit. However, the use of one type of institution versus another has had different results in different countries for obvious reasons. The purpose of a development bank is to provide financial support to sectors or activities which are not attended due to market
imperfections. The market perceives that the profit potential of funding certain activities do not compensate the levels of risk involved.

4.39 In some countries the institutions in charge of allocating directed credits cannot be properly supervised by monetary authorities. In Venezuela for instance, the specialized institutions in charge of providing directed credits do not constitute an organic part of the financial system. They are attached to different Ministries, as a result of which they are not coordinated or supervised by the Superintendency or the Central Bank. While proper supervision would not result in reducing distortions in credit allocation, it could result in better lending and collection practices.

4.40 **Main Drawbacks.** There is plenty of literature on the negative effects of directed credits; we will only list some of the most commonly cited criticisms. It is argued that directed credits: (i) discourage resource mobilization by banks because they prefer to use cheaper sources of funds available under these credit lines, (ii) result in inefficient allocation of credit, (iii) result in large subsidies to the beneficiaries or intermediaries of these credits, (iv) hamper the development of long-term credit and equity markets, and (v) delay or prevent the exit of problem firms.

4.41 Governments' usually used three arguments to support directed credits: (i) that without their intervention, some sectors would receive less credit than indicated by social priorities, while other sectors with lower priority would receive too much; (ii) to compensate for market failures, and (iii) income distribution objectives (the need to subsidize certain groups). The empirical evidence, however, tends to discredit these arguments. Data from various countries indicate that these credits are highly concentrated, with a few companies receiving the bulk of it. The main reason for this is that large companies are usually in a better position to fulfill the bureaucratic conditions than small borrowers. For example recent work done on Guatemala's financial system shows that the largest 90 agricultural loans accounted for 90% of total agricultural credit; 33% of the industrial loans accounted for 90% of industrial credit; and 2% of construction loans account for 53% of construction credit. If these credits were provided at rates below the opportunity cost of capital, these subsidies would have gone to a small number of large borrowers thus worsening income distribution. With respect to market failures, it is not clear that directed credits are always the best way to deal with them. It may be preferable to tackle those factors which cause the market failure rather than introducing additional distortions into the financial system in an attempt to eliminate existing barriers to market development.

4.42 Granting directed credit at subsidized rates to selected subsectors or activities introduces rigidity in the allocation of a substantial portion of the resources mobilized by the financial system, preventing their allocation to the sectors demanding them at the margin. Given the low spreads typically allowed to the institutions channelling directed credit to final borrowers, financial intermediaries have a strong preference to lend to less risky clients, and to minimize risk by demanding high real collateral, often in excess of the loan amount. Furthermore, there are economies of scale to be realized with larger loans, adding to the preference of banks for large borrowers.

4.43 Directed credit, has most often been designed to facilitate the entry of new firms, but it has gone mostly to existing firms. In some cases,
it has also resulted in delaying or inhibiting the exit of problem firms. For example the criterion of insufficient installed capacity in the industry has been an important requirement for granting of development credit, making it difficult for firms to use this credit to increase efficiency in sectors with sufficient capacity.

4.44 The system of directed credit discourages the development of long-term credit markets, because loans funded with resources mobilized from the public cannot compete with central banks' subsidized loans. Moreover, the directed credit system has discouraged the development of equity markets, by giving firms an incentive to finance investment through credit rather than equity. In Colombia for instance there is historical evidence that there were capital markets (small but efficient) before the advent of directed credit, and that the decline of the stock market was partly caused by the creation of Banco de la Republica's development credit lines.

4.45 Not only do Colombian firms show a preference for debt over equity financing, but they show a preference for financial investment over investment in physical plant and equipment. The financial investment of firms, including loans to other firms, is comparable in volume to physical investment. There is evidence that firms demand credit beyond their own productive investment needs, and some firms are arbitraging in the financial market since they demand credit and lend funds or invest in financial paper simultaneously.

4.46 The existence of credit lines at below-market interest rates also provides incentives for entrepreneurs to take over the control of financial institutions in order to secure subsidized credit for their enterprises. A good portion of financial institutions do not generate profits sufficient to maintain the real value of their equity capital. Similarly, the access to subsidized credit that the ownership of financial institutions gives to entrepreneurs is an important source of indirect profitability which increases the demand for permits to establish new financial institutions. Colombia and Ecuador illustrate this point. In Colombia's case, the existence of these subsidies was also a major factor leading to the build-up of debt by large conglomerates in the early 1980s which resulted in their failure.

4.47 Thus, elimination of the directed credit system is desirable not only from the standpoint of efficient resource allocation, but also to reduce the incentive to create ownership linkages between financial institutions and their borrowers, a major cause of the recent portfolio problems of the financial sectors in most countries in Latin America.

4.48 Empirical Evidence. In most Latin American countries directed credits play an important role in the total credit of the banking system. Directed credit accounted for 30% of the total bank credit in Colombia in 1986, while it accounted for 80% of total bank credit in Brazil, and over 40% of bank credit in Argentina. It has also been largely used in Peru and Mexico. In all cases directed credit has been the result of strong pressures to the government to provide medium and long-term credit at "reasonable" interest rates to finance priority activities, including industrial and agricultural development, urban infrastructure, and exports.

4.49 Brazil is probably the Latin American country which uses directed credit to the largest extent. It is also among the countries in the developing
world which make more use of these programs, and may even be the largest.\textsuperscript{11} It is estimated that in 1986-87 directed credit programs accounted for 80% of the average stock of credit in Brazil. World Bank estimates placed the implicit subsidy on a sample of the largest directed credit programs, including housing finance, at the equivalent of 80% of treasury revenue, or about 7 to 8% of GDP.\textsuperscript{12}

4.50 Argentina also has made large use of directed credit. As of March 1987, over 40% of total bank credit was "rediscounted" by the Central Bank. Through its policy of high reserve requirements, forced investments and rediscounts, the Central Bank directs a large proportion of total credit in the financial system and in the process it affects its allocation and the finances of the various banks. Banks' finances in some cases are improved because of preferential access to these rediscounts, while in other cases they are worsened because of high reserve requirements and forced investments and limited access to rediscount facilities. In 1989, Argentina made an effort to reduce the intermediation role of the Central Bank, but the inability of provincial banks and certain public banks to repay previous rediscounts, and the need to sterilize funds since the Central Bank has assumed the amortization of treasury bonds, did not make possible a reduction in forced investments or reserve requirements.

4.51 In Peru, the government, through the Central Bank, has passed regulations mandating commercial banks to lend to specific sectors (particularly agriculture). In addition, the public development banks play an important role in the allocation of credit, particularly long term. The Banco Agrario, Banco Minero and Banco Industrial, all publicly owned, have provided large amounts of credit in recent years, many times based on political pressure rather than economic or financial criteria. As a result, not only credit has been misallocated, but the finances of these institutions are in a dismal situation. The current recession affecting the country will expose the portfolio problems of these institutions. These credits have by and large been provided at preferential interest rates, even more negative in real terms than those fixed by the Central Bank for commercial bank operations. A recent estimate by Central Bank officials indicated that the cost to the Central Bank of these subsidized lines of credits through official banks exceeded 7% of GDP in 1988. These subsidies are not explicit, and in the context of high inflation complicate monetary and fiscal management because of the difficulty of measuring them.

4.52 In addition to directing credit to specific activities, governments also distort the credit allocation policy by borrowing heavily from the banking system to finance public spending. Mexico's case is illustrative. Direct commercial bank lending to the public sector, excluding reserve requirements, has grown from 3.6% of assets in 1980 to over 35.3% in July 1988. Argentina has also used the banking system as a major source of resources to the public sector. However, as opposed to Mexico, it has not been in the form of direct lending but rather as forced investments in Central Bank "paper" and purchase of treasury securities. Peru has also overused bank credit to finance government deficits,

\textsuperscript{11} For more details on directed credit in LDCs refer to the 1989 World Development Report (Chapter 4).

the result has been crowding out of private sector borrowers. Credit to the public sector which stood at 14.6% of total bank credit exceeded 27% in May 1988.

4.53 In Ecuador, the Central Bank is also the dominant lender. Its role was increased significantly in the early 1980s as a result of the "sucretization" which converted the large foreign debt of the financial system into sucre debts to the BCE. In addition, it plays a major role in rediscounting commercial bank loans for agriculture and industry. Central Bank credits are generally provided at rates significantly below short-term deposit rates.

4.54 Chile has the system of credit allocation which most resembles a free market. Most credit is allocated on the basis of an evaluation of risk and the interest rate charged is based on this evaluation and on the quality of the collateral. There are no sectoral credit guidelines. The only instance of government-directed credit corresponds to the allocation of credit from multilateral institutions like the World Bank and the Inter-American Development Bank. With respect to these lines, the government is in the process of implementing a system of auctions to allocate its lines of credit to financial institutions at market prices. The Government also influences housing credit to middle- and lower-income families through state guarantees of loans and subsidies to qualified borrowers. These subsidies, however, come directly from the budget, thus, not distorting the financial intermediation process. Uruguay also has a credit system which allocates funds with little government intervention, excluding the housing finance market which is practically monopolized by the government-owned Banco Hipotecario, and a large proportion of the commercial bank credit which is provided by publicly owned banks.

V. BANKING SUPERVISION AND PRUDENTIAL REGULATIONS

5.01 This chapter provides a description of an effective regulatory framework and compares prudential regulations in Latin American countries against it. It assesses the capacity of the Supervisory agencies to stay abreast of banking system developments and reviews the main prudential regulations in the various Latin American countries, commenting on their effectiveness. Prudential regulations must try to embrace the whole spectrum of risks involved in the banking industry. Frequently they just cover credit risk. Other risks such as foreign exchange, liquidity and interest rate risk should also be overviewed by supervisors and regulators. To facilitate the comparison among countries, the analysis is done by type of regulation, rather than by country. The main prudential regulations which will be reviewed are: (i) existing guidelines for a system of loan portfolio classification and provisioning, (ii) rules with regards to rollover of loans, (iii) policies on accrual of interest on non-performing loans, (iv) limits to loan concentration, (v) capital adequacy, and (vi) information disclosure and external auditing requirements. This list by no means exhausts the list of areas which need to be regulated or supervised. Supervisors need to require bankers to pay attention to foreign exchange risk, liquidity, and interest rate risk.

5.02 Other important regulatory aspects had to be left out due to lack of time and to avoid overtaxing the reader. These aspects included: the consolidation of financial information of groups or holding companies, the regulation of intra-group transactions within financial groups, the treatment and classification of investments, the establishment of a database with
information on all major lenders in the system classified according to risk to be shared by all banks in the system ("centrales de riesgo"). These databases have been very useful in Chile, Bolivia, Peru, Mexico and Venezuela.

A. Quality of Supervision

5.03 Optimum Supervision. Optimum bank supervision includes the following pillars: (i) that the supervisors have sufficient autonomy from political interference, (ii) that the overall regulatory framework is adequate, (iii) that the supervisors have adequate resources to hire, train and retain competent personnel, and acquire appropriate technology; and (iv) that the supervisors have sufficient authority to enforce its decisions without having to resort to the extreme action of recalling a bank's charter to operate. The main focus of supervision should be on the prudential aspects of financial monitoring, such as assessing the quality of assets, accounting procedures and management controls. Efficient regulation should also provide governments with information about the consequences to the financial system of their policies, thus enabling modification.

5.04 Supervisors should have the powers to carry the following actions: impose fines, issue cease and desist orders, restrict dividend payments, restrict branching, limit special operations in which managers have no expertise, request administrative actions, remove or fine managers and directors, force write-offs and provisions, force changes on published financial statements, and, last but not least, require capital increases.

5.05 As highlighted in the 1989 World Development Report, an adequate system of bank supervision should balance off-site supervision and on-site inspection. The task of the off-site supervisors is to analyze reports of banks, to identify possible problem areas, and to propose remedies. The task of the on-site inspectors is to check the accuracy of the periodical reports to the supervisor and analyze those aspects of a bank that cannot adequately be monitored by off-site supervision. Inspections should assess the quality of the assets with special emphasis on loans to directors and affiliated companies, of management and control procedures, and of accounting systems. Finally, to be effective, prudential regulation must be backed by a political commitment to supervision and enforcement. The supervisory body must be given clear policy goals, and must be independent.

5.06 Empirical Evidence. Since 1979 several Latin American countries have made efforts to strengthen banking supervision with technical assistance from abroad. Important efforts have been carried out in Ecuador, Peru, Colombia, Chile and Bolivia to overhaul their banking regulatory frameworks and to modernize their Superintendencies of Banks. Mexico is currently preparing a program for modernization of its regulatory framework and banking supervision. Nonetheless, Latin American countries still have major deficiencies in the area of banking supervision and in their regulatory frameworks. In addition to the inadequacies in regulations highlighted in the following section, there are major deficiencies in the way bank supervisors carry out their functions. As a result of lack of resources or unclear mandates, financial analysis of banks is usually inadequate and bank examinations are infrequent and ineffective.

5.07 Banking supervisors in Latin America are aware of the need to revamp their regulations and strengthen supervision, and of the importance of an
interchange of experiences. As a result, with the sponsorship of the Latin American Center for Monetary Studies (CEMLA), the Commission of Banking Supervisors of Latin America and the Caribbean was established in 1982. The Commission meets periodically and it has resulted in an increase in the flow of information between supervisors and in significant improvements in the quality of supervision in the region.

5.08 As indicated earlier, the importance of an autonomous bank supervisor cannot be overemphasized. Unfortunately, in Latin America very few supervisors are autonomous. Furthermore, in many cases banking supervision is done by a department of the Central Bank or of the Ministry of Finance, as a result of which the objectives of banking supervision are muddled with other objectives which do not correspond to a bank supervisor. At present, Latin American countries have separate (not necessarily autonomous) Superintendency of Banks in the following countries: Bolivia, Chile, Ecuador, Peru, Guatemala, El Salvador and Colombia. Banking supervision is done by a department of the Central Bank in the following countries: Argentina, Brazil, Costa Rica, Honduras, Paraguay and Uruguay. In Venezuela the Superintendency depends of the Ministry of Finance and in Mexico from the Secretariat of Treasury and Public Credit.

5.09 One of the most difficult choices in terms of banking supervision is whether to place it in an independent agency or whether to entrust it to the central bank. If we look at the Group of Ten countries, in reality fifteen, we observe that in eight of them the central banks are in charge of banking supervision, six have a separate authority, and one (the United States) has a mixed system in which responsibility is shared. There are advantages and disadvantages in each alternative. The main disadvantage of having the central bank in charge of supervision is that it adds another complex objective to an already large list of difficult objectives. The achievement of some of these objectives may conflict at times. Supporters of having the central bank in charge of supervision argue that supervision and central banking are linked and since the central bank is the lender of last resort it makes sense that it be in charge of assessing their creditworthiness. The empirical evidence in Latin America has shown that, with few exceptions, those countries which have experienced the more dramatic banking crises are those in which banking supervision was in the hand of the Central Bank (i.e., Uruguay, Argentina and Bolivia).

5.10 In most Latin American countries the supervision of financial institutions other than commercial banks, such as: development banks, S&Ls, insurance companies, warehouses, and leasing companies is not under the purview of the Superintendent of Banks. In those countries in which regulation and supervision is generally weak, it has been found that supervision of non-commercial banks is even weaker. Another deficiency commonly found in Latin America is the overlapping of functions between several entities. For instance in Venezuela, three entities, the Superintendency of Banks, the Central Bank, and the Deposit Guarantee Fund, realize independent supervision of the institutions with little coordination. Despite the overlap, however, the supervisory work is insufficient.

5.11 Another important limitation of several bank supervisors in Latin America is their inability to control and supervise public banks. In many countries federal or provincial public banks have more political clout than the
bank supervisor and as a result ignore most of their regulations. Argentina and Brazil are typical examples of this situation, although it also occurs in other countries such as Peru. Considering the importance that public banks have in many of these countries, it is necessary to correct this deficiency. An unsupervised, poorly managed public bank can result in huge losses to the central government which can remain hidden for many years.

5.12 The Superintendency of Banks of Guatemala, while separate from any Ministry or the Central Bank, functions as an appendix of the Monetary Board, which also oversees the operations of the Banco de Guatemala (the Central Bank). As a result, the Superintendency lacks autonomy, and as a matter of fact, banks have the recourse to contest in the Monetary Board any resolution of the Superintendency. Since two private bankers are members of the Monetary Board, this results in conflict of interest.

5.13 The National Commission on Banking and Insurance is the banking supervisory body in Mexico. It has several shortcomings which reduce its effectiveness at overseeing the condition of banks. The following are the most important: inadequate regulations in critical areas such as loan portfolio classification and provisioning, lack of autonomy, lack of computer technology, need to upgrade accounting manuals, and insufficiently trained bank inspectors. The Mexican Government is currently preparing a program to strengthen the Commission. Since 1989 the Commission has been implementing an action program to correct regulatory deficiencies and to upgrade its supervisory capacity. This program has received foreign technical assistance.

5.14 Colombia's Superintendency of Banks underwent a reorganization in 1986 which has contributed to its modernization. The reorganization included a program of reforms to shift the emphasis from legalistic considerations to financial analysis. This will require a shift in the structure of personnel, currently mostly composed of lawyers and accountants, and very few financial analysts and economists. The Superintendency has also carried out a program of technological modernization and has revised its regulations on loan classification and provisioning to make them uniform and mandatory. As a result of technical assistance a new bank examination manual and a new uniform charter of accounts have been developed. A training program to inform staff on how to make use of these two new tools was also carried out.

5.15 Recognizing the limitations of a banking supervisor ascribed to the Central Bank, in November 1987 the Bolivian Government re-established an independent banking superintendency. A comprehensive organizational and regulatory framework is being developed for the new superintendency. It is also being strengthened by adequate staffing, experienced consultants, computer equipment and training provided with assistance from the World Bank Group. Progress has been impressive, and Bolivia's banking superintendency is now among the most sophisticated in Latin America.

5.16 As in many other Latin American countries, the banking superintendency in Argentina--organizationally part of the Central Bank--has traditionally concentrated on compliance with Central Bank rules on reserve requirements, forced investments and interest rates, while analysis of loan portfolio quality and operating efficiency has been largely overlooked. This limited the superintendency's capacity to take timely actions to stop unsound financial practices. The Central Bank is aware of the need to correct many of
these deficiencies and has put together a program of technical assistance geared to strengthen the banking superintendency's capabilities on both credit risk analysis and assessment of the overall financial condition of banking institutions. Unfortunately, this program has not yet been implemented.

5.17 The main banking supervisory entity in Chile is the Superintendency of Banks and Financial Institutions (SBIF). It depends directly from the Presidency. The capacity of the SBIF to control the solvency of banks and finance companies is very high in comparison to other Latin American countries and better than in many developed countries. This in part due to the fact that it has broad powers and is autonomous and isolated from political interference. It also owes much to the experience suffered by Chile in the early 1980s, when many domestic banks experienced difficulties.

5.18 In Honduras the Superintendency is legally a department of the Central Bank. The Superintendency is considered a professionally qualified agency, having improved its capacity to audit and perform financial analysis through foreign assistance in recent years. This modernization program is still under implementation.

5.19 The Superintendency of Banks and Financial Institutions (SBIF), an agency adhered to the Ministry of Finance, is the banking supervisory agency in Venezuela. Due to a combination of lack of autonomy, lack of resources, and inadequate legal and regulatory framework, banking supervision in Venezuela has significant shortcomings. The Government is aware of the need to overhaul the supervisory framework and is in the process of preparing a comprehensive program of financial sector reform which includes major changes in regulations to strengthen supervision and prudential regulations.

5.20 Banking supervision in Uruguay is also undergoing a modernization program with technical assistance from abroad. Important deficiencies in the frequency and quality of on-site inspections will be corrected. The Central Bank, responsible for supervision, has increased the number of employees and is preparing a comprehensive training program. In addition to upgrading inspections and providing training, the Central Bank is preparing more stringent regulations, particularly with regards to new operations and provisioning for possible bad debts. The changes include a review of the organizational structure of the supervision department, an assessment of its budget and salary levels, and an improvement in computer technology.

B. Loan Portfolio Classification System

5.21 Optimum Policy. Loan portfolio classification is more an art than a science, therefore there is not an optimum or best loan classification system. Nonetheless, there are systems that are better than others, judged by certain criteria used as a yardstick. Banks should systematically and realistically classify their loan portfolios as a function of risk of default. Similarly, external auditors and supervisors should be in the position to identify and oversee portfolio risks. In order to facilitate these tasks and guarantee that the quality of banks' portfolios is measured with the same yardstick, countries should introduce regulation which require banks to classify their assets according to specific criteria. The classification of the loan portfolio should not only be based on the repayment status of the loan, but also on the repayment capacity of the borrower (based on an assessment of its financial condition) and
the cash value of the collateral. Loans should be classified based both objectively on performance and subjectively on the debtor's financial condition and ability to repay.

5.22 The following loan classification system can be judged as adequate:\textsuperscript{13}

(a) \textbf{Current}. Loans in this category are neither past-due nor are borrowers subject to criticism.\textsuperscript{14}

(b) \textbf{Sub-Standard}. The following objective and subjective criteria is used to determine sub-standard loans: (i) Objective criteria: Non-performing loans which are past-due for more than 30 days but less than 180 days or those loans in which losses, up to 25% of its value, are estimated;\textsuperscript{15} (ii) Subjective criteria: Loans which display well-defined credit weaknesses such as inadequate cash flow to service debt, undercapitalization or insufficient working capital not protected by the current sound worth or paying capacity of the borrower or collateral pledged, if any; absence of adequate financial information or collateral documentation.

(c) \textbf{Doubtful}. The following criteria is used to determine doubtful loans: (i) Objective criteria: Non-performing loans which are at least 180 days past-due but less than 360 days; and not well secured by legally foreclosable collateral in process of collection; (ii) Subjective criteria: Loans that demonstrate all the weaknesses inherent in loans classified as substandard with the added characteristics that the timely collection of the debt in full is very uncertain; realizable collateral values under forced liquidation are not sufficient to protect from loss, potential losses are estimated to exceed 30% of the face value of the loan.

(d) \textbf{Lost Loans (Losses)}. Loans which should be considered lost are measured following the following criteria: (i) Objective criteria: Non-performing loans which are 360 days or more past-due and not well secured by legally foreclosable collateral in process of collection; (ii) Subjective criteria: Loans which are considered uncollectible and of such little value that continuation as a bankable asset is not warranted. Loans classified as loss include loans to insolvent firms with negative working capital and cash flow.

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\textsuperscript{13} This criteria is based on a proposal made by the Financial Policy and Systems Division of the World Bank.

\textsuperscript{14} A credit facility becomes past-due when either: (i) principal or interest is due and unpaid for 30 days; or (ii) interest payments equal to 30 days interest or more have been capitalized, refinanced or rolled-over into new loans.

\textsuperscript{15} A credit facility becomes non-performing when any of the following conditions exist: (i) either principal or interest is due and unpaid for 90 days or more; (ii) interest payments equal to 90 days interest or more have been capitalized, refinanced or rolled-over into a new loan.
5.23 Another category which could also be included is "other loans specially mentioned" in order to provide an early warning of risky loans which although still performing, have the potential of partial uncollectibility in the future. It would include loans that are not yet substandard but have characteristics that could develop into substandard credits. This category would not require provisions or affect interest accrual.

5.24 Empirical Evidence. As shown in Table 5.1, about one half of the countries covered in the study have adequate guidelines for the classification of the loan portfolios of banks. The following Latin American countries have mandatory guidelines on a uniform loan portfolio classification system based on risk of default: Chile, Argentina, Peru, Colombia, Honduras, Ecuador and Bolivia. Venezuela has a system only for internal use by bank examiners, although banks are not obliged to classify their loans or base their provisions on such a system.

Table 5.1: LOAN PORTFOLIO CLASSIFICATION SYSTEMS

<table>
<thead>
<tr>
<th>Country</th>
<th>System based on risk of default</th>
<th>System based on other criteria</th>
<th>No uniform system</th>
<th>Adequate monitoring</th>
<th>Inadequate monitoring</th>
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Source: IBRD staff based on individual country studies.

5.25 Chile has the best loan classification system of the 12 countries studied. The system obliges banks to classify, at any point in time, either 85% of its loan portfolio by value, or the 400 largest debtors, whichever is the larger. Loans are classified in a ranking that distinguishes between five categories based on criteria similar to that provided in earlier paragraphs. The Superintendency of Banks (SBIF) not only provides the classification criteria, but it has the power to object to the classification of any given loan. If the bank disagrees with the suggested classification for a given loan, it may appeal to the SBIF, who determines the final accounting value of the loan. A team from the Superintendency makes surprise visits to each domestic private bank an average of three times a year, and each foreign-owned bank an average of once a year, to review the classification of a random sample of loans with
an average value of 20% of a bank's portfolio. Loans classified too liberally are reclassified, but loans classified too conservatively are not.

5.26 Colombia requires banks to classify their portfolios at least twice a year. The classification criteria is provided by the Superintendency and is the same which is used by bank examiners. It was recently revised to correct important deficiencies. At least 75 percent of the loan portfolio needs to be classified taking into consideration the following factors: the repayment status, the debt servicing capacity of the borrower, and the quality of collateral. The new system is a major improvement over previous policies which distinguished between performing and non-performing loans based solely on the repayment status (loans in arrears in excess of twelve months were classified as non-performing).

5.27 Several countries have systems which need to be overhauled, such as: Mexico, Brazil, Uruguay, and Guatemala. Brazil classifies loans between performing and non-performing. Loans are classified as non-performing if they are overdue for over 180 days (industrial or agricultural credit) or 90 days for other credit, and legal action has to be taken against the debtor. In Mexico, loans are classified as either current or past due. If loan servicing is delayed beyond 15 days, they are classified as past due. Under Uruguay's system, loans are classified in five categories based on the aging of the overdues, rather than on risk of default. Furthermore, some of these categories can be reclassified as "performing" after small payments of overdue interest. Systems based on the repayment status of loans do not permit an assessment of the real quality of the loan portfolios.

5.28 It is not only important to have an adequate system to classify the loan portfolio, but also to be able to monitor its implementation. In a large number of countries, the Superintendency of Banks or the agency which supervises the commercial banking system does not have the ability or the authority to ensure that banks are classifying their loans appropriately.

C. Provisioning for Bad Debts

5.29 **Optimum Policy**. Mandating minimum provisions to cover possible losses based on the classification of loans. Provisioning establishes discipline in the credit process and forces banks to more accurately reflect their true financial condition. Two types of provisions can be identified: specific and general. Specific provisions are those which are made according to risk of default, based on the classification of the loan. The general provision is a small percentage (1%) of the total current loan portfolio, and is made under the assumption that even the highest-quality segment of a portfolio will show some degree of loss.

(a) **Specific Provisions:**

(i) **Current Loans** - no specific provision is required.

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16/ These criteria are also based on work done by the Financial Policy and Systems Division of the World Bank.
(ii) **Sub-standard Loans** - minimum provision equivalent to 25% of the aggregate outstanding balance.

(iii) **Doubtful Loans** - provisions between 50% and 90% of the aggregate outstanding balance based on how long has the loan been overdue. For example, provisions of 50% of loans overdue between 180 and 225 days, provisions of 60% for loans overdue between 226 and 270 days, provisions of 70% for loans overdue between 271 and 315 days, and provisions of 80% for loans overdue between 316 and 364 days.

(iv) **Lost Loans (Losses)** - should be provisioned at 100% of the aggregate outstanding balance.

(b) **General Provision:**

(i) One percent of the aggregate outstanding balance of all current assets.

(ii) A discretionary phase-in period could be established by the regulatory agency to provide banks some time to adjust.

5.30 **Empirical Evidence.** Provisioning is related to the loan classification system and institutional capacity of banks and regulators (see Table 5.2). Thus, in general those countries which have a strong loan classification system, also have good provisioning policies. In several Latin American countries, such as Brazil and Mexico, provisions are only required for overdue loans, and in many cases these provisions are quite insignificant. In other countries, such as Venezuela and Guatemala officials seemed to be more concerned about the possibility of banks' provisioning too much to avoid taxes rather than about requiring banks to provision in accordance with the real status of the loan portfolio. There are some countries such as Venezuela, which do not have an established policy for provisioning for possible bad loans. The Superintendency mandates the provisions on a case by case basis, frequently long-overdue. In Honduras, loan provisioning is not linked to the loan classification system.

5.31 Some countries have made major efforts in recent years to tighten provisioning policies. In Colombia, provisioning requirements have been linked to the riskiness of the asset measured by the likelihood of loss, with provisions varying from 20 to 100 percent of the value of the loan depending on the risk of default. Since 1984 Ecuador established norms to classify risk assets and constitute provisions on the basis with the real quality of the underlying assets. A gradual program was established to allow banks which had deficiencies to reduce them overtime, thus avoiding destabilizing the system in the process. Banks which are still short of full provisions are not allowed to distribute cash dividends.

5.32 In those countries in which loans are only classified as performing or past due, and only past due loans are provisioned, banks may be grossly under-provisioned. Since loans deteriorate gradually, it is important to provision for intermediate situations, under which doubtful loans are subject to provisioning to cover for potential loan losses. Furthermore, since past due loans can be rolled over very easily, a large proportion of doubtful loans could
be hidden as performing unless provisioning is not only made on the basis of the aging of the overdues, but on an assessment of the real quality of the portfolio.

Table 5.2: PROVISIONING PRACTICES

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<tr>
<th></th>
<th>Provisioning based on repayment status</th>
<th>Provisions based on risk of default</th>
<th>No provision policy</th>
<th>Partial deductibility of provisions for tax purposes</th>
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Source: IBRD Staff based on individual country studies.

5.33 In many Latin American countries banks are not allowed to deduct from income taxes the provisions they make for loan losses. As a result, banks are discouraged from provisioning. In others, banks are allowed to deduct from income taxes provisions up to certain percentage of net income, and if the Superintendency mandates further provisions, these can also be deducted as expenses for income tax purposes. The latter is a better policy. In addition to the tax issue, in many countries banks resist provisioning because it could: (i) severely decrease income and (ii) result in negative net worth, (iii) compromise their ability to raise new funds. Further, regulators also may resist more vigilant provisioning procedures because they also do not want to expose themselves to the morass of bank insolvencies, they do not have the power to enforce them, and they do not want to face the tax reductions due to provisioning. For instance, in Venezuela provisions for bad debts cannot be deducted from income for tax purposes unless the bank proves that the loans have been completely lost.

5.34 Other countries, such as Colombia and Chile, have tax policies which are consistent with supervisory regulations. In 1988 Colombia revised its tax rules so that provisions made in accordance with superintendency norms can be deducted from income for tax purposes. In Bolivia banks pay wealth tax rather than income tax, and provisions constitute an indirect reduction of wealth, thus they are deductible.
D. Rollover Practices

5.35 Optimum Policy. Reprogramming, rescheduling or refinancing of loans should take into consideration the repayment capacity of the borrower (based on an assessment of its financial condition), and should at least require partial payment of interest. Clear guidelines on rollovers are important because they force banks to face up to their bad loans. Rolling over bad loans just make them worse.

5.36 Empirical Evidence. A large number of Latin American countries have very lenient rules with regards to refinancing or rolling over overdue loans. For instance, in Guatemala, Venezuela and Mexico, banks are allowed to rollover loans without concern for the actual repayment capacity of the borrower, and in some cases including the full capitalization of interest. Until recently, Bolivian legislation had the same deficiency. In Uruguay rollover of credits are allowed if at least 20% of interest is paid, no reference is made on whether the borrower is still considered creditworthy.

5.37 Other countries such as Chile, Ecuador, Colombia and Peru have strict rules which limit refinancings. For instance, Ecuador has established clear rules which forbid the capitalization of interest on rescheduled overdue loans. In 1989 Colombia issued very strict rules which limit rescheduling practices in an attempt to stop previous practices which allow hiding the real condition of the loan portfolio. Reschedulings are only allowed if based on an assessment of the true repayment capacity of the borrower and after cash payment of at least 30% of overdue interest.

E. Interest Accrual Policy

5.38 Optimum Policy. All non-performing, doubtful and lost assets are required to be placed on non-accrual basis. This implies that interest is no longer accrued on the books of the bank nor is taken into income unless paid by the borrower in cash. Also, all previous accrued but uncollected interest is reversed from income. A separate account for accrued interest is established for each borrower who is unable to pay his interest on the due date.

5.39 Empirical Evidence. Only in a few of our sample of Latin American countries there is an adequate policy on interest accrual. This deficiency is partly due to the inadequacy of the loan classification system. Of all the sample countries, Guatemala has the most conservative policy on interest accrual: only interest actually received is considered income. In Chile interest on non-performing loans is not considered income (non-performing loans are those loans overdue by more than 89 days). In Peru and Bolivia, not only non-performing loans are placed on non-accrual basis, but also those loans which although current are classified as doubtful or loss. Other countries such as Colombia also disallow income generated from interest on non-performing loans, but their definition of non-performing is more flexible. For example, in Colombia a loan has to be overdue by 6 months to be classified as non-performing. Ecuador tightened its interest accrual policies in 1987 through a superintendency resolution which forces banks to debit from income interest and commissions overdue over 45 days.
F. Loan Concentration and Lending to Related Parties

5.40 **Optimum Policy.** Loans to a single borrower should be limited to a certain proportion of the bank's capital and reserves (20 to 30% depending on the collateral) to avoid excessive risk taking. The definition of single borrower should be stated clearly, and should be very comprehensive to include financial conglomerates and related parties. This policy is very important because in many LDC countries, including Latin America, banks had been or are currently used as a means of financing the business of its principal shareholders and of circulating money within a small group. It is also important to highlight that in many cases, in spite of stringent regulations, excessive lending to parties related to the owners of the banks explain a large number of bank failures in Latin America. The lack of stringent regulations on loan concentration is very dangerous because it can result in an increased fragility of the banking sector.

5.41 **Empirical Evidence.** Chile, Ecuador, Peru and Bolivia have stringent rules with regards to lending to related parties. In Bolivia, a single borrower (including financial conglomerates or related parties) cannot borrow more than 20% of the capital and reserves of a bank. In Chile the limit is 25%, as long as the excess over 5% of capital is adequately secured. In Peru, a single borrower cannot borrow more than 10% of the bank's capital and reserves unless approved by the Central Bank based on a report from the Superintendency of Banks and Insurance Companies in which case it could increase up to 30 percent. In Ecuador the Banking Law limits bank lending to a single party to 15 percent of the bank's capital and reserves, an amount which can increase to 25 percent if appropriate collateral is provided. These four countries, have had strict regulations on loan concentration since the late 1920s or early 1930s, in spite of which all of them have experienced important bank failures which were related to excessive lending to related parties. Therefore, it is not only important to establish the adequate policy, but also to be able to enforce it.

5.42 Colombia also has stringent rules with regard to loan concentration (10% of capital and reserves for unsecured loans and 25% if secured), but there are several operations which are not subject to limits: (i) lending to official institutions, (ii) lending with resources such as discounts or rediscounts from Banco de la Republica, among others. In Mexico, banks can lend up to 30% of capital to a corporate borrower and 10% to an individual borrower. However, related parties are treated as separate parties, therefore a bank could result lending more than its total capital to a group of customers which involve the same credit risk.

5.43 Banks in Venezuela cannot lend more than 10% of their equity to any single individual borrower and no more than 20% to single corporate entities. However, there are important exceptions which loosen significantly the importance of the 20% limit. Banks in Honduras and Guatemala also have a limit on loans provided to individuals or corporations (up to 20% of the bank's capital) but the definition of single borrower is very lax (each enterprise of the group can obtain up to 20%). Uruguay does not have any limits on credit concentration. Banks are free to lend any amount to any individual or corporation.

5.44 It is not only important to have limits on lending concentration to a "single party", but also to define clearly what constitutes a "single party" to avoid situations of high credit concentration within legal boundaries such
as those in Venezuela, Honduras, and Guatemala. The lack of an adequate
definition of what constitutes a single party reduces the validity of lending
limits as some countries have discovered in recent years. For instance, Ecuador
is currently preparing a resolution to define clearly what constitutes a single
party by providing criteria to identify what constitutes a group or conglomerate,
and therefore reduce lending concentration. Furthermore, external auditors are
obliged to disaggregate the loan portfolio by group or conglomerate to assist
in determining the lending concentration of banks.

5.45 Brazil also has important shortcomings in its rules to reduce lending
concentration. While Brazilian banking law prohibits a bank from lending more
than 30% of its portfolio to its ten largest borrowers, there is no limit for
single borrowers. Banks could lend several time their capital to a single
borrower, increasing its riskiness significantly. In early 1989, the Central
Bank was studying the issue. It is expected that the rules on lending
concentration will be changed to base then on bank's equity, to include all
risks (including guarantees), and to define conglomerates and groups as single
borrowers.

G. Capital Adequacy

5.46 Optimum Policy. There are two important aspects of capital adequacy.
The first refers to the minimum capital required from financial institutions to
start operations—in absolute monetary value. The required minimum capital is
obtained after balancing the conflicting goals of keeping it low enough to allow
entry into the system, while high enough to provide a critical mass of resources
to permit the healthy startup of operations. This figure varies from country
to country. The second aspect refers to the level of capital required to support
a given level of operations, usually measured in relation to assets or
liabilities, since for financial prudence, banks should be limited in how much
leverage they can acquire. Thus the capital of a bank should grow in parallel
with the expansion in its operations. The trend in OECD countries is to base
minimum capital requirements in relation to assets rather than liabilities, and
to the extent possible, to place them according to the riskiness of the various
assets. The recently approved uniform capital adequacy standards for OECD
countries imply an average capital of 8% of total assets (including contingent
obligations).

5.47 Along with strict loan classification and provisioning, the capital
adequacy guidelines are aimed at limiting leverage so that the banking system
does not collapse in an economic downturn and that bank profits do not merely
stem from increases in leverage.

5.48 Empirical Evidence. Regulations on minimum capital requirements
are very similar throughout the sample of countries, perhaps reflecting the
influence of the Kemmerer mission in the early part of the 1900s which
spearheaded bank legislation in many Latin American countries. Where the
differences are is in the ability and interest of the regulators in ensuring
that the capital base (capital and reserves) reflects the true net worth of
banks, and whether contingent obligations require some form of capital
requirement.

5.49 Not all countries have established guidelines on the minimum level
of capital (in absolute monetary value) which banks need in order to apply for
a banking charter and start operations. In some countries these guidelines are not binding because these limits were established many years ago in nominal amounts which have been eroded by inflation. Some countries, like Peru do not have limits. Other countries, like Venezuela and Guatemala, have limits which appear to be too small relative to the size of their economies or of other banks in the system. Opening a bank in Venezuela would require the equivalent of US$3 million. A limit of about US$5 million would appear more appropriate. In Guatemala the limit is the equivalent to US$2 million. Mexico requires banks to regularly adjust their capital base, so that they do not fall below 0.3%, 0.5% or 1% of the total capital base of the banking system (depending on the type of bank). Uruguay has a limit of US$5 million which appears to be adequate. In Peru, the country has been divided into financial districts; depending on which districts banks operate, they have different minimum capital requirements. This creates major distortions.

5.50 With regard to the second kind of capital requirement, i.e., the level of capital required to support a given level of operations, most countries define the minimum capital requirement as a proportion of total liabilities. Maximum debt to capital and reserves ratios of 20 to 1 have been established in Chile, Peru, Uruguay, Honduras and Venezuela. In the case of Chile, the 20 to 1 limit includes contingent liabilities, thus is more conservative. Guatemala has an asset base system, in which minimum capital requirements vary as a function of type of assets: 20 to 1 for investments in government securities, 10 to 1 for other investment and loans, and 2 to 1 for fixed assets. Ecuador has recently established capital requirements based on the type of assets of the bank and on their riskiness, including contingent obligations, rather than on liabilities. This system follows the system being implemented by the industrialized countries based on the Accord of Basle.

5.51 In 1989 Colombia reduced the allowed leverage of banks from 15:1 (debt to capital and reserves) to 12.5:1. The intent was to induce banks to step up recapitalization efforts. In early 1990, Bolivia went the other way, by allowing banks to increase their leverage from 15:1 to 20:1. This change may not be the most desirable since banks are still far from healthy and they could use additional capital. The Colombian Government has indicated its intention to establish a system similar to the Accord of Basle. The Colombian superintendency is currently working on the legal changes to move to a system based on the type and risk of the assets rather than on the leverage of the institution.

5.52 Under Brazilian banking law, banks' liabilities cannot exceed 15 times the institution's equity. This 15 to 1 limit, however, is not comprehensive since it excludes borrowing from the Government, interbank certificates of deposit, and guarantees. As a result, banks could actually be operating with dangerously high leverage requirements. The Central Bank has expressed an interest in including CDs and guarantees in the leverage requirements.

5.53 The treatment of contingent liabilities is better in Latin America than in other developing regions. Only in a few countries are contingent obligations not reported in the balance sheet and not subject to capital requirements. Several Latin America countries treat contingent liabilities as regular obligations: thus they are included in the balance sheet and are subject to minimum capital requirements. Colombia, Ecuador and Peru require banks to
disclose their contingent liabilities as a separate category within their financial statements in accordance with their uniform charter of accounts. Other countries have very loose requirements when dealing with contingent obligations. For instance, in Guatemala bank guarantees and lending supported by warrants and mortgage bonds are not subject to capital requirements. This has resulted in an inordinate growth of off-balance sheet items. In Venezuela, contingent liabilities are not subject to minimum capital requirements.

5.54 The analysis of minimum capital regulations in Latin American countries have also found that in some countries (i.e., Guatemala) the procedures for increasing authorized capital are lengthy and complicated, often requiring approval from more than one Government agency. Considering the importance of adequately capitalized institutions, these procedures should be streamlined. In Bolivia, to circumvent bureaucratic procedures, though not to eliminate them, capital contributions are treated as capital for leverage purposes, even before formal approval by the Superintendency or other government agency.

H. Information Disclosure

5.55 Optimum Policy. An adequate level of information disclosure is critical to facilitate public scrutiny of the performance of banks which allows depositors to discriminate between banks. The Superintendency of Banks or the agency in charge of supervising banks should publish on a regular basis a summary of the audited financial statements of each bank. In addition, short of distributing their Annual Reports at request, banks should be required to keep at their premises information for the public on their financial situation, the structure of its Board, and the name of their external auditors, which would be made available at request. If banks are to be subject to market forces, then the public must be able to make rational choices as to the riskiness of their deposits. This requires disclosure of information. Without this recourse from the public, some banks may not feel encouraged to discipline themselves and administer their businesses properly. Information should be issued periodically, in a timely fashion, and should contain enough information to allow depositors and investors a reasonable idea of the real financial condition of the bank. This would require information on the quality of the loan portfolio and on the adequacy of the provisions.

5.56 Empirical Evidence. In most Latin American countries, banks are not obliged to publicly distribute their income statements. Some supervisory agencies argue that if banks publish weak financial results it could lead to runs. The counter argument is that regulators can use all the assistance they can get in ensuring that banks are well managed, and forcing banks to disclose their income statements would result in better managed banks. The Latin American countries which have the most liberal information disclosure are Chile and Bolivia, and in neither of these countries the free access of information on the condition of banks have led to runs on banks. In Chile, banks ensure that they have adequate provisions so that the public do not perceive them as more risky than other banks in the system.

5.57 Several countries in Latin America have increased the quantity of published data available to the public. Bolivia, for instance, requires two annual audits by external auditors, one of which is paid for by the Superintendency of Banks. Chile has a very liberal information disclosure.
The Superintendency of Banks publishes a summary of the financial statements of banks including their financial results, a summary of the status of the loan portfolio, lending to related parties and loan provisioning. Bolivia's Superintendency of Banks also issues information on the financial condition of banks on a monthly basis. Peru and Colombia also disclose financial information, but with some lag. The Colombian superintendency has issued recently a series of norms in an attempt to increase transparency. For instance, since October 1989 the bulletin of the superintendency includes information of the financial condition of the intermediaries, including indicators of solvency, efficiency and risk. Ecuador requires banks to publish bi-annual financial statements, and the superintendency of banks plans to start publishing a quarterly magazine which will include financial information as the bulletins issued by Chile and Bolivia. Other countries such as Argentina, Guatemala and Honduras, do not require banks to publish their income statements.

I. Audit Requirements.

5.58 Optimum Policy. The prudential framework should require audits of banks' statements by independent auditors. The supervisory agency should also establish clear guidelines and standards on how these audits should be carried out, on their scope, and on their frequency and timing, in order to avoid inadequate audits. Auditors should specifically be required to audit the loan portfolio including adequacy of loan loss provision. But this requires a loan classification and provisioning system to be in place. The supervisory agency should also, from time to time, pay for the audit of banks, to guarantee independence and to have access to information which audit firms only provide to their clients. External auditors should be reputable, qualified and independent.

5.59 Auditors should be made responsible for the quality and veracity of their reports. Furthermore, the possibility of collusion between the auditor and the audited firm should be discouraged as much as possible, therefore arrangements such as having the external auditor based permanently in the audited firm should be forbidden. Finally, audit requirements and audit reports should be standardized to ensure uniformity and to facilitate the comparability of the data.

5.60 Empirical Evidence. Most Latin American countries require external audits of banks' financial statements, but have not established precise guidelines on how these audits have to be carried out. Furthermore, only in a few countries the supervisory agencies pay for audits. Nonetheless, several countries have recently strengthened audit requirements. Bolivia, for instance, requires two external audits per year, one of which can be paid by the superintendency. Ecuador has issued very detailed external audit guidelines which describes the criteria to be used and the contents of the various audit reports. Its Superintendency of Banks has been following up very carefully the audit quality as a result of which it has gone as far as suspending an audit firm for poor workmanship. While in Ecuador all audits are paid by the banks, the Superintendency has the faculty of requesting and obtaining all the working papers and any other information which the auditor gathered to substantiate the recommendations and conclusions of their audit.
J. Barriers to Entry

5.61 Barriers to entry typically are initial capital requirements and approval by the bank superintendency for new banks, branches or mergers. Foreign bank subsidiaries and branches are also generally subject to separate entry requirements.

5.62 **Optimum Policy.** The superintendency, monetary board or other regulatory authority should ensure that new entrants to the banking system are sufficiently capitalized and reputable to command the public trust. The approval process for both banks and branches should be objective and transparent. Initial capital requirements should only be high enough to insure initial deposits yet not so high as to create an additional artificial barrier to entry. Fees for approval should reflect the cost the government incurs in the approval process and not any excess. Finally, regulators should be shielded from lobbying by existing banks and politicians who will inevitably restrict access by new entrants.

5.63 Three caveats apply to the optimum policy indicated. First, the superintendency or other regulator must reconcile enabling the market for banking financial intermediation to function uninhibited with its own capability to sufficiently regulate to ensure public confidence. Put another way, if the number of banks increases, then there must be a concomitant increase in the number of regulators in order to maintain the same level of scrutiny and regulatory enforcement for each bank. Second, the optimum policies indicated inevitably result in barriers for new entrants. While such barriers may inhibit some of the efficiency of the banking system, such barriers are a necessary cost of ensuring effective regulation and thus public confidence. Third, since no authoritative evidence indicates that there is an optimal number of banks for any particular market size, regulators should not attempt to limit the number of banks to a specific number because such a policy may result in uneconomic market concentration hampering competition and ultimately increasing intermediation costs.

5.64 **Empirical Analysis.** Barriers to entry depend largely on the policy of the supervisory agency, and on its institutional capability and autonomy. In most countries studied, new banks are limited as a matter of policy—an effort to stabilize the banking system. In Argentina, Chile and Uruguay, for example, the supervisory agency has a definitive policy not to authorize the creation of new banking institutions. Further, in Mexico and Peru banks have been nationalized and new entrants are therefore likely to remain prohibited.17

5.65 In those cases where the approval is subject to the discretion of the executive or where the supervisory agency is legally subject to the President or Legislature, the approval process may be institutionally difficult or hampered by lobbying efforts. Further, in some countries, the institutional capability of the agency may be limited and thus the approval process by default subject to political influence such as the banking lobby. In both of these cases, the approval process may be arbitrary and the requirements unclear. This is generally the case in Colombia, Ecuador and Guatemala.

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17/ The nationalization of banks in Peru has been halted, but the nationalization law is still in place.
Specific regulations and approval processes also generally regulate foreign ownership. In Brazil for example, foreign banks or branches can only be established by Presidential decree and Board members must be Brazilian. In Colombia, foreign banks are required to enter into partnerships with local investors. In Venezuela, branches and capital of foreign banks are limited to 1971 levels.

VI. BANKING CRISIS IN LATIN AMERICA AND THEIR RESOLUTION

A. Introduction

This chapter reviews how banking crises were handled in various Latin American countries, discusses deposit insurance issues, and assesses whether the current regulatory frameworks in Latin American countries are appropriate in facilitating the resolution of bank failures (whether through restructuring or liquidation of insolvent institutions).

In the 1980s, several Latin American countries experienced significant banking crises which can be classified as systemic. By this we mean that a significant proportion of the banking system became insolvent and that these insolvencies were at least partially motivated by macroeconomic (system-wide) events. In order to prevent public panic resulting in a run on the banking system as a whole, the governments of the various countries had to resort to different means to allay fears of lenders and restore public confidence. The most noteworthy cases in the 1980s were the banking crises of Argentina, Chile, Colombia and Uruguay. The financial systems of Ecuador, Bolivia and Mexico also experienced distress during this period. Bolivia's crisis would not classify as systemic only because of the prior disintermediation or demonetization of the financial system. Other countries also faced isolated bank failures, which were dealt with in different ways. Appendix A provides brief descriptions on the banking crises which occurred in Latin American countries in the 1980s and how they were resolved or confronted.

A major deficiency in the banking laws of many Latin American countries has been the inadequate means provided for handling banks in distress. The banking crises which developed in several Latin American countries caught the supervisory authorities in each of these countries unprepared to take effective measures. As a result, major indiscriminate bailouts were organized which were very costly to governments. With few exceptions, depositors were paid in full, even though explicit deposit insurance schemes were not in place. Recognizing the need for clear guidelines on bank rehabilitation and liquidation, several Latin American countries changed regulations or laws to incorporate specific mechanisms to handle banking crises, including more formal deposit insurance schemes. Adequate means to handle banking crises are necessary to minimize the potential effects of crises spreading into other institutions, and to attempt to reduce their overall costs. The advantage of institutionalizing these mechanisms is to remove discretion and dilute political influence over the process.

In most Latin American countries banking crises emerged from four important causes: (i) macroeconomic instability, derived in most cases from wrong economic and financial policies pursued by Governments, (ii) mismanagement,
(iii) fraud, and (iv) banking failures in other countries which affected local banks which were either foreign subsidiaries or branches. Mismanagement and fraud were possible due to weak supervision and insufficient prudential regulations. Adequate prudential regulation and supervision can reduce banking failures due to mismanagement and fraud, but are less effective in preventing banking crises caused by macroeconomic instability stemming from, or at least aggravated by, inept public policies. Nonetheless, even in cases of macroeconomic instability, banking regulators should be able to inform the authorities in charge of economic policy of the negative impact of their policies on the financial system. Finally, supervisors should try to prevent the importation of banking crises by carefully overseeing the performance of foreign subsidiaries, particularly when they are owned by private banks from neighboring countries. An effort has to be made to obtain information of the performance of the parent bank.

6.05 In Argentina, Bolivia, Chile, Ecuador and Uruguay, governments tried to avert these crises by providing funds to their banking systems to refinance ailing portfolios. This serves to increase the liquidity of the portfolio, increase the likelihood of repayment on the part of the borrower, and reduce the level of provisions. In some cases, the government "dedollarized" the liabilities of the productive sector and banks. These liabilities were converted into local currency denominated obligations, with the Central Bank assuming the foreign debt obligations retaining the foreign exchange cost. In some countries these types of assistance were not enough and further assistance had to be provided. The forms of the subsidies embedded in the bank debt refinancings varied from country to country, but in all cases were quite significant. In Argentina these refinancings were purposely done at rates significantly below inflation, resulting in tremendous subsidies to borrowers which the Central Bank (and the financial system) has yet to fully recognize. The refinancings in Uruguay and Chile also contained an important subsidy element. The refinancings in Chile and Bolivia provided breathing space to debtors in the form of longer maturities but not in subsidization through negative interest rates. Other channels for support of ailing banks included: the relaxation of prudential standards, Central Bank deposits or low interest loans, and Government guarantees, among other.

6.06 Another important deficiency in the Latin American countries studied is the lack of clarity as to whether deposits are insured or not, and more importantly, the depositors' perception. In most Latin American countries, either because of past experience or due to the recognition that bank failures are politically explosive, depositors believe that their deposits are fully insured. Therefore, most countries are operating under a system of implicit full deposit insurance. This means that if governments do not do anything to dismiss this perception, the costs of liquidating insolvent institutions will be fully absorbed by taxpayers or, more likely, through the inflation tax. One country, Mexico, nationalized the banking system before providing any assistance. Colombia also used nationalizations as a means to resolve banking crises. In Peru, after a failed attempt of rehabilitating a failing bank with the assistance of other private banks, bank failures have been handled by forcing ailing banks to absorb the ailing banks. In some cases the ailing banks were merged into the public banks, in other cases they were ultimately liquidated. The associated costs were covered by the Central Bank.
6.07 The Latin American experience in handling financially distressed institutions offers many lessons, particularly to avoid past mistakes. Lessons have been learnt in three major areas: (i) institutional arrangements and guidelines for handling ailing institutions, and (ii) usefulness of deposit insurance/deposit guarantee schemes. Deposit insurance is dealt separately from the guidelines from handling ailing financial institutions because in practice the deposit insurance function can be separate of the "bank hospital" function. As a matter of fact, this is common practice in most Latin American countries which have deposit insurance schemes.

B. Institutional Arrangements and Guidelines for Handling Ailing Institutions

Empirical Analysis

6.08 In most countries in the region, the banking law and regulations do not encourage the concerned government agencies to take swift action for either the intervention, rehabilitation or liquidation of ailing financial institutions. In many countries the Superintendent requires approvals from the Minister of Finance and the President of the Central Bank before intervening a distressed financial institution. Past experience also shows that in many countries political pressures have prevailed and bank interventions have sometimes taken place either months or years after the Superintendency's petition. As a result, the losses were magnified. The common denominator of successful bank interventions is their timeliness. In Latin America in many cases former owners and managers have emptied the banks of their good assets by the time of intervention, thus leaving no possibility for recovery. This was possible due to lenient criminal penalties. Thus, the importance of clear and simple guidelines which permit swift action and clear and enforceable legal penalties cannot be overemphasized.

6.09 The experience of Latin American countries showed that in most cases, a simple injection of conventional capital did not suffice to restore the banks' profitability. A major clean-up of bad and non-performing assets, replaced with cash or government bills, was also required. In those cases which were successful, a strong management of the bank was instrumental in selling off real estate, reducing overhead, establishing new lending policies to effectively reduce loan concentration and implement a strong recovery action, among other restructuring measures.

6.10 At the time major crises developed, none of the countries had mechanisms to effectively deal with banking sector problems. Thus, solutions were implemented by trial and error, in many cases at a high cost to the countries. A diversity of instruments was used in Latin America to handle banking crises. These include (i) requiring the development of rehabilitation and recovery plans of institutions whose solvency or liquidity is impaired, (ii) promotion of mergers, (iii) liquidation, and (iv) nationalization. In order to facilitate the rehabilitation process of failing banks, Central Banks

18/ For more details refer to Appendix A, "The Handling of Banking Crises in Selected Latin American Countries."

19/ Government bills would be preferable to cash because its monetary and fiscal impact could be spread over time.
in most countries granted provisional exceptions to certain regulations such as credit limits and capital adequacy ratios. To assist the problem banks, Central Banks provided new capital through loans and exempted banks from repayment or allowed them to defer payments. These mechanisms in many cases were managed in an inconsistent, crisis-led fashion. Some countries established Deposit Guarantee Schemes to insure deposits up to certain limit and serve as a mechanism to deal with bank insolvencies. Others, such as Chile decided to provide deposit insurance to small depositors, but not to link deposit insurance to bank rehabilitation or liquidation. Still others have yet to decide whether or not to provide deposit insurance and how to deal with bank insolvencies. In spite of the significant diversity in approaches to handle banking crisis, most of the countries studied have developed or are in the process of developing these mechanisms.

Optimal Policy

6.11 As a result of the experience indicated in the countries studied, the following institutional arrangements are necessary. First, an "early warning system" at the Superintendency is imperative to pinpoint potential banking problems. Second, regulators must be trained to assess bank solvency and vulnerability to liquidity problems rather than mere adherence to legal requirements. Third, regulators must feel efficacious—that their assessment of bank deficiencies will be acted upon. Fourth, concerned agencies must be able to take swift action for intervention, rehabilitation or liquidation of ailing financial institutions. This intervention must by law and by custom be shielded from the meddling of political leaders or economic interest groups. Otherwise, intervention will be delayed or aborted and losses magnified. Fifth, governments have to study alternative administrative mechanisms to carry out the rehabilitation and restructuring of financial institutions and to finance the cost of these operations. Finally, laws must mandate the use of specific mechanisms to rehabilitate or liquidate insolvent banks.

6.12 In cases of banks appearing to be experiencing solvency problems a procedure such as the following could be used. The first step is to assess whether or not intervention is necessary and, if so, what sort of mechanism should be used. The following three aspects should be jointly considered in the process of deciding the treatment to be given to different problem banks: (i) solvency, (ii) profitability, and (iii) externalities associated with each course of action. The key is to clearly specify the situations that may require action on the part of banking authorities, and the nature of the actions that will be prompted in those cases. The extent of intervention by the authority will be related to the extent of decapitalization of the institution. Minor decapitalization would result in the establishment of a preventive surveillance regime (regimen de vigilancia preventiva), under which the institution will be subjected to the following measures: (i) neutralization of its lending capacity through the imposition of a special non-remunerated reserve requirement; (ii) reduced access to rediscounting facilities; and (iii) possible imposition of a special surveillance (veeduria) by the supervisory authority, under which the vedor retains veto power over all Board decisions.

6.13 When the supervisory authority detects losses in a financial institution that would reduce its equity by more than 50%, it will apply a capital replenishment regime (regimen de reposicion patrimonial) for a period not to exceed 90 days. Shareholders would be summoned to replenish capital
within this period, meanwhile the institution would also fall under the preventive surveillance regime. If existing shareholders fail to satisfy the supervisory authority's request for additional capital in the prescribed period, the authorities will determine whether the institution will be rehabilitated or liquidated.

6.14 When faced with an insolvent bank there are two alternative courses of action, namely, (i) rescuing the bank (rehabilitation), with change of ownership and management, if required, or (ii) closing it down (liquidation). The decision will fall on the minimum cost alternative. Closing down a problem bank implies direct costs resulting from the liquidation process and partial deposit coverage. Rescuing a problem bank implies the direct costs resulting from the process of "cleaning-up" and recapitalization of the institution. Additionally, both alternatives imply indirect costs related to potential domino effects, impact on borrowers' behavior, effect on depositors, labor disruptions, interruption of services, and other similar effects.

6.15 Renewal of operations and rehabilitation of a bank that has started liquidation procedures is very difficult, especially when confidence in the system is weak. The decision on whether to liquidate or rehabilitate an insolvent bank should therefore be made prior to formal intervention and be based on a comparison of financial costs and externalities affecting each alternative. If rehabilitation is necessary, the following principles need to be applied: (i) capital injection will be more effective if coupled with other reforms such as clean-up of bad and non-performing assets, (ii) restructuring of management is recommended, and (iii) existing shareholders should not be bailed out, which in practice means the change of ownership. Difficult measures which entail major restructuring of management, staffing reductions, and recognition of capital losses are unlikely to be taken by the existing management and owners in most banks. As a result, new ownership and management should be considered as a prerequisite for rehabilitation in such cases. These changes are necessary for reasons of equity as well as an effective rehabilitation that would prevent the hiding and/or repetition of previous mistakes. Bailing-out shareholders would also increase current problems and not lead to the desired rehabilitation, as the risk of the banking business would then be absorbed by the government.

6.16 Therefore, if the rehabilitation option is chosen, the supervisory agency will adopt the following measures simultaneously: (i) intervention of the institution, with displacement of the general assembly of shareholders; (ii) removal of directors; (iii) charge-off of losses against equity; (iv) subscription of new capital by the Deposit Insurance Scheme or any other Government agency charged with bank rehabilitation in the amount necessary to consolidate the institution's capital position. These measures are designed to recognize losses and inject new capital without undermining the public's confidence in the bank. Once the new capital is subscribed, the institution ceases to be under intervention, as there is a new majority owner of the institution. This would facilitate the task of finding a permanent solution quickly, by looking for new shareholders. This option will avoid maintaining the present shareholders/management in charge while struggling for a solution or passing on to them benefits derived from a clean-up operation. A permanent solution would imply the merger or sale of the bank to an institution that is solvent and well managed, after due cleaning. This should be done promptly,
within a prespecified time frame of no more than one year after the intervention of the bank.

6.17 Once an institution falls into the hands of the Deposit Insurance Scheme (DIS) or of the Government agency in charge of rehabilitation, financial assistance will occur mostly through capital injections. This assistance will not be forthcoming unless the DIS or the Government agency owns at least 51% of the bank's equity (satisfied by subscribing the capital offered by the supervisory authority. As the majority owner of the bank, the DIS will assume the management of the bank. It will be allowed to increase, diminish, restructure or change the value of the bank's stock. Likewise, it will be authorized to restructure the bank's operations, personnel and internal policies and procedures.

6.18 If liquidation is decided, all efforts should be directed at reducing costs from the outset. This may be done by selling off the good portion of the loan portfolio to other banks, and to transfer bank liabilities in compensation in an attempt to reduce the likely erosion of the deposit base of the banking system. The Central Bank or the Deposit Insurance Scheme would lend to the bank, prior to its liquidation, the resources required to allow the full transfer of the insured bank's liabilities with the public to banks in sound condition. Small Depositors would be paid up to the limit (to be determined). The unpaid balance to depositors, if any, would be dealt with in accordance to the liquidation procedures established by law.

C. Usefulness of Deposit Insurance/Deposit Guarantee Funds

Empirical Analysis

6.19 Deposit insurance is a topic which is linked to banking crises because the extent to which depositors are (or perceive to be) insured determines the degree of freedom that authorities have when dealing with bank insolvencies and affects the magnitude of the possible losses. Before getting into the pros and cons of providing deposit insurance we will review what is the situation in Latin American countries with regard to deposit insurance. Two groups of countries can be identified: those which have some form of formal insurance of deposits in private banks (public banks have de facto government guarantees) and those which do not.

6.20 The first group includes Chile, Argentina, Colombia, and Venezuela. It is interesting to note that all these countries have established or modified their deposit insurance systems after being faced with bank failures. In Venezuela and Colombia their deposit insurance funds are responsible for the rehabilitation or liquidation of the ailing financial institution, while in Argentina and Chile their deposit insurance mechanisms do not have these

20/ For a comprehensive review of deposit insurance issues refer to "Deposit Insurance in Developing Countries" by Samuel Talley and Ignacio Mas, World Bank PPR Staff Paper, Forthcoming. The descriptions of the deposit insurance systems in Latin American countries were taken from the various Country Case Studies, from various World Bank Financial Sector Reports, and from "La Proteccion al Depositante" by Augusto Magliano, Serie Ensayos 1988 FIBAFIN, Buenos Aires, Argentina, 1988.
attributions. However, since in Argentina the deposit insurance function and the superintendency are an integral part of the Central Bank, it could be argued that the insurer does have the failure-resolution attributions.

6.21 The second group of countries comprises those which do not have an explicit deposit insurance system. These include Brazil, Bolivia, Mexico, Guatemala, Honduras, Peru, Ecuador and Uruguay. All the countries, with the exception of Uruguay, have implicit insurance for deposits in government-owned banks. Uruguay has an explicit deposit insurance system for deposits in public sector banks. In addition, many of these countries have in the past fully protected depositors in case of liquidation of private banks which would indicate that there is de facto deposit insurance. In Mexico and Brazil, demand, savings, and time deposits have legal seniority over other liabilities in the case of bank liquidations. In Peru, savings deposits have seniority. In Bolivia, the Saving and Loans System has a deposit guarantee scheme.

6.22 Uruguay is a special case because it has a formal deposit insurance mechanism for deposits in its public banks. The system is absolutely free and provides unlimited coverage. At present since Banco Republica controls a large number of banks, 80% of total deposits are currently covered by deposit insurance. Deposits on private banks, are not insured, but since these banks are all foreign there is expectation of support from abroad in case of distress (they probably would never get to bankruptcy). It does not seem to be necessary to have a deposit insurance system for the foreign bank subsidiaries, however other non-subsidiary foreign-owned banks may not be willing to support Uruguayan depositors as happened with some financial houses that failed in the past. The need for restructuring the deposit insurance system is evident. In the past there was also deposit insurance for private banks which was removed in 1982 by the Law of Financial Intermediation.

6.23 As of the end of 1989 Brazil still had not established a deposit insurance system, although the new Constitution has authorized its creation. The proposal that is being analyzed contemplates a private system, both administered and funded by the member institutions. In fact, the Government is expressly forbidden by the Constitution from contributing to the system. It would be compulsory for universal (multiple) banks and voluntary for other types of banks and non-bank financial institutions. It is not clear whether the fund would have a role in the liquidation or rehabilitation of ailing banks.

6.24 Chile. Deposit insurance in Chile has experienced several modifications. It was first established in 1977 when it was clear that banking crises were eminent. It covered small deposits (up to 100 tax units or about US$1000) and was managed by the Superintendency of Banks. In December 1981 the system was expanded after the crisis earlier that year. It allowed depositors to purchase additional protection from the Government. Under the new complementary voluntary scheme, depositors could insure up to 75% of their deposits or 150 tax units, whichever was less. The cost to depositors was 0.1% of monthly insured deposits. In 1983, after the two major rounds of bank failures, the Government decided to eliminate the system since bankers and the public realized by then that the Government would assume most of the banking losses.

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21/ In Peru saving accounts are fully insured by the Government.
6.25 In January 1987 the Government established a new deposit insurance system. It has three types of explicit guarantees on deposits. The first type of explicit fiscal guarantee covers "small depositors," and covers 90% of deposits registered. Guarantees are registered under the name of each depositor, and covers up to 120 tax units (a CPI-adjusted index) per year. The maximum payout was initially set at 90% of deposits up to the limit of 120 tax units per person. Since June 1988 only 60% of deposits are covered up to 120 tax units per person. Societies, partnerships and corporations are excluded. The guarantee can be claimed only after a bank is liquidated or proposes an Agreement of Creditors.

6.26 The second type of explicit guarantee covers all liquid deposits (with maturities below 10 days), in the cases of liquidation and proposition of an Agreement of Creditors. In both cases, the Central Bank replaces the depositor as a creditor, but in addition, the law grants the Central Bank priority over other creditors. It must be mentioned that the law does not talk of a guarantee explicitly, because the Central Bank is constitutionally banned to guarantee anybody. Rather, the law says that in the case mentioned, the Central Bank must lend to the failing bank, which must use those funds to pay holders of liquid deposits. The third guarantee covers all deposits and liabilities of the state bank, Banco del Estado. In all cases the Central Bank is responsible for covering any uninsured financial liabilities in excess of assets.

6.27 Argentina. Argentina also has a long history of deposit insurance. The system existing up to 1979 was an unconditional Government guarantee of deposits, at times insuring all deposits. In 1979 a more formal deposit system was established, requiring banks which chose to join, to contribute. The system is optional and the participating institutions can withdraw from the guarantee system upon prior notification to the Central Bank. They are also required to state clearly in all advertising material and deposit instruments whether or not they are members of the deposit guarantee system. In broad terms, national and foreign banks have opted not to participate in the scheme, while most locally owned private institutions (including all non-bank financial institutions) have joined. The system is managed by the Central Bank, with no formal board or institution to oversee the funds. Demand, savings and term deposits are covered. Coverage limits vary according to the nature of the account and of the depositor. Demand deposits are insured by 99% of their value (100% for individuals) up to A$3 million (US$4,600), and by 1% of their value in excess of this amount. Savings and non-transferable time deposits are insured by 99% of their value (100% for individuals) up to A$1 million, by 75% of the value of the deposits between A$1 million and A$2 million, by 50% of the value of deposits between A$2 million and A$4 million, and by 1% of their value in excess of A$4 million. Term deposits are only covered by 1% of their value. It is basically a coinsurance system where the depositor increases his exposure as his deposits increase. As of end-1988 about 50% of total banking system deposits were covered.

6.28 The system has not worked very well because of lack of credibility and equity. In recent years the Central Bank has been very reluctant to liquidate banks, and it has opted for their intervention even in those cases in which it is clear that the bank needs to be closed. Once a bank is intervened by the Central Bank all deposits are covered. The system has lacked credibility because depositors have not felt that the scheme was properly funded or managed to protect their deposits under all circumstances. The recent forced conversion
of time deposits into long-term Government bonds at the end of 1989 will certainly wipe away any remaining credibility on the deposit insurance system.

6.29 **Venezuela.** In March 1985, as a result of the failure of a large private commercial bank (Banco de Comercio), Venezuela established a deposit guarantee fund. The Deposit Guarantee and Banking Protection Fund (FOGADE) guarantees deposits and acts as a means for providing financial and other support to banks and credit institutions which may be intervened. It is a legally separate entity from the Central Bank and the Superintendency of Banks. Membership is compulsory for all banks and formal credit institutions. It is funded by premia paid by participants each semester (0.25% of total deposits). It has access to a rolling credit line from the Central Bank to complement its resources.

6.30 **FOGADE** has broad functions since it guarantees public deposits, facilitates the intervention of banks, and provides financial support to troubled banks prior to intervention when such support would help to preserve financial stability. Since FOGADE has authority to deal with ailing banks, it was covered extensively in the previous section and in Appendix A. Several of FOGADE’s recent actions have made it apparent that it is affected by its insufficient human resources, lack of decision-making power, poor coordination with other regulatory agencies (such as the Superintendency and the Central Bank) inadequate capitalization, and vulnerability to political pressure.

6.31 **Colombia.** In Colombia, there is deposit insurance through the Fondo de Garantias de Instituciones Financieras (FOGAFIN) which was established in 1985. Deposits are covered up to 75% of the established limits. In 1988 the limit was placed at Col$200,000. Insiders who are proved to be linked in any way with the bank’s failure are not covered. FOGAFIN not only pays off depositors in case of bank failures but is also the entity in charge of rehabilitating or liquidating ailing financial institutions by assuming temporary ownership and management. It also has the mandate to ensure that member banks have enough liquidity. Participation in the system is compulsory. Participating banks pay a monthly fee linked to deposits which cannot exceed 0.05% of the bank’s total deposits per month. It can borrow both from the Central Bank and from the general public by issuing securities.

6.32 The study also found that deposit insurance *per se* does not guarantee an appropriate solution to financial crises. This was the case of FOGADE in Venezuela and to a lesser extent of FOGAFIN in Colombia. Their laws did not give them an adequate mandate and the appropriate mechanisms to rehabilitate or liquidate insolvent banks. There is a need for a clearly defined institutional and legal framework, including a set of complementary procedures on how to confront banking problems when liquidation is not desirable. These procedures should have legal form and clearly specify who is responsible for the rehabilitation and liquidation of banks and what alternative routes he has to carry out his functions. While the absolute value of deposit insurance is subject to considerable debate, an advantage is that neither taxpayers nor banks have to bear the full costs of problem banks in the system. For deposit insurance to work, a limit for compensation to depositors should be established and regulators should adhere to that limit. Governments should clearly indicate what will happen to depositors in case of bank liquidations. In many Latin American countries depositors believe that their deposits are insured, although no regulation or law indicates this. In practice, they have been correct in
believing in the existence of an implicit deposit insurance. Countries should be explicit on the subject to avoid having to pay the full cost of bank failures. Otherwise, government acceptance of responsibilities for compensating depositors at selected banks could snowball to general perceptions of 100% deposit insurance.

Optimal Policy

6.33 The issue of whether to have or not a deposit insurance system is very controversial without a definite answer. Deposit insurance has its pros and cons. Positive elements are the fact that premia charged help pay for the expenses incurred in rehabilitating and liquidating distressed financial institutions, and the confidence they provide to depositors which is likely to result in higher levels of intermediation through the banking system than otherwise. Banking crises are at many times difficult to acknowledge because authorities try to hide their costs. Since deposit insurance can help alleviate these costs, it may facilitate the prompt resolution of crises before they grow further. The prompt payment to depositors contributes to neutralize one of the principal externalities of bank failures; which is the inconvenience to depositors and their creditors of having their funds frozen until the liquidation of the failed bank is completed.

6.34 Critics of deposit insurance point to the "moral hazard" argument as a significant reason to oppose it. They argue that deposit insurance reduces the incentive for depositors to put their money in safe institutions and thus encourage risky lending by banks. Defendants of deposit insurance, while accepting the "moral hazard" argument, indicate that past experience has shown that the lack of any explicit deposit insurance usually results in full deposit insurance because authorities are generally reluctant to let depositors lose their money. Therefore, they argue that deposit insurance for small depositors, coupled with strict prudential regulations and supervision, is a worthwhile second best solution. Based on the empirical evidence on banking crises in Latin America we support the establishment of deposit insurance for small deposits in countries which are not subject to predictable macroeconomic threats.22/ The existence of this system has to be publicized extensively, and all banks should be covered. Those banks which do not comply with the superintendency’s regulations should be penalized and eventually closed down or rehabilitated. This could change the public’s perception that all deposits are insured.

6.35 A well functioning deposit insurance needs to be equitable and have credibility. These characteristics have been missing in most systems established in Latin America. There are several operating principles which should characterize any deposit insurance system which attempts to be successful:23/ (i) its losses will be minimized if it acts in a decisive and timely manner to resolve bank failures, (ii) it should not administer or provide financial support to institutions in which it does not hold exclusive ownership, (iii) all

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22/ This means countries which are carrying macroeconomic policies which appear to be sustainable through the medium term.

23/ Taken from an Unpublished World Bank Mimeo Draft entitled "Deposit Insurance and Bank Crises", written by Ignacio Mas (staff member) in November 1989.
institutions with the same characteristics and faculties should offer the same deposit protection.\(24\) (iv) it should enjoy full financial backing from the Government and be adequately funded from the outset, (v) its finances should be transparent with clear accounting and disclosure of costs and income, (vi) it should have decision-making authority, (vii) the private sector should participate in decision-making and management, and (viii) the deposit guarantee should only be partial, in order to maintain a certain degree of market discipline.

6.36 None of the explicit deposit insurance systems in the Latin American countries studied have all these operating principles, or even the majority of them, in place. As a result, unless major modifications are made in their by-laws or in their procedural rules, it is very likely that they will not be able to carry out the purpose of their creation: to promote banking stability in order to increase financial savings through the development and growth of financial intermediation.

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\(24\) Mandatory rather than voluntary participation is important to avoid another insurance type problem which is adverse selection. Adverse selection can occur because the low risk activities (good banks) opt not to get the insurance while the poor risks (bad banks) decide to obtain it. As a result, the chances of sinisters and failure of the deposit insurance system are increased.
The Handling of Banking Crises in Selected Latin American Countries

1. This section summarizes the experience of Latin American countries in handling banking crises. While the 12 countries studied have faced bank insolvencies at some point in recent years, this section will focus in those cases which have specific lessons to offer. We will discuss the cases of Chile, Argentina, Colombia, and Uruguay with some detail, and will also provide a brief description of how banking crises in Bolivia, Ecuador, Venezuela, Guatemala, Mexico and Peru were dealt with.

Chile

2. The Chilean banking system went through a dramatic crisis in the early 1980s. The crisis and the way it was solved will have medium-term effects over Chilean banking. The origins of the banking crisis are related, to a large extent, to the severe macroeconomic problems experienced by the country, especially from the end of 1981 through 1982, and they were aggravated by poor lending practices by bankers. Macroeconomic factors included the collapse of major export prices (mainly copper), high domestic interest rates, deterioration of competitiveness linked to overvalued currency, and balance of payments crisis. Macroeconomic problems substantially weakened the repayment capacity of large segments of Chilean borrowers. The negative impact of macroeconomic problems was in several cases aggravated by unsound financial practices. These unsound practices resulted from a regulatory environment where supervision and control did not keep pace until very late, with other reforms in the economy. Of particular importance were loose lending practices, especially loan concentration in affiliated and usually highly leveraged industrial or financial conglomerates. The result was a dramatic increase in non-performing loans, which reached 35% of total loans in 1986.

3. In the face of the widespread banking crisis, the Government was faced with two extreme solutions: to let insolvent institutions go bankrupt or to bail out these institutions by absorbing their losses. The first solution would have created no direct costs to the Government, although it would have, caused a chain of bankruptcies in two thirds of the banking system and large segments of borrowers, and it would have undermined the confidence on the financial system. The second solution would have transferred costs to the Government and would have represented a complete departure from Chile’s market-oriented economic policy. In the end, an intermediate solution was chosen. Losses were taken primarily by the Government but also by shareholders and, to some degree, by depositors. Moreover, some institutions were liquidated and others rescued and rehabilitated according to their degree of insolvency.

4. The mechanisms used by the Government to rehabilitate the banking system can be grouped into two categories: those directed at improving borrowers' repayment capacity, mainly across-the-board debt reschedulings and coverage against exchange rate losses; and those aimed at rebuilding the banking system’s capital base, mainly the purchase of non-performing loans by the Central Bank (with an obligation for shareholders to repurchase these loans from future

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1/ This section draws substantially from a World Bank Working Paper entitled "How the 1981-83 Chilean Banking Crisis was Handled" by Mauricio Larrain, WPS 300, December 1989.
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profits), and the direct recapitalization and subsequent sale to small investors of large intervened banks. In addition, the Chilean Government completely changed the focus of banking supervision by starting to concentrate on loan portfolio analysis, assessing the overall financial condition of each banking institution, and increasing transparency.

5. The decisions to recognize and allocate the losses resulting from the banking crisis in a short period of time, and to implement comprehensive measures for its solution, has been key to the success of the Chilean experience. If the allocation of losses had been delayed or the implemented solutions had been partial, rapid recovery of the banking system would not have been possible. Similarly, losses would most likely have increased.

6. The 1981/82 Interventions. During the end of 1981 and 1982, 11 financial institutions were intervened by the Government and subsequently liquidated. These institutions represented some 14.5% of the system's total loan portfolio. In all of these cases, depositors were compensated, and losses taken by both shareholders and the Government. Shareholders lost their equity investment and the Government absorbed any difference between the value of assets and liabilities, excepting equity. The government was able to rapidly sell the two largest banks intervened during this period to banks of recognized solvency (in this case two well known foreign banks operating small branches in the country). Depositors were therefore not affected.

7. The 1983 Banking Crisis. By the end of 1982 the magnitude of the macroeconomic crisis was apparent and the banking system's profitability and solvency seriously weakened. Several institutions were insolvent. In January 1983, the Government decided to intervene the insolvent institutions (seven banks and one finance company) and immediately liquidate three of them which had major problems. In the five remaining cases--which included the system's two largest private banks--the decision was made to rehabilitate them under the assumption that the costs of these rehabilitations would be outweighed by the benefits. These five banks were not only affected by the macroeconomic situation but had also heavily concentrated their loan portfolios in affiliated companies. Concentration fluctuated between 12% and 46% of their total loan portfolios.

8. In the case of the institutions which were liquidated, the Government paid depositors 75% of their face value. Foreign creditors were also offered 75% of their loans but did not accept. In the end, these foreign liabilities were guaranteed by the Government within the overall restructuring of the external debt.

9. Mechanisms used to Rehabilitate Banks. Four main measures were taken by the Government in early 1983 to relieve borrowers, the banking system in general, and to rehabilitate and privatize the institutions intervened by the Government: (i) debt-relief schemes for borrowers, including preferential exchange rates for repaying their dollar-denominated debts, across-the-board debt reschedulings, and dedollarization of certain debts; (ii) purchase of risky loans by the Central Bank with a repurchase obligation on the part of banks' shareholders; (iii) recapitalization and subsequent sale of intervened banks to small investors; and (iv) streamlined supervision and prudential regulations (which were put in place gradually to permit banks to adjust). Besides these four mechanisms, an explicit deposit guarantee was offered by the Government to
all depositors to restore confidence in the system while the effects of these mechanisms were taking place.

10. The purchase of risky loans by the Central Bank brought about a substantial improvement in the solvency and profitability of non-intervened banking institutions, since non-performing assets were heavily reduced or eliminated from their balance sheets. Confidence by depositors was also increased in the face of sounder institutions. Pressures over spreads and interest rates started to recede. According to the Superintendency of Banks’ estimates, this mechanism lowered the proportion of risky loans to equity from 155% to 50% in the case of those banks that made use of it.

11. Shareholders were not allowed to receive any dividend from their investments until the purchase obligation was finished. The amount of risky loans to be repurchased was adjusted according to inflation plus a 5% surcharge. For this reason, this mechanism can also be considered as a credit from the Central Bank to shareholders to recapitalize their banking institutions, with an interest rate of 5% a year in real terms. Capital increases were exempted from the repurchase obligation and dividends could be received in proportion to the capital increase.

12. The administration of the purchased loan portfolio remained in each bank, which received a mandate from the Central Bank to administer and collect it. All collections had to be allocated to repurchase risky loans. Borrowers were not informed of the fact that their debts had been sold to the Central Bank. These arrangements made it unnecessary for the Central Bank to set up a special facility to administer the purchased loans. Moreover, borrowers could not take advantage of the fact that their credit was not with a private bank any more.

13. Recapitalization of Intervened Banks ("Capitalismo Popular"). Considering that proportionately higher losses affecting the banks which were intervened and their uncertain future because of the intervention, the Central Bank did not agree to purchase risky loans from these banks until their financial condition was improved. Therefore, it was decided that they needed an injection of capital. For this purpose, in early 1985 a law was enacted authorizing the Superintendency of Banks to require from banking institutions under intervention the necessary capital increases to make them financially viable.

14. To force the recapitalization of these intervened banks, the law established that the required capital increases should first be offered to existing shareholders for a short period of time and then to the public in general. Any stock not purchased by existing shareholders and the public could be purchased by the Government which would pay by converting Central Bank emergency loans into equity. These shares would be disposed of by the Government over a period not to exceed five years and at a rate not less than 20% p.a. Purchase of stock by the Government could not exceed 49% of the intervened bank's capital at any moment, thus, avoiding government control. If the need for recapitalization was higher, the Government had to sell part of its stock to comply with its limit. Once the capital increase required by the Superintendency of Banks had been paid in, each intervened banking institution was entitled to sell risky loans to the Central Bank under the same mechanism applied to the banks not under intervention. As in the previous case, new shareholders were not bound by the repurchase obligation.
15. The Government offered ample credit facilities to small investors to encourage them to purchase stocks of intervened banks. Investors had to pay only 5% as downpayment, and the rest in a period not to exceed 15 years. The interest rate was zero in real terms, and a 30% discount on the principal was also offered for prompt payment. Dividends were tax-free. Moreover, investors could cancel these credits at any time by turning in their shares to the Government. A limit was set on these sales to ensure wide ownership ("capitalismo popular").

16. This procedure was used in the case of the two largest intervened banks (Banco de Chile and Banco de Santiago). Two other banks (Banco Concepción and Banco Internacional) were sold to other domestic investors and the smallest one (Banco Colocadora Nacional de Valores) was absorbed by Banco de Santiago. Between 1985 and 1987, the recapitalization and sale of stocks of these institutions was basically completed. At present, these banks are under private administration with Banco de Chile and Banco de Santiago having about 39,000 and 16,000 shareholders, respectively.

17. Conclusion. Because of the steady macroeconomic and financial sector improvements from 1984 to 1988, it can be argued that the way the Chilean banking crisis was handled was successful. Nevertheless, financial costs were significant. Total financial costs are difficult to estimate because they were and will be spread over several years. Depending on future fluctuations of the exchange rate or interest rates, these costs will also change.

18. Critics of Chile’s solution to the banking crisis, particularly the purchase of risky or bad assets by the Central Bank with a repurchase agreement, argue that the contingent liability of these repurchase obligations significantly weakens the financial condition of the system. The Bank’s analysis, however, shows that while repurchase obligations present a real burden to profitability and capital accumulation for banks in Chile, they are not shouldered evenly among banks, and do not impair the finances of most banks. As an aggregate, banks with repurchase obligations have been able to reduce these obligations, in real terms, over the past two years. In any event, because the amount of repurchase required in any given year for banks depends on the level of net income, as long as banks remain profitable, decreases in income would only slow the process of repurchase and not threaten the financial position of the banks involved.

19. Two important side benefits of the banking crisis were the recognition from the Government that banking legislation should explicitly provide the authorities with alternative mechanisms to handle the situation of ailing banks, and provide the public with a clear indication of the extent to which their deposits are protected from losses. Changes in banking legislation include important changes with regards to these two topics.

20. The new banking law provides the SBIF and the Central Bank with various mechanisms for managing the transfer of property rights in a failing bank, most of which attempt to keep the bank as a going concern. These mechanisms are the following: (i) Central Bank loans, which may have strings attached; (ii) soft loans from Banco del Estado and public enterprises, which may also have strings attached; (iii) intervention, where the SBIF takes over the responsibilities of an individual that legally replaces the bank’s board of directors; (iv) agreement of creditors, whereby part of the losses are forced onto holders of non-liquid deposits; (v) preventive capitalization, whereby the
board of a bank that is experiencing losses is forced to call an extraordinary shareholder meeting and propose a capital increase; (vi) help from other banks, whereby an ailing bank issues two-year maturity subordinated debt and sells it to other banks. This subordinated debt is considered capital for the purposes of loan limits and the debt/equity ratio; and (vii) liquidation. This is the only mechanism that results in the closure of the ailing bank. Holders of non-liquid deposits may suffer a loss and will surely be delayed in recovering their funds.

Argentina

21. Argentina has also been subject to a financial crisis of major proportion which started in 1980 and has not yet been fully resolved. Argentina's financial sector problems stem from the extreme instability and drastic policy reversals which have characterized Argentina's macroeconomic policy in the past 15 years, coupled with a weak framework of prudential regulations. Policies ranged from: extreme interventionism in the banking sector, with an effective nationalization of deposits and an allocation of credit exclusively through Central Bank rediscounts (1973 to mid-1977); to complete liberalization of interest rates, credit allocation, and entry into the system (mid-1977 to mid-1982); to a return to financial repression and substantial reliance on Central Bank rediscounts (mid-1982 to early 1985); to, most recently, hesitant movements toward a more liberal system (early 1985 to the present). These shifts in approach occurred under conditions of continuous macroeconomic instability, weak bank supervision and, until recently, full government guarantee of deposits, first implicit, then explicit. The changes in approach were implemented through changes in interest rate policy and in reserve requirements and forced investments. The latter instruments were used during much of the period to finance large public sector deficits and to transfer large volumes of subsidized resources to favored borrowers. These approaches to the financial sector contributed to the financial panic of 1980, Argentina's worst, and one which still influences Argentina's financial development. More importantly, these approaches and the macroeconomic instability, have contributed to the high real interest rates, the large spreads and the shallowness that characterize Argentine financial markets today.

22. In early 1980, a financial crisis occurred which resulted in the liquidation of the largest private commercial bank and in the intervention and liquidation of 42 other financial intermediaries over the next year. As in the case of Chile, the crisis resulted from a policy of financial liberalization without an appropriate supervisory framework coupled with inconsistent macroeconomic policy. Some of these interventions were challenged in court, unsuccessfully, because, at that time, the law did not grant explicit intervention powers to the Central Bank. Weak supervision and full government guarantees of deposits permitted banks to assume imprudent risks. Distress

2/ This section is drawn from: (i) "Argentina's Banking Sector: The Need for Reform" (unpublished World Bank Paper, December 1986), (ii) from the "Argentine Banking Crisis of 1980s", an IMF Staff Paper written by Tomas Balino, (iii) "Argentina: Financial Sector Review" (unpublished World Bank paper, November 1989), and (iv) "El Saneamiento de Bancos en la Argentina", Juan Carlos Casas, appeared in "Saneamiento de Bancos" (op. cit.).
borrowing developed among producers of non-tradeables which were being hurt by the growing overvaluation of the peso and the sudden, brief liberalization of imports. Gradually, the scramble for liquidity by banks in distress and speculation against the peso began to produce higher interest rates, which in turn generated more distress borrowing. The authorities' reaction to the crisis included enlarging the coverage of deposit insurance and providing more liquidity to the banking system to avoid a bank panic, partial debt relief to private borrowers by extending maturities and reducing rates through Central Bank rediscounts.

23. Financial distress continued in 1982 as interest rates continued at high levels due to expectations of devaluation and borrowers' fears of further bank crisis and a possible inflationary bailout. The Malvinas War, the cutoff of new foreign credit, continued fiscal imbalances, and a mounting recession exacerbated the crisis. Further corporate bankruptcies resulted which led to serious liquidity and solvency problems in numerous financial intermediaries. As a result, in the first half of 1982 the Central Bank had to intervene 26 financial institutions, including three commercial banks. The new economic team that took over in July 1982 decided to introduce a drastic reform in the financial system, which included negative interest rates over a limited period of time in order to erode the value of existing bank loans and deposits. The measure succeeded in reducing the debt burden of the private sector but at a high cost in terms of lost confidence in the financial system due to heavy losses by depositors, a tremendous income redistribution, and an increased role for the Central Bank in overall financial intermediation due to its large involvement in providing rediscounts as a major debt relief mechanism.

24. Measures were also established to relief the burden of foreign currency debts. Debtors were partly compensated for the increase in the peso value of their debts due to the devaluation of June 1981, and later an exchange insurance scheme was introduced which provided further subsidies since the premium paid was lower than the rate of devaluation of the peso.

25. Measures to Restructure the Financial System. The banking crises caught the authorities unprepared. As a result, banking legislation had to be enacted to legitimize certain actions which the Central Bank had already taken. For instance in 1980 Law 22.267 was passed to ratify the intervention of three banks mandated several months earlier. In 1982 it was evident from the strong demonetization process that the financial system was overdimensioned and there was a need to consolidate it, thus the Law of Consolidation (Law 22529) was passed to enlarge the means available to rehabilitate ailing banks. The following mechanisms were authorized: (i) temporary administration by another financial institution with a purchase option, (ii) merger by absorption, (iii) sale of controlling interest, (iv) intervention by the Central Bank to assist in the resolution, and (v) liquidation (if majority of shareholders do not agree with the recommendation of the Central Bank it is forced to liquidate the institution within 90 days of the intervention).

26. The purpose of the Consolidation Law was to minimize liquidations which were thought to be the most costly and disruptive of the five mechanisms. Unfortunately it was the mechanism that was most frequently applied. A major reason for the large number of liquidations was the inability of the authorities to convince the majority of shareholders to accept alternative actions, thus leaving the Government no other choice but liquidation. This created perverse
incentives since the public realized that most interventions lead to liquidations so banks intervened had major runs on deposits. As a result, the Central Bank implemented a de facto 100% deposit insurance system in which all depositors, whether protected or not by current deposit insurance legislation, were covered once the institution was intervened. To prevent panic, the Central Bank stopped liquidating institutions without prior intervention, thus providing full coverage to depositors.

27. As of December 1989, 93 institutions have been intervened by the Central Bank since 1980. Of these only 7 were successfully rehabilitated and subsequently sold or merged. In the last five years, no intervention has resulted in sale or merger. With this history, intervention is inevitably seen as the prior step to liquidation, thus causing bank runs. Liquidation has become Argentina's main failure resolution device. In the past 20 years about 220 institutions have been liquidated as opposed to 6 rehabilitated. Liquidations have been lengthy and costly in Argentina. At present, 202 liquidations are still in process.

28. The Government is currently contemplating establishing an autonomous Deposit Insurance Corporation--similar to the American FDIC or the Spanish Deposit Guarantee Fund--to assist the process of bank rehabilitation. Deposit insurance would be restricted to small deposits. In October 1987 the Government ratified its policy to insure only small deposits. It is to be seen whether the Central Bank will abide to the new system and only cover the insured deposits in case of liquidations. In any event, the recent forced "conversion" of all time deposits in commercial banks into long-term government bonds (December 1989) will contribute to the lack of confidence of the public on Argentina's banking system and reduce credibility on the usefulness and protection provided by the deposit insurance system.

Uruguay

29. The origins of the banking crisis of the 1980s in Uruguay is similar to that of crises in other southern cone countries. It resulted from a combination of macroeconomic problems coupled with bank mismanagement, compounded by a weak prudential regulatory framework. In October 1978, the Government adopted the policy of preannouncing future values of the exchange rate (the "tablita") as an anti-inflationary tool. Financial liberalization was completed with the removal of reserve requirements and of several banking taxes. A huge capital inflow entered the country induced by exogenous events in Argentina and by the "tablita" policy, high interest rates for deposits in pesos. This in turn caused a strong real appreciation of the peso. Financial assets continued to grow rapidly during the 1979-82 period for three reasons: (i) growing dollar deposits, (ii) attraction of short-term capital by the "tablita", and (iii) further deregulation of the financial sector.

3/ This section draws substantially from: (i) “La Crisis Bancaria en el Uruguay” by Manfredo Cikato, appeared in “Saneamiento de Bancos” (op. cit.); (ii) “Uruguay’s Financial System, Case Study prepared by Juan Carlos Protasi, Unpublished Mimeo Draft, 1988; and (iii) several internal World Bank Reports.
30. Together with a sharp increase in financial deepening, two kinds of issues arose during this phase: a rapid process of currency substitution (dedollarization first and dollarization towards the end) and a huge indebtedness of the private and public sectors. Banking difficulties began to mount in 1980/81 on account of a drop in beef prices (main export), the collapse of a real estate boom, and reduced Argentine import demand. Simultaneously, Uruguayan firms, which had been highly leveraged because of negative interest rates, encountered positive rates in 1980, causing financial costs to increase sharply. Firms which engaged in speculative activities and acquired overpriced assets found themselves illiquid. Commercial banks sought to protect themselves from the coming devaluation by converting debtors' obligations in pesos to dollar denominated debts. This and the flotation of the peso in 1982 compounded the debt problem of firms and creditor banks. Many producers became insolvent and nonperforming loans grew in banks' portfolios.

31. In response, the Central Bank, first encouraged the commercial banks to refinance debts of rural producers, roughly constituting 30% of the outstanding domestic debt in 1980/81. Second, it provided relief funds to participating banks at below market rates in 1982, refinancing 1,704 million in new peso loans and US$346 million in dollar loans. Third, the Central Bank absorbed a substantial portion of the losses of failing banks in 1982/83. This operation resulted in a portfolio purchase of US$386 million covered with US$281 million in Treasury bonds and a cancellation of previous Central Bank credit to these banks. Fourth, the Central Bank purchased, mostly from the Uruguayan branches of several foreign banks, portfolios in arrears for US$216 million in exchange for new dollar loans in an amount equal to 2.5 times the face value of the actual portfolio purchase. Local bankers, however, did not have the dollars needed to participate and were left with significant bad loan portfolios.

32. These actions not only did not fully resolve the debt situation but, in fact, exacerbated it by creating the expectation of future bail-outs for banks and debtors. The combination of positive real interest rates and quickly multiplying debts, as the peso floated, virtually bankrupted numerous firms. Many firms sought the protection of concordatos (a bankruptcy procedure). Others rolled over loans (at higher interest rates), postponing the inevitable. Collection problems escalated. Meanwhile, prudential control of banks continued to be inadequate. Faced with the prospects of massive bankruptcies, the military government decreed a debt moratorium in 1984 (subsequently extended in steps to early 1986, when the 1985 refinancing law put an end to it).

33. A new administration that took office in March 1985 realized that the existing banking crisis contributed to macroeconomic instability and also was a major constraint in revitalizing the economy. It also recognized the need for a reduction of the financial burden on productive, viable firms to manageable levels and for support to the private banking system to withstand its losses. It first sought to maintain afloat both the banks and their debtors through debt restructuring and financial restructuring of firms. Its program also included initial improvements in the regulatory and supervisory procedures of the Central Bank; a revamping of the legal framework regulating corporations and other forms of business associations, banking documents and leasing contracts; and a modernization of judicial procedures.
34. A 1985 law established rules for refinancing existing debts and for apportioning losses between debtors and creditors, with the banks absorbing the losses originating from poor lending practices. The legislation provided a stretching out of maturities, grace periods, and a reduction of capitalized interest. The law focused mostly on the rescheduling of outstanding debts, thus it did not improve the debt/equity structure nor did it improve the recovery prospects of outstanding loans if the companies are not viable. Nevertheless, the law established a serviceable mechanism for rescheduling existing debts and for liquidation procedures to resume. It also removed the expectation of a general bailout of both creditor banks and debtors. However, it also precluded any foreclosures.

35. The refinancing law forced the commercial banks to confront the losses on their uncollectible portfolios. Two local banks (Banco Comercial and Banco Caja Obrera) collapsed and had to be intervened by the state-owned Banco República. The latter also had to take over two local branches of foreign banks (Banco de Italia and Banco Pan de Azúcar), when their main offices in Argentina and Chile fell into serious financial difficulties. However, the deterioration of their domestic portfolios would have required a rescue operation anyway.

36. Good examples of lack of appropriate mechanisms available in Uruguay to assist in the rehabilitation of banks are the bad experiences in liquidating banks, in the purchasing of portfolios that the Central Bank was not prepared to collect, and purchasing ailing banks which in turn imposed additional permanent losses to BROU and fiscal deficits.

37. The Government is currently carrying out a reform program which attempts to address the key problem areas affecting the sector. An important problem is the need to resolve the situation of the four private banks which came under Government control in 1986-87 due to their financial distress. Since the Government took them over, the losses of the Central Bank and Banco República in assisting these banks have exceeded US$100 million equivalent. The Government has initiated a program directed to the restructuring of three of these banks (Banco Pan de Azúcar, Banco Caja Obrera and Banco Comercial) which have a long tradition and a sizeable market share in spite of their difficulties. The fourth insolvent bank, Banco de Italia, will be liquidated. These actions would help stem further losses in the banking system, result in better portfolios and improved capital adequacy of the rehabilitated banks, which should reduce the cost of funds to borrowers, and avoid a run on deposits. Other reforms under implementation include an strengthening of the regulatory framework and of banking supervision, a review of the policies and mechanisms to handle the restructuring (or exit) of insolvent banks if needed, including the study of existing regulations for deposit insurance.
In Colombia, as in the Chile, Uruguay and Argentina, the authorities were caught unprepared for the banking crisis which developed in the early 1980s. As late as at the end of 1981, the general impression in Colombia was that the banking system was in a solid financial condition, with low leverage ratios (6.7 times capital and reserves compared to the legal limit of 10 times) and with few problems in its loan portfolio (the share of loans classified as risky or bad accounted for only 7.6% of the total portfolio). There was no evidence of a systemic problem although in retrospect it became evident that the banks had overextended their lending to industrial/financial conglomerates. In early 1980s macroeconomic variables started to weaken and there were various signals of a downturn in economic growth: the overvaluation of the currency, excessive external borrowing, sharp slowdown in growth after coffee boom of 1976-80, sharp deterioration of current account and fiscal deficits.

In 1982, two of these conglomerates failed, and the Government had to face the financial difficulties of the financial institutions linked to them. Two banks, accounting for about 5% of the assets of the financial system, Banco Nacional and Banco del Estado were intervened. The failure of these two banks was attributed to incompetent administration and high risk lending to related parties. The first institution intervened, Banco Nacional, was immediately liquidated after a run on deposits which forced its closure. In spite of the lack of an explicit deposit insurance scheme, small depositors were covered using Central Bank funds. The intervention of the second bank, Banco del Estado, caused a shift in deposits from private banks to public banks and S&Ls. This bank was not liquidated but nationalized, penalizing previous shareholders and managers. These caused some legal problems because of lack of legislation. Depositors were fully covered.

The failures of the two banks exposed the deficiencies of the Superintendency of Banks in handling these failures and the need to develop new institutional mechanisms to deal with bank failures. It also started a debate on the need to "democratize" bank ownership which led to the passing of legislation strengthening restrictions upon interlocking ownership of industrial/financial conglomerates, limits on portfolio concentration, and limits on ownership of banks to 20% of their capital base by any single shareholder. By the time these measures came into effect, however, the portfolio of several financial institutions was already too concentrated. Thus, the reforms could not prevent a second round of bank failures which included the two largest Colombian banks. As opposed to the Chilean and Argentine cases, these failures were not only related to mismanagement of the domestic operations of banks, but also to the reckless operations of overseas affiliates and subsidiaries of Colombian banks which engaged in risky lending without appropriate guarantees.

41. In 1984, the government took over the management of the country's largest private commercial bank (Banco de Colombia) and the largest finance company (Corporación Financiera Grancolombiana), both owned by the same conglomerate. Excessive intra-group dealings was a major cause of their financial problems. Both institutions were subsequently nationalized. A few months later, the second largest private commercial bank, Banco de Bogota, also experienced difficulties due to lending to related parties and to losses which resulted from a takeover battle, in which the Banco de Bogota (and its associated financial institutions) provided credit to its own shareholders to resist the takeover attempt. The Government intervened, providing credit to the bank, using its shares as collateral. These shares were placed in trust with the Banco Cafetero, the largest government-owned commercial bank. Banco de Bogota was later sold at a discount to the group which tried to take it over before. This group pledged to engage in a clean up of the bank, recapitalize it and reduce credit concentration. The sale was widely criticized, but the government argued that it was the best offer it had for the bank.

42. Between 1982 and 1986 the Superintendency intervened approximately 20 financial institutions. These interventions spearheaded major changes in legislation, including Decree 2920 in 1982 authorizing the nationalization of intervened banks, the establishment of a Deposit Guarantee Fund (FOGAFIN) in 1985, and improvements in prudential regulations and supervision.

43. FOGAFIN is an autonomous institution, although linked to the Government because of the composition of its Board of Directors. It has the following functions: (i) insure deposits for a fee, (ii) complement the supervision work done by the Superintendency of Banks, (iii) take over ailing institutions in order to liquidate, recapitalize or merge them with stronger institutions. Its Board is composed of five directors (the Minister of Finance, the General Manager of the Central Bank, another Government official, and two representatives from financial institutions).

44. As a result of its rescue operations, as of end-1988 FOGAFIN owned four commercial banks--Banco de Colombia, Banco del Comercio, Banco Tequendama, and Banco de los Trabajadores. The Fund also owned two finance companies one of which is being liquidated. The management of FOGAFIN expects to auction the controlling interest of Banco de los Trabajadores (51% of its shares) among bidders prequalified by the Superintendencia Bancaria in the near future. The remaining interest will be offered to the general public at or above the highest price of the auction. Regarding Banco de Colombia, the Fund's management, and the Government have found very difficult to sell the bank because of the likely political costs. The experience with Banco de Bogota, which was criticized as providing a large subsidy to the purchasers, and the recognition that the bank would have to be sold at a loss complicate matters. There do not appear to be domestic buyers and the government is very reluctant to sell it to foreign investors because it is the largest bank in Colombia. Several alternatives are being studied. One is to market the stock of this bank widely among the general public, in a scheme of "popular capitalism" to place the stock on an installment basis. For Banco de Tequendama, two alternative are being weighed: to merge it with Banco Popular--another large public bank, or to sell its assets to Banco Popular and auction the operating license among prequalified bidders. For Banco del Comercio there are no definite plans, although FOGAFIN's management thinks that it would be a likely candidate to be offered to foreign investors under an eventual debt-equity swap scheme, if (and when) legislation is approved that
would make it possible to sell banks to foreign firms. If all these sales take place at the estimated commercial value of the institutions, FOGAFIN would be able to recover about 60% of its initial capital investment. Furthermore, of the total assets of the Fund at historical cost, it is estimated that only 72% is recoverable. The remaining 28% will have to be supplied by the central government, or by the implementation of a reasonable insurance premium mechanism.

45. The case of Colombia clearly indicates that the establishment of an autonomous deposit insurance guarantee fund does not by itself solve the problem of how to deal with distressed financial institutions. It needs to have the appropriate legal powers and be structured adequately to prevent inaction due to political considerations.

Other Cases

46. In addition to the four cases already described, there were banking crises in other Latin American countries, which although not as renowned as those of Chile, Argentina, Colombia, and Uruguay, were important in their own right and offer some lessons. These are the cases of Bolivia, Ecuador, Venezuela, Guatemala, Mexico and Peru.

47. Bolivia. In the early 1980s, the Bolivian banking system started a process of deterioration as a result of a series of economic events which included a sharp reduction in economic activity in the period between 1981 and 1986, a "dedollarization" by decree in 1982 and hyperinflation. These events, coupled with the extreme instability and drastic policy reversals which took place since the early 1980s, weakened the financial sector, causing shallowness, high real interest rates, insufficient credit to the productive sectors and overdimensioning. Hyperinflation together with controls on interest rates reduced dramatically the demand for deposits, so that the real size of banking operations fell by August 1985 to approximately one-tenth of what had been in 1981. The reduced volume of deposits, and hence potential earning assets, together with substantial investments in real estate and other real assets that did not earn current income but were undertaken to avoid the ravages of hyperinflation, meant that Bolivian commercial banks had to either reduce costs substantially or operate with very high real spreads until they could reach adequate size.

48. Some of the Bolivian commercial banks obtained significant benefits during the period of hyperinflation, thereby emerging in fairly good condition. As mentioned above, there were substantial investments in real estate and other real assets. In addition, banks were well positioned to make large speculative profits through access to foreign exchange at the highly overvalued official exchange rate and through access to credit at highly subsidized interest rates, if not for the banks themselves, at least for their owners and their associated groups of companies. However, when hyperinflation was followed by stabilization and liberalization after the August 1985 reform decree, the possibilities for such speculative profits were largely eliminated. Bolivian commercial banks began to face a depressed market for real estate and other real assets that had served them so well during hyperinflation. These assets began to produce little or no return and instead started to require expenditures to maintain them, significantly reducing the profitability of banks. Moreover, the very high nominal interest rates that often had to be paid during hyperinflation and which presented essentially no problem for borrowers because they quickly became
negative in real terms, suddenly became very high, creating problems for borrowers and hence resulting in a substantial portfolio of non-performing loans for commercial banks. Analysis of available financial information for private domestic commercial banks for 1985 through 1987, showed a continuous decline in their return on equity and a weakening of their loan portfolios. The actual situation was even worse, however, since published financial statements reflected insufficient bad loan provisions and included accrued but unpaid interest on doubtful loans.

49. As of September 1987, 7 of the 12 private domestic commercial banks were reporting losses. Their annualized losses amounted to 8.6% of the system's net worth, and cumulative losses amounted to 28% of the system's net worth. Since net worth was overvalued, as indicated above, losses in fact accounted for a large proportion of the system's net worth. The main reasons for bank losses were the very high operating costs of banks and the large percentage of non-performing assets.

50. Recognizing the major weaknesses of its banking system, in 1986 the Government started a program of financial sector reform which included the restructuring of the Central Bank and the strengthening of the Superintendency of Banks. As a result, major efforts were made at determining the real financial condition of banks. The Superintendency issued new regulations which uncovered the real financial situation of banks. The Government recognized that it lacked adequate mechanisms to deal with bank insolvencies. For lack of an alternative mechanism to deal with ailing banks, the Central Bank used liquidation as the solution to three problem banks it had been facing. Five banks were liquidated in the last three years, one of them public (Banco de la Vivienda). The problems of the largest of these banks, Banco de Crédito Oruro, started in the 1980s, prompting its intervention by the Government. It was intervened by Decree several years ago, although at that time the Superintendency of Banks did not have powers to intervene banks. Later, it was returned to its former owners who continued their bad management of the bank, as a result of which the finances of the bank deteriorated even further, forcing the Government to liquidate it in early 1987. Most depositors were paid in spite of the lack of deposit insurance, subject to a limit of US$50,000. The reason for covering deposits was the fear of a run on the banking system, already experiencing financial problems. The liquidation of this bank was very problematic because a bank had not closed in Bolivia in several decades. The two other banks liquidated in 1987 were Banco Progreso and Banco Potosi, two small banks which fell prey of fraudulent operations. Most deposits were also covered in these two liquidations. In 1988 another small bank was liquidated (BLADESA).

51. In spite of these liquidations and of a substantial increase in deposit mobilization, the banking system remained weak, with several banks confronting serious insolvency problems due to the high level of real interest rates. In mid-1988, recognizing the need to improve its mechanisms to deal with banking crises, the Central Bank established a Vice-presidency (GSF) to deal with bank liquidation and rehabilitation. The conceptual objectives of GSF were to anticipate banking crises and to rehabilitate and or provide financial assistance to problem banks. Financial assistance was supposed to be preceded by full-fledged rehabilitation or strengthening plans. In practice, these plans were not as comprehensive as desired, and follow-up on their implementation has been lax.
52. In mid-1988 the Government made available a line of credit to banks to allow them to refinance loans to the productive sectors. Access to the line of credit depended on compliance with the norms of the Superintendency, and on agreeing on a plan of action (bank by bank) to reduce certain deficiencies. The majority of the ten private banks were eligible. The remaining banks are still negotiating with the Central Bank. At least in one case the Central Bank will buy their risky assets with a repurchase agreement (as in Chile) to permit the bank to meet regulatory requirements. The purchase of the risky portfolio is based on the collateral provided by the bank (including shares of the bank) and on an agreement on a plan to strengthen the bank (including further recapitalizations).

53. Taking into consideration the weak financial condition of banks and borrowers and the little confidence of the public on the financial system, it appears that the Government did not have other choice but to buy time by refinancing liabilities. However, it is a pity that the rehabilitation plans required from banks prior to disbursing the financial assistance were not more stringent. The Government may have lost a golden opportunity to accelerate the needed recapitalization of the system. It is expected, however, that strict supervision will continue by both the Superintendency of Banks and the Central Bank that will lead to requests for additional capital to bank shareholders.

54. Perhaps the more severe criticism that can be made of the way bank insolvencies were handled in Bolivia is that the Government's support was provided to the shareholders who could be held accountable for the financial problems of the banks and that in no case shareholders or management were removed. Government officials argued that banking legislation did not allow them the option of taking control of a bank even on a temporary basis, and that removal of owners would result in litigation which would make difficult to rehabilitate the bank and sell it to new owners. They also argued that at present there are not eligible entrepreneurs willing to purchase a bank in Bolivia. The Government has submitted legislation to Congress to authorize the Superintendency to intervene banks. Its passing would enlarge the options available to the authorities to rehabilitate ailing banks.

55. Ecuador. Ecuador also experienced a financial crisis in the mid-1980s. The crisis resulted from very high debt/equity ratios of business firms, partially induced by the availability of subsidized credit. The macroeconomic recession that began in 1981 and subsequent devaluations seriously limited the debt service ability of these firms, thereby impairing the portfolio of FIs. The portfolio problems led the government to "sucretize" the foreign debt of the financial intermediaries, establish rehabilitation programs, liquidate one commercial bank and take over another. Ecuador does not have a Deposit Guarantee Fund in place to help restructure financial institutions that become illiquid or insolvent. In the past, insolvent institutions have either been nationalized or liquidated. Deposits received de facto insurance from the Central Bank. While it is believed that further bankruptcies will be exceptional, a large number of institutions need restructuring of their finances, management and, possibly, ownership.

56. Until a Deposit Guarantee Fund is set up, the Central Bank will inevitably face the task of providing financial assistance to help some FIs normalize their operation. This assistance can be provided today in the context of Rehabilitation Plans which are implemented by the Central Bank and the
Superintendency, but have so far focused mainly on liquidity problems without compelling institutions to rebuild their equity bases. Rehabilitation Plans must combine non-subsidized financial assistance with adjustment programs that commit owners to recapitalize the institutions to make the changes in direction and management that are required to improve performance. Otherwise, insolvent FIs should face no alternatives but to change ownership or liquidate. The Central Bank must not commit resources without strict assurances that the institutions will rebuild equity and improve its credit policy. As of late 1986, there were 3 commercial banks and 2 development banks which had entered rehabilitation programs. The work-outs consisted of non-payment of dividends, Central Bank financial assistance, some contribution of fresh capital from shareholders, and operational changes.

57. Venezuela. While Venezuela has not had a banking crisis which can be classified as systemic, it has had to face several bank failures in recent years which prompted legislative changes establishing an autonomous Deposit Guaranty Fund.

58. Contrary to the situation in the southern cone, macroeconomic instability was not a major factor in bank failures in Venezuela. The more publicized and larger bank failures in recent years have been the Banco Nacional de Descuento (BND), the Banco de Comercio, and Banco de los Trabajadores de Venezuela. In all these cases, the banks' financial problems were associated with insider lending, an excessive concentration of lending to related parties, and poor management, associated with a need to cover up poor lending practices and fraud. Government actions to handle these failures were delayed, permitting bankers to continue their improper practices for years. The case of BND is particularly interesting because it took the Government about nine years to make the decision to liquidate the institution from the time it started to show major deficiencies in 1975. At that time it was the largest bank in Venezuela.

59. The handling of problems at Banco de Comercio also indicates the need for changes to expedite the implementation of solutions. The bank was able to survive its crisis with the help of official deposits of the public sector and financial assistance from the Deposit Guaranty Fund (FOGADE), which was created as a result of the Banco de Comercio crisis, and an inordinate amount of rediscounts from the Central Bank (it is estimated that at one point, Banco de Comercio was the recipient of about 48% of the total Central Bank rediscounts to the financial system as a whole). The intervention of Banco del Comercio also took too long. The external audit of the financial statements for the first half of 1984 indicated fraudulent practices and lack of compliance with superintendence regulations (over 20% of the loan portfolio was lent to companies linked to the bank's owners). The audit for the second half of 1984 showed that the situation had deteriorated even further, and that 37% of the loan portfolio was concentrated in the group's companies; even then the bank was not intervened until June 1985. The problems of Banco de los Trabajadores (BTV), intervened in December 1982, are also related to fraud and poor lending practices. BTV is a special case, however, because it was owned by the labor unions, and reportedly has been very affected by political influence.

60. FOGADE has intervened in several instances to support ailing financial institutions. Thus far, its most important intervention was with Banco de Comercio. It has also liquidated two small finance companies (SOFAIN and SOFIZULIA) mainly by paying back depositors. In recent years, however, the
bulk of its assistance has been given to assist the rehabilitation, rather than the liquidation, of problem banks. There are serious doubts about the ability of the institution to carry out its functions properly. FOGADE’s weaknesses stem not only from institutional constraints but more importantly from deficiencies in its legal framework.

61. Existing procedures concerning bank rehabilitation, as defined by the Decree creating FOGADE and by its operating procedures, permit it to carry out a series of corrective actions when faced with a bank that is not complying with the solvency and operating criteria defined by the Law. The following actions are authorized: (i) to provide long term credits (up to ten years), (ii) make equity investments in the financial institution, and (iii) purchase all kinds of assets, including the loan portfolio of a failing financial institution (these operations may have a repurchase agreement). Unfortunately these actions can be taken without removing management or requiring stockholders to relinquish their stock. The Decree also indicates that the Government (Ejecutivo Nacional) can authorize FOGADE to request, as prerequisite for providing financial assistance, that shareholders pledge their shares as guarantee, that they sell them to FOGADE, or that they initiate expropriation procedures. This authorization, however, has never been requested.

62. FOGADE’s procedures do not include all the principles that need to be present in order to enhance public confidence in the Government’s ability to deal with bank failures and maintain the integrity of the banking system. Furthermore, the menu of financial assistance that FOGADE provides is designed as if the banks’ problems are mostly due to economic problems which result in illiquidity and insolvency and which can be fixed with more money, when experience elsewhere has demonstrated that bank failures are usually caused by mismanagement and fraud.

63. Liquidation procedures are also unclear. The Banking Law authorizes the Government (Ejecutivo Nacional) to suspend or cancel the operating licence of financial institutions but does not indicate how liquidation will take place. Thus, liquidation procedures should be clarified. If liquidation is decided, all efforts should be directed at reducing costs from the outset. This may be done by selling off the good portion of the loan portfolio to other banks, and to transfer bank liabilities in compensation in an attempt to reduce the likely erosion of the deposit base of the banking system. FOGADE would lend to the bank, prior to its liquidation, the resources required to allow the full transfer of the bank’s liabilities with the public to banks in sound condition. The bank’s liabilities to the Central Bank, FOGADE and external creditors would be handled under the procedure established by the Banking legislation. Small depositors would be paid by FOGADE, by assignment of depositor rights, up to the insured limit (Bs 250,000). The unpaid balance to depositors, if any, will be dealt with in accordance with the liquidation procedures established by law.

64. Guatemala. The experience of Guatemala in dealing with insolvent banks has so far been relatively insignificant. While there are several banks which can be considered to be insolvent, only one is officially acknowledged to be insolvent, which continues to operate under joint management by the Superintendency and their owners without a clear rehabilitation program. There are other private banks near insolvency, mostly new banks which undertook a policy of rapid growth through aggressive lending without an appropriate management base or capital.
65. The Banking Law authorizes the Superintendent to intervene banks. However, it is not clear how quickly the Superintendent can assign interventors, and what appeal mechanisms are available to bank shareholders and managers to delay or stop bank interventions. Considering the little autonomy of the Superintendency vis-a-vis the Monetary Board it seems very unlikely that a bank intervention can be undertaken swiftly.

66. Concerning bank rehabilitation, existing procedures, as defined by the Decree Law 7-72, permit the Monetary Board to carry out a series of corrective actions when faced with a bank that is not complying with the solvency and operating criteria defined in the Law. The following actions are authorized: (i) to suspend or remove, partially or totally, the Board of Directors, and the management of the affected bank; (ii) to nominate an additional Director to the Board, which in addition to having the same attributions of the other Directors would also have veto powers, (iii) to limit or prohibit the distribution of dividends, (iv) to limit, regulate or prohibit certain type of operations and investments, and (v) to authorize the Central Bank to provide funds to specified financial institutions for their recapitalization, as necessary. Decree Law 7-72 also empowers the Superintendency to assess the net worth of the firm, and if it is found that its net worth is negative, the stockholders could lose all rights and be forced to relinquish ownership by endorsing their shares to the Superintendency. The Monetary Board is empowered to adopt the financial and administrative actions required for the prompt reorganization of the banking institution. The participation of the Central Bank (BG) as sole owner or as co-owner of a bank cannot exceed five years. While Decree Law 7-72 provides a legal framework ample enough to permit the Monetary Board and the BG to attempt a series of alternative routes to rehabilitate banks and other financial institutions, the administrative procedures need to be spelled out and be more transparent.

67. Mexico. The country faced a banking crisis of major proportion in 1982 which resulted from a serious economic crisis which had built up over several years and manifested itself in massive capital flight, steep increases in interest rates, and financial difficulties for major banks. The Government opted for the nationalization of the system as a means of boosting depositors confidence. The Government then carried out a series of mergers in various stages. The first stage resulted in a reduction in the number of banks from 58 to 29. The second stage was intended to give a regional character to banks outside Mexico City, resulting in the creation of five regional banks. The last stage involved the formation of multiregional banks. These banks were formed from the merger of a series of smaller banks which were having difficulties presumably because of their small size. The multiregional banks had to be assisted by the Government. This led to the setting up of an agency known as Fondo de Apoyo Preventivo a las Instituciones de Banca Multiple or FONAPRE which is funded by small contributions from the banking system. FONAPRE provides support through capital contributions, interest-free loans and absorbing losses incurred through bad debts. It is a fund to provide financial assistance but does not have authority to intervene or take over institutions for their restructuring or liquidation. So far FONAPRE has provided financial support to five multiregional banks.

68. The recent decision in Mexico of allowing more competition to public banks by expanding the powers of "Casas de Bolsa" is a positive step toward a
more efficient financial system. However more competition should be accompanied by stronger prudential regulations and supervision and by effective mechanisms to deal with institutions under financial distress.

69. **Peru.** As other Latin American countries, Peru does not have a clear mechanism to deal with bank insolvencies. This has caused haphazard and probably inefficient responses in moments of financial crisis. Furthermore, the country does not have in place a deposit insurance fund as a result of which the Government, and particularly the Central Bank, have been assuming the enormous costs resulting from insolvency of financial institutions. In the early 1980s, as a result of the failure of a private commercial bank (Banco Comercial), an attempt was made to rehabilitate it with the assistance of other banks in the system. During the last quarter of 1982, finance authorities were informally advised that the bank was experiencing serious illiquidity due to some problem loans. They were told that the problem was being worked out internally (by the bank’s shareholders), that a change of management would take place and, that with a little support from the Central Bank the situation would be surmounted. Authorities were also advised that the bank’s Board of Directors had requested a full audit from an outside firm.

70. The Superintendency of Banks was requested to make a report on the matter. The first response was that the problem was solvable. That an examiners team had recently visited the bank and that the bank’s management was working on a solution. This suited finance authorities since the Minister was in the process of relinquishing his position and did not want to do so in the midst of a financial crisis.

71. When the new Minister was appointed, he decided to attempt the rehabilitation of the bank with the assistance of a group of public and private sector banks. At that point, Banco Comercial’s bad loan portfolio was already considered to exceed its capital and reserves several times. However, liquidation was not an option. The rescue operation involved the creation, by the participating banks, of a private company that would own all of the stock of the new bank and, act as the conduit for the bank’s recapitalization.

72. Once the new management team started making the decisions a major finding was made. The bad loan portfolio was in fact, five times the size it had been previously estimated. This immediately wiped-out the new capital and forced the bank into bankruptcy. At this point, the Central Bank and the Banco de la Nacion (the major public sector bank) came into play. It was decided that Banco Continental—a commercial bank owned by Banco de la Nacion—would take over the bank. The Central Bank took over the bad loans and started acting as lender of last resort to Banco Continental in order to allow it to smooth-out its cash flow stream.

73. Thereafter, bank failures were handled by forcing public commercial banks to absorb the ailing banks. For instance, Banco Continental absorbed Banco Nor-Peru and Banco de los Andes; Banco Internacional absorbed Banco de la Industria de la Construccion, and Banco de la Nacion absorbed Surmeban. The associated costs were covered by the Central Bank. In some cases the ailing banks were merged into the public banks, in other cases they were ultimately liquidated.
74. The main lessons from this experience were: (i) the lack of an institutional framework to deal with problems posed by insolvent banks delays the appropriate response, issues are resolved on an ad-hoc basis and the solution process becomes quite ineffective; (ii) the lack of follow-up on bank examinations causes misinformation and promotes poor decision-making; (iii) external audit firms can seldom be used to go beyond a general assessment of the financial condition of banks. They do not evaluate policy matters that, in a case of insolvency, become very relevant to judge the soundness of an institution (management capabilities and quality, strategic orientation, checks and balances systems, among other); (iv) the human factor is always important. Owners are generally reluctant to face the facts, specially if they are negative to them. Authorities, mired in solving many "fires", don't want to be presented with more problems specially if they do not have the proper institutional framework for handling them; (v) when governments utilize off-the-cuff approaches the end result, if something goes bad, is to take the majority if not the total cost of the final solution. And, thus, society is badly served.
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