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Banking Crises in Latin America: Experience and Issues

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I. Introduction

Since the early 1980s major crises have occurred with increasing frequency, both in industrial and developing countries. Because of the special role that banks play in the economy as issuers of monetary liabilities and providers of clearing services for non cash payments, these crises have provoked serious concern among policymakers and regulators everywhere. Hence, developing effective policies to reduce the severity of banking problems and to restructure banking systems has become a priority for bank regulators.

In Latin America, banking crises emerged in the wake of the external debt crisis in 1982. Where policymakers did not respond to banking problems with stringent fiscal and monetary policies and bank regulators did not put disciplined bank restructuring programs in place, the effects of crisis were quite prolonged, in some cases lasting almost a decade. Moreover, even where policymakers managed the crisis by following appropriate policies, resolving banking crises took four or five years and required major adjustments in the real economy.

This paper argues that the experiences with banking crises in Latin America have been different from those in the industrial world because of the peculiarities of Latin American financial systems. Hence, applying the lessons derived from crisis resolution in the industrial world is not sufficient to deal with banking problems in the region; it must be augmented by the unique experiences of Latin American regulators if future crises in the region are to be managed or avoided.

The remainder of the paper is divided into five sections. Section II discusses the features of Latin American financial systems that distinguish them from those in the industrial world. Latin American financial markets are characterized by a lower ratio of financial intermediation relative to GDP, less investor willingness to commit long-term funds, and higher volatility in deposit markets than in industrial countries. These differences result from weaknesses in the structural foundations of Latin American financial markets: the legal framework in which financial markets operate is not fully developed and accounting standards are weak. In addition, sharp fluctuations in the direction of economic policies have increased uncertainty about the stability of economic and financial conditions in these countries.

Section III discusses how the fragility of Latin American financial systems contributes to the relative severity of banking crises in the region. It also discusses how inexact accounting standards make it difficult for the authorities to assess the magnitude of banking problems.

Section IV discusses the performance of Latin American financial systems under the liberalized environment of the early 1990s compared to their performance under the highly regulated environment of the 1980s. The evidence suggests that, while crises have occurred under both policy regimes, highly regulated regimes have been characterized by a greater volatility in financial markets than more liberal policy environments. Moreover, this section demonstrates that, under the liberal rules of the 1990s, market discipline has played a significant role in controlling the growth of risky institutions and therefore in ameliorating the severity of banking crises.

Section V considers the role of the authorities in improving the performance of liberalized financial systems. It concludes that regulators have an important role in complementing private market discipline. However, because supervisors in Latin America often lack the tools of their counterparts in developed countries, they in many cases rely more heavily on reserve requirements than on supervision of individual banks to control the growth of risky bank credit. Nevertheless, because reserve requirements impose costs on both strong and weak banks, these measures should be applied only until the conditions for strong supervision are present. Section VI discusses some policy options for reducing financial market fragility and concludes the paper.

II. Latin American Financial Systems: Key Features

In Latin America, depository institutions -- banks and savings institutions issuing deposit-like liabilities -- are the only major vehicles for institutional savings, with the exception of Chile where pension and insurance funds account for 44 percent of institutional savings. In contrast, in the major industrial countries, savings institutions issue substantial amounts of non deposit liabilities, which are long term, even when these institutions are classified as banks.

In the United States, depository institutions account for less than one third of institutional savings. In Germany, where depository institutions account for most of institutional savings, 45 percent of the domestic private liabilities of these institutions are medium and long-term bonds. In Japan, another bank dominated system, 34 percent of financial institutions' private domestic liabilities are bonds, insurance reserves, and trust accounts.

Even though the deposit liabilities of banks and other depository institutions play a much more significant role in Latin American than in industrial economies, deposit liabilities to the private sector of all banking institutions are a lower percentage of GDP in Latin America than in major industrial countries (Chart 1). That is, relatively few funds are held in financial intermediaries.[1]

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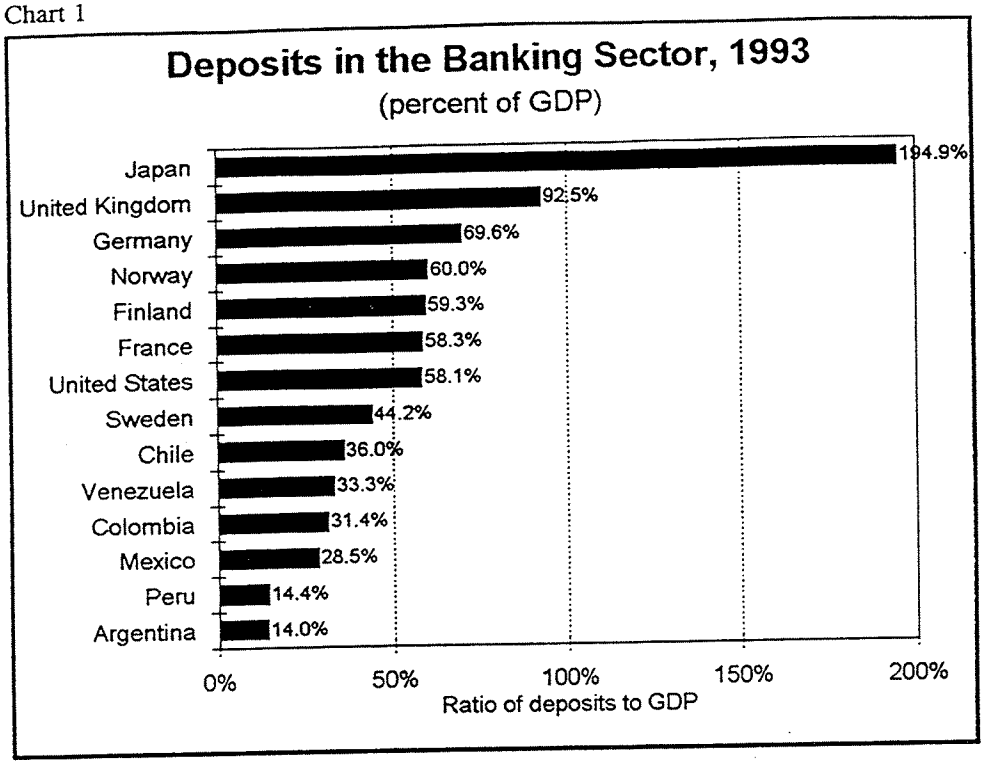
[1] In many Latin American economies, important segments of financial markets are informal. This fact also reflects a low degree of confidence in the financial system.

Chart 1



The relatively small size of the financial institution sector and the short maturity of liabilities of these institutions suggest that investors' confidence that financial assets will yield a positive rate of return over an extended period of time is not as strong as in industrial countries. Investor concerns are verified in Charts 2a and 2b, which present real interest rates on deposits in selected industrial and Latin American countries between 1982 and 1993. In contrast to the evidence for industrial countries, interest rates remained negative for substantial periods of time in several Latin American countries. These same investor concerns have led to a high degree of volatility in the change in deposit to GDP ratio in the region, as indicated in Chart 3.[2]

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2 Indeed, many of the policies that generated a lack of investor confidence in banking systems also contributed to the large capital outflows experienced in many Latin American countries in the 1980s.

Chart 2a

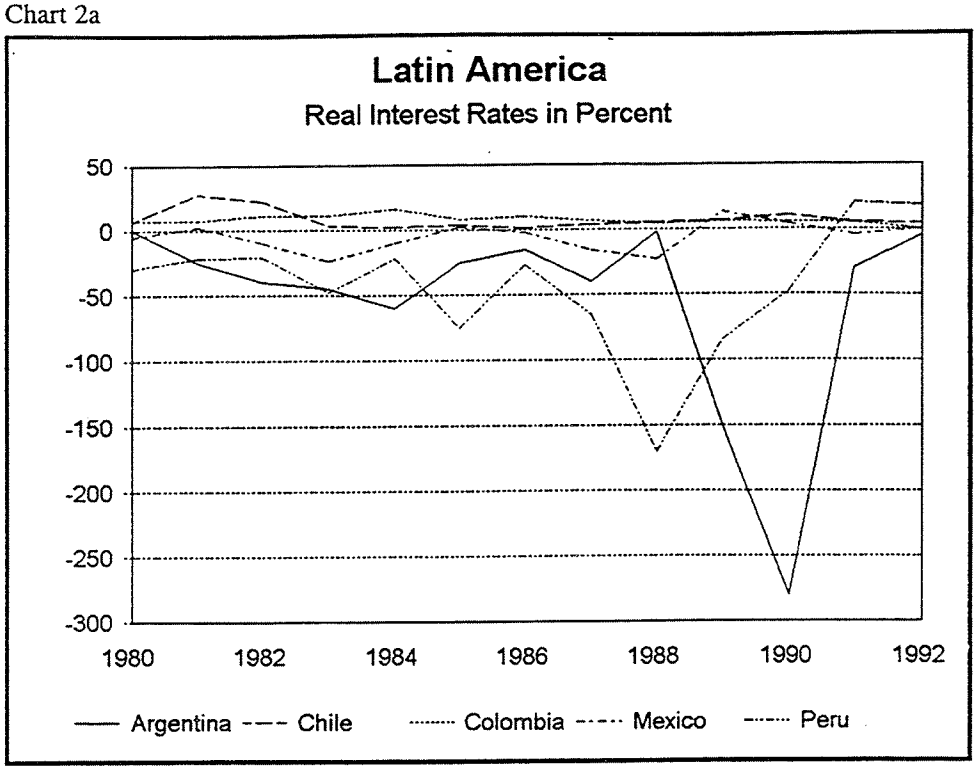


Chart 2b

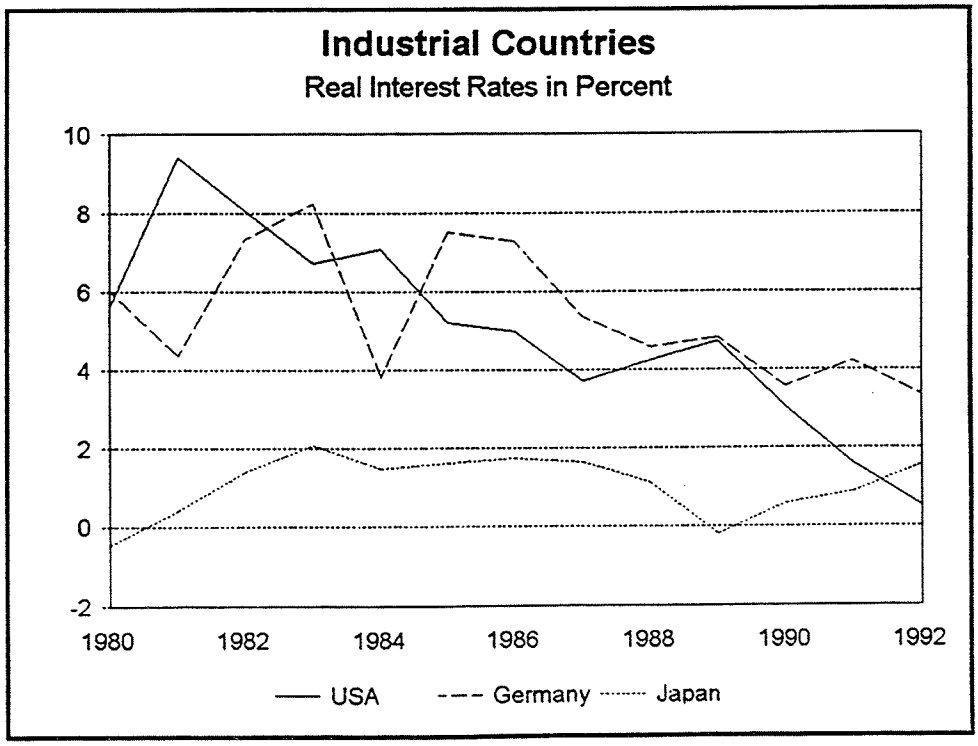
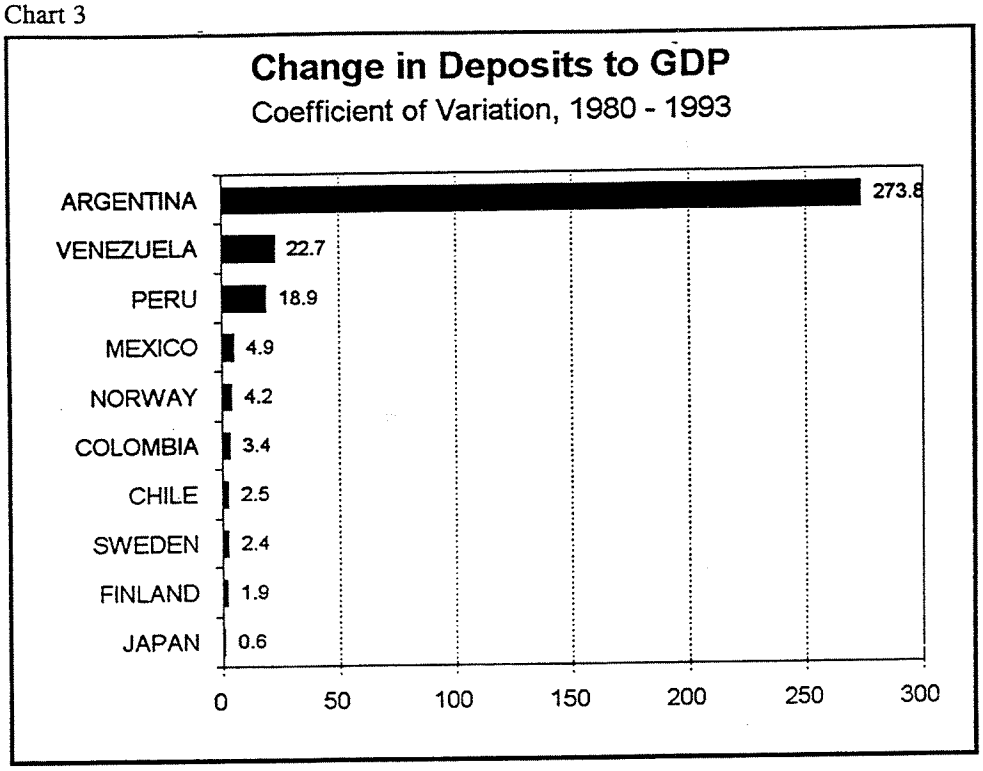


Chart 3



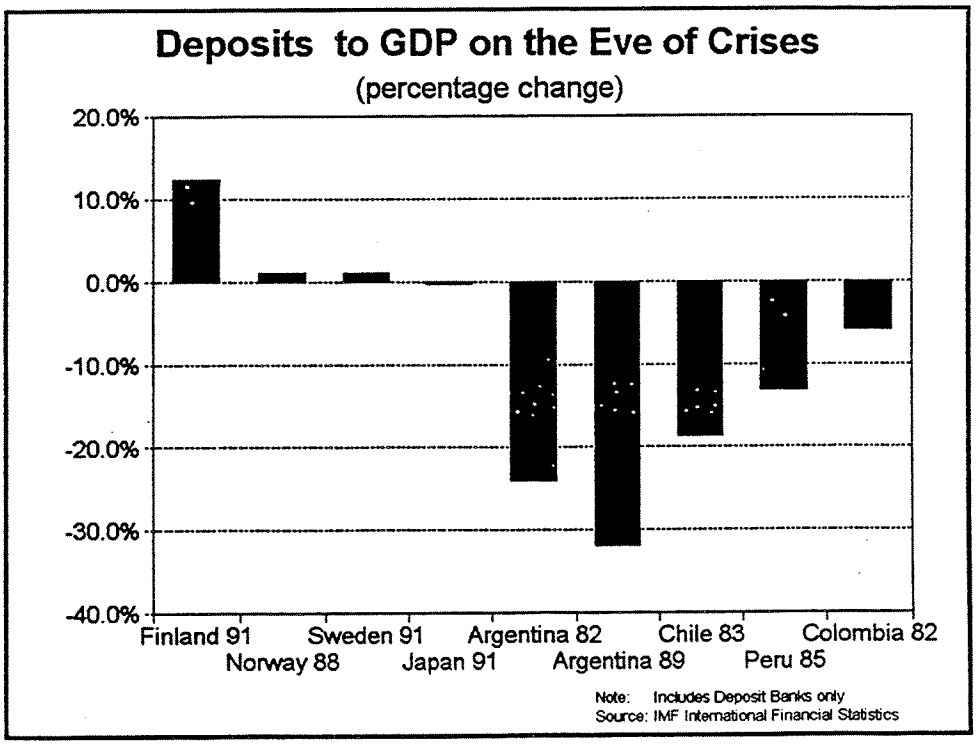
The features of Latin American financial systems delineated above are the outcome of several factors. First, accounting standards are not sufficiently developed to permit depositors to evaluate the quality of bank balance sheets, and it is difficult for banks to evaluate the income statements of borrowers. Second, the legal environment makes it difficult for creditors to predict their prospects for gaining possession of collateral in the event of default. Third, there is a legacy of destabilizing economic policies, including hyperinflation, large currency devaluations, and nationalization of important segments of the economy, which erodes investor confidence.

As a result of all of these factors, investors prefer to hold short-term financial assets, and banks prefer to make short-term loans. Borrowers must remain fairly liquid in case bankers are forced to curtail lending when investors withdraw their funds. If borrowers cannot prove their liquidity, they appear insolvent because legal and accounting obstacles make other forms of credit evaluation difficult. Therefore, in Latin America liquidity crises cannot easily be differentiated from solvency crises.

III. The Severity of Banking Crises in Latin America

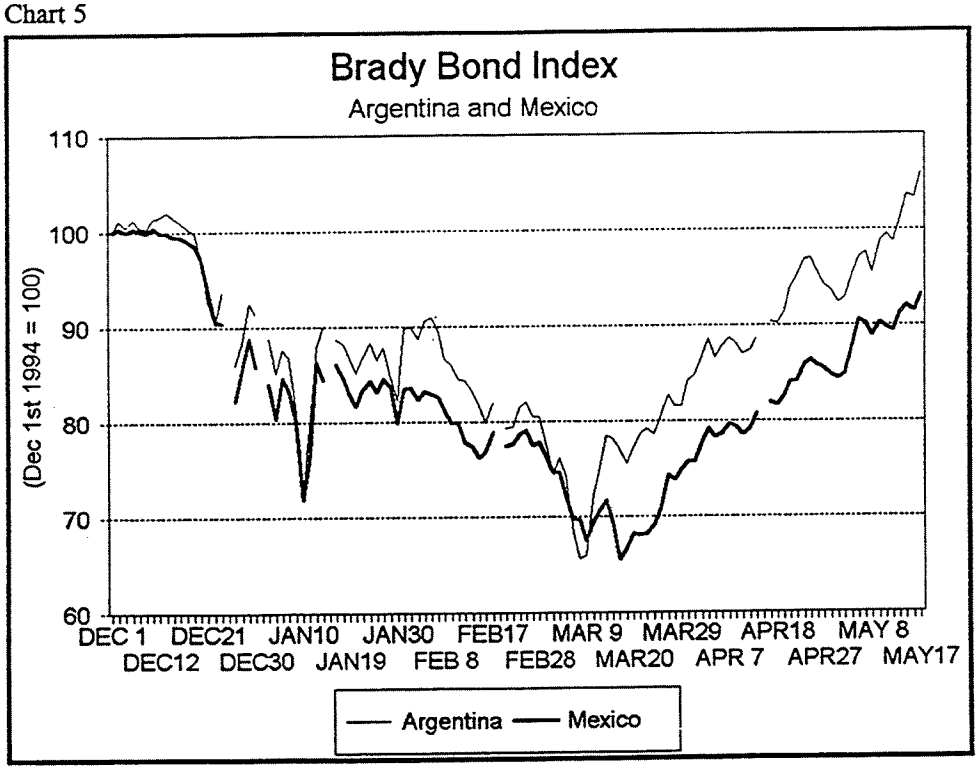
As suggested by the characteristics of Latin American financial systems described above, even relatively mild shocks to the banking sector can quickly result in sharp reductions in the deposit base. That is, Latin American financial systems are very fragile. An indicator of this fragility is presented in Chart 4, which displays the percentage change in the ratio of deposits to GDP for selected Latin American and industrial countries during the early phases of a banking crisis. The evidence indicates that depositors in Latin America are much more prone to flee the banking system when bank borrowers' capacity to pay is adversely affected than are depositors in industrial countries. These data suggest that, to a large extent, depositors in Latin America fear that they will suffer a real financial loss following a banking crisis whereas depositors in industrial countries believe that, even in a crisis, the real value of their deposits will be preserved. Thus, investors in industrial countries, for the most part, believe that banking crises, while severe, are temporary events and that the long-run viability of the system will soon be restored.

Chart 4



The sharp drop in confidence in Latin American financial systems that follows initial signals of distress is common to both domestic and foreign investors.[3] As a result, periods of banking difficulties are also associated with loss of access to international capital markets. In the 1980s, during periods of banking crisis, countries in Latin America were not able to raise sufficient funds in international capital markets to cover current account deficits, and their overall balance of payments position became sharply negative. In late 1994 and early 1995, the drop in confidence in the financial systems of Argentina and Mexico was manifested in a 30 percent drop in the Brady bond indexes for these two countries. (See Chart 5.)

Chart 5



In contrast, during the Nordic banking crises in the late 1980s and early 1990s, the overall balance of payments positions of these countries were largely unaffected. Moreover, long-term government bond prices in Norway and Sweden were largely unaffected by the crisis.[4]

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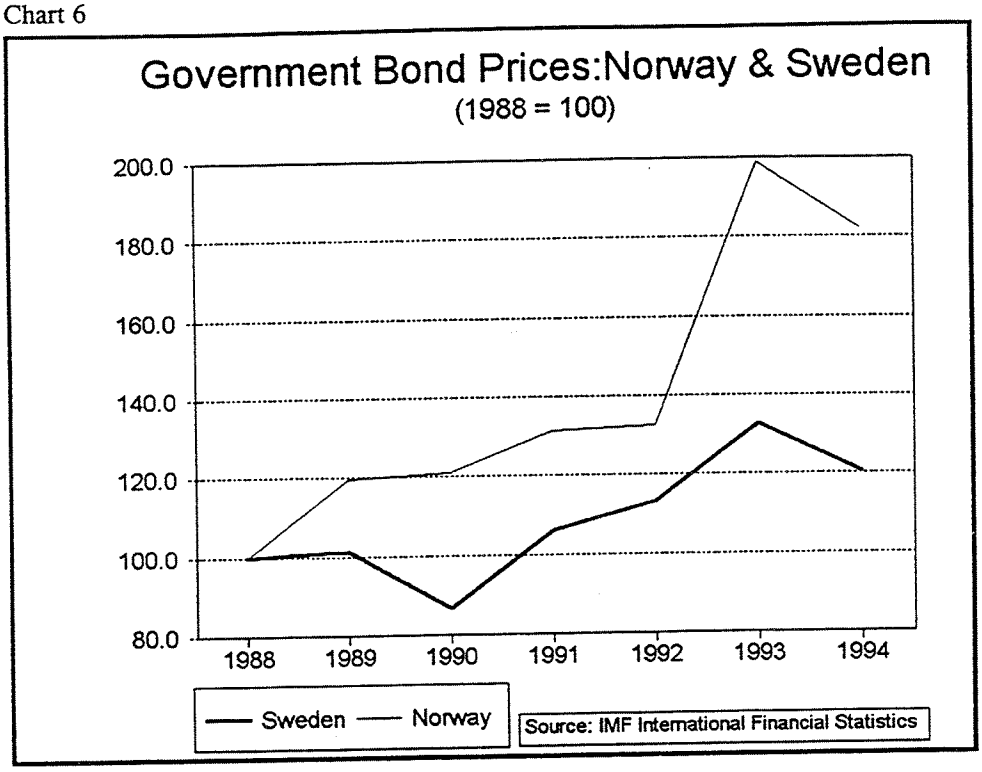
3 In Latin America, initial distress is often signaled by macroeconomic disequilibrium. For a discussion of macroeconomic causes of banking crises, see Gavin and Hausmann (1995).

4 There is no domestic long-term government bond rate available for Finland. It should also be noted that there was a sharp increase in short-term interest rates in the Nordic countries in the Fall of 1992, during an attack on the exchange rate. Rates quickly fell after devaluation, however.

(See Chart 6.)

Chart 6



The fragility of the Latin American banking systems is also reflected in the high costs associated with restructuring banking systems after a crisis. Table 1 shows the cost of restructuring banking systems, excluding recoveries from future sales of assets and recoveries from future bank earnings, as a percent of GDP and as a percent of bank loans for selected industrial and Latin American countries.[5] For industrial countries, the cost to loan ratio ranges from a low of about 4 to 6 percent for Norway and Sweden to a high of almost 10 percent for Finland. In Latin America, the cost ranges from a low of about 23 percent in Chile to a high of 57 percent for Venezuela. Relative to GDP, the immediate cost of bank restructuring is substantially higher in Latin America than in the industrial countries, with the exception of Colombia.

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[5] We use the outlays at the time of the program as the measure of severity because it best represents the information that depositors and regulators have about "the worst case" magnitude of the problems faced by banks -- that is, it presumes no future recoveries. It also represents the amount of funds that regulators must raise at the time of the crisis to rescue banks. For specific definitions of costs, see Table 1.

Table 1
The Cost of Rescuing Banks

Date	Country	Cost/GDP	Cost/Loans
1982	Argentina	13.0	42.5
1985	Chile	19.6	22.5
1985	Colombia	6.0	40.0
1994	Venezuela	13.0	57.2
1991-93	Finland	8.2	9.7
1988-92	Norway	4.5	5.5
1991-93	Sweden	4.5	3.7
1991	United States	5.1	7.8
1989	U.S. Commercial Banks	1.5	3.9

Notes: For Argentina the cost is estimated as the increase in central bank lending to banks in real terms between 1981 and 1982. For Chile, the cost is net central bank loans to private domestic banks in 1985. For Colombia the cost, measured for commercial banks only, is the real change in central bank lending to banks between 1982 and 1985 plus the decline in the real value of bank capital over the same period. The U.S. estimate includes the cost of the savings and loan restructuring program up to 1991 plus total FDIC payouts between 1984 and 1989.

Sources: IMF, International Financial Statistics; Superintendencia de Bancos e Instituciones Financieras (Chile), Información Financiera, various issues; Banco de la República (Colombia); Drees, Burkhard and Ceyla Pazarbasioglu, "The Nordic Banking Crisis: Pitfalls in Financial Liberalization?"; FDIC Annual Report, 1989, Federal Reserve Bulletin.

The extreme differences in restructuring costs between Latin American countries and industrial countries indicate the burdensome task faced by regulators in the region when they face a crisis. The authorities' problems, however, are compounded by weaknesses in accounting standards. Indeed, accounting data used to describe the quality of bank balance sheets do not reflect the marked differences in the severity of crises between Latin America and industrial countries, as is evidenced by comparing Tables 1 and 2. Table 2 presents an often-used accounting measure of the riskiness of bank loan portfolios, the ratio of non performing loans to loans, at the inception of banking crises in four Latin American countries as well as for Finland, and the United States.[6]

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6 Differences in country coverage between Tables 1 and 2 merely reflect data availability.

Table 2 Non Performing Loans to Loans		
Date	**Country**	**Ratio**
1980	Argentina	9.1
1982	Chile	4.1
1993	Venezuela	9.3
1994	Mexico	10.6
1989	United States	4.8
1992	Finland	9.3
Note:	All data are year end, except Mexico, which is as of September 1994. U.S. data are for commercial banks only.	
Sources:	Sundararajan, V. and Tomas J.T. Balino, eds.Banking Crises: Cases and Issues, IMF, 1991; Superintendencia de Bancos e Instituciones Financieras, Informacion Financiera December, 1982; Drees, Burkhard, andCeyla Pazarbasioglu, "The Nordic Banking Crisis Pitfalls in Financial Deregulation?" IMF Working Paper, 95/61, June 1995. Comisión Bancaria y Valores, Boletín Estadístico de Banca Múltiple, December 1994Federal Reserve Bulletin, July 1992.	

On the eve of a banking crisis, the ratio of non performing loans to loans for Chile at year end 1982, 4.1 percent, was less than half that reported in Finland at year end 1992, 9.3 percent. In Argentina at year end 1980 and Venezuela at year end 1993, they are about equal to those in Finland. (See Table 2.) Thus, the fact that the costs of resolving bank crises were substantially higher in each of the Latin American cases is not reflected in higher ratios of non performing loans to loans reported by banks in Latin America. In 1989, U.S. commercial banks reported non performing loans to loans of 4.8 percent, about 50 percent of those reported by banks in Latin American countries discussed above. However, the cost of rescuing U.S. commercial banks between 1984 and 1989 was approximately 1.5 percent of GDP, only about 11 percent of the relative cost of rescuing Venezuelan banks.

Because Latin American financial markets are more fragile than those in industrial countries, loan loss reserves as a percent of loans should be higher in Latin America than in the industrial countries, given the relative severity of past crises. However, as indicated in Table 3, Latin American banks had a loan loss reserves to loan ratio that was very similar to the largest banks in the United States. In 1989, the ten largest commercial banks held a loan loss reserve to loan ratio of 4.36 percent. In Chile, the riskiest segment of the banking industry in 1982 was domestically owned private banks, which had a loan loss reserve to loan ratio of 4.17 percent. In Mexico, banks that required government assistance during the crisis had loan loss reserves to loans of 4.39 percent in December 1994. In Argentina, small private banks, which are relatively risky had loan loss reserves to loans equal to 4.34 percent in late 1994.

Table 3 Loan Loss Reserves to Loans			
Dates	**Country**	**Banking Segment**	**Loan Loss Reserves to Loans**
1982	Chile	Domestic Private	4.17
1994	Argentina	Small Private	4.34
1994	Mexico	Government Assisted (1995)	4.39
1989	United States	Ten Largest	4.36
Notes:	Returns are averages over the periods indicated. Countries with positive returns never experienced negative returns.		
Sources:	See Table 2.		

The somewhat lax accounting standards in many Latin American countries also appear in banks' income statements. In the past, the banking systems in many countries in the region have reported positive net income to assets during a banking crisis, whereas banking systems in industrial countries have reported significant negative net income to assets. When reporting standards are adequate, net income becomes negative in a banking crisis because provisions for loan loss, the income statement item to provide funds for loan loss reserves, exceed net income. As a result, banks are forced to reduce their capital account.

However, it should be noted that the accounting system in Chile improved significantly after its banking crisis in 1982 and Argentina and Mexico are using the current crisis to improve their procedures as well.[7]

IV. Has Financial Liberalization Worked?

In the late 1980s and early 1990s, many countries in the region instituted policies of financial liberalization. Because of the fragilities of these markets, however, many analysts have begun to question whether these policies are appropriate for the region. Indeed, this issue has also been raised among policymakers in industrial countries, where markets are much less volatile. In the industrial world, some analysts look back on the quiet days of interest rate regulation, high reserve requirements, and segmented financial markets as far superior to the risky world of today, which some see as having been created by deregulation.

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7 For example, large provincial banks in Argentina reported losses during the first quarter of 1995.

Newly deregulated banking systems have certainly fallen into crises in Latin America. This occurred in Argentina and Chile in the early 1980s and Argentina and Mexico in 1995. However, it is just as true that in the mid 1980s, severe banking difficulties occurred in the highly controlled banking systems of Mexico, Peru, and Argentina, all of which were subject to high reserve requirements, credit allocation restrictions and in Argentina and Peru to interest rate ceilings.

The latter three banking crises were the consequence of mismanagement of banking crises earlier in the decade. Instead of adopting policies to strengthen their banking systems, authorities responded to these earlier crises by imposing credit allocation schemes that were used to finance government and government-sponsored programs. In Argentina and Peru, when the authorities were unable to pay off their debts to the banks, they imposed interest rate controls on banks and resorted to highly inflationary policies, which resulted in major reductions in the ratio of deposits to GDP as depositors' real wealth declined and capital flight took hold.

The experiences of Argentina, Mexico, and Peru in the mid 1980s strongly indicate that financial regulation in Latin America often leads to instability rather than stability. Indeed, in the 1980s and early 1990s, these countries experienced extremely high volatility in their deposit to GDP ratios compared to Chile and Colombia (Chart 3). As indicated in Chart 2, real interest rates were substantially negative in Argentina, Mexico, and Peru, in the 1980s, reflecting regulations.

Throughout the early 1990s, most Latin American countries have shown great determination in moving toward financial liberalization. As demonstrated by the recent experiences in Mexico and Argentina, these policies have allowed market discipline to work: risky banks have been forced to pay a premium for funds in an environment in which interest rates fluctuate freely.

For example, in Mexico, as far back as 1992, investors had identified many of the banks that are currently experiencing the largest capital deficiencies.[8] In 1992, the two largest banks in the market were able to raise funds for 11.8 percent whereas other riskier banks had to pay 14.5 percent. Similar evidence has been found for Venezuela before its banking crisis. In this country, banks that were later resolved paid substantially more for deposits than other banks several years before the crisis.

In the Argentine market, deposit costs were substantially higher at large provincial banks -- a segment of the banking market with particularly high non performing loan to loan ratios -- than at large private banks. In addition, in 1994, before the banking crisis, large provincials had difficulty raising funds in the dollar inter bank market. Between March 1993 and November 1994, these banks' dollar liabilities to other banks declined by over 10 percent, compared to a growth in dollar inter bank liabilities of about 30 percent at large private banks.

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8 This argument is developed in detail in Rojas-Suarez and Weisbrod (1995a).

As the Mexican data demonstrate, if the interest rate is high enough, investors are sometimes quite willing to supply short-term funds to risky banks in the hopes of being able to withdraw their funds quickly when a crisis appears possible. For example, in 1993, deposits at small banks grew by about 35 percent whereas deposits at large banks grew by 2 percent. Between January 1994 and September 1994, small bank deposits grew 20 percent, compared to 5 percent at large banks.

However, as in the case of Argentina, it became somewhat more difficult for risky banks in Mexico to raise funds as a crisis approached. Between September and December 1994, small bank deposits grew 10 percent while large bank deposits grew 17 percent. A similar phenomenon was observed in Venezuela. Banks that were intervened had a deposit market share that increased from 10.3 percent in 1988 to 19 percent in 1991. After 1991, they found it much harder to expand. Their deposit share increased only slightly to 21.5 percent of deposits at year end 1993. The banking crisis began in late 1993.

Thus, past and recent experiences with regulation of financial markets in Latin America provides strong support for policies of liberalization. Controls have been associated with a high degree of instability and have caused credit to be directed toward uneconomic projects. In addition, they prevented markets from acting as automatic stabilizers, by choking off funds to weak institutions.

V. The Role of Regulators in Complementing Market Forces

The previous section emphasized the role of markets in differentiating between strong and weak banking institutions, but the evidence presented there also indicates that markets are often willing to supply credit to risky banks if the price is right. Because regulators are concerned with the stability of the economy and the preservation of the payments system, their objectives are not always the same as those of the market. Thus, even though investors in Latin America differentiate between risky and sound banks, effective supervision is still necessary to complement and strengthen the role of markets.

Because of the fragility of Latin American financial systems, the issue is whether regulators need some of the tools from the regulated era to be effective -- specifically high reserve requirements. There are two arguments for high reserve requirements in Latin America: the first is that, because of the extreme volatility of the Latin American environment, banks need liquidity to meet the surprise demands for deposit withdrawals; the second is that reserve requirements can play a role in the expansion of risky credit when bank supervision is ineffective.[9] In regard to the first argument, experience has shown that, in Latin America, systemic deposit withdrawals occur

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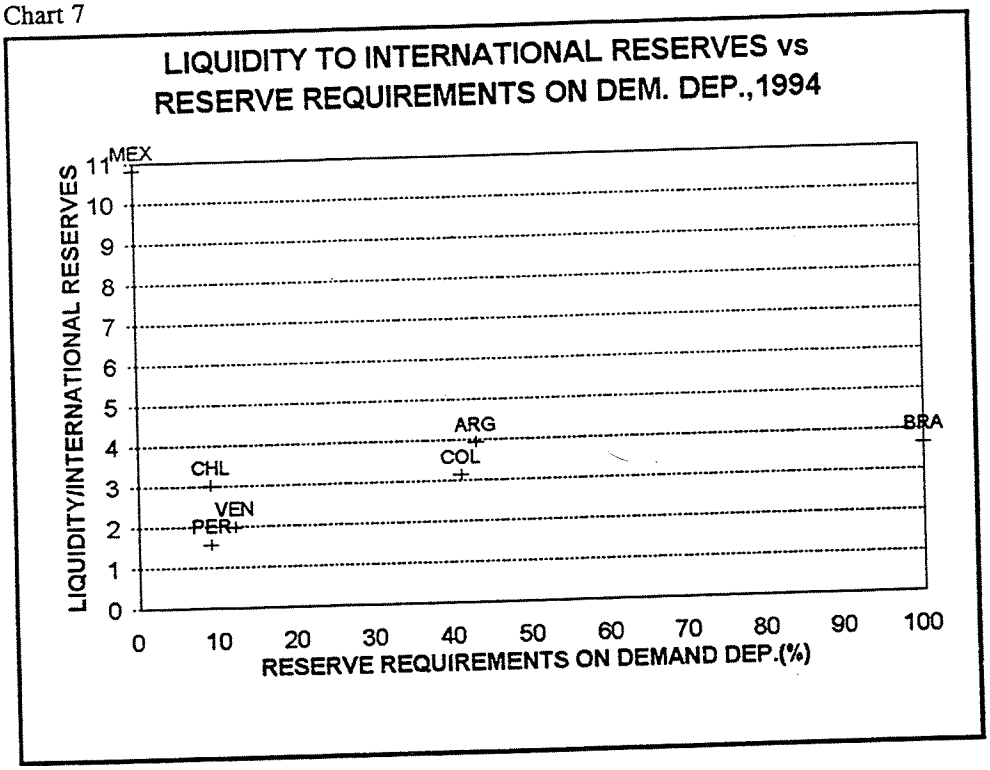
[9] The second argument has been developed in Fernandez and Rodriguez (1995) and Rojas-Suarez and Weisbrod (1995).

simultaneously with capital flight; hence, reserve requirements can only play this role if central banks invest them in international reserve assets.[10] Judging the efficacy of reserve requirements in providing liquidity during capital flight, however, requires the consideration of an important issue: even if reserve requirements are high and properly invested so that bank deposits remain liquid, they cannot provide liquidity to other short-term financial markets, which in Latin America are primarily government and central bank paper. That is, if the lack of confidence extends to both bank and non bank paper, the stock of reserves will leave some assets uncovered. Chart 7 presents the relationship between reserve requirements on demand deposits and the ratio of liquid assets to international reserves for selected Latin American countries. It shows that countries with high reserve requirements, such as Brazil, do not have lower ratios than countries with low reserve requirements, such as Chile.

Chart 7



Reserve requirements have several other drawbacks even when government and central bank paper is held on bank balance sheets. Because reserve requirements are a tax on bank intermediation, banks try to find ways to avoid them. These include creating off balance sheet

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10 International reserves are necessary to protect the stability of the banking system when a country follows a targeted or fixed exchange rate policy, which is the case in most of Latin America. Even if the financial system is dollarized, international reserves are necessary because a loss in confidence in the stability of the banking system leads to withdrawals from the system, regardless of the currency denomination of deposits.

markets, often known as mesa de dinero in Latin America. In addition, banks move business to more liberal offshore environments.

If reserve requirements are not avoided, they can be used as a policy tool to restrain credit expansion as well as a source of liquidity: to expand their balance sheets, banks must first acquire reserves, the quantity of which can be controlled by the central bank. This policy tool, however, does not discriminate between expansion of sound and weak banks and, therefore, may be of limited use in restricting the growth of riskier forms of credit. If possible, bank regulators would prefer to target policies that restrain banks' portfolio decisions to risky segments of the banking system. It seems that, if supervision can be made effective, it would provide a more targeted tool for managing bank risk and liquidity.

In industrial countries, policy tools to restrict credit expansion are increasingly based on supervisory standards, which constrain banks differentially, rather than on reserve requirements, which affect all banks similarly.[11] For example, while capital-to-risk-weighted-asset requirements are applied across the board in the sense that all banks must meet a standard ratio, the accounting procedures by which the requirement is met can force risky banks to be more constrained than less risky ones. If supervisors pressure a bank to increase its reserves for potential loan loss, they are, in fact, forcing a bank to write down the value of its capital. Hence, the capital-to-risk-weighted-asset constraint relies much more heavily on an effective supervisory process than does the reserve requirement constraint. Thus, while regulators may not have better information than the market, they have tools to complement market discipline in controlling the growth of risky banks.

The effectiveness of these tools depends on supervisors' ability to identify non performing loans. In fact, it has been acknowledged that several banking crises in Latin America have been preceded by capitalization of unpaid interest into new loans to make non performing loans look performing. There seems to be little reason, however, why a regulator cannot observe whether loans to a single borrower are expanding at the rate of interest that is supposed to be paid on the loan. The ability to identify this behavior depends on establishing proper procedures for reviewing banks' loan files.

In this connection, there is a debate as to whether Bank for International Settlement asset classification rules and capital standards are appropriate for Latin America. It would seem that a much more urgent issue is developing the supervisory skills needed to classify assets appropriately.

Evidence that strong supervision can be effective in reducing the impact of a crisis is provided by the differences in net income to asset ratios for savings and loans and commercial banks in Texas in 1988. In that year, savings and loans, which were generally recognized as lacking adequate supervision, experienced a loss equal to almost 11 percent of assets while commercial

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[11] Even in Germany, a market known for high reserve requirements, the reserve to deposit ratio has recently averaged less than 6 percent, which is low compared to many Latin American markets.

banks in the Dallas Federal Reserve District, generally recognized as well supervised, operating under the same economic conditions, experienced a loss of about 1.5 percent of assets.

Of course, it would be hard to duplicate the experience of U.S. commercial banks in Latin America. A major reason for this is not that it is difficult to identify whether a loan is non performing but that it is difficult to determine whether the borrower receiving a new loan has a business relationship with a borrower having a non performing loan. In other words, the less exact accounting and legal standards of Latin America imply that the procedures for loan documentation are probably not as developed in the region as they are in the U.S. Nevertheless, because the market can clearly identify potential problem banks in Latin America, regulators can focus on pressuring these banks to improve their procedures. The evidence for the effectiveness of reserve requirements vs. supervision for controlling bank risk is dealt with in Rojas-Suarez and Weisbrod (1995b).

Thus, Latin America is still moving toward the conditions that make effective supervision possible. In the transition period, reserve requirements may be necessary. However, these should only be viewed as a temporary device; they should not impede the process of creating an environment in which supervision can be effective. Fragility is also not a viable reason to view reserve requirements as permanent since fragility itself is an outcome of the same forces that make effective supervision difficult. The policy goal should be to build the proper structure for healthy financial markets, which takes time.

VI. Concluding Remarks

Banking crises in Latin America are more severe and have a greater impact on local economies than banking crises in the industrial world because the financial systems in the region are more fragile. This fragility results from frequent periods of destabilizing economic policies and structural problems in the market, which include inexact legal and accounting standards and weak supervision. Despite these factors, Latin American financial systems have been more stable under liberalized financial policies than under highly regulated regimes.

However, in contrast to industrial countries, the necessary conditions for effective supervision are not fully developed in most Latin American countries. Hence, some regulation, such as high reserve requirements, can be justified on a temporary basis. Nevertheless, the long-run goal must be to build legal, regulatory, and policy structures in which liberalized financial markets can flourish.

As a result of the legacy of abrupt swings in the direction of economic policies, authorities in Latin America face the challenge of overcoming a lack of credibility in policy announcements. In this connection, indexation and dollarization, which guarantee the value of financial contracts in real terms, are popular tools for achieving credibility in the region. Indeed, some observers attribute the success of Chile in creating a stable financial system to the introduction of indexation. It is

argued that Chile was able to build a long-term bond market because it indexed principal of financial contracts and because it mandated the development of a pension fund industry that absorbed indexed long-term bonds.

Clearly, both sound institutions and strong contractual commitments are important in developing domestic long-term bond markets. However, careful analysis of the Chilean experience demonstrates that the road to making both these elements believable is a gradual one. For example, indexation first became an important element in the Chilean financial system during the banking crisis in the early and mid 1980s when the central bank mandated that the principal of restructured loans would be indexed to inflation. However, when the program was first started, the central bank, rather than depositors, provided most (70 percent) of the indexed liabilities of the financial system. This provides evidence that investors were initially skeptical that banks would, in fact, be able to maintain the real value of deposits.[12] Likewise, the willingness of pension funds, which are private institutions in Chile, to invest in long-term assets developed only gradually. As late as 1988, over half the assets of the pension funds were invested in bank deposits.

Thus, the Chilean evidence indicates that domestic investors had to be coaxed into providing long-term funds to the government and monetary authorities. To build confidence, the authorities had to demonstrate to investors that they had a full commitment to the stability of the financial system.

As in the case of indexation, dollarization, which permits borrowers and investors freely to write their contracts in US dollars, ensures that the value of principal will not be eroded by domestic currency inflation. When a banking system is sound, dollarization can help prevent capital flight if a crisis of confidence in the announced exchange rate regime emerges; bank runs can be avoided since investors can merely change the currency denomination of their deposits. However, if the banking system is weak, in a balance of payments crisis, depositors will flee the system regardless of the currency denomination of deposits, thus creating a run both on banks and on the foreign exchange reserves of the central bank. During the crises of the 1980s, Latin American investors have had ample experience with dollar-denominated bank deposits being forcibly converted to local currency deposits at unfavorable exchange rates when international reserves were scarce. Building confidence that such confiscation policies will not be repeated is an additional challenge for policymakers.

While banking crises in Latin America are particularly severe, it is important to note that, in crises, investors gain confidence in the promises of governments to maintain their contractual obligations. In other words, crises provide opportunities to build credibility. For example, the commitment of the Argentine government to a stable policy course in the midst of banking difficulties deserves to be noted.

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12 The difficulty in getting investors to believe this is indicated by the fact that in 1985, the indexed interest rate on deposits of 90 to 365 days was 8.2 percent whereas the real interest rate on unindexed short-term deposits was 4.1 percent.

References

Comisión Bancaria y Valores, Boletín Estadístico de Banca Múltiple (Mexico), December 1994

Drees, Burkhard and Ceyla Pazarbasioglu, "The Nordic Banking Crisis: Pitfalls in Financial Liberalization?", IMF Working Paper, 95/61, June 1995.

FDIC, Annual Report, 1989.

Federal Reserve Bulletin, Federal Reserve Bulletin, July 1992

Fernandez, Roque B. and Pablo E. Guidotti, "Regulating the Banking Industry in Transition Economies: Exploring Interactions between Capital and Reserve Requirements," paper prepared for the conference on Economic Reform: Latin America and the Transition Economies at Georgetown University, May 12-13, 1994, November 6, 1994.

Gavin, Michael, and Ricardo Hausman, "The Roots of Banking Crises: The Macroeconomic Context," paper prepared for the Inter-American Bank/Group of Thirty conference on Banking Crises in Latin America, October 6-7, 1995.

International Monetary Fund, International Financial Statistics, various issues.

Rojas-Suarez, Lilianna, and Steven R. Weisbrod, "Financial Fragilities in Latin America: the 1980s and 1990s," IMF Occassional Paper No. 132, October, 1995(a).

Rojas-Suarez, Liliana, and Steven R. Weisbrod, "Achieving Stability in Latin American Financial Markets in the Presence of Volatile Capital Flows," IDB Working Paper No. 304, April, 1995(b).

Sundararajan, V. and Tomas J.T. Balino, eds. Banking Crises: Cases and Issues, IMF, 1991

Superintendencia de Bancos e Instituciones Financieras, Informacion Financiera (Chile), various issues.