IMF Working Paper

WP/97/140
Corrected: 11/3/97

INTERNATIONAL MONETARY FUND

Monetary and Exchange Affairs Department

Banking Crises in Latin America in the 1990s: Lessons from Argentina, Paraguay, and Venezuela

Prepared by Alicia García–Herrero[1]

Authorized for distribution by Tomás J.T. Baliño

October 1997

Abstract

Recent banking crises in Argentina, Paraguay, and Venezuela suggest that the macroeconomic impact is influenced by the causes of the crisis, the exchange rate regime, the degree of dollarization, and the structure of the banking system. Crises stemming from both macroeconomic and bank-specific causes had the largest macroeconomic impact. Countries with high dollarization and a large share of foreign and government-owned banks maintained a more stable deposit base, at least temporarily, by shifting to dollar-denominated deposits and foreign and government-owned banks. Countries that responded with a rapid, consistent, and comprehensive policy response reduced the negative macroeconomic consequences of their crises.

JEL Classification Numbers: E65, G21, G28

Authors' E-Mail Address: bsantander.eem@mad.servicom.es or aghl@bancosantander.es

---

[1]I would like to thank Tomás J.T. Baliño, Luis Catão, Daniel Dueñas, Alain Ize, Alfredo Leone, Hernán Mejía, Elisabeth Milne, Carlos Muñiz and Roberto Rosales for their comments on an earlier draft of this paper. Ms. Lisabeth Moore's excellent research assistance is gratefully acknowledged. None of them, of course should be held responsible for any remaining errors. At the time this paper was written, I was working at the Monetary and Exchange Affairs Department of the International Monetary Fund. I presently work at the Research Department of Banco Santander, Spain.

Contents

Page

Contents Page

Contents Page

SUMMARY

This paper reviews three banking crises that took place in Latin America in the 1990s—those of Argentina, Paraguay, and Venezuela—and draws lessons about the factors affecting the macroeconomic impact. The causes of such crises influence their macroeconomic effect. Past experience also plays a role: a tradition of honoring deposits strengthens public confidence in the banking system, reducing the extent of the runs.

The exchange rate regime, the degree of dollarization, and the structure of the banking system significantly influence monetary, credit, and macroeconomic variables. A fixed exchange rate regime and a high level of internal foreign currency debt make it more difficult to use inflation to shrink banks' balance sheets in real terms. A high degree of dollarization and a large share of foreign and government-owned banks with implicit government guarantee can reduce the magnitude of deposit outflows. These offer depositors a possibility of keeping part of their funds (temporarily) within the domestic banking system, but in a currency and in banks perceived to be less risky. A well-funded deposit insurance scheme and a flexible lender-of-last-resort facility also help to reduce the negative macroeconomic impact of a banking crisis. In contrast, a poorly regulated offshore banking system and substantial off-balance-sheet operations in the domestic banking system increase the costs of a crisis. Finally, the authorities' rapid, consistent, and comprehensive policy response to a banking crisis reduces its negative macroeconomic impact.

I. Introduction

The purpose of this paper is to review the recent banking crises of Argentina, Paraguay and Venezuela, and draw lessons on the factors affecting their macroeconomic impact, including the authorities' reaction to the crises. To this end, the following issues will be addressed for each country.

First, the macroeconomic and bank-specific causes of the crises are analyzed. The three countries reviewed offer insights on whether crises stemming from different origins may have different macroeconomic consequences. The country studies indeed support the hypothesis that the origin of a banking crises—whether related to specific bank problems or macroeconomic imbalances or both—will be essential in understanding the scope of the crisis, in terms of number of banks and share of the deposits affected, as well as the crisis' macroeconomic impact.

Second, the paper describes developments of the three countries' banking crises, with specific attention to the behavior of monetary and credit aggregates, as well as economic growth and inflation. The scope of the crisis in terms of number of banks and share of deposits affected is also reviewed, as a standpoint to compare developments in the three countries. The economic and structural characteristics of the country, such as the exchange rate regime, the degree of dollarization, and the structure of the banking system, appear to explain at least part of the developments in monetary, credit and macroeconomic variables. A fixed exchange rate and a high level of indebtness in foreign currency, makes it more difficult to use inflation to shrink the banks' balance sheets in real terms. A high degree of dollarization and the existence of a large share of foreign and government-owned banks with implicit government guarantee help stabilize the deposit base. In turn, the existence of a poorly-regulated offshore banking system and substantial off-balance sheet operations in the domestic banking system increased the cost of a banking crisis. A well functioning legal environment, effective bank regulation and supervision, coupled with a well-funded deposit insurance scheme and a flexible lender-of-last-resort facility also help reduce then negative macroeconomic impact of a banking crisis.

Finally, the paper reviews the authorities' response to the crisis in order to draw conclusions on how that response (including support operations or the absence of them) may modify the crisis' macroeconomic consequences. This includes the use of lender of last resort facilities, but also of other monetary instruments for general liquidity management. The macroeconomic policies adopted during the crises are analyzed as well as the treatment of the quasi-fiscal losses stemming from them. Again, differences in the origin of a country's crisis and the structural characteristics of the country and its banking system affect the authorities' leeway to respond to the crisis.

Given the small number of countries reviewed, the lessons drawn in this paper should not be taken as general since they cannot be abstracted from the specific underlying characteristics of the countries reviewed. Nevertheless, these lessons may prove useful as a benchmark for possible future banking crises in other countries if differences in country characteristics are carefully taken into account.

II. Lessons to be Drawn

A. Causes of the Crisis

The causes of a banking crisis will influence its macroeconomic impact. In the countries analyzed, the crisis that resulted from both macroeconomic and bank-specific causes had the largest negative macroeconomic consequences.

Venezuela's banking crisis, which had the largest negative macroeconomic impact, was due to a combination of macroeconomic imbalances, incomplete financial liberalization and lack of adequate banking supervision. The banking system was saddled with problems, such as very high levels of insider lending and loan concentration. The banking system was already very weak before the crisis, mainly because of the negative impact of interest rate liberalization. Inadequate supervision allowed banks to hide the high levels of insider lending and outright fraud for several years. The interest rate premium of some banks, especially of the one that triggered the crisis, clearly indicated several months before the crisis erupted that a number of banks had embarked on an aggressive expansion strategy and were eating up their capital by accumulating losses. The unstable political environment and high real interest rates contributed to the timing of the crisis.

Argentina's banking crisis went hand in hand with a currency crisis. Notwithstanding its large scope in terms of deposit withdrawals, it had a relatively small macroeconomic impact, especially in terms of inflation. Both the currency and banking crises were mainly originated from an external shock, the Mexican crisis, and in part also by macroeconomic imbalances. The Mexican crisis was transmitted more rapidly and to a greater extent to Argentina than to other countries in the region, because of existing macroeconomic imbalances and the distressed situation of provincial banks. Among the macroeconomic imbalances, Argentina suffered from persistent current account deficits, a low level of domestic savings, and a deteriorating fiscal position just before the crisis began. Also, the distressed situation of provincial banks, which had continued to finance the provinces' fiscal deficits, increased the public's mistrust of the Argentine banking system.

Paraguay's banking crisis, which so far has had a relatively small macroeconomic impact, occurred largely because of bank-specific problems stemming from financial liberalization without adequate bank regulation and supervision. This led to an undercapitalized financial system. Reserve requirements were maintained at high levels, encouraging the expansion of the informal financial sector. The banking system also lacked essential banking skills, and suffered from a number of factors including poor credit and risk assessments, high levels of insider lending and loan concentration, as well as outright fraud.

Both the Venezuelan and Paraguayan experiences show the importance of accompanying financial reform with an appropriate incentive structure to promote sound banking. Interest rate liberalization can provide new opportunities for banks to compete aggressively for deposits and loans. Given the systemic risks involved with this aggressive competition, interest rate liberalization must be accompanied by the strengthening of supervision and regulation, including exit policies.

B. Past Experience with Banking Problems

The experience of the countries reviewed shows that if no drastic exit policies have ever been carried out, banks tend to take higher risks. The extent of the deposit runs will also depend on past history; if in the past deposits were always honored, either through bailouts or a full or generous deposit guarantee, this will have a positive impact on the public's confidence in the banking system, reducing the extent of the runs.

Argentina's past experience with banking crises, as well as balance-of-payments crises, is crucial to understanding developments in 1995. Past crises were very large in scope and led to dramatic changes in monetary and macroeconomic aggregates, including hyperinflation. During the 1995 crisis, the government was forced to take drastic measures, such as the freezing of deposits and the enactment of the "Bonex Plan." The cost of these measures for the public was still in the mind of depositors in early 1995, which may explain the extremely rapid and substantial deposit withdrawals.

In the case of Paraguay, the general perception before the crisis erupted was that an implicit government guarantee existed for all banks and for all kinds of deposits (including off-balance sheet ones). Indeed, very few banks in Paraguay had ever experienced an official intervention, and those that had, received sufficient resources from the central bank to protect all creditors. Moral hazard problems related to the authorities' past behavior occurred during the crisis on the part of banks and depositors. Banks in need of liquidity tended to compete for financial resources with little regard to cost, and depositors accepted the highest bid with little regard, if any, to risk.

Given the large scope of the Venezuelan banking crisis in terms of the number of institutions and share of deposits affected, one may have expected an even larger macroeconomic impact than what actually occurred during the crisis. The history of government bailouts of distressed banks and the lack of hyperinflation episodes in Venezuela limited deposit runs somewhat, especially at the beginning of the crisis. Nevertheless, the fact that neither shareholders nor depositors had borne the costs of previous bank failures created an environment of excessive risk-taking by the banking sector, eventually increasing the costs of the crisis.

C. Exchange Rate Regime, Exchange Rate Controls, and Capital Flows

The Argentine experience shows that countries under fixed exchange rate regimes, and especially under a currency board, can easily convert a balance-of-payments crisis into a banking crisis and vice versa. The use of inflation through a devaluation, to shrink the banks' balance sheets in real terms, may turn out to be very costly in a country with a strong commitment to a fixed exchange rate, and may even be ineffective if the country is highly dollarized. Finally, the imposition of exchange controls during the Venezuelan banking crisis did not manage to stop capital outflows.

In the case of Argentina, the banking crisis was a direct consequence of the massive capital outflows that the country experienced after the devaluation of the Mexican peso. Reserve requirements constituted an important buffer to deposit runs. However, they were not enough to respond to the massive deposit withdrawals. The Argentine banking crisis also shows that the possibility of using inflation through exchange rate devaluation to shrink banks' balance sheets in real terms is very limited in a country with a strong exchange rate commitment. Apart from the loss of credibility that could have come with a devaluation, Argentina's high degree level of dollarization together with the large foreign currency denominated debt, both of the public and the private sector, would have increased the crisis' negative macroeconomic impact.

When the Venezuelan banking crisis had reached its peak, the authorities opted to fix the exchange rate and to introduce exchange controls. This did not stop capital outflows, and limited the surge in inflation only temporarily. The deposit base continued to fall and inflation remained high, accelerating to even higher levels when the controls were lifted. In turn, exchange rate controls introduced serious allocative distortions and weakened external financing prospects. This contributed to the delays in the privatization of the banks that were nationalized during the crisis.

D. Degree of Dollarization

The case of Argentina suggests that dollarization can help stabilize the deposit base during a banking crisis. Also, high levels of foreign-currency-denominated debt in that country reduced the authorities' leeway to resort to a surge in inflation to shrink banks' balance sheets in real terms.

Argentina, the most dollarized economy of the ones reviewed, benefited from the existence of dollar deposits in the domestic banking system. During the first stages of the banking crisis, when the situation was perceived as a currency crisis but there was confidence in the government macroeconomic program, depositors shifted from peso to dollar deposits within the domestic banking system. The already high level of dollar deposits also acted as a buffer since they remained in the domestic banking system until confidence in the country's macroeconomic situation started to decline. At that point, dollar deposits fell sharply and there was a substantial capital flight until the new macroeconomic program was announced.

In the case of Paraguay, dollar-denominated deposits also helped stabilize the deposit base, although to a lesser extent than in Argentina. This may be related to the existence of an off-shore market, closely linked to the domestic banking system, to which depositors could easily shift their savings.

In Venezuela, dollar deposits were practically nonexistent within the domestic banking system but a large off-shore market had developed where Venezuelans kept their savings and obtained credit in dollars. Since the off-shore market was so closely connected to the domestic banking system, it was easily used by Venezuelans to protect their savings from exchange rate risk. But, at the same time, this sort of "external" dollarization fostered the instability of the deposit base.

The Argentine and Paraguayan banking crises, compared to the Venezuelan one, suggest that having a dollarized economy helps stabilize the deposit base, reduces capital flight and, therefore, reduces the negative macroeconomic impact of a crisis. On the contrary, "external" dollarization, that is the existence of a large off-shore banking system with close links to the domestic one, fosters capital flight increasing the crisis' negative macroeconomic impact.

E. Structure of the Banking System

Foreign banks and, in most cases, also government-owned banks helped the countries reviewed to stabilize the deposit base, thereby reducing the respective crisis' negative macroeconomic consequences. The existence of a poorly regulated off-shore banking system and substantial off-balance sheet operations in the domestic banking system increase the costs of banking crises in Paraguay and Venezuela.

In Argentina and Paraguay, the large share of foreign and government-owned banks, perceived to have a full guarantee either from their overseas headquarters or the government, fostered flight to quality rather than capital flight, and thus helped stabilize the deposit base. The fact that depositors decided to "move to quality" at the onset of the crisis stemmed from the very segmented structure of the Argentine and Paraguayan banking systems. In the case of Argentina, the largest losses in deposits came from wholesale and provincial banks. At the other extreme, foreign banks and some of the largest public banks substantially increased their deposit base during the first two stages of the crisis. However, when the public lost confidence in the country's overall macroeconomic situation, foreign banks experienced deposit withdrawals and their overseas headquarters cut their credit lines in view of the general loss in confidence. This led to deposit withdrawals from foreign banks as well, which added to the massive capital outflows until the macroeconomic program was announced.

In Paraguay, the stable macroeconomic situation allowed foreign and government-owned banks to increase their deposit base throughout the crisis period. In Venezuela, where foreign and government-owned banks had a relatively small market share, capital flight was much larger. Within their small capacity, though, foreign and government-owned banks nearly tripled their deposits during the crisis. Had they been able to expand their capacity faster, capital flight would probably have been smaller.

Paraguay and Venezuela had a large and nonsupervised off-shore banking system, as well as a substantial share of off-balance operations in the domestic banking system. The existence of the off-shore market encouraged capital flight since it was easy for depositors to move their savings abroad. Off-balance sheet operations increased the fiscal cost of the crisis both in Paraguay and Venezuela. Consolidated financial statements, including off-shore and off-balance sheet operations, would have helped avert the Paraguayan and Venezuelan crises at an earlier stage and reduce the actual costs of those crises.

F. Contagion Effects and Payments System

Contagion effects among banks may stem from the excessive specialization of banking systems or problems in the payments system. Problems in the payment system related to the crisis appear to have a negative impact on economic growth.

During the Argentine banking crisis, bond traders and wholesale banks suffered from contagion effects after a small bond trader failed in December 1994. The type of depositors, large sophisticated investors, and the concentration of their assets in bonds, which lost their value abruptly in the aftermath of the Mexican crisis, encouraged contagion effects, notwithstanding the solvency of some of the wholesale banks. This highlights the risks involved in having undiversified portfolios, especially if financed by volatile deposits, in countries with incomplete capital markets, in practically all Latin America. A less specialized banking system might help reduce the risks of contagion during banking crises.

The case of Paraguay shows that contagion effects may come from problems in the payments system stemming from the intervention of institutions. Indeed, depositors at the intervened banks could only withdraw their funds with several months' delay. Because of these delays, other banks perceived as distressed by the public suffered deposit runs as well, since depositors feared they would not be able to withdraw their deposits immediately in case their bank was intervened.

G. Authorities' Reaction

The authorities' rapid, consistent and comprehensive response to a banking crisis appears to reduce its negative macroeconomic impact. Delays in their response may create breakdowns in the payment system and reduce public confidence, with significant negative macroeconomic consequences.

The case of Argentina clearly shows the advantages, in terms of a relatively small macroeconomic impact, of responding quickly and in a consistent and comprehensive way to signs of major weaknesses in the banking sector. The authorities responded to the deposit withdrawals by enlarging the central bank's very limited lender-of-last-resort role, and establishing trust funds to restructure the banking system. Efforts were also made to avoid discretionary treatment of distressed banks. Venezuela did not respond rapidly to the crisis. Banco Latino, the bank that triggered the crisis, remained closed for two-and-a-half months, and while closed no announcement was made concerning the treatment that the bank's depositors would receive or the general strategy the authorities would follow to solve the banking crisis. In the case of Paraguay, the delays in providing liquidity to intervened and distressed banks so that they could honor their deposits disrupted the payments system and affected economic growth. Furthermore, no comprehensive strategy to solve the crisis was announced which added to the public's lack of confidence in the domestic banking system.

H. Financial System Safety Nets: Lender of Last Resort and Deposit Insurance

Limited but well-functioning lender-of-last-resort facilities prior to a banking crisis reduce the crisis' negative macroeconomic impact. If existing facilities are too limited for the scope of the crisis, the case of Argentina shows that lender-of-last-resort facilities can be extended without a surge in inflation if the necessary accompanying measures are taken. The Venezuelan crisis shows that a deposit insurance scheme needs to be well-funded in order to have a positive impact on public confidence. However, even in the latter case, such a scheme will not be a solution in a systemic crisis.

The Argentine monetary authorities were placed in the difficult position of providing both limited lender-of-last-resort facilities and peso convertibility on demand. The rapid extension and increased flexibility of the central bank's lender-of-last-resort facilities and the introduction of substitutes to the central bank facilities (such as the transfer of reserves to a government-owned bank and the creation of trust funds with financial assistance from multilateral institutions) not only provided the banking system with the necessary liquidity but also enhanced public confidence. The establishment of a limited privately-financed deposit insurance scheme also proved to be reassuring.

During the Paraguayan and Venezuelan banking crisis, continuous provision of liquidity to insolvent banks created serious moral hazard risks. There were strong incentives for insiders who knew the true condition of the banks to withdraw their funds ahead of a possible government intervention. Given the lack of consolidated supervision in both countries, banks could easily channel funds into loans to related enterprises and also cover losses elsewhere within the financial group. In the case of Venezuela, the provision of liquidity by the monetary authorities was carried out without a thorough assessment of banks' true financial condition or a change in management, which increased moral hazard. As a result, the fiscal cost associated with the bailout or failure of institutions was much larger than would have been the case had the banks been closed when the problems first emerged. Venezuela's situation also demonstrates that the deposit insurance scheme, by itself, might not enhance confidence.

Indeed, at the onset of the crisis it became apparent that the deposit insurance scheme would not have had enough funds to meet all obligations given the large number of banks that were perceived as insolvent, which intensified the deposit runs.

With regard to Paraguay, the central bank gave massive financial assistance to intervened and distressed banks to enable them to honor their deposits, but no conditionality and little or no valuable collateral were attached to it. The subsequent establishment of a new lender-of-last-resort facility, the so-called Bank Security Net, helped foster confidence in the banking system. However, it turned out to be very costly because the mechanisms of provision of credit to banks were not stringent enough.

I. Macroeconomic Policies

Sound macroeconomic policies are essential before, during, and after a banking crises. Such policies will help avoid crises, and alleviate any negative macroeconomic impact if a crisis should occur. During a banking crisis, it is essential that the monetary authorities continue to maintain inflation under control. A restrictive fiscal stance will reduce the burden of adjustment that would otherwise fall on monetary policy, thereby helping to avoid excessively high real interest rates. After the crisis is over, sound macroeconomic polices will help avoid future banking problems.

The Argentine case clearly shows how important it is to have sound and credible macroeconomic policies in place during a crisis. The country's poor fiscal position at that time clearly complicated matters since the deficit had to be financed when there were capital outflows. The problem of financing the budget was magnified in the case of Argentina because of the still underdeveloped capital markets and the presence of strict legal limits to issue money, set by the currency board arrangement. At the beginning of the crisis, the public's fears were mainly related to a possible devaluation and not to the country's overall macroeconomic situation. During that time only peso-denominated deposits decreased. However, when fears about the country's macroeconomic situation spread, the drop in deposits was abrupt and generalized. Notwithstanding measures taken by the authorities to avoid such massive withdrawals, only the announcement of a new macroeconomic program allowed the fall in the deposit base to slow down.

In Paraguay, favorable macroeconomic conditions and, especially, the cautious fiscal policy that the authorities conducted before and during the crisis offset the impact of the expansion of central bank credit to distressed banks. The restrictive fiscal policy stance also helped avert pressures on the foreign exchange market and on interest rates.

In Venezuela, inadequate macroeconomic policies before the crisis contributed to an unsustainable price boom at the beginning of the 1990s and to a general climate of macroeconomic instability, with periodic episodes of capital flight and an erosion of real money demand. As regards the macroeconomic policies adopted during the crisis, monetary and fiscal policies were too expansionary and, thus, inconsistent with macroeconomic stability.

Negative real interest rates due to lax monetary policy contributed to the fall in the demand for money and to pressures on the bolivar. Fiscal policy was too lax as well, especially taking into account the costs of the crisis.

J. Instruments for Liquidity Management

The Argentine experience shows that reserve requirements may act as a buffer for deposit withdrawals during a banking crisis. However, excess liquidity needs to be absorbed with other monetary instruments. To avoid situations such as that of Paraguay in which too high reserve requirements fostered the development of a large informal financial sector, it would be advisable to reduce reserve requirements if possible without losing monetary control or else convert them into liquidity requirements. Appropriate remuneration of reserve requirements could be another solution. Finally, the case of Venezuela shows that existing monetary instruments may not be enough for monetary control when large amounts of liquidity are injected into distressed banks.

In Argentina, inflation was kept well under control during the crisis. The decline in deposits that occurred was compensated for by a reduction in reserve requirements and central bank rediscounts and swaps. Without the high legal reserve requirements that existed prior to the crisis, banks would probably have been unable to meet the massive withdrawals that occurred until the macroeconomic program was announced. It may, therefore, be advisable to maintain reserve requirements and capital requirements above international standards if a country has a fragile and volatile financial system. However, given the distortionary impact of reserve requirements, such high levels of reserve requirements should be remunerated or converted into liquidity requirements, as was the case in Argentina. A buffer for crisis periods can also be created with the establishment of a line of credit to be used by banks in periods of systemic problems, as Argentina did in early 1997.

Paraguay's situation is a clear example of the distortionary effects of reserve requirements. The high levels of reserve requirements, even if partially remunerated, contributed to the fast development of the informal financial sector, including off-balance sheet operations and the offshore banking system. Furthermore, massive liquidity injections during the crisis made it difficult for the authorities to reduce reserve requirements even if perceived as excessively high for the level of distress of the banking system. In Paraguay, reserve requirements could only be reduced well after the crisis started, and still massive sales of central bank paper had to be used to withdraw the liquidity injected into distressed banks.

In Venezuela, reserve requirements were reduced while the crisis was underway, contributing to excess liquidity. The sales of central bank paper were not enough to absorb this excess liquidity which resulted from the massive injections into distressed banks and the reduction in reserve requirements. As a consequence, the central bank lost monetary control and inflation surged.

K. Reduction in Private Credit

The reduction in credit during a crisis depends, among other things, on the change in the structure of the banking system that results from the banking crisis. A high concentration and a large share of assets in foreign banks tend to accelerate the reduction in credit.

The Argentine and Paraguayan experiences show that a high bank concentration and a large participation of foreign-owned banks may delay the recovery in private credit. This is especially the case when the crisis is accompanied by a strong flight to quality to foreign-owned banks. The reason for this development is that information on borrowers is not transmitted easily from banks facing deposits withdrawals to banks receiving deposit inflows (chiefly foreign-owned banks). Apart from changes in the financial structure, demand factors, such as an economic recession, clearly reduce the level of private credit. In Venezuela, private credit fell because of the recession and also because of the legal changes prohibiting lending to related parties.

L. Quasi-Fiscal Losses

Typically, central banks find it difficult to transfer the quasi-fiscal losses incurred during a banking crisis to the government. As long as these losses remain on the central bank's balance sheet, they may reduce the central bank's ability to control inflation.

In Paraguay, the large amount of assistance injected into distressed institutions was practically double the amount of deposits withdrawn and was carried out in the form of noncollateralized overdrafts or collateralized with nonperforming loans. These loans still appear on the central bank balance sheet as credit to the banking system, but no provisions have been made for them yet. The quasi-fiscal costs of the central bank's support to insolvent institutions will have to be made transparent in the near future, transferring the cost of the crisis to the budget.

In Venezuela, the central bank lent large sums to the deposit guarantee fund, which in turn provided distressed banks with liquidity without any conditionality and little or no collateral. Given the insolvency of the deposit guarantee fund which occurred as a consequence of the crisis, the central bank found itself depleted of capital and with little leeway to place the amounts of central bank paper needed for monetary control. The delay in transferring the quasi-fiscal losses of the crisis to the government was, therefore, one of the main reasons for the surge in inflation.

III. The Argentine Banking Crisis

A. Situation Before the Crisis

Macroeconomic developments

During the 1980s, Argentina experienced very low intermediation as a consequence of macroeconomic instability. Chronic inflation and periodic hyperinflation led to widespread dollarization of the economy and a reduction in the maturities of financial instruments and credit. In addition, chronic public sector deficits crowded out private sector credit.

From 1990 onwards, a bold stabilization program was implemented. The program was further strengthened by the enactment of the Convertibility Law in early 1991, which established a currency board monetary arrangement.[2] Argentina's monetary base was set not to exceed the country's international reserves and strict limits were placed on the Central Bank of the Republic of Argentina's (CBRA) financing to the nonfinancial public sector and to financial institutions, including provincial banks. The Convertibility Law, coupled with major efforts to reduce federal expenditures and raise federal taxes, succeeded in bringing down monthly inflation from double-digit levels to single-digit levels and in improving the country's macroeconomic situation (Figure 1). This facilitated a process of remonetization and re-intermediation in which the ratio of broad money (M2) to GDP rose from 7 percent in 1990 to 19 percent in 1994 (Figure 2.a).[3] Re-intermediation was stimulated by the elimination of taxes on financial transactions and by the gradual reduction and harmonization of reserve requirements to promote the lengthening of deposits' average maturities and the equal treatment of deposits irrespective of the currency of denomination. The increase in deposits and the resurgence of external credit lines, coupled with the robust growth during 1991-94, led to an expansion of the volume of bank credit to the private sector from 12 percent of GDP in 1991 to 18 percent in 1994 (Figure 2.b). The "credit boom" period was largely financed by capital inflows and, was mainly composed of consumer credit expansion, especially during the first two years of convertibility. The distortions in relative prices due to the exchange rate real appreciation led to a shift from nontradable to tradable goods, and to a large current account deficit (of nearly 4 percent of GDP in 1994, Figure 1.f).[4]

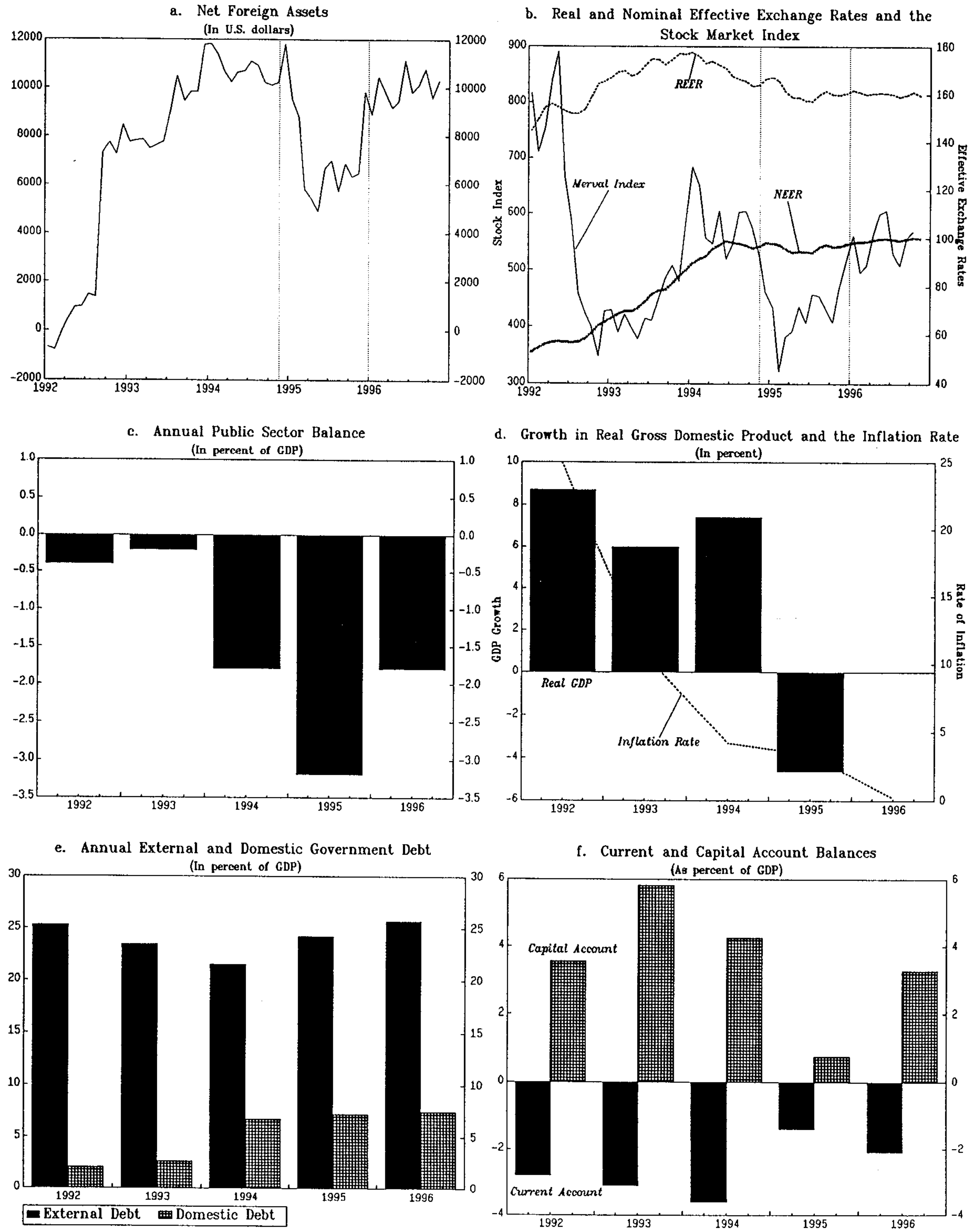
---

[2]For a discussion of currency board arrangements and country experiences, including Argentina, see Baliño et al. (1997).

[3]The broad monetary aggregate used throughout this paper includes foreign-currency deposits and is called M2 for simplicity.

[4]Exchange rate appreciation, as measured by the real effective exchange rate, reached a peak in January 1994, but depreciated thereafter. However, productivity gains, tax reductions deregulation and the decline in input costs offset part of the exchange rate appreciation.

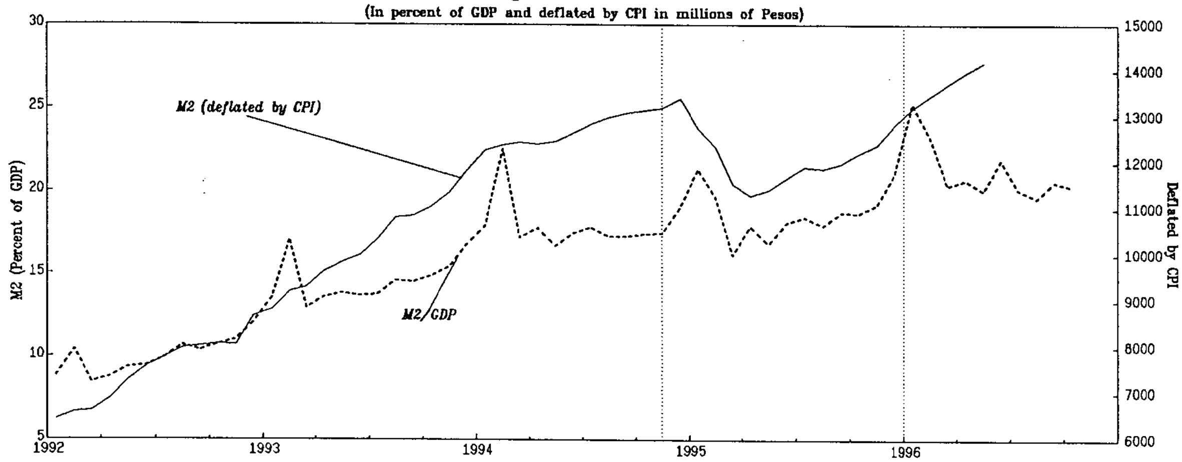
FIGURE 1
ARGENTINA
MACROECONOMIC DEVELOPMENTS



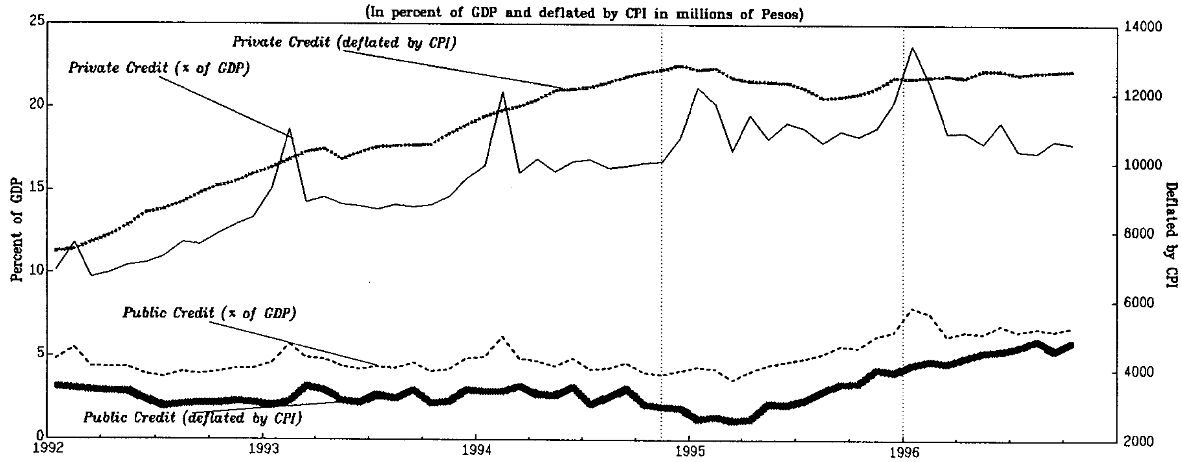
Sources: International Financial Statistics, Information Notice Service, the Emerging Markets Database, and staff estimates.

FIGURE 2
ARGENTINA
MONETARY AND CREDIT DEVELOPMENTS 1/

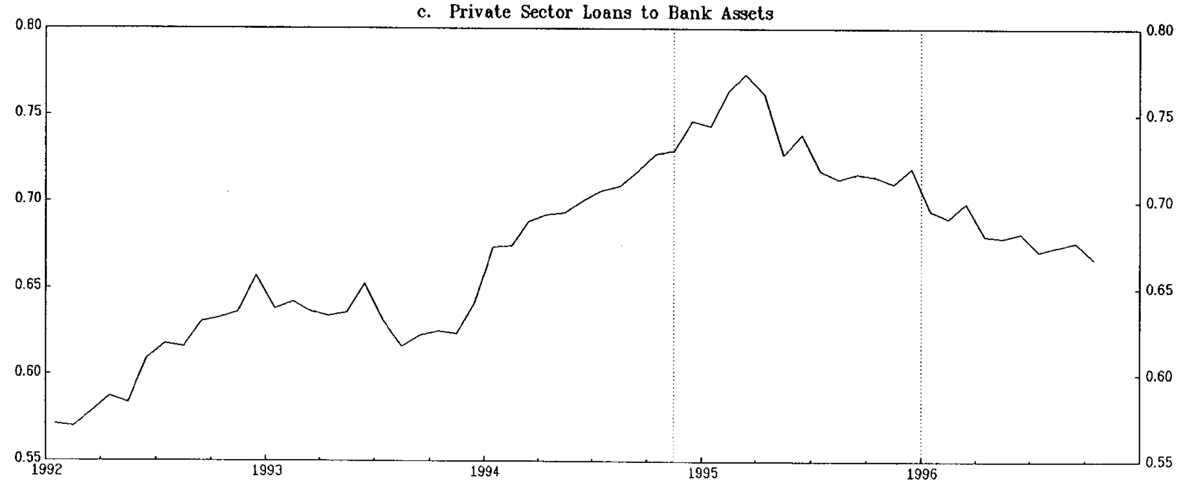
a. Degree of Intermediation
(In percent of GDP and deflated by CPI in millions of Pesos)



b. Private and Public Credit
(In percent of GDP and deflated by CPI in millions of Pesos)



c. Private Sector Loans to Bank Assets



Sources: International Financial Statistics and staff estimates.

1/ Monthly industrial production index used as a proxy for GDP.

The banking system

During the 1980s, the Argentine banking system remained under stress, with a low rate of mobilization of bank deposits, scarcity of credit, the prominence of public sector banks and a very segmented private banking system. This led to several banking crises which, together with hyperinflation, resulted in large-scale capital flight and a sharp contraction in financial intermediation. The 1989 banking crisis had the largest negative impact in terms of reduction in monetary aggregates.[5] Such negative impact was mainly due to hyperinflation but also to the measures taken by the government to solve the crisis, such as the forced conversion of commercial bank time deposits and the short-term government debt in long-term dollar bonds.[6]

In the 1990s, with the remonetization brought about by a successful stabilization program, the situation of the banking system improved. This process was helped by the authorities' implementation of a comprehensive program to strengthen bank supervision and regulation. This included sharpening the focus of these activities on prudential issues, reorganizing the banking supervision area of the CBRA, tightening capital requirements, and adopting the CAMEL rating system for the assessment of banks. These measures helped in making the system more resilient and better prepared to absorb the impact of the 1995 crisis. However, problems with provincial banks remained, since they continued to be used to finance the deficits of provincial governments. The deteriorating fiscal situation of the provinces and the poor management of most provincial banks led to the emergence of a large volume of nonperforming loans that continued to undermine confidence in these banks. As of December 1994, nonperforming loans in provincial and other government-owned banks accounted for 33 percent of total loans, compared to 10 percent in private banks. The extremely weak situation of provincial banks, and the fact that they could no longer be bailed out through unlimited discount facilities under the Convertibility Law, led the authorities to set up a restructuring program to liquidate or sell most of these banks.[7] At the same time, the Argentine private banking system remained highly segmented in terms of intermediation costs

---

[5]For a description, see Baliño (1991).

[6]This was the so-called Plan Bonex, in which a depositor holding a claim against a bank denominated in domestic currency, with the interest rate freely agreed upon and usually with a 7-day maturity, suddenly found him/herself with a claim against the Government denominated in dollars, with a 10-year maturity and interest rate linked to the LIBOR. The opening price of the Bonex implied a 67 percent discount. Nowadays, the discount is down to less than 200 basis points.

[7]By end-1994, one small national bank had been liquidated, another privatized, and three provincial banks had been privatized, out of a total of 34 government-owned banks.

and credit quality. Small commercial banks located in the hinterland recorded higher operating costs than large banks. This was due to the large share of peso deposits at small commercial banks, and their limited access, or no access, to international credit lines.

Although an increase in intermediation occurred since 1991, dollar deposits grew six-fold, compared to a four-fold growth in peso deposits until the crisis erupted in December 1994 (Figure 3.a). Credit denominated in dollars also grew at a much faster pace (Figure 3.b). By end-1994, 60 percent of total loans were denominated in dollars, a proportion of which was allocated to firms producing nontradable goods. Another source of fragility came from the balance sheet mismatch stemming from the very short maturity in both pesos and dollar time deposits. Consequently, during this period the financial system became increasingly exposed to exchange rate risk, both in the event of a nominal devaluation or a sudden capital flight. Indeed, the latter started to occur during 1994, as a consequence of the countries widening macroeconomic imbalances. Already before the Mexican crisis, provincial banks began to have difficulties in raising dollar funds at the interbank market and had to increase interest rates on dollar deposits in order to be able to finance their dollar loans. Notwithstanding the more attractive rates, dollar deposits at provincial banks grew by less than the average for the rest of the banking system. On the peso market, though, there was no evidence that investors distinguished between the quality of the banks since peso deposits at provincial banks expanded at the same rate as in the rest of the banking system. This might be so because of the lesser sophistication of holders of peso deposits.

B. The Outbreak of the Crisis

The uncertainty generated by the Mexican devaluation adversely affected market sentiment about Argentina's macroeconomic situation, and about its financial system in particular. Because the country had been running current account deficits since the beginning of the 1990's, the severe restriction on external financing that came as a consequence of the change in market sentiment made it difficult to meet external obligations and finance the public sector deficit.[8] Foreign investors' and bank depositors' concerns appeared as to whether the governments would be able to maintain the exchange rate and meet its debt obligations.[9] The improvements in banking regulation and supervision that had been implemented helped in the early detection of bank problems. Nevertheless, shortly after the Mexican devaluation, the

---

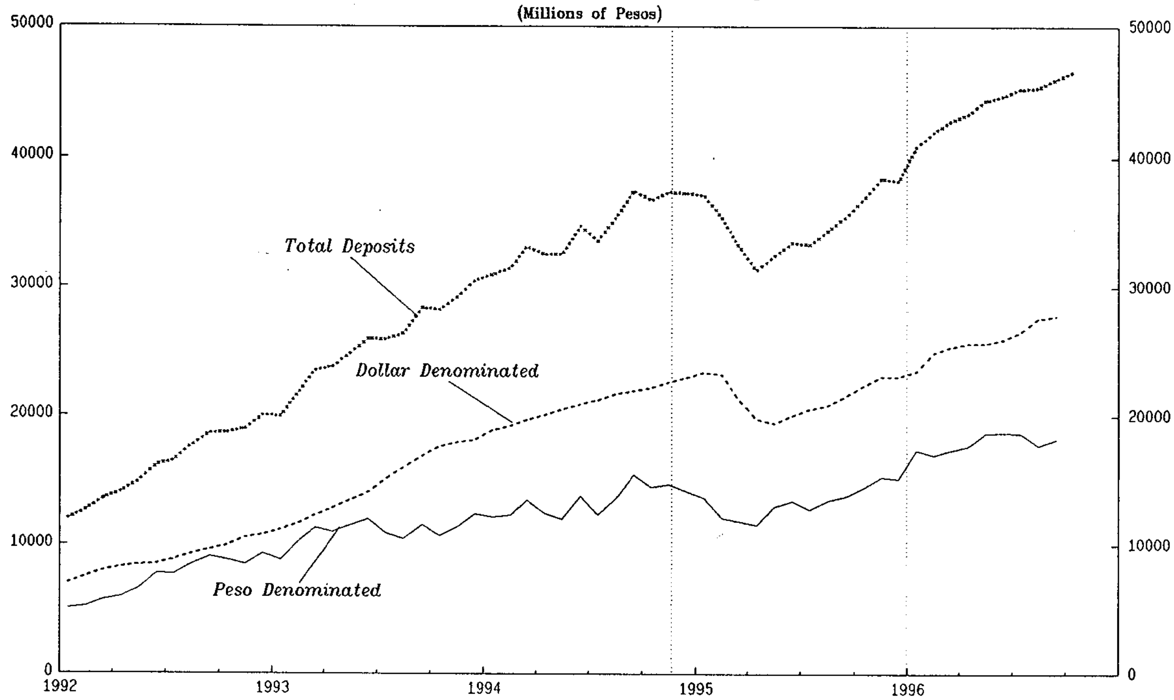
[8]The public sector's solvency problems were aggravated by the emergence, for the first time since the Convertibility Law, of a fiscal deficit equal to 1.7 percent of the GDP in the second half of 1994 (earlier, fiscal deficits had approached zero as Figure 1.c shows).

[9]Figure 1.b shows the degree of real effective appreciation of the Argentine peso at the onset of the banking crisis.

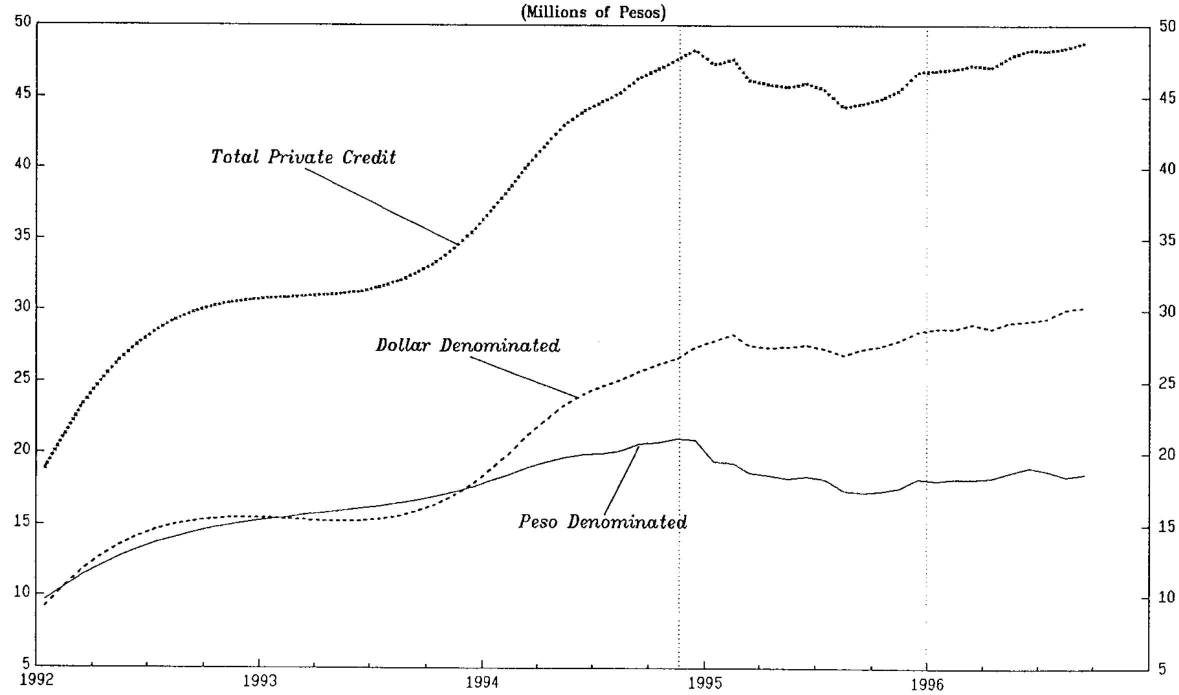
FIGURE 3
ARGENTINA

PESO AND DOLLAR DENOMINATED DEPOSITS AND PRIVATE CREDIT

a. Peso and Dollar Denominated Deposits
(Millions of Pesos)



b. Peso and Dollar Denominated Private Credit
(Millions of Pesos)



Source: Country authorities.

1/ Total dollar deposits include dollar-denominated demand, saving, and time deposits. Data interpolated from 1992m1 to 1993m12.

liquidity squeeze of a small bond trader, Extrader, brought about financial panic.[10] Extrader was heavily exposed in Mexican bonds and securities, whose value fell sharply in the aftermath of the Mexican crisis. The closure of Extrader on January 18, 1995, persuaded most banks to cut their credit lines to other bond traders, further damaging the bond market. This, in turn, eroded the financial position of several banks that held a large bond inventory and open trading positions. At the same time, the perception that capital flight could affect the liquidity of financial institutions gave way to uncertainty over the general soundness of the financial system.

The banking crisis began in early 1995; wholesale banks were among the first to be affected because they had large bond stocks and open trading positions and depended almost entirely on large corporate deposits. Withdrawals of large deposits from wholesale banks and simultaneous cuts in interbank lending forced some of them into liquidation. As news of the failures spread and in the absence of deposit insurance, retail depositors fled from weak provincial, cooperative and small retail banks, thereby producing a major banking crisis. The interbank rate peaked at 70 percent, and loan rates in pesos and U.S. dollar reached 40 and 19 percent, respectively (Figure 4.a and b). Deposit rates also increased, averaging some 20 percent for peso-denominated deposits and 10 percent for dollar-denominated deposits, compared to 9 percent and 6 percent, respectively, in December 1994. Apart from the sharp movements in interest rates, the natural adjustment mechanism under a currency board, the capital outflows further aggravated the situation. This was reflected in a sharp fall in the central bank's international reserves and demand for peso-denominated deposits.[11]

Nevertheless, not all deposit runs from distressed banks contributed to capital flight, at least during the initial months of the crisis. Some of the funds were redeposited at foreign-owned banks and some were converted into foreign currency deposits, but remained in the domestic banking system. Figure 3.a shows that foreign currency deposits increased substantially during the first months of the crisis, until confidence in the country's macroeconomic situation started to decline.[12] The flight from public banks to foreign-owned banks also helped reduce capital flight. However, after confidence in the country's macroeconomic situation was lost, also foreign-owned banks started to lose deposits and their credit lines with headquarters abroad were cut.

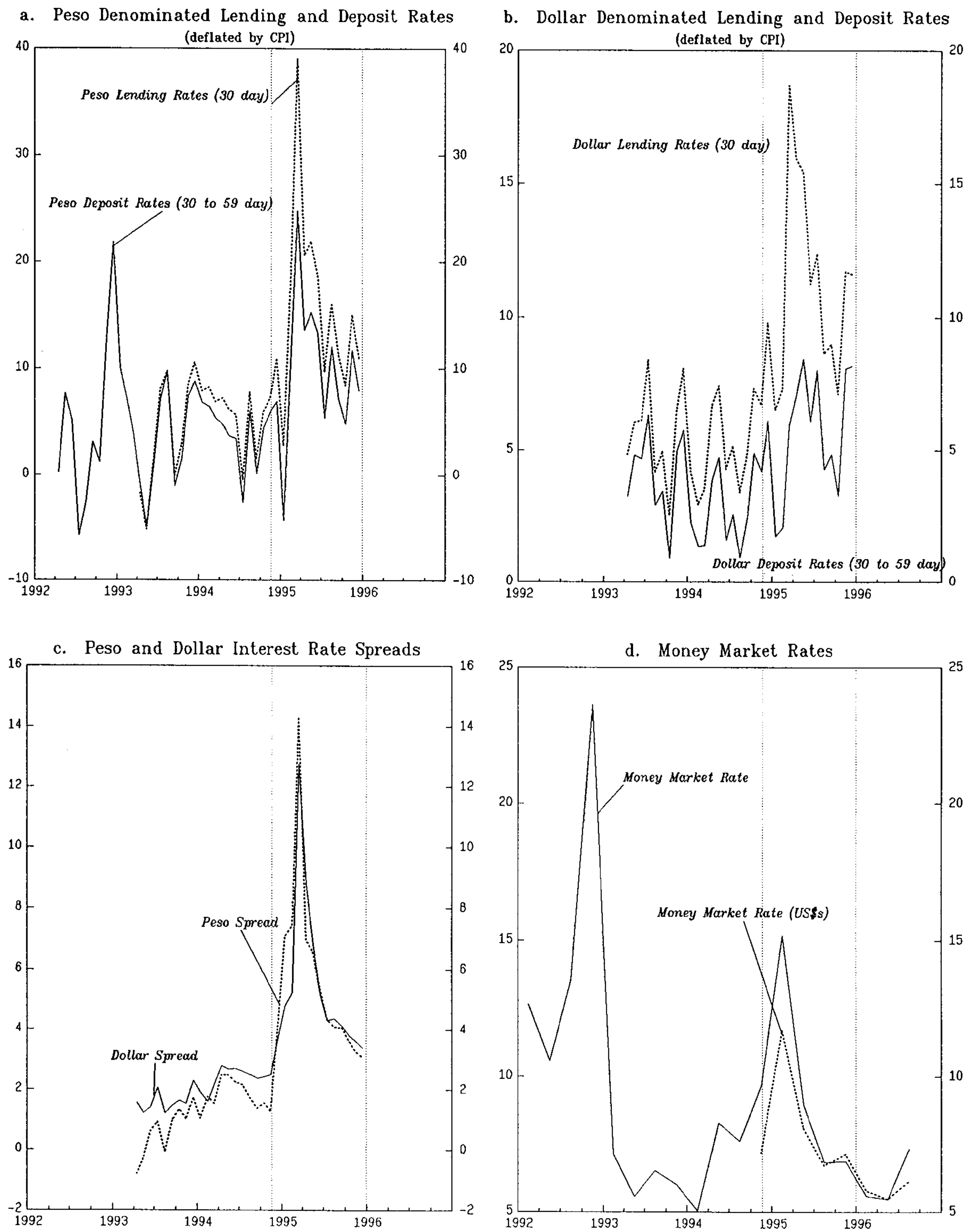
---

[10]Extrader only held 0.2 percent of the total deposits in Argentina's financial system.

[11]The deposit base fell by Arg$3 billion (7 percent) from mid-December 1994 to end-February 1995. This decline accelerated in early March.

[12]As will be shown later in Table 4, foreign banks increased their deposit base by 11 percent from December 1994 to December 1995, compared to a overall deposit reduction of about 5 percent.

FIGURE 4
ARGENTINA
INTEREST RATE DEVELOPMENTS



Source: International Financial Statistics and the Economic Bulletin of the Argentine Ministry of Finance.

1/ Spreads are calculated as lending rate minus deposit rate.

In sum, the existence of a group of "haven" banks, especially foreign-owned banks, a large share of dollar deposits in the domestic banking system, and the absence of restrictions to convert peso deposits into dollar deposits, served as a buffer to the fall in the deposit base. The fiscal impact of the support measures, including the Trust Funds was kept at the equivalent of about 1.3 percent of GDP, the bulk of which was financed abroad.

C. Authorities' Response to the Banking Crisis

Soon after the beginning of the crisis, the Government responded to the devaluation fears, taking measures to reassert the continuity of the exchange rate policy. These included the elimination of the CBRA's buy-sell price gap for dollars, the conversion of reserve requirements on peso deposits into dollars,[13] and the unification of each bank's account at the CBRA into a single, dollar-denominated, account.

Because the Convertibility Law severely restricted the central bank's role as lender of last resort (LLR), in early January 1995, the CBRA persuaded the top five banks to create a $250 million safety net to buy the assets of illiquid wholesale banks in exchange for lower reserve requirements. A second safety net of $790 million soon followed. This time 25 banks were authorized to lower their required reserves by the equivalent of 2 percent of their pre-crisis deposit base, and the freed funds were transferred from the CBRA to the government-owned Banco de la Nación (BN). The latter made collateralized advances to banks in need of liquidity. In this way, the BN replaced the CBRA in its role of LLR. In addition, on January 26, the CBRA allowed the trading of excess legal reserve positions ("numerales") among financial institutions, while assuming the credit risk of the institutions lending their excess reserves. On December 28, 1994, the CBRA lowered the reserve requirements on dollar-denominated deposits,[14] as a way to alleviate banks' liquidity problems. This measure was extended to peso-denominated deposits on January 12, 1995.

In February 1995, continuous fears of a devaluation raised doubts about the financial system's capacity to face its liquidity problems, especially given the CBRA's limited LLR facilities under the Convertibility Law. As a result, the Government decided to amend the Central Bank Charter in February 1995, permitting the CBRA to lengthen the maturities of its swap and

---

[13]Although no real transactions were actually carried out, this was a confidence building measure, a reaffirmation of the intention to maintain the Convertibility Law.

[14]The reserve requirement rate was reduced from 43 percent to 30 percent in January on demand and saving deposits, and from 3 to 1 percent on term deposits.

rediscount facilities, with the possibility of monthly renewal, and in amounts exceeding the net worth of the borrowing bank.[15] Table 1 summarizes the measures taken by the authorities to free liquidity.

Table 1. Argentina: Facilities Providing Liquidity to the Banking System

Date	Measures
1/95	Arg$250 million safety net from top 5 banks' funds in exchange for lower reserve requirements.
1/95	Arg$790 million safety net from the transfer of 2 percent of their pre-crisis deposit base of the top 25 banks to Banco de la Nación.
1/95	Trading of excess legal reserve positions between banks allowed.
2/95	Swaps and rediscounts allowed at longer maturities and in amounts exceeding the net worth of the borrowing bank.
3/95	Banks with insufficient credit balance in their account at the central bank allowed to cover themselves by presenting the documents drawn on them up to the amount necessary to achieve a positive balance in that account.

Source: Fund and World Bank documents.

Deposit runs continued during February and intensified at the beginning of March, while interest rates on peso and dollar deposits doubled. The reasons for the acceleration in deposit withdrawals was related to the public's mistrust in the government's macroeconomic program, given the distressed fiscal situation and the large share of external debt that was coming due. Also, there were increasing concerns about the solvency of the banking system as a whole since several banks, mostly provincial banks and some bond traders, had stopped paying out deposits. The recent history of freezing deposits and converting deposits into bonds, during the 1989 banking crisis, also contributed to the public's concerns.

The dramatic and generalized loss of deposits during the first half of March forced the CBRA to adopt additional measures to reduce the impact of deposit runs on banks. On March 13, the CBRA authorized banks to use up to 50 percent of their cash in vaults, as well as resources used to purchase assets from banks in difficulty, for compliance with reserve requirements. As a result, the average reserve holdings, including cash in vaults, declined from 21.5 percent in December 1994 to 15 percent in March 1995. Table 2 summarizes the changes in reserve requirements during the crisis.

---

[15]The Charter also changed the maximum period during which the CBRA could suspend the operations of financial institutions from 30 to 90 days, increasing thereby the time available to the CBRA to assess banks' financial situation.

Table 2. Argentina: Changes in Reserve Requirements 1/

ARG	RRs on Peso-Denominated Deposits (In percentage)			RRs on Dollar-Denominated Deposits (In percentage)		
	Dds	Sds	Tds	Dds	Sds	Tds
12/95	43	43	3	43/35 2/	43/35	3/1
1/96	35/30	35/30	1	35/30 3/	35/30	1
2/96	32	32	1	32	32	1
3/96	33	33	2	33	33	2
8/96	30	30	-- 4/	30	30	--

Source: Fund documents.

1/ Dds stands for demand deposits, Sds for saving deposits, and Tds for time deposits.
2/ On December 28, 1994, reserve requirements on foreign currency deposits were reduced. This measure was extended to peso deposits on January 12, 1995.
3/ Beginning January 15, 1995, reserve requirements were reduced again.
4/ Introduction of liquidity requirements of 6 percent for 30-59 day time deposits and 2 percent for 60-179 day time deposits.

On March 17, banks with an insufficient credit balance in their account at the central bank were authorized to cover their 24-hour clearing balances by presenting the CBRA with documents drawn on them up to the amount necessary for a positive balance in the account. This measure was taken to avoid the Central Bank financing overdrafts that could put in jeopardy the Convertibility Law. As a consequence of this measure, some banks were forced to restructure deposits—the so-called pisada—by forcing the renewal of term deposits and putting limits on the withdrawals on the demand and savings deposits. At the same time, the CBRA continued to provide rediscounts and swaps to about half of the banking system in an amount that reached Arg$1.7 billion (0.6 percent of the GDP) in March.

Notwithstanding the authorities' efforts, deposit runs continued and, by mid-March, the CBRA had lost about US$5 billion of gross international reserves. This implied that the limit of coverage of gross international reserves with monetary liabilities of 80 percent under the Convertibility Law was about to be breached.[16]

[16]According to the Central Bank Charter, up to 20 percent of base money could be covered by holdings of U.S. dollar-denominated securities during the first mandate of the CBRA's Board of Directors, which expired in late 1995, and 33 percent of the monetary base thereafter.

It was at this point that the Government moved to enhance the credibility in the country's macroeconomic situation by implementing a new program supported by a Fund arrangement.[17] At the same time, two trust funds were established to facilitate the restructuring of private banks and the privatization of provincial banks, funded by a US$3.7 billion package of financial assistance from multilateral institutions and the international financial community.[18] Along with these measures, a limited private deposit insurance was announced to cover private banks' deposits. Deposits at private banks had so far borne the full risk, since they were not perceived to have a government guarantee, unlike provincial and national banks. The scheme was designed to cover local and foreign currency deposits of private banks with maturities of less than 90 days up to Arg$20,000 (i.e., about 80 percent of accounts or 25 percent of the deposit base).The fiscal impact of the support measures, including the Trust Funds was kept at the equivalent of about 1.3 percent of GDP, the bulk of which was financed abroad.

Although the steps taken by the authorities succeeded in decelerating the reduction in deposits, an additional loss of over Arg$2,300 million (0.9 percent of 1995-GDP) occurred in the two months prior to the general elections, on May 15. This loss was concentrated in dollar deposits, while the peso deposits increased somewhat, and affected many smaller banks, which in some cases had to force their clients to accept rollovers. Additionally, measures were taken after the election to free up more bank liquidity. This included the passage by Congress, in April 1995, of an amendment to the Financial Institution Act, increasing the CBRA's involvement in bank restructuring as well as its powers to impose penalties on individuals responsible for breaking regulations. In August, reserve requirements were replaced with liquidity requirements, set at a uniform rate for all checking accounts and term deposits.[19] The level of liquidity requirements maintained the same monetary policy stance as before, but reduced the financial costs for banks, since banks were now allowed to invest their reserves in assets bearing lower risk. Finally, as a measure to avoid future problems in the provision of liquidity to distressed banks, in early 1997, the authorities set up a US$6 billion medium-term line of credit for banks in need of liquidity, financed by a group of foreign banks (Table 3).

---

[17]The previously discontinued Fund arrangement was extended for a year.

[18]The Trust Fund for the restructuring of distressed private banks amounted to US$2.5 billion, US$2 billion financed by Government bonds and the remaining US$0.5 billion financed by the World Bank. The restructuring for the privatization of provincial banks amounted to US$1.25 financed by the Inter-American Development Bank and the World Bank.

[19]When liquidity ratios were established, assets eligible to fulfill the liquidity requirements included cash in vault, national public securities issued in local or foreign currency, and securities issued by the governments of the OECD countries. Also, liquidity requirements were extended to liabilities other than deposits, in order not to affect banks differently, depending on the composition of their liabilities. More recently, cash in vault was eliminated as an eligible asset and the liquidity ratio was increased.

Table 3. Longer-Term Measures to Enhance Confidence in the Banking System

Date	Measure
4/95	Trust Fund for the privatization of provincial banks amounting to US$1.95 billion.
4/95	Trust Fund for the restructuring of private banks, amounting to US$2.50 billion.
4/95	Creation of a limited private deposit insurance.
4/95	Amendment to the Financial Institution Act, increasing the CBRA's involvement in bank restructuring.
1/97	US$6 billion medium-term line of credit for banks in need of liquidity.

Source: Fund and World Bank documents.

D. Macroeconomic Impact of the Crisis

Monetary policy

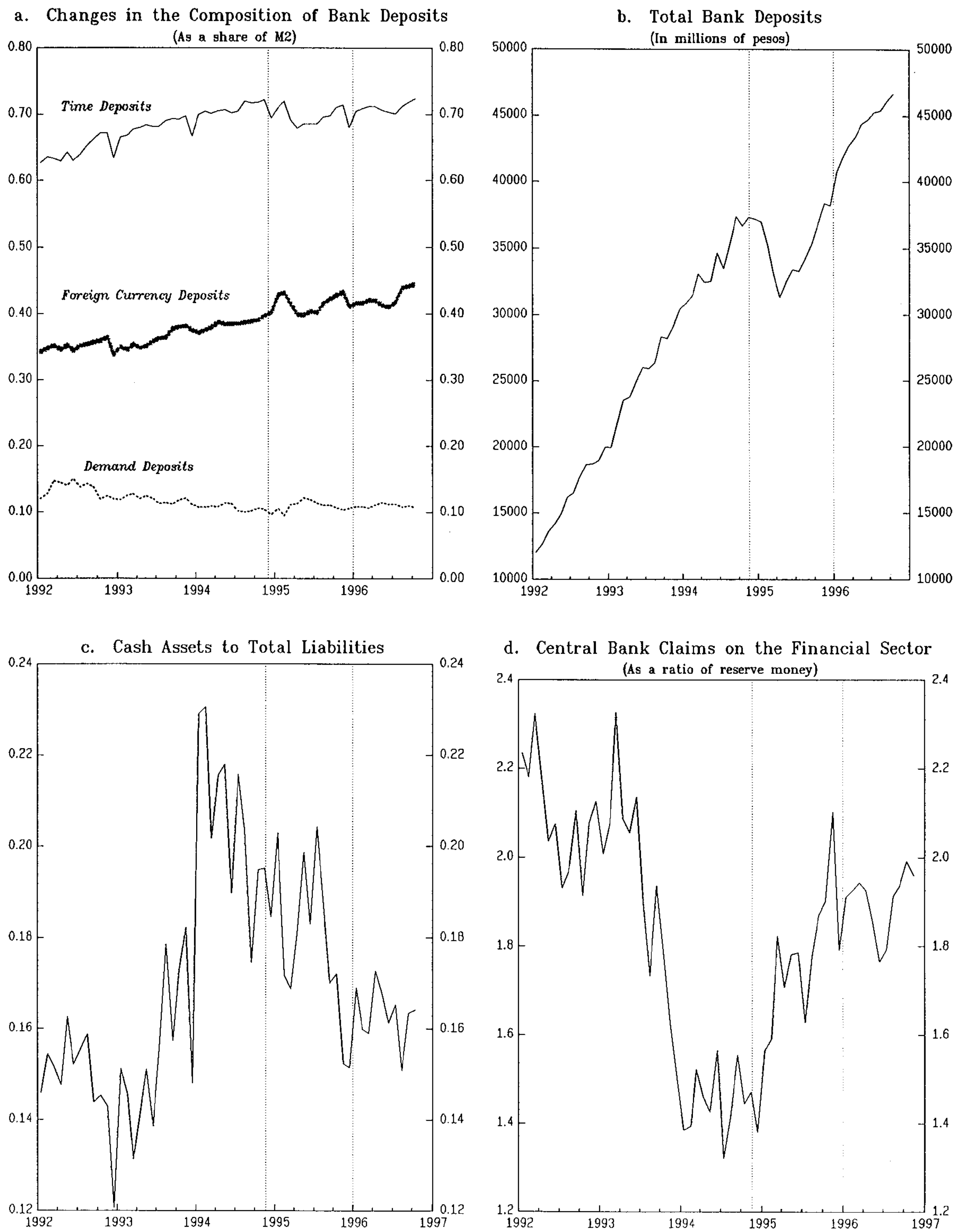
Notwithstanding the sharp increase in central bank claims on the financial sector (Figure 5.d), the CBRA maintained inflation under control, in large part as a consequence of the reduction in net foreign assets and credit to the public sector. Yet, the relation between monetary and credit aggregates and the ultimate objective of monetary policy, inflation, shifted substantially. This was specially the case for the relation between M2 and inflation (Figure 6.b). The relation between credit aggregates (net domestic assets) and inflation also worsened, especially during March when the public lost confidence in the country's macroeconomic program (Figure 6.c).[20]

As regards interest rates, the transfer of free resources from sound banks to the BN so that it could inject liquidity into distressed banks allowed for a reduction in interbank rates after the sharp swing at the onset of the crisis. The large amounts of repos and swaps that the CBRA used from February 1995 onwards also contributed to the reduction in interest rates (Figure 4.d). This might have helped mitigate the negative impact of the banking crisis on economic growth.

---

[20]For more details on the impact of the Argentine banking crisis on monetary policy, see García-Herrero, 1997.

FIGURE 5
ARGENTINA
BANK DEPOSITS AND LIQUIDITY 1/

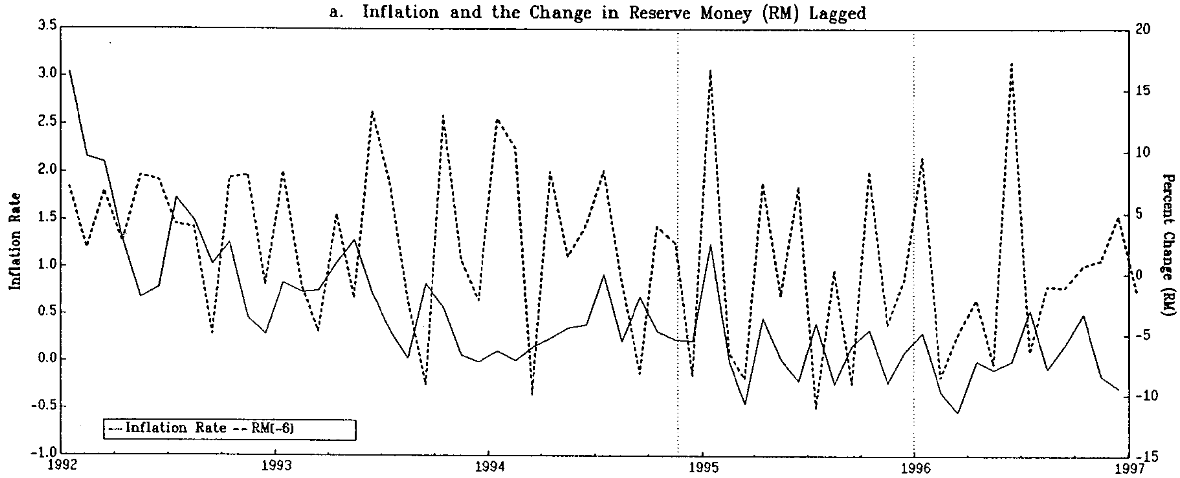


Source: International Financial Statistics.

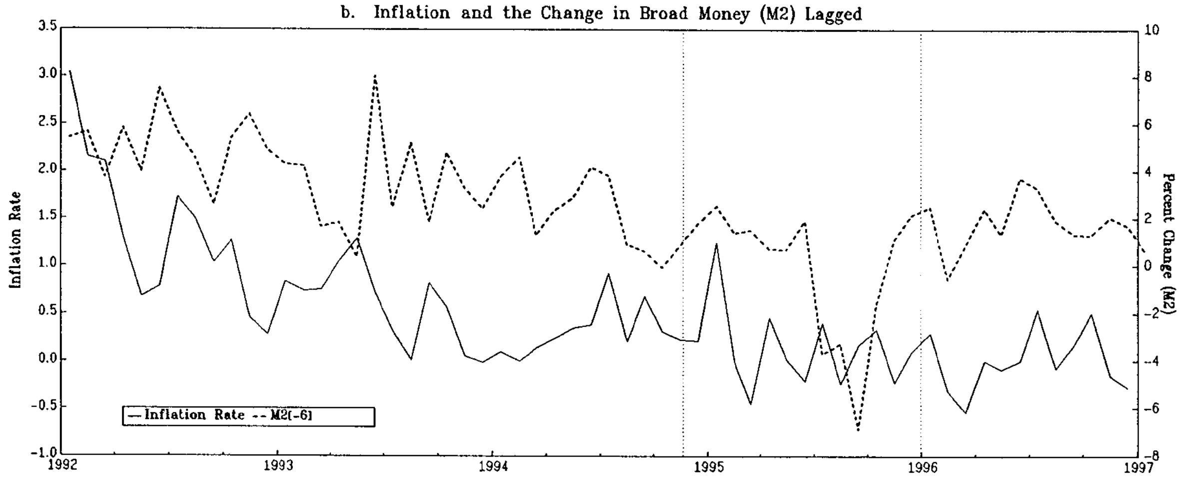
1/ Cash assets are banks' reserves in foreign or domestic currency, plus their liquid assets in foreign currency.

FIGURE 6
ARGENTINA
RELATIONSHIP BETWEEN MONETARY AND CREDIT AGGREGATES, AND INFLATION 1/

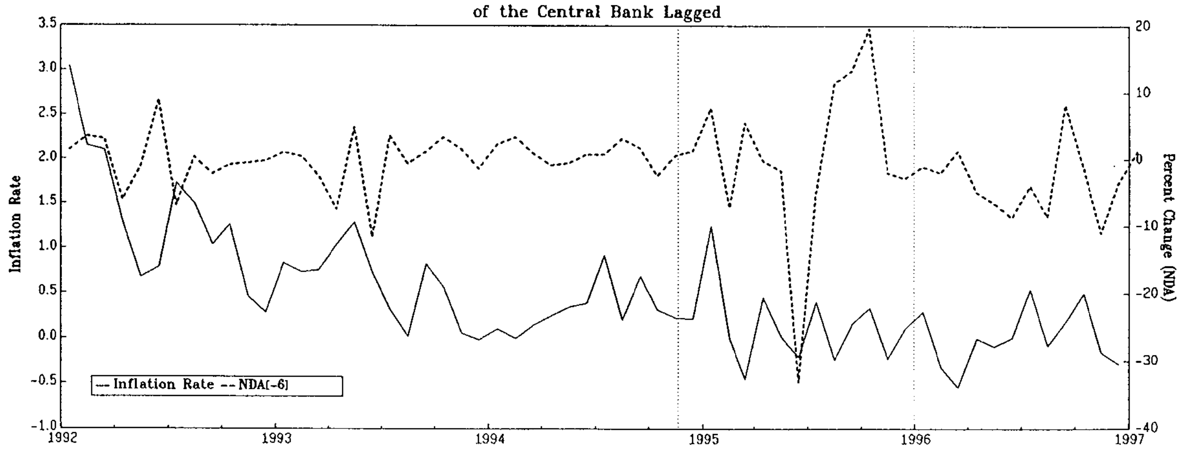
a. Inflation and the Change in Reserve Money (RM) Lagged



b. Inflation and the Change in Broad Money (M2) Lagged



c. Inflation and the Change in Net Domestic Assets (NDA)
of the Central Bank Lagged



Source: International Financial Statistics.

1/ Monthly data has been used. The closest relation between monetary and credit aggregates, and inflation was found with a six month lag for monetary and credit aggregates.

Fiscal policy

The economic recession that accompanied the banking crisis had a negative impact on budget revenues. The distressed situation of provincial banks complicated even more the financing of the provinces' budget. The authorities tried to strengthen the fiscal program, but were stymied by the recession in the real sector. The privatization process also slowed down, due to the deterioration of the economic environment.[21] External government debt increased due to the establishment of the two Trust Funds, at least for the part financed by multilateral institutions. The rest of the financing for the two Trust Funds increased domestic debt since it consisted of bonds issued by the government and mainly purchased by domestic banks.

Inflation and growth

The Argentine banking system had a relatively large negative impact on growth and no impact on inflation (Figure 1.d). While inflation decreased even further in the aftermath of the crisis, the real economy recovered less rapidly than financial markets. The sluggishness of the real sector was probably related to the persistent fall in private credit. In 1995, real GDP declined by 4.5 percent, and a gradual recovery of activity began only in early 1996. Unemployment jumped from 12.5 percent in October 1994 to an all-time high of 18.6 percent in May 1995. Despite these difficulties, the government maintained the thrust of its economic program.

The other potential strategy, exchange rate devaluation and a surge in inflation, was not considered as a realistic option by the Argentine authorities. Indeed, a devaluation strategy would have turned out to be much more costly in a country with such a large share of debt denominated in foreign currency.

E. The Banking System in the Aftermath of the Crisis

The sharp fall in the deposit base had a negative impact on the process of remonetization and financial deepening that Argentina had started in 1991.[22] After the general elections in May 1995, the deposit base started to recover, reaching the pre-crisis levels by December 1995 (Figure 3.a). This allowed for the cancellation of part of the CBRA's rediscounts and swaps, and some recovery in the level of cash assets held by banks (Figure 5.c).

---

[21]In 1995, privatization receipts were only half the amount projected for that year.

[22]M2 and credit as a percentage of GDP remained practically constant during the crisis due to the economic recession that the country underwent at that time. However M2 and credit declined in real terms (Figure 2.a and b).

High real interest rates and economic recession led to persistently falling profits[23] and some solvency problems in spite of the progress in bank restructuring. Nonperforming loans of the banking system—although related in a large part to more stringent loan classification regulations—reached 10 percent of total credit in October 1995, double the level in December 1994. At the same time, the reduction in bank credit to the private sector was substantial, reaching 5 percent during 1995, after having grown at an annual rate of 19 percent in real terms in the four years ending in 1994. Private credit continued to fall even after deposits had started to recover, and only resumed in the first half of 1996 but at a subdued pace compared to the growth in deposits.[24]

There were several factors behind the relatively slow recovery in bank credit.[25] As regards the supply of private credit, the deposit reflow was partially offset by a tightening of liquidity requirements and by risk-return considerations, including the increase in nonperforming loans. Both factors made financial institutions more prone to increase net lending to the public sector rather than the private sector and improve their net foreign asset position. Also, the concentration of bank activity in a smaller number of banks after the crisis appears to have reduced the amount of private credit offered.[26] Large banks were unable to maintain the level of credit that used to be provided by small institutions that failed or merged because of their lack of knowledge about the past situation of their new customers. Also, there were significant discrepancies in the composition of their portfolios among different types and sizes of banks. On the demand side, although credit responded positively to the decline in nominal interest rates in late 1995, the economic recession and high real interest rates delayed the full recovery in demand for credit.

Of the 205 financial institutions that existed at the onset of the crisis, only 160 continued to operate at the end of 1995. Thirty five small institutions (which held 9.5 percent of total deposits prior to the crisis) disappeared through mergers or take-overs, eleven (with 1.9 percent of total deposits prior to the crisis) had their rights to lend revoked, and one single new institution was authorized to start operations. The impact of the banking crisis was uneven across different types of banks. The deposit reflow accrued to the 15-20 largest private banks, most of them foreign-owned, while remaining banks recovered only modestly, still dependent on CBRA rediscounts and on loans from the safety net administered by the

---

[23]The banking system, which had remained highly profitable since 1994, accumulated US$117 million (or 0.3 percent of its assets) in losses, as of October 1995.

[24]When the interests on loans are subtracted from total credit, private credit was curtailed by a much larger amount.

[25]See Catão (1996), Cañonero (1996) and Machinea (1995).

[26]The five largest banks increased their deposit share from 36 percent in December 1994 to 47 percent in August 1995.

BN. Some of the wholesale banks, small private and cooperative banks experienced deposit losses of 35 percent during 1995. Government-owned national and provincial banks did not recover from the large loss in deposits in the first half on 1995, and ended the year with an average loss of 3 percent (Table 4). Thus, the banking system became more concentrated and even more segmented after the banking crisis. Apart from having a larger impact on specific types of financial institutions, the banking crisis affected most of those banks that had allowed for high interest rates and large deposit increases prior to the crisis. This path reflects that rapidly expanding banks with aggressive interest rate policies were perceived as more risky than the others.

Table 4. Argentina: Change in Banks' Balance Sheet
December 1994-December 1995

	Percentage Change, December 1994-December 1995					
	Government-Owned		Private		Other 1/	Total System
	National	Provincial	National	Foreign		
Total Assets	14.5	1.8	13.7	43.5	-35.6	11.0
Liquid reserves	-41.0	-51.4	-33.2	12.7	-62.2	-35.8
Private and public paper	299.8	34.2	149.6	184.0	161.2	152.0
Loans net of provisions	4.2	-3.8	2.1	12.7	-47.2	-2.0
Provisions	-18.8	5.6	52.6	5.1	-5.4	5.3
Other assets	45.1	45.7	55.4	153.0	4.8	57.5
Total Liabilities	17.5	5.5	13.9	45.4	-35.6	12.8
Deposits	-4.2	-2.2	2.5	11.0	-52.9	-4.5
Other obligations	46.1	21.2	33.5	125.5	27.4	45.8
Net worth	6.2	-25.3	12.5	30.9	-38.1	1.6

Source: National authorities and Fund documents.

1/ It includes wholesale banks and bond traders.

IV. The Paraguayan Banking Crisis

A. Situation Before the Crisis

Macroeconomic situation

During most of the 1980s, the Paraguayan financial system was affected adversely by an unstable macroeconomic environment and policies of financial repression, such as interest controls. A change in the political regime in 1989 was followed by a major shift in financial policies. Reforms included the unification of the exchange rate and floating of the guaraní, the liberalization of interest rates during 1990-91, the introduction of market-based monetary instruments, and the elimination, at least partially, of selective credit controls. To continue to manage liquidity under the more liberalized financial environment, the Central Bank of Paraguay (CBP) began to carry out open market operations in October 1990 using its own short-term debt instrument. At the same time, it reduced the use of rediscount operations, which had constituted a significant source of monetary expansion during the 1980s. Rediscounts at subsidized rates to the National Development Bank were phased out in 1993.

Additional reforms included the authorization of foreign currency loans by local banks for export in 1991 and for import substituting activities in 1992, as well as the harmonization and gradual reduction of reserve requirements during 1992-94.[27]

These policy changes, accompanied by an improvement in general economic conditions (Figure 7), resulted in a reversal of the declining trend in financial deepening that had been observed in the previous years. The ratio of broad money (M2) to GDP increased from 17 percent in 1988 to 30 percent of the GDP in 1993 (Figure 8.a).[28] It should be noted that a major element driving the growth of deposits since 1993 was the decision to move the deposits of public enterprises and the Social Security Institute out of the CBP into the private financial system. In reality, the private sector continued to operate in large part through the informal financial sector, a major channel of financial intermediation in Paraguay.[29] The volume of credit channeled by the banking system increased from 10.4 percent of GDP in

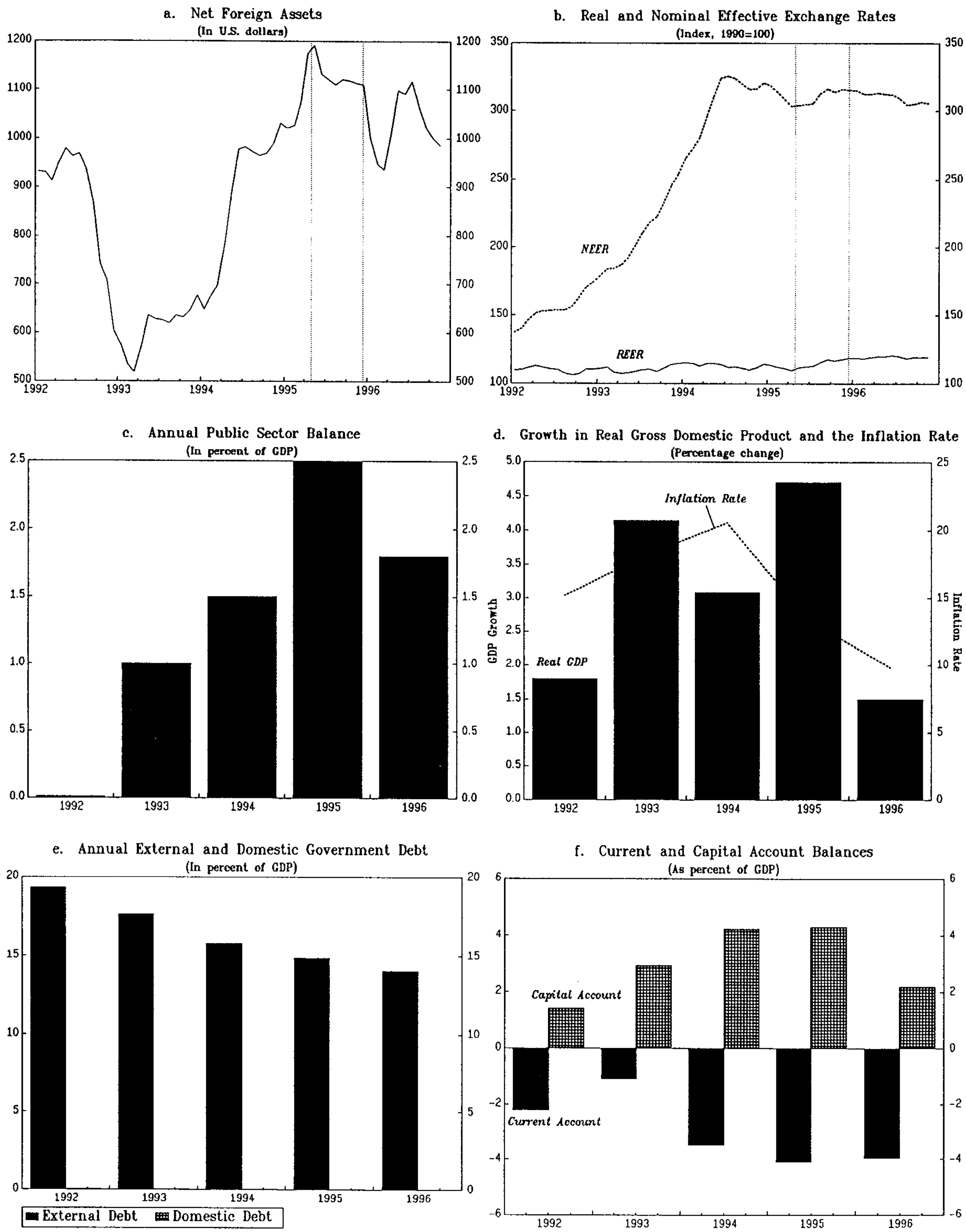
---

[27]While reserve requirements on domestic currency deposits were reduced from 42 to 30 percent, those on foreign currency deposits were raised from 15 percent in 1990 to 30 percent. Yet, the net impact was a reduction in the average reserve requirement ratio.

[28]As in the case of Argentina, the broad monetary aggregate chosen includes foreign-currency deposits and is called M2 for simplicity.

[29]Even if decreasing, the share of informal financial institutions continued to be very large compared to neighboring countries.

FIGURE 7
PARAGUAY
MACROECONOMIC DEVELOPMENTS



Sources: International Financial Statistics, Information Notices Service, and staff estimates.

1988 to over 20 percent in 1994 (Figure 8.b). This strong expansion largely reflected sizable private capital inflows as well as central bank rediscounts to the agriculture sector from 1991 to 1993 and then to commerce from 1993 onwards.

The degree of dollarization, in terms of dollar deposits to total deposits, rose sharply from 3 percent in 1988 to 32 in 1993, thanks to the positive real interest rates on dollar time deposits. The share of dollar deposits to total deposits decreased somewhat in 1994, reflecting changes in reserve requirements which favored guaraní deposits (Figure 9).[30]

Financial liberalization also increased real interest rates on certificates of deposit from highly negative levels in the late 1980s to positive levels. In the year before the crisis, interest rates grew substantially in real terms (Figure 10).

Banking sector developments

Prior to 1980, the Paraguayan banking system was largely composed of foreign banks. During the 1980s, a number of domestic banks and finance companies started to operate holding a small share of deposits. In the late 1980s and 1990s, the lax entry requirements in the law, resulted in a large increase in the number of domestic banks and finance companies operating in the system. However, the legal framework as well as bank supervision, were not strengthened at the same time so as to facilitate the exit of distressed financial institutions. As of December 1994, the Paraguayan banking system was clearly over-banked, with approximately 100 financial intermediaries, including banks and financial companies.[31] Although this helped to decrease the degree of informal financial intermediation, it also resulted in a wide dispersion in the size of financial institutions, and limited gains from economies of scale.[32] Such a situation made stricter banking supervision all the more pressing. Table 5 briefly describes the situation of the Paraguayan banking system prior to the crisis.

---

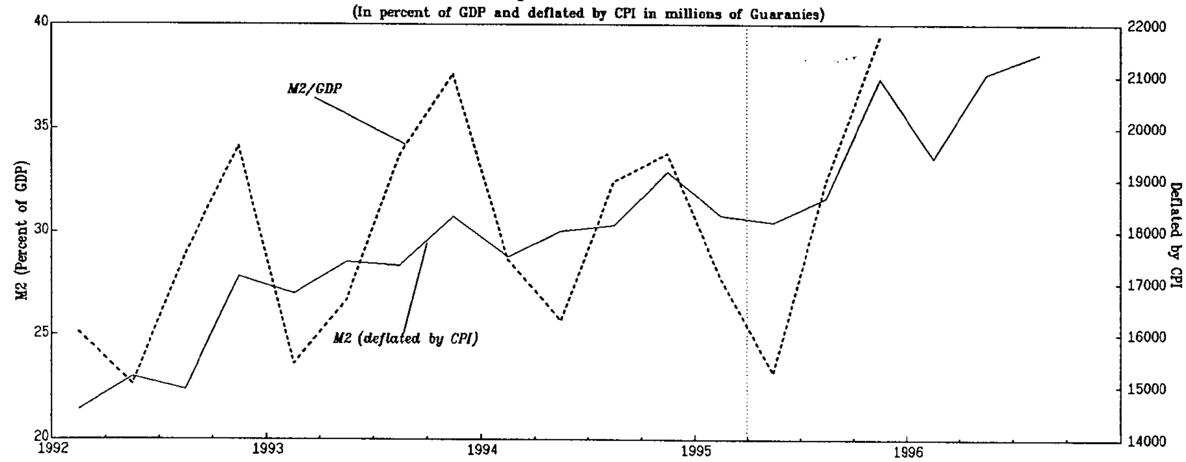
[30]In order to stop the expansion of dollar deposits and discourage excessive capital inflows, the Central Bank started to remunerate legal reserve requirements on local currency deposits from June 1992. Also, in 1993, legal reserve requirements on guaraní deposits were reduced further to 25 percent, and then to 18 percent in September 1994. In October 1994, the Central Bank started to remunerate legal reserve requirements on guaraní deposits in excess of 10 percent. As a result, the interest differential in favor of dollar deposits that existed prior to 1994 was gradually reversed.

[31]Banks and finance companies mobilized 92 percent of financial resources; savings and loans associations mobilized the remaining 8 percent.

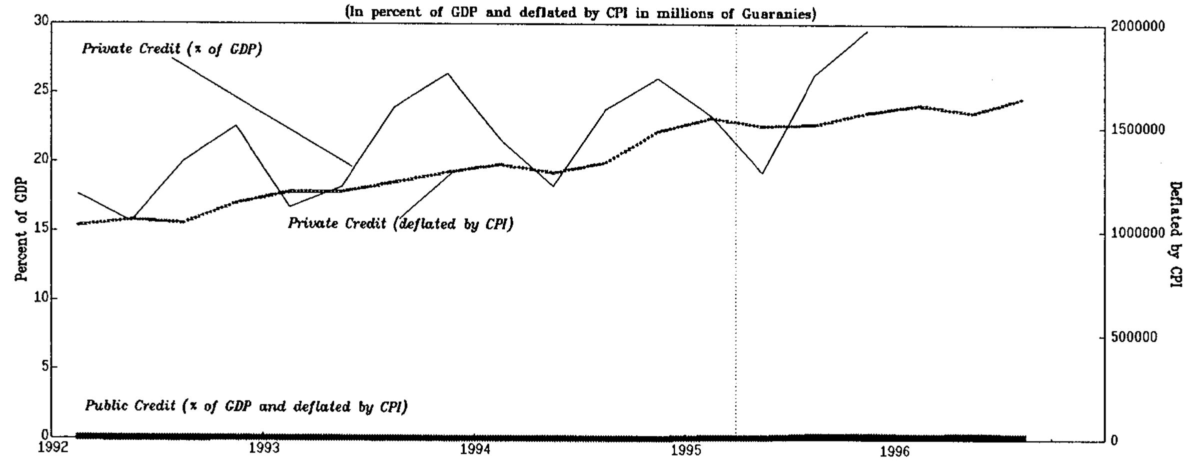
[32]Administrative costs were about twice as large per unit of assets in the smaller banks than in the larger ones, as of end-1994.

FIGURE 8
PARAGUAY
MONETARY AND CREDIT DEVELOPMENTS 1/

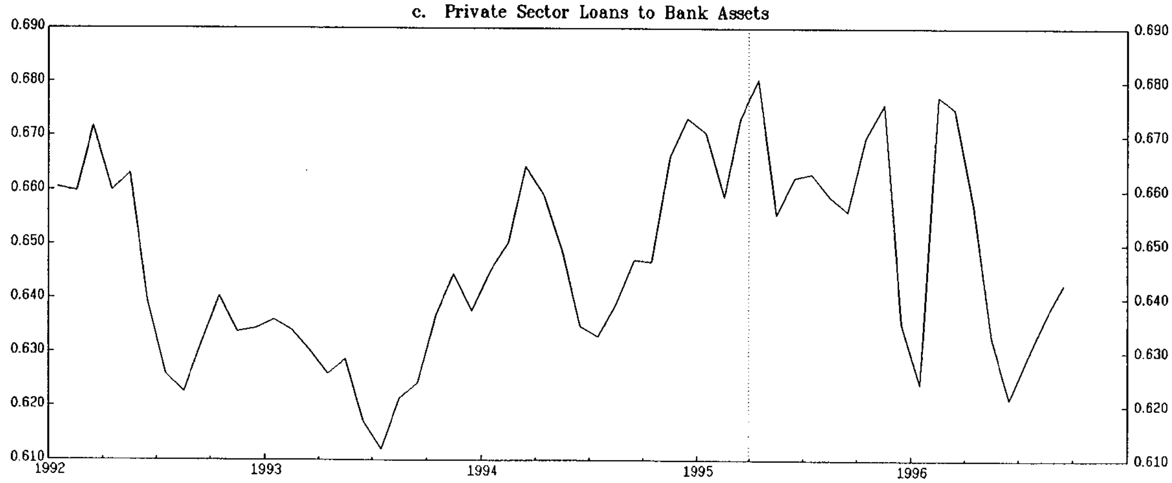
a. Degree of Intermediation
(In percent of GDP and deflated by CPI in millions of Guaranies)



b. Private and Public Credit
(In percent of GDP and deflated by CPI in millions of Guaranies)



c. Private Sector Loans to Bank Assets

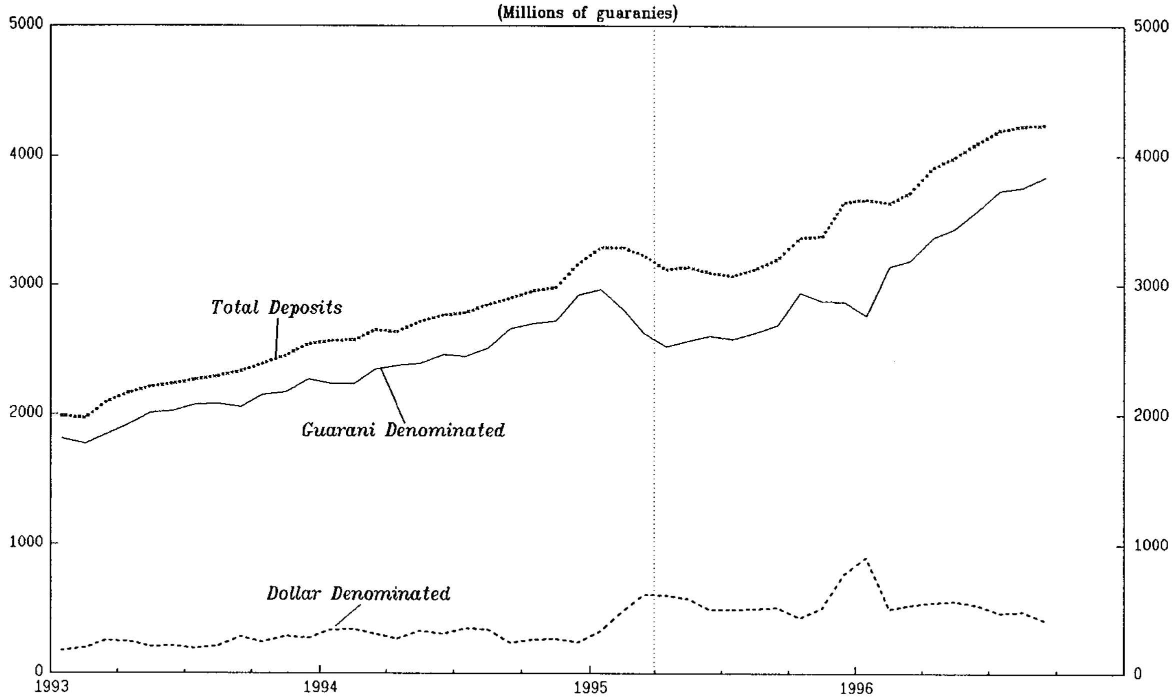


Source: International Financial Statistics.

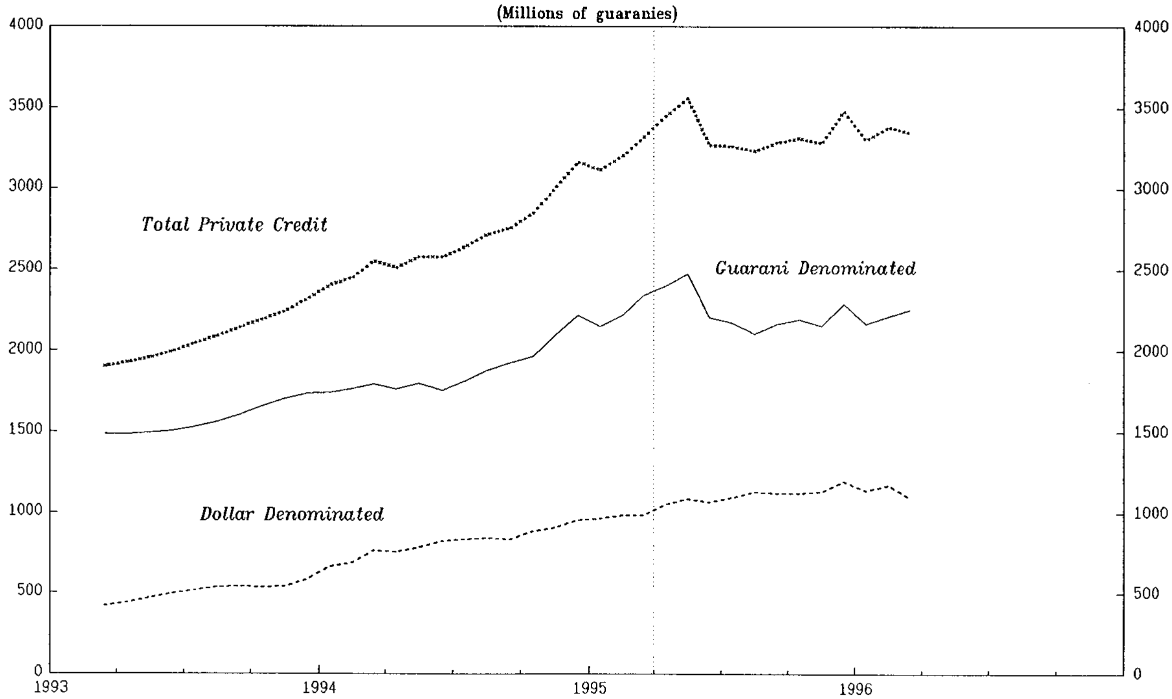
1/ Quarterly GDP provided by the national authorities.

FIGURE 9
PARAGUAY
GUARANI AND DOLLAR DENOMINATED DEPOSITS AND PRIVATE CREDIT

a. Guarani and Dollar Denominated Deposits
(Millions of guaranies)

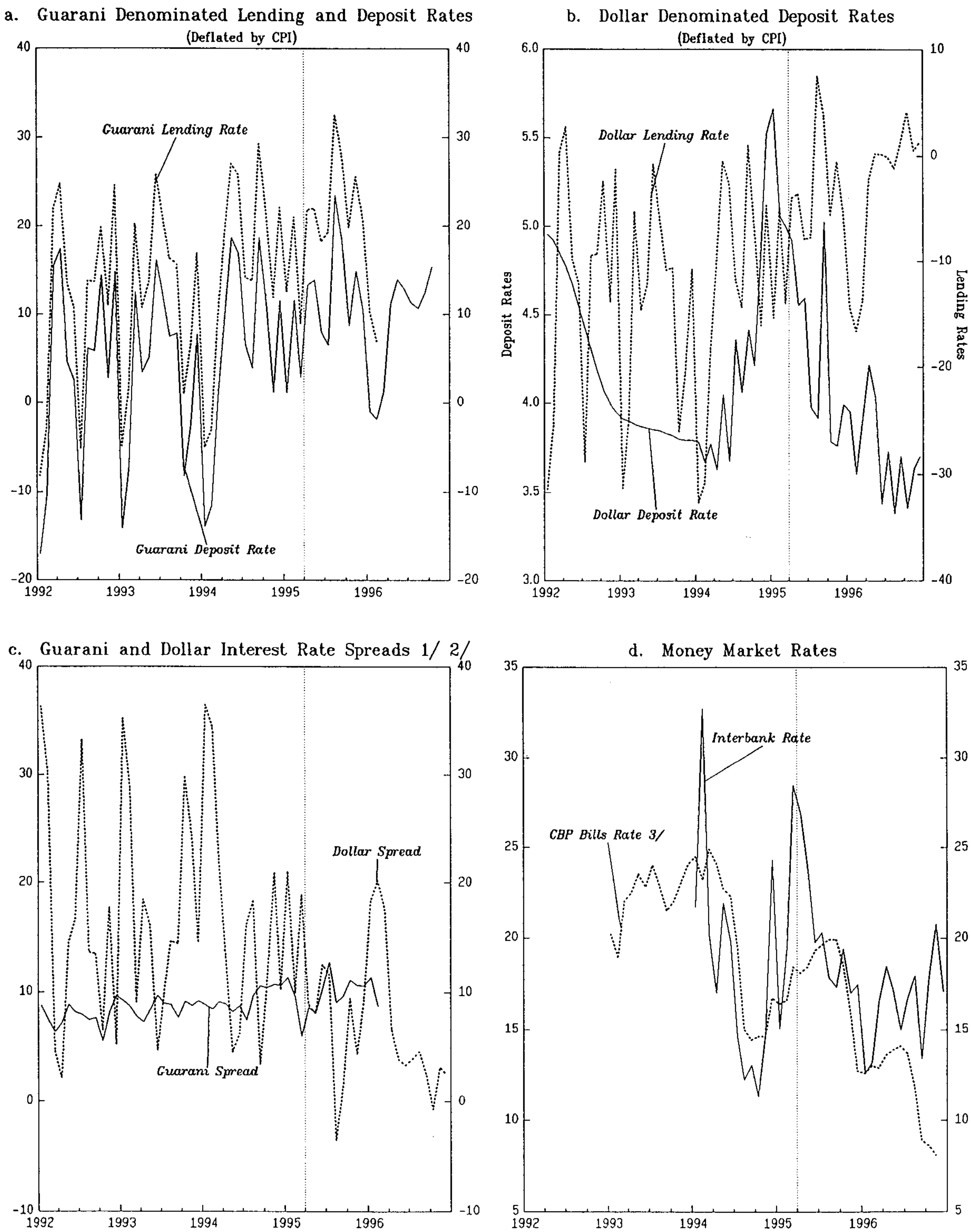


b. Guarani and Dollar Denominated Private Credit
(Millions of guaranies)



Source: Country authorities and International Financial Statistics.

FIGURE 10
PARAGUAY
INTEREST RATE DEVELOPMENTS 1/



Source: International Financial Statistics and staff estimates.

1/ The yearly average dollar interest rate is interpolated from annual data for 1992-1993.
2/ Spreads are calculated as lending rate minus deposit rate.
3/ The interest rate on bills issued by the Central Bank of Paraguay (CBP).

Table 5. Paraguay: Selected Balance Sheet Items as of December 1994
(Percent of Total)

Balance sheet items	Domestic Banks	Foreign Banks	Public Banks	Total Banks	Finance Companies	Total (Billions of Guaraníes)
Assets	41	36	16	93	7	5263
Deposits	38	43	12	93	7	3493
Net Worth	37	33	14	84	16	856

Source: National authorities and Fund documents.

Despite the positive macroeconomic developments and the increase in the levels of intermediation, the level of capitalization of the Paraguayan banking system remained very low. In fact, the ratio of the system's net worth to total assets only increased from 14 to 16 percent from 1988 to 1994. Interest rate spreads continued to be large and increased sharply during the months before the crisis (Figure 10c). The large spreads not only reflected the implicit tax arising from relatively high reserve requirements, even if a certain proportion was remunerated, but also the need to cover losses from nonperforming loans, which increased by 200 percent in the seven months before the crisis.[33]

Progress in banking supervision during the liberalization process was slow, especially the enforcement of capital requirements and minimum entry capital. In this latter regard, many small banks and financial companies entered the system during the period of financial liberalization with very low levels of capital. Although the Superintendency of Banks was aware of the distressed situation of part of the financial system, it was not allowed to apply the appropriate sanctions by the political authorities.[34] Meanwhile, the CBP continued to give credit to problem banks, while requesting shareholders to provide additional capital. However, this capital never materialized. A system of loan risk classification was introduced in December 1992, but was resisted by the banking system. In fact, several institutions managed to obtain a five-year grace period to comply with the loan risk classification requirements. In addition, there was growing evidence of high credit concentration and of insider lending

[33]Financial companies had even larger interest rate spreads than banks prior to the crisis, ranging from 10 to 12 percentage points.

[34]Already in 1989, the Superintendency had assessed that about a third of the banking system was practically insolvent. The law at this time seriously limited the authorities' ability to act.

practices. In late 1994, a number of undercapitalized institutions were authorized to remain in operation under the condition that they would start making annual provisions equivalent to 20 percent of the amount legally required by the loan classification scheme. Yet, in March 1995, ten of the thirty-four banks in the system continued to present capital deficiencies.

B. Crisis Developments

The banking crisis broke up in May 1995, following a highly publicized accounting discrepancy of about US$4 million in the value of local currency held in the CBP's vault. This event shook public confidence. Additionally, the third and fourth largest commercial banks in terms of deposits, Banco General and Bancopar, were unable to meet their clearing obligations and the CBP decided to intervene them, while keeping them open to the public. These two banks had been pursuing aggressive lending policies, and were in the group that the Superintendency had identified as having capital deficiencies in 1994. Also, both banks had been heavy users of financial resources in the interbank market, and had received large shares of public sector deposits. In June, another commercial bank, Bancosur, and a finance company were intervened. In July, a small commercial bank, Banco Mercantil, two finance companies, and a savings and loans association were intervened as well. Altogether, these banks together with the distressed financial companies and the savings and loans association, amounted to over 15 percent of the financial system's deposits. Finally, in November 1995, three more finance companies were intervened.

Although some of the problems of the intervened institutions had been known to the Superintendency for quite some time, subsequent investigations revealed that widespread mismanagement and fraud practices had been carried out in these banks. Many of the assets recorded in these institutions' books were nonexistent, more than half of their loans were made to related parties, and only a fraction of the banks' liabilities had been registered as such. Indeed, a large number of unrecorded deposits were found off-balance-sheet in the banks' second book-keeping system. Unrecorded deposits were of two different natures: the so-called "grey" deposits, for which adequate documentation existed but had been recorded off-balance-sheet, and the so-called "black" deposits, based on inadequate documentation, such as promissory notes and alike. Unrecorded deposits (grey and black) were a widespread practice in Paraguay before the crisis started, not only at the intervened banks but at most Paraguayan banks and some foreign banks as well. This was to avoid the implicit taxation of the high reserve requirements as well as the direct taxation on earnings.

Following the intervention of the two first banks in late May, there was a massive withdrawal of deposits from private domestic banks as a group, and from intervened banks in particular. To avoid a run on the entire banking system and a failure of the payments system, the BCP provide distressed banks with massive liquidity support. Because of the reluctance of sound banks, especially foreign banks, to channel their excess liquidity through the interbank market, the CBP's window was the main source of liquidity for distressed banks. About half of the borrowing from the CBP was used by intervened banks to offset deposit withdrawals, and the other half to cover the call loans outstanding with other financial institutions and short-term external obligations. In addition, pressure started to mount from other organized sectors for special lines of credit to ease the perceived "liquidity shortage" and for longer term credit facilities for investment projects directly or indirectly through banks.

Notwithstanding the massive withdrawals of deposits from the distressed banks, the decline in the deposit base at end-1995 was very small, about 2 percent. This was in good part due to the CBP's massive injections of liquidity into distressed banks. The substantial flight to quality that occurred, from distressed banks to foreign and government-owned banks perceived as having full guarantee either from their headquarters or the government, also acted as a buffer on the fall of deposits. In addition to the flight to quality, previously unrecorded deposits began to be entered into the banks' records because of concerns about the legality of such claims in the event of further bank failures. The amount of unrecorded deposits that appeared on the banks' balance sheets was large and, together with the CBP's liquidity injection, cushioned the decline in the deposit base (Figure 11.b).

The closure of the financial companies had an additional negative impact on public confidence and on the functioning of the payments system because it raised concerns about the security of the investment bills issued by these entities. These investment bills were frequently used by a large share of the population as a transferrable instrument to settle payments. According to the banking legislation, such instruments, although subject to reserve requirements, were not covered by the same explicit guarantee as that extended by the CBP to savings deposits. Concerns also appeared on the validity of post-dated checks, frequently used by the retail sector as short-term lines of credit. For this reason, although the five finance companies held a small share of total deposits, their closure had a large negative impact on the functioning of the payment system, particularly for small businesses. Finally, the delays in the payment of depositors from the intervened banks led to deposit withdrawals from other banks that were perceived as weak by the public.

C. The Authorities' Response to the Crisis

After the intervention of the four banks closed in mid-1995, the Paraguayan government assumed ownership and the banks' shareholders lost their stake. The banks continued to operate but under new management,[35] honoring the withdrawal of deposits with financing provided by the CBP. This financing was provided under the Central Bank Law in place before the crisis started, which did not put limits to the CBP's lending to ailing banks. The Central Bank Law was modified in the second semester of 1995 and limits were introduced to the CBP's LLR facilities.[36]

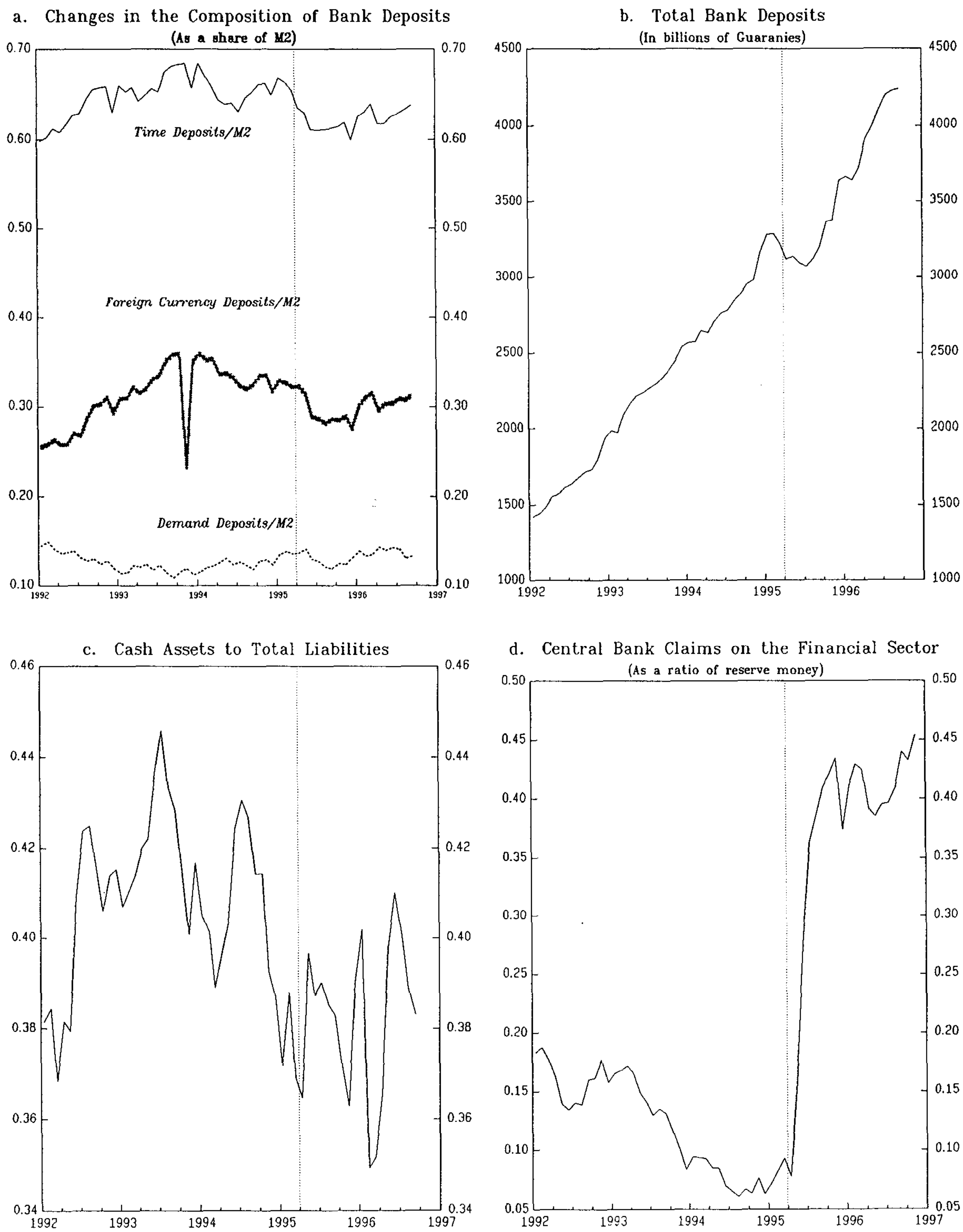
---

[35]Some of the Superintendency's staff became managers of these banks.

[36]The new Banking Law established that a special decree would be required for the CBP to give massive assistance to ailing banks.

FIGURE 11
PARAGUAY

BANK DEPOSITS AND LIQUIDITY 1/



Source: International Financial Statistics.

1/ Cash assets are banks' reserves in foreign or domestic currency, plus their liquid assets in foreign currency.

To re-establish public confidence in the domestic banking system, and to stop the deposit withdrawals from the intervened institutions, the CBP announced it would stand behind the deposits and other liabilities of the banks, despite the absence of a formal system of deposit protection at the time. Although the intention at the beginning was to honor only recorded deposits in full, holders of unrecorded deposits put pressure on the government to have their deposits covered as well. The pressure exerted by holders of unrecorded deposits, and the overriding importance that the authorities gave to reestablishing confidence, led to Congressional approval of a Law in late 1995, granting the restitution of unrecorded deposits. Although this Law was vetoed by the President, in May 1996 Congress overrode the President's veto, forcing the Government to appeal to the Supreme Court against the decision taken by Congress. In the meantime, the CBP tried to cover only recorded deposits from the intervened banks.

Because the overall situation of distressed banks was not improving, in June 1995 the authorities decide to create a new CBP facility to facilitate borrowing by distressed institutions. The so-called Bank Safety Net was conceived to recycle liquidity from those banks that were experiencing deposit increases to those that were losing deposits. Under such a mechanism, distressed banks would use loans as collateral to obtain funds from banks with excess liquidity. The CBP was to act as a broker between lending and borrowing institutions, certifying the quality of the loans being placed as collateral by the latter. However, institutions with excess reserves were reluctant to assume the risk of lending to other local banks, which obliged the CBP to provide the liquidity itself, by giving rediscounts to distressed institutions for a period of 90 days, extendable to 180 days. The facility had been designed in such a way that, to have access to this facility, financial institutions had to prove that their financial distress resulted from unexpected deposit withdrawal brought about by the crisis. In reality, rediscounts were given more freely than planned and, thus, the CBP became a provider of nearly-automatic credit. By end-1995, the amount of CBP credit given to intervened and distressed banks in rediscounts reached ₲700 billions or 4 percent of the GDP (Figure 11. d). From this amount, about 80 percent was directed to the four intervened banks.

Despite the large amounts of credit provided by the CBP, the situation of distressed banks did not improve. In June 1996, the authorities decided to extend the scope of the CBP's LLR facility, and provide longer-term credit. Under the new facility, the CBP could provide credit to distressed banks (defined as those having lost at least 50 percent of their capital) for a maximum of 6 years, provided they complied with a rehabilitation plan. The authorities' decision to create this long-term facility stemmed, at least in part, from the continuous requests by organized sectors for special lines of credit and for longer term credit facilities for investment projects. In November 1996, because of the acute liquidity problems in some of the ailing institutions that had not managed to comply with their rehabilitation programs, the CBP started a program of repurchasing bad loans. The assistance provided to banks through these new facilities amounted to 1.1 percent of GDP in 1996.

An additional measure to boost confidence was taken in June 1996 when a new Banking Law was passed, making deposit insurance compulsory for all banks. However, the low limit imposed on the deposit insurance, about US$2,500 per account, did not help reduce the public mistrust of the banking system. The responsibility for funding the scheme was fully ascribed to the government budget rather than to banks, creating additional moral hazard problems.[37] In late December, the Supreme Court finally decided against the President's appeal to the Law, and allowed the payment of the deposit guarantee on unrecorded deposits up to US$15,000 per account.

In sum, given the overriding objective of financial stability and a comfortable macroeconomic position, especially on the fiscal side, the Paraguayan authorities took all possible measures to enhance the depositors' confidence in the banking system and to avoid deposit flight, in spite of the quasi-fiscal cost that such measures entailed (Table 6).

D. Macroeconomic Impact of the Crisis

Monetary policy

The ₲700 billion provided by the CBP in financial assistance by end-1995 was equivalent to more than 40 percent of reserve money. Despite this massive injection of credit, currency in circulation expanded only by ₲24 billion because of the fall in international reserves at the peak of the crisis, the reduction in net credit to the public sector, the increased bank reserves, and the aggressive use of open market operations to sterilize the liquidity injection.[38]

In the second half of 1995, currency in circulation—the CBP's monetary target—exceeded program levels by 15 percent (or ₲100 billion) because of the large deposit withdrawals at the onset of the crisis.[39] Although the increase in the demand for currency was temporary, the authorities' decision not to accommodate the money supply, implied a contraction in monetary policy. Foreign reserves were used as an additional instrument to absorb liquidity, falling by ₲145 billion between May to August 1995, the peak of the crisis. Eventually, foreign reserves increased by about US$60 million by end-1995 due to favorable external conditions and seasonal factors. In late 1995, reserve requirements were reduced slightly on long-term

---

[37]In reality, moral hazard problems exist even when banks are ascribed the responsibility for funding the deposit insurance scheme, unless each bank pays according to its individual riskiness.

[38]Between end-April and end-October 1995, net placements of Central Bank paper through open market operations resulted in a nearly sixfold increase in the stock outstanding .

[39]In reality, it was already off-track when the crisis erupted (currency in circulation was about ₲75 billion—10 percent—above program) but the situation became worse during the crisis.

Table 6. Paraguay: Measures to Increase Confidence in the Banking System

Date	Measures
4-7/95	Intervention of 4 banks, 6 finance companies and a savings and loan association, but maintaining them open so that all registered deposits could be honored.
7/95	BCP announcement of full implicit guarantee of all deposits in the financial system.
mid-95	Congressional Law granting the restitution of unrecorded deposits as well, but thereafter appealed by the President.
mid-95	Creation of a special LLR facility , the "Bank Safety Net," to provide the banking system with liquidity.
6/96	Expansion of the CBP's LLR facility to longer-term credits linked to the rehabilitation of distressed financial institutions.
6/96	Passage of a new Banking Law, making deposit insurance compulsory for all banks. An amount of US$2,500 guaranteed per account.
11/96	CBP's purchase of loans to distressed banks.
12/96	Adoption of the Congressional Law granting the restitution of unrecorded deposits up to US$1,500 per account.

Source: National authorities and Fund documents.

deposits, with the view of contributing to the lengthening of the average maturity of the deposit base. In July 1996, reserve requirements were reduced again but to a larger extent both on guaraní and dollar deposits.[40] Table 7 summarizes the use of monetary instruments by the CBP to manage liquidity since the onset of the crisis.

In spite of the pronounced recovery in deposits in late 1995 and 1996, bank credit to the private sector stagnated. Banks remained reluctant to lend whatever their liquidity position. The further segmentation of the banking system and the increase in the share of deposits held

[40]Reserve requirements were reduced from 18 percent to 15 percent on guarani deposits and from 20 percent to 27 percent on dollar deposits.

by foreign-owned banks as a consequence of the crisis may have contributed to these credit developments. Also real interest rates remained high due to the lingering problems in the financial sector.[41]

Table 7. Paraguay: Use of Monetary Instruments to Manage Liquidity

Instruments to Inject Liquidity	Instruments to Absorb Liquidity
CBP overdraft	Central Bank paper
Bank Safety Net	High reserve requirements
CBP longer term credit linked to banks' rehabilitation programs	Sales of foreign reserves
CBP purchase of banks' loans	

Source: Fund documents.

Fiscal policy

Monetary policy was supported by a cautious fiscal stance that contributed to a significant reduction in central bank credit to the public sector while the banking crisis was underway. This clearly helped dampen inflationary pressures. However, the costs of the crisis were not fully incorporated in the public sector budget and remained on the CBP's balance sheet. The loans purchased from distressed and intervened institutions were kept on the CBP's balance sheet as performing, even if they were unrecoverable.[42]

Inflation and growth

The Paraguayan banking system had a relatively small impact inject on inflation and economic growth (Figure 7.d). The restrictive monetary policy, coupled with a cautious fiscal policy, dampened the price pressures that could have been expected from the increase in the volume of currency in circulation. In fact, the tight monetary policy resulted in low rates of growth of the monetary aggregates, leading to a lower than programmed inflation rate for 1995 (10.5 percent rather than 12 percent). Indeed, Figure 12.a shows that the relationship between currency, the CBP's intermediate monetary target, and inflation shifted substantially during crisis period. This would have called for a closer look at a broader monetary aggregate, at

---

[41]For more details on the impact of the Paraguayan banking crisis on monetary policy, see García-Herrero, 1997.

[42]A preliminary estimate of these unrecoverable loans is equivalent to 3 percent of GDP.

least during the banking crisis giving its relatively closer relationship to inflation during the period (Figure 12.b). Looking at the exchange rate development may also have provided the authorities with more information about the actual monetary stance (Figure 12.c).

As regards exchange rate developments, following their managed-float exchange policy, the authorities were able to maintain the guaraní more or less steady against the U.S. dollar, which also contributed to the low rate of inflation.[43]

The restrictive monetary policy, coupled with the shortage of private credit, led to a slow-down in economic activity, which continued in 1996. The break-down in the payments system from the malfunctioning of retail transaction instruments may also have had a negative impact on economic growth. The sharper reduction in economic growth in 1996 was related to other factors as well, especially external shocks, such as the slowdown in foreign demand from neighboring countries and the restrictions imposed by Brazil on entrepot trade.

E. The Banking System in the Aftermath of the Crisis

After the crisis erupted, bank interest rate spreads rose, reflecting widespread uncertainty. Real interest rates also increased but fell again to previous levels after the first months of the crisis (Figure 10). This was mainly due to the large injections of liquidity by the CBP.
The structure of the financial system was clearly affected by the crisis. As shown in Table 8, there were increases in the share of deposits, assets and net worth held by foreign-owned banks, as well as government-owned banks, from end-1994 to end-1995. In sum, the impact of the crisis was uneven across different types of banks and the banking system became more concentrated and segmented.

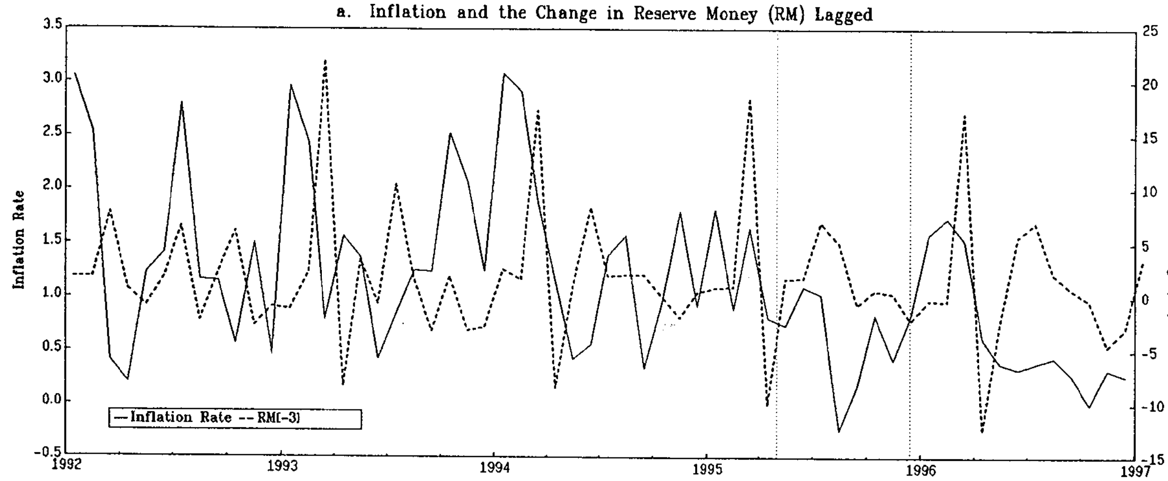
Domestic private banks reduced their deposit share in the Paraguayan financial system. The increase in deposits at foreign banks was one of the reasons for the slow recovery in private credit. This occurred because the type of borrowers that used to operate with the distressed institutions (small borrowers and local firms) were too different from the usual borrowers at foreign-owed banks (large international corporations), and foreign-owned banks did not want to take the risk of accepting borrowers from the failed institutions (mostly small and local borrowers).

---

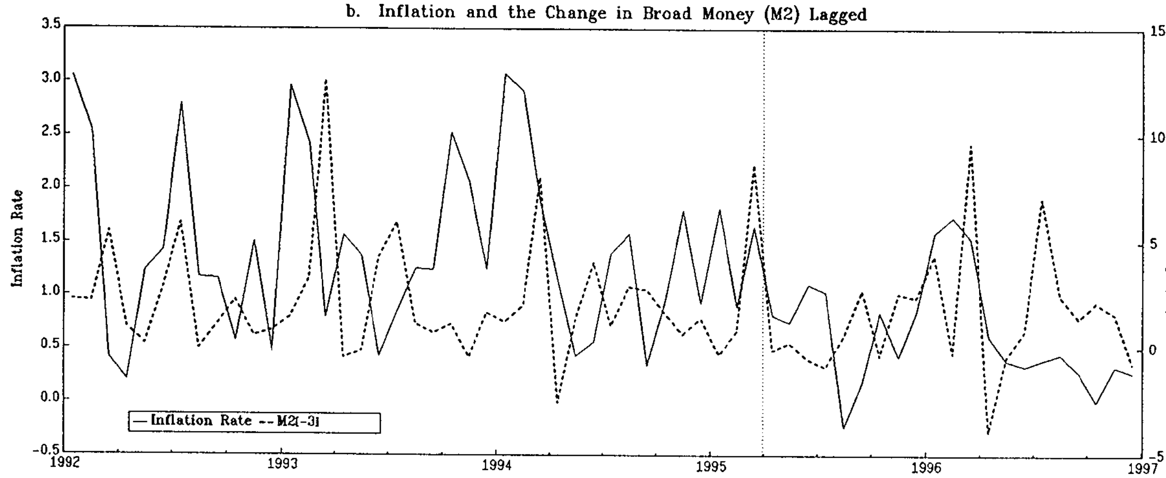
[43] As Figure 7.b shows, the real exchange rate remained very stable considering that there was a crisis situation.

FIGURE 12
PARAGUAY
RELATIONSHIP BETWEEN MONETARY AND CREDIT AGGREGATES, AND INFLATION 1/ 2/

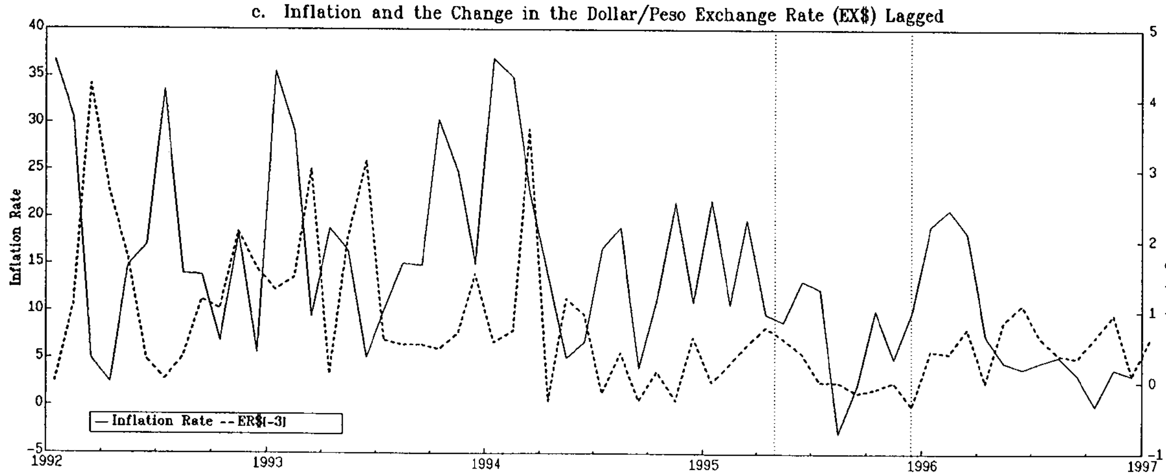
a. Inflation and the Change in Reserve Money (RM) Lagged



b. Inflation and the Change in Broad Money (M2) Lagged



c. Inflation and the Change in the Dollar/Peso Exchange Rate (EX$) Lagged



Source: International Financial Statistics.

1/ Monthly data has been used. The closest relation between money and inflation, and the exchange rate and inflation was found with a 3 month lag for money and the exchange rate.
2/ The relation between NDA and inflation was not chosen because Paraguay did not have a Fund program at the time of the crisis.

Table 8. Paraguay: Selected Balance Sheet Items, as of October 1996
(Percent of total, and as a percentage change from
December 1995 between parentheses)

Balance sheet items	Private Domestic Banks	Foreign Banks	Gov't Owned Banks	Total Banks	Finance Companies	Total Financial Sector
Assets	32 (36)	42 (23)	17 (29)	92 (58)	10 (-1)	100 (26)
Deposits	34 (28)	44 (22)	13 (26)	93 (64)	9 (-6)	100 (22)
Net Worth	49 (-53)	29 (31)	10 (15)	85 (43)	12 (7)	100 (-14)

Source: National authorities, Fund documents, and author's calculations.

V. The Venezuelan Banking Crisis

A. The Situation Prior to the Crisis

Macroeconomic situation

During 1980s, the Venezuelan economy performed poorly. Real GDP growth averaged only about 1 percent in 1980-88 (compared with more than 4 percent in the previous decade), while the average rate of inflation increased from 6 percent to 24 percent. Monetary policy objectives were subordinated to the goals of maintaining low and stable interest rates, and to channeling subsidized credit to priority sectors such as agriculture, housing, and the government. In this context, real interest rates became increasingly negative, which encouraged disintermediation and strong capital outflows. Dollarization did not spread within the country, but in the late 1980s Venezuelan residents started to transfer large amounts of their domestic accounts to the off-shore banking system, which contributed to a sharp fall in intermediation.

In early 1989 the Government initiated a major program of macroeconomic adjustment and economic reform, supported by the Fund. Measures included the unification and floating of the exchange rate, and the shift from direct to market-based instruments of monetary control, including abandoning interest controls. Interest rates increased sharply to become positive in real terms in late 1989, and the demand for broad money recovered substantially in 1990-91.

Commitment to the adjustment efforts slackened markedly after 1990 and the authorities resorted increasingly to maintaining a fixed exchange rate to contain inflationary pressures. The resulting inconsistency between financial and exchange rate policies and the two coup attempts in 1991 contributed to a steady decline in real broad money demand in the last months of 1991. Subsequently, the economy became more vulnerable to periodic episodes of capital flight, particularly following increasing political instability in 1992. At the same time, efforts to reduce interest rates and stabilize the exchange rate failed and an exchange rate crisis occurred in October 1992.[44]

At the beginning of 1993, a weak oil market, a persistently lax fiscal policy, and increasing political tensions affected public confidence and contributed to the pressures on the bolívar. After a sharp loss in reserves, the Central Bank of Venezuela (CBV) tightened credit considerably, engineered a sharp rise in interest rates, and implemented, *de facto,* a crawling peg vis-à-vis the dollar (Figures 13.a and b). During the second half of 1993, monetary policy was eased somewhat after the sharp contraction early in the year, because of concerns about the mounting nonperforming loans of the financial sector. Nonetheless, lending interest rates remained high because of the risk premium associated with economic and political uncertainty, as well as the rise in the level of nonperforming loans in the banks' balance sheets. Under such unstable conditions, the demand for real broad money declined again in 1993 as the economy contracted (Figure 14.a). At the same time, the off-shore banking sector continued to grow through funds received from Venezuelan residents who fled the domestic banking system.

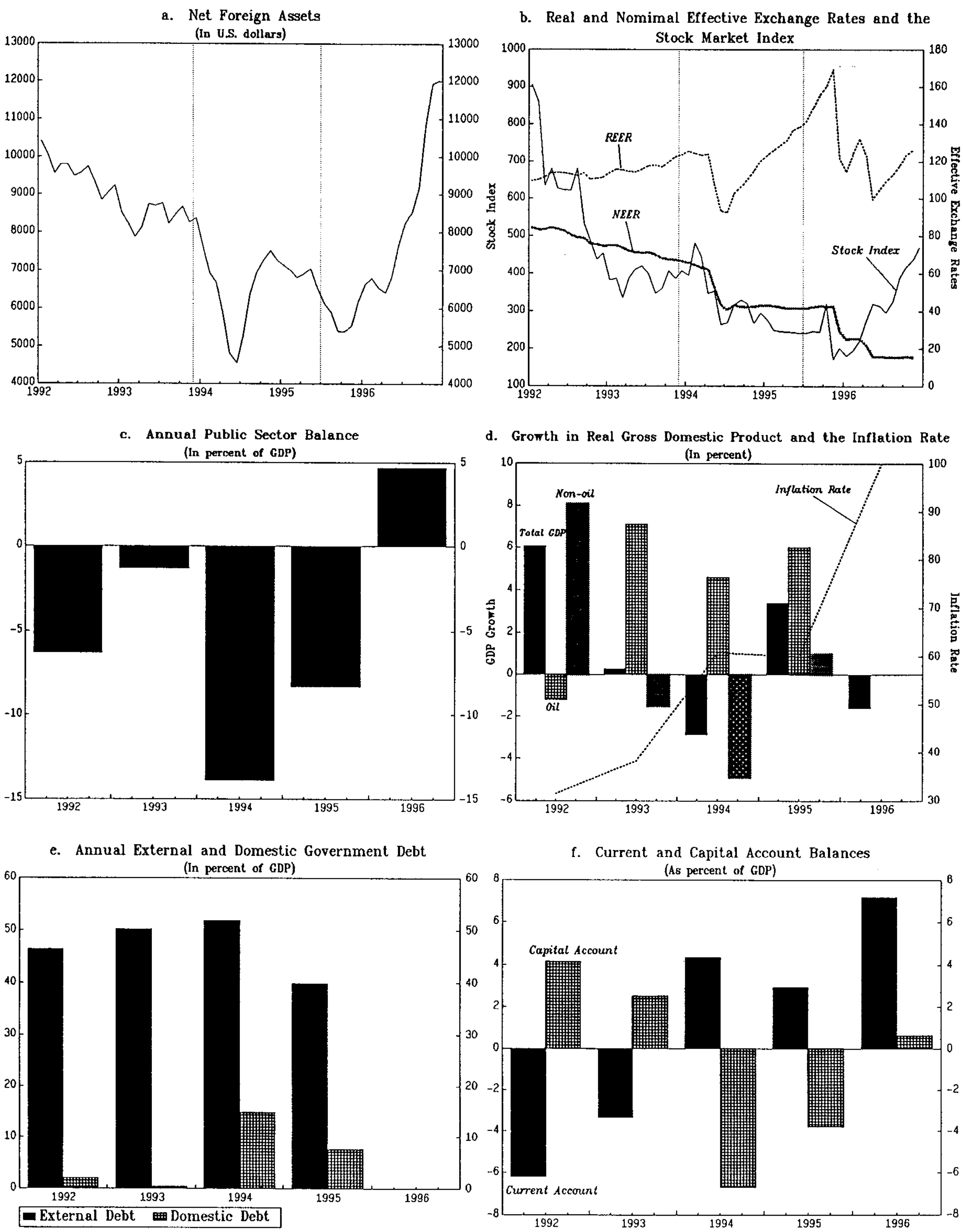
The level of intermediation was also reduced in terms of private credit, which started to fall in 1992 and 1993 (Figures 14.b and c). From the demand side, private credit fell because of high real interest rates and economic recession (Figures 15.a and 13.d). From the supply side, the continuous decline in the deposit base reduced banks' loanable funds. The reduction in private credit was in part substituted by an increase in off-balance sheet lending, since banks had off-balance- sheet funds available (from the deposit flight of Venezuelans to the offshore) and supervision was weak. Given the widespread uncertainty, funds from the reduction in private credit were also used to purchase safer domestic assets, such as real assets and government and central bank paper. Private credit was also partially replaced by bank credit to a number of large government-owned companies, which had borrowed heavily in the domestic and international markets in previous years, but which had run into difficulties and required major debt restructuring.

The banking system

Prior to the adoption of the macroeconomic program in 1989, the Venezuelan banking system was composed of a large number of specialized banks, belonging to financial groups. These groups were practically outside the control of the Superintendency of Banks. There existed a

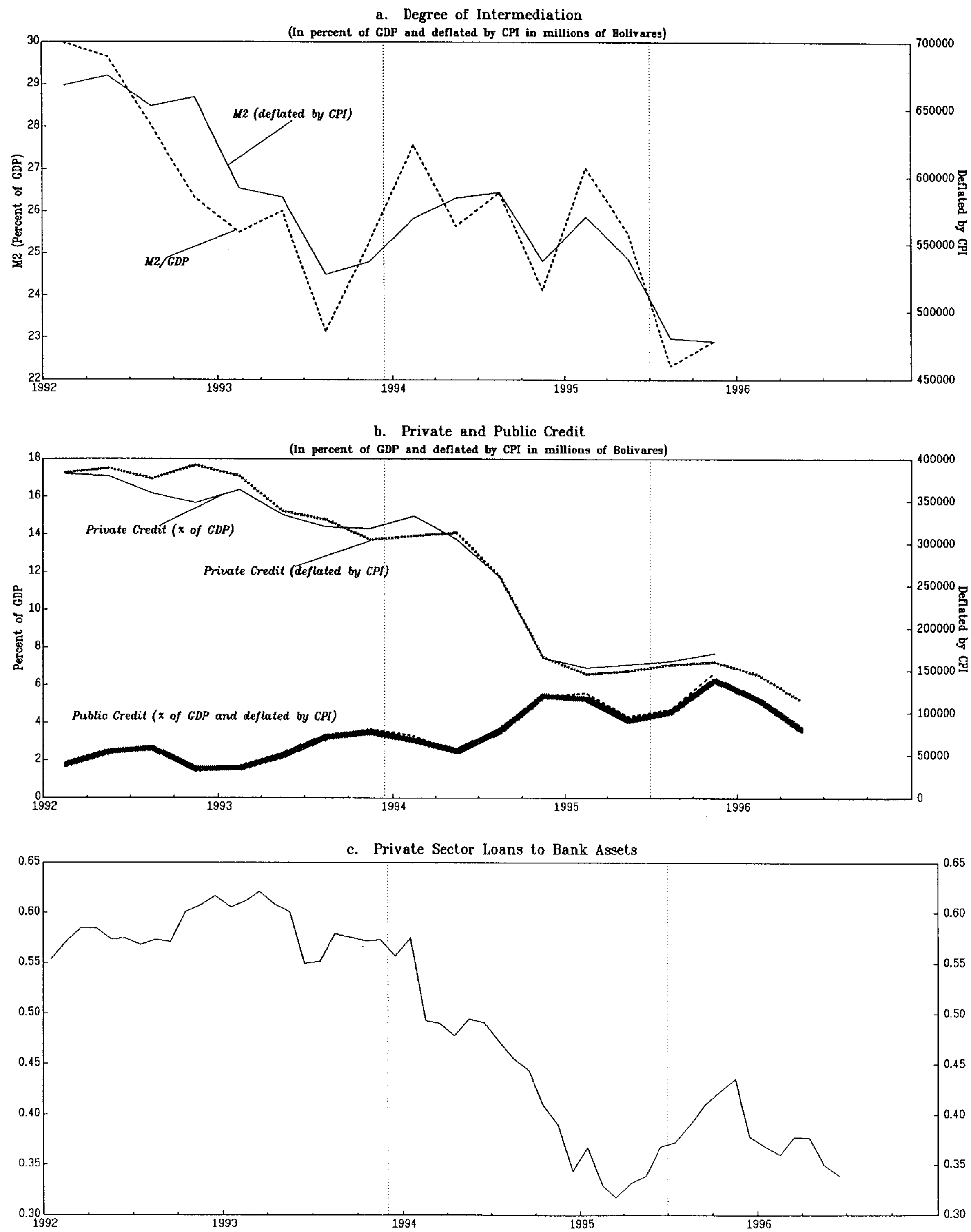
[44]About US$1 billion in reserves were lost through September 1992.

FIGURE 13
VENEZUELA
MACROECONOMIC DEVELOPMENTS



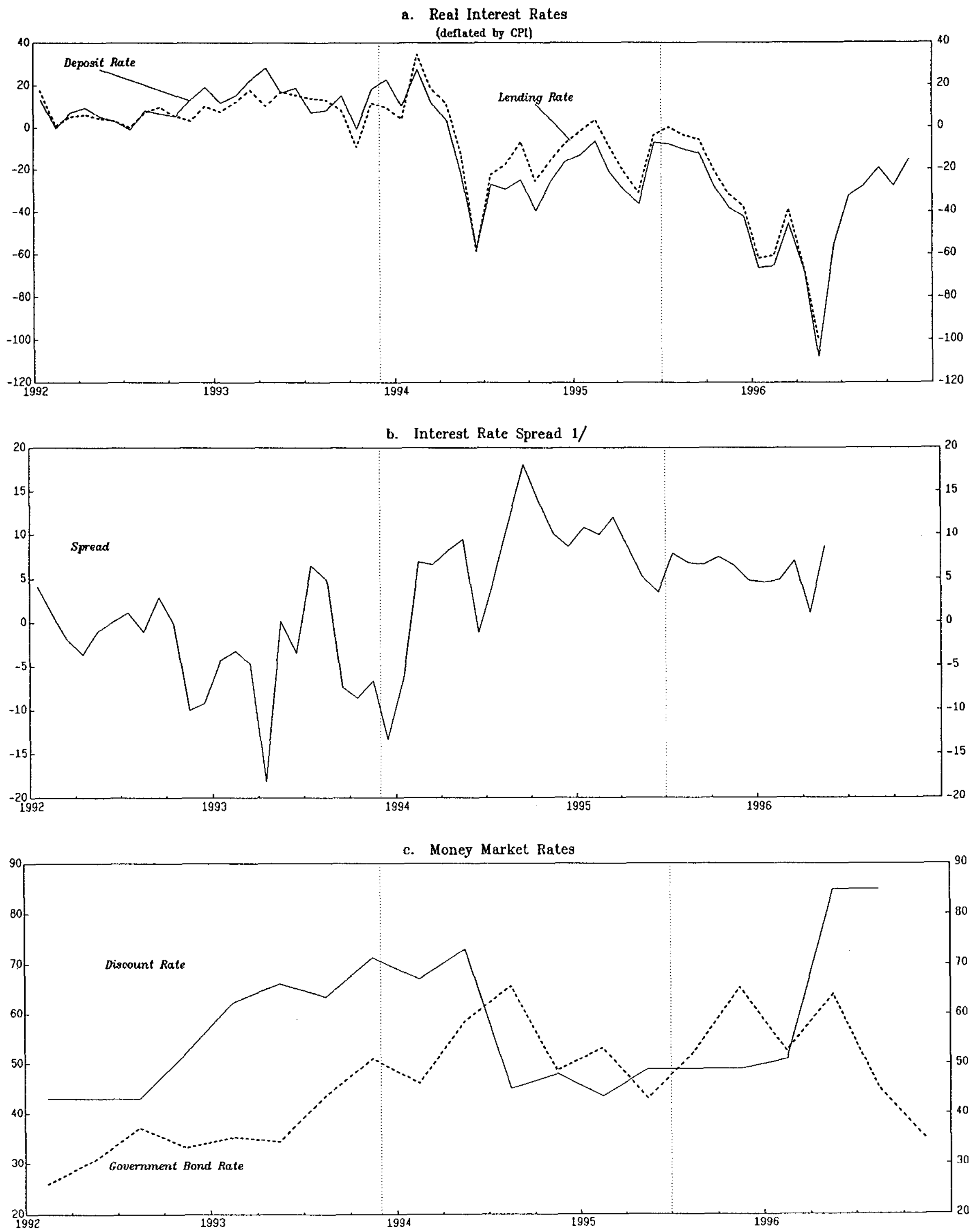
Sources: International Financial Statistices, Information Notices Service, the Emerging Markets Database, and staff estimates.

FIGURE 14
VENEZUELA
MONETARY AND CREDIT DEVELOPMENTS



Source: International Financial Statistics and staff estimates.

FIGURE 15
VENEZUELA
INTEREST RATE DEVELOPMENTS



Source: International Financial Statistics and country authorities.

1/ Spreads are calculated as lending rate minus deposit rate.

number of clear weaknesses in the functioning of the banking system, such as its low capitalization (Figure 16.b). During the last decades, several banks failed because of excessive loan concentration, insider lending practices and weak management. In all cases, the Government bailed the banks out and depositors never bore the costs of the banks' failures. This practice encouraged excessive risk-taking by banks.

From 1989 until the banking crisis erupted at end-1993, the structure of the Venezuelan financial sector, as well as its supervisory and regulatory framework, remained largely unchanged. This was due to the delays in the adoption of a comprehensive financial sector reform program that had been designed to accompany Venezuela's macroeconomic program. The financial sector reform program, financed by the World Bank, was intended to abolish barriers to entry, especially to foreign banks, and to strengthen the role of the Superintendency, particularly in terms of regulating the financial groups that had developed under the old legal system of specialized banking.[45] In this context, the weight of foreign-owned banks in the Venezuelan banking system continued to be very limited during the program period, holding less than 1 percent of commercial bank assets. Also, the share of government-owned banks remained relatively low compared to other Latin American countries, holding about 10 percent of total commercial bank assets (Table 9).[46] In turn, private banks held 90 percent of total assets—the six largest of them holding 52 percent—as of June 1993. In reality, not only was the banking activity concentrated in a few banks but also the ownership of banks and financial groups was in the hands of a few individuals because of the allowances made by the legal framework in place at the time. The oligopolistic structure of the Venezuelan banking system contributed to reducing the power of the supervisory authorities especially as regards the accuracy of the data reported by banks and the enforcement of existing regulations. Because of the lack of consolidated supervision, financial groups had clear incentives to divert problem loans or losses to their related affiliates so as to avoid limits on bank loan concentration, and especially to their off-shore branches since they were not supervised and they were not subject to reserve requirements. The high concentration of the banking system and the lack of foreign competition allowed for an excessive cost structure within the banking industry, which reflected in the low efficiency of the Venezuelan banking system.[47]

---

[45]Eventually, the package of legislative reforms to strengthen bank regulation and supervision was only passed at end-1992 while the new Banking Law only came into effect in early 1994 after the crisis had started.

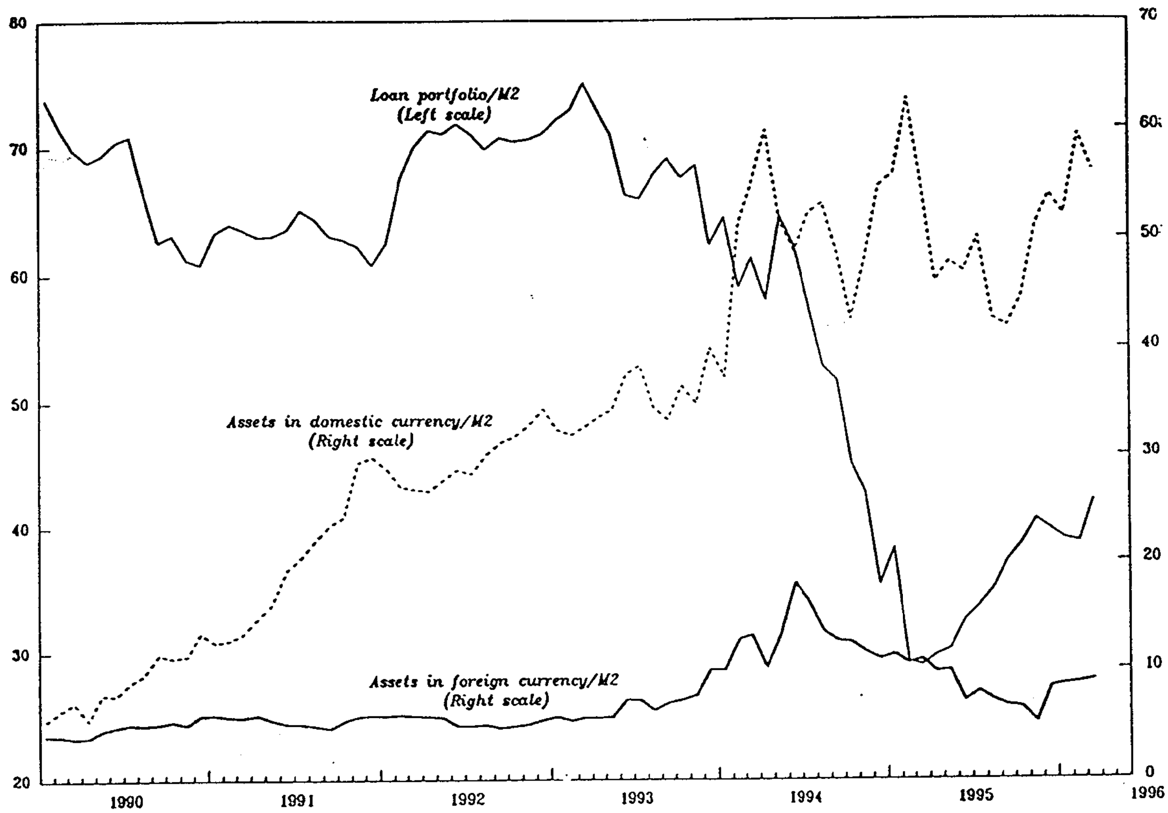
[46]This includes regional banks. National government-owned banks only held about 3 percent of total deposits.

[47]Bank profitability had become negative in real terms since 1985 and the ratio of equity to assets had been declining since 1983.

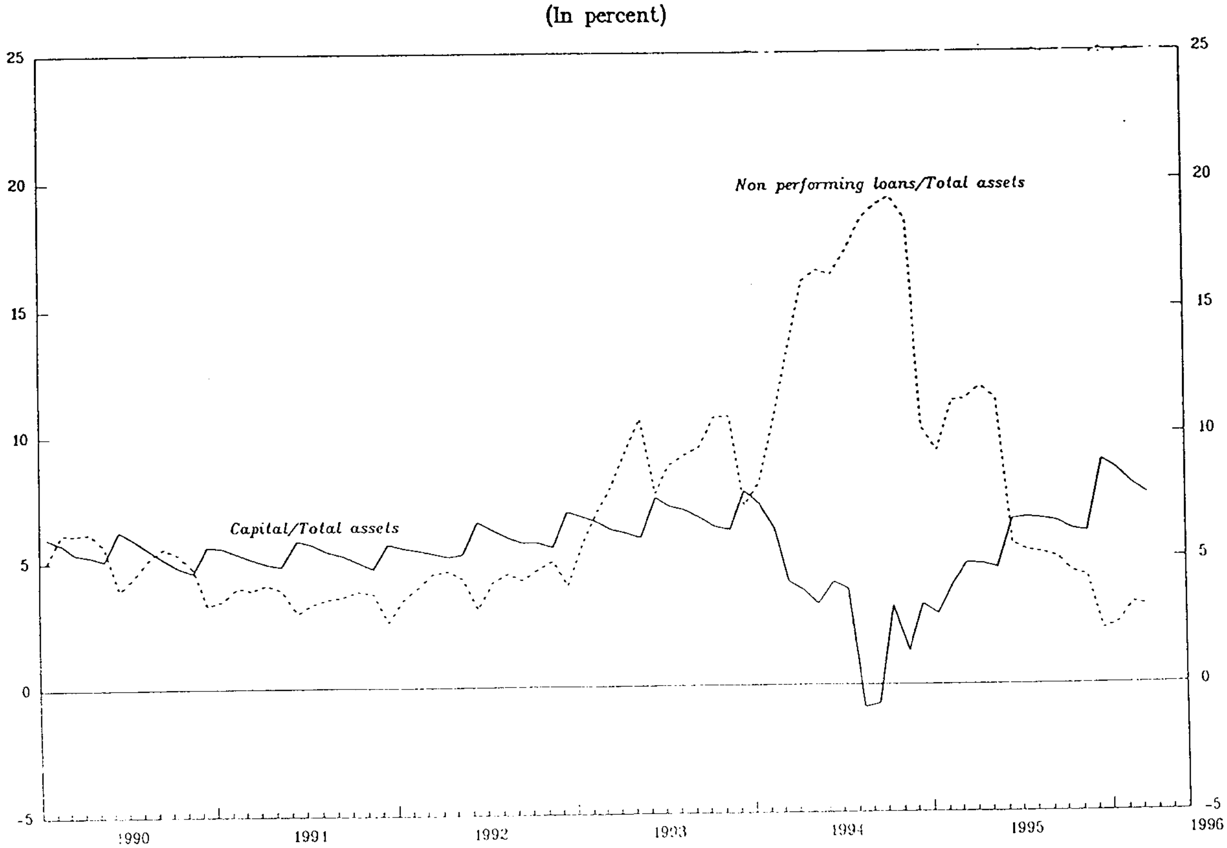
FIGURE 16
VENEZUELA

BANK ASSETS, LIQUIDITY, AND SOLVENCY

RATIO OF LOAN PORTFOLIO AND ASSETS TO M2
(In percent)



RATIO OF ASSETS TO CAPITAL AND NON PERFORMING LOANS
(In percent)



Source: Country authorities.

Table 9. Venezuela: Structure of the Banking System, as of December 1993
(As a percentage of total deposits of the commercial banking system)

Type of banks	Number of banks Total: 51	Percentage of deposits
Private banks	36	90.2
National public banks	2	3.1
Foreign banks	4	0.7
(Public) regional banks	9	6.0

Source: National authorities, Fund documents and author's calculations.

Certain flaws in the implementation of the economic reform program, and especially the incomplete process of financial liberalization, had a negative impact on the banking system. The sharp rise in real interest rates from negative to highly positive levels increased the level of financial deepening during the first years of the program but also increased the ratio of reported nonperforming loans to total loans (Figure 16.b).[48] The latter rose even further, from about 4 percent in 1991 to 10 percent in 1993, when the economy entered a recession.

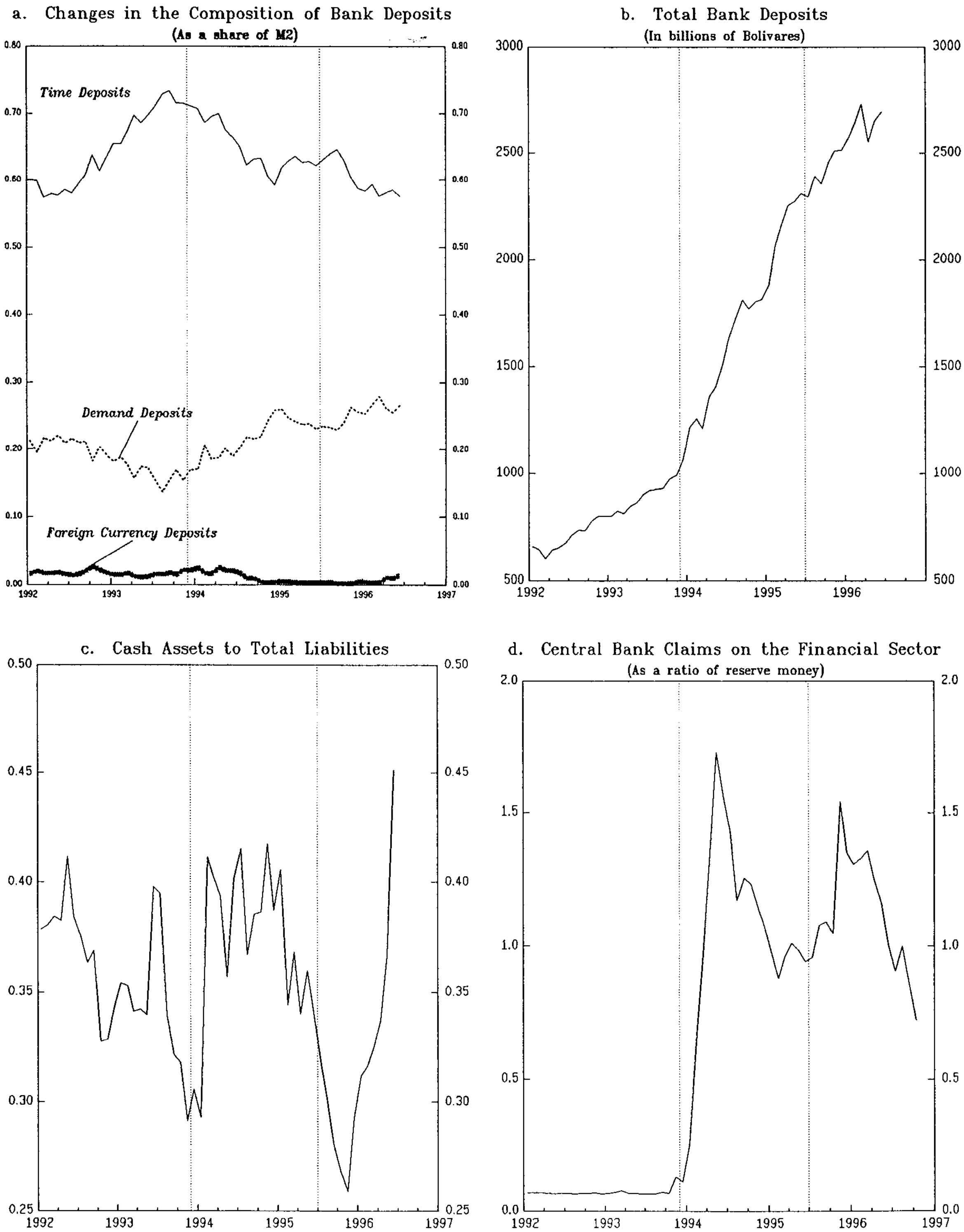
The high real interest rates and the economic recession not only increased the amount of nonperforming loans but also reduced substantially the amount of credit to the private sector. This was reflected in the large quantities of excess reserves on the banks' balance sheets, which were in part used to buy central bank or government paper (Figure 17.c).

The political instability and the sharp erosion in the developments of the macroeconomic program in 1992-93 led to a fall in bank deposits, notwithstanding the very high real interest rates. Deposits fell by about 11 percent in real terms in 1993 with respect to 1991. To confront the sharp fall in deposits, banks increased their interest rates on saving deposits even further, especially in distressed banks that were already experiencing liquidity problems.[49] Another measure taken by banks was to attract large amounts of funds to be transferred to their off-shore branches. This had an additional negative impact on the demand for domestic deposits and on the liquidity situation of domestic banks. At end-1993, the CBV stepped up the use of its LLR facilities to inject liquidity into distressed banks. These distressed banks

[48]Because of the weaknesses of the banks' own loan classification systems, the level of nonperforming loans were probably substantially understated.

[49]During 1993, the interest rate premiums of these banks reached 10 percentage points above the banking system's average.

FIGURE 17
VENEZUELA
BANK DEPOSITS AND LIQUIDITY



Source: International Financial Statistics.

1/ Cash assets are banks' reserves in foreign or domestic currency, plus their liquid assets in foreign currency.
2/ Foreign currency deposits do not appear because of their small size.

were also net borrowers in the interbank market, especially with banks from the same financial group. Such interbank borrowing, not based on risk considerations, had contagion effects on sound banks that belonged to the same financial group of the distressed banks.

B. Crisis Developments

The Venezuelan banking crisis was triggered by the collapse of Banco Latino in mid-January 1994, the second largest bank in terms of deposits. From the last quarter of 1993, when rumors spread about its distressed financial situation, Banco Latino had to meet major deposit withdrawals through large-scale asset sales and borrowing from the CBV. These withdrawals became unsustainable by end-1993 when they reached twice the amount of the bank's capital. Consequently, the bank and the rest of the institutions belonging to the Latino financial group were closed. Throughout the closure, the group's financial liabilities were frozen, affecting over 10 percent of total commercial banks' deposits, including a large share of trust funds, pension funds, government deposits and interbank deposits.

The closure of Banco Latino took place just when a new Government had come to power, which made the situation even more difficult to handle. The new banking legislation finally came into effect in early 1994, only after the crisis has started. This facilitated the closure of Banco Latino under the new more stringent regulations for closure.[50]

The uncertainty created by the freezing of Banco Latino's deposits brought about deposit runs in two banks that belonged to the same financial group as Banco Latino. Soon thereafter, deposit runs started in other banks perceived by the public as financially weak.[51] The Deposit Guarantee Fund (FOGADE) reacted to the deposit runs by offering financial assistance to banks on a large scale. At the same time, the CBV continued to provide liquidity to distressed banks through its LLR facilities, and designed mechanisms so that sound banks could channel their excess reserves to illiquid banks. To facilitate this transfer, reserve requirements were reduced from 15 percent to 12 percent. By February 1994, FOGADE had depleted its own resources and had to start receiving funds from the CBV in order to continue providing loans to distressed institutions. The increasing deposit withdrawals, capital flight, and the sharp loss in the CBV's foreign reserves obliged the government to enforce a special law to protect depositors in March 1994. The new Law allowed the reopening and nationalization of Banco Latino, two and a half months after its closure. To this end, FOGADE injected Bs 300 million, equivalent to 3.6 percent of 1994 GDP, to cover Banco Latino's losses. Its losses were much higher than previously expected due to high-risk off-balance sheet

[50]The new Law established stricter and higher capital requirements (an 8 percent minimum capital-to-asset risk ratio) and also provided the supervisory authorities with more power to handle bank failures.

[51]This group of weak banks accounted for over 30 percent of total deposits.

activities.[52] When the bank was reopened, the previously frozen deposits—even off-balance ones—were allowed to be withdrawn up to a Bs 10 million limit. This was above the newly increased legal deposit guarantee of Bs 4 million under the Banking Law. Larger depositors received long-term non negotiable bonds at below-market terms for amounts above Bs 10 million.

Despite the authorities' efforts to restore confidence in the banking system, market expectations worsened as a result of uncertainty surrounding the new government's economic policies. There were widespread fears of exchange controls, devaluation and partial freezing of bank deposits.[53] By end-March, seven banks and a financial company had been virtually excluded from the overnight interbank market. Runs also affected the trading desks and off-shore operations of these banks, especially after it became known that there were large amounts of hidden off-balance sheet deposits with virtually no asset coverage. FOGADE continued to assist these banks without compelling them to adopt a restructuring plan. In early June, however, the CBV decided to stop lending to FOGADE and, given the lack of FOGADE's resources, the eight distressed financial institutions, with about 21 percent of total deposits, had to be intervened. By that date, a total of Bs 500 million or 6 percent of 1994 GDP had already been injected into these banks, which still had liabilities amounting to the equivalent of 3.5 percent of 1994 GDP.

In order to restore public confidence after the intervention of the eight financial institutions, the government established the Financial Emergency Board, a high-ranking executive body composed of the Minister of Finance, the Governor of the CBV and three other high-ranking officials, as the main institution in charge of solving the systemic banking crisis. The impact of this measure on public opinion was undermined by the authorities' frequently contradictory statements regarding the health of the banking system and the lack of a comprehensive and consistent policy to deal with bank problems. In addition, FOGADE's precarious financial situation and the discontinuation of its support by the CBV reduced public confidence.

During the weeks following the closure of the 8 banks, money demand fell sharply and capital flight led to a large loss in reserves. In early July, the government decided to fix the exchange rate against the dollar and impose strict exchange rate controls both on the current and capital accounts. Price controls were introduced and some constitutional rights were suspended in order to be able to expropriate the banks' owners and have the state become the banks' owner. While these measures slowed down the fall in the deposit base for some weeks in July and August, rumors about the financial situation of two large banks, Banco Consolidado and Venezuela, led again to deposit runs. Given FOGADE's precarious financial situation, the Government decided to nationalize them. In December 1994, it became clear that two other

---

[52]Banco Latino's losses were more than three times its loan portfolio at end-1993.

[53]There was a fear that depositors in other banks would be treated as those of Banco Latino for amounts above Bs 10 million.

banks, Banco Progreso and República, would not be viable since they did not manage to improve their financial situation in spite of the massive financial assistance received from FOGADE. The authorities decided to close Banco Progreso because large amounts of irregular operations in its balance sheets made the bank irrecoverable. In turn, Banco República, with a more stable and regular deposit base, was nationalized.

Because FOGADE was not in a position to honor the guarantee on Banco Progreso's deposits, the decision was taken to "migrate" this bank's liabilities to four other banks that had been nationalized out previously (Banco Latino, Consolidado, Venezuela and República). Suspiciously, a large number of off-balance sheet deposits appeared in the banks' books before the migration occurred. This increased the amount of deposits transferred without any corresponding asset, and thus raised the financial costs for the receiving banks. Although the government stated its responsibility for the transfer of these liabilities, there were no assets given to counter those deposits which had migrated to the nationalized banks. The massive withdrawal of deposits, upon this migration, made nationalized banks lose most of their liquid assets. The situation worsened even further when three other banks had to be closed and their deposits migrated in February 1995. The total amount of deposits transferred amounted to 3 percent of 1995 GDP, with practically no valuable assets that could be transferred to the nationalized banks. All the cost of the migration, therefore, were borne by taxpayers since bonds had to be issued by the Government and FOGADE, and transferred to the nationalized banks as counterpart.

One of the measures taken by the authorities to reduce the burden of the deposit migration on nationalized banks was to eliminate reserve requirements on all migrated deposits. In practice, though, nationalized banks opted not to comply with reserve requirements on the total of their deposits, which made monetary management even more difficult for the CBV. Meanwhile, FOGADE promised to provide these banks with cash to cover part of the interest on the migrated deposits, but payments were delayed and did not cover the full amount. The lack of an official definition of the compensation for the migrated deposits increased market uncertainty on the future of the nationalized banks and some of them, especially Banco Latino, experienced large deposit withdrawals. Also, the prospective privatization of these banks was further delayed by this uncertainty, together with the difficult macroeconomic situation and several impending legal actions from former shareholders.

In July 1995, Congress finally passed the Financial Emergency Law, which gave broader powers to the Financial Emergency Board and placed the Superintendency and FOGADE under its authority. This Law eliminated existing obstacles for the liquidation of assets transferred to FOGADE from the eight banks intervened in June 1994 and the four closed from December 1994 to February 1995. However, the congressional approval of the Financial Emergency Law did not help change market sentiment regarding the situation of the banking system. Even if to a lesser extent, deposit runs continued to take place, especially on Banco Latino which the market continued to perceived as insolvent. In August 1995, a small private bank was intervened. Table 10 summarizes the measures taken by the authorities, from the beginning of 1994, to bolster public confidence and put an end to the banking crisis.

Table 10. Venezuela: Measures Taken by the Authorities

Date	Measures
2/94	FOGADE depleted its resources giving credit to ailing banks after the closure of Banco Latino.
3/94	Enforcement of a special law for the protection of depositors, opening the possibility to rehabilitate insolvent institutions.
4/94	Nationalization of Banco Latino.
6/94	Creation of the Financial Emergency Board, after the closure of eight financial institutions.
7/94	Imposition of a fixed exchange rate and strict exchange rate controls and price controls.
8-12/94	Nationalization of several banks.
12/94-1/95	Closure of four banks and "migration" of their deposits, including off-balance sheet deposits, to the banks nationalized during the crisis.
7/95	Passage of the Financial Emergency Law.

Source: Fund documents.

C. Macroeconomic Impact of the Banking Crisis

Monetary policy

Before the banking crisis started, monetary policy had remained tight and had carried all the burden of combating inflation. Real interest rates stood at very high levels and liquidity was scarce especially in distressed banks. When the deposit runs from Banco Latino started, the CBV used its overdraft facility to provide the bank with liquidity until the decision to intervene was taken in early January. From that moment, the CBV had to inject liquidity into several other banks that were suffering from a contagion effect after the failure of Banco Latino. Moreover, the CBV reduced reserve requirements and established a mechanism that allowed the central bank to free required reserves on a temporary basis if the funds released were directed to assist banks in difficulty. As a result of these operations, interest rates started to decline in February until the CBV increased sharply the sale of Central Bank bonds in an effort to absorb the liquidity which had been made available in the previous weeks. This reversed some of the decline in interest rates.

The large-scale assistance provided by the CBV to banks in difficulty, either directly or through FOGADE, brought about another substantial injection of liquidity that needed to be absorbed by additional sales of Central Bank paper. The excess liquidity was heavily concentrated in a few large banks that had benefitted from the flight to quality from distressed banks. In particular, Banco Latino had substantial excess funds that had been injected by FOGADE after its nationalization. This excess liquidity placed downward pressure on interest rates, which were already significantly negative in real terms. Although the CBV attempted to mop up the excess liquidity through the placements of its zero-coupon bonds, concerns about the large quasi-fiscal losses that were being accumulated due to the assistance to banks directly or through FOGADE prevented the CBV from stepping up bond placements as needed. Table 11 summarizes the CBV's use of monetary instruments to inject and withdraw liquidity during the crisis.

Table 11. Venezuela: Monetary Instruments to Manage Liquidity

Instruments to Inject Liquidity	Instruments to Withdraw Liquidity
CBV rediscount facilities	Sales of CB bonds
CBV loans to FOGADE for its long-term lending to distressed banks	Sales of Government bonds
Reduction in reserve requirements	Sales of foreign reserves
Mechanism to free reserve requirements on a temporary basis to sound banks that would lend to distressed banks in the interbank market	

Source: Fund documents.

During these months of uncertainty, the banking system remained functioning but with rising excess liquidity. The excess liquidity was mainly due to large assistance to banks extended by FOGADE with CBV financing, as well as the reduction in reserve requirements. Commercial banks' excess reserves had increased substantially since July, reflecting the highly accommodative monetary stance.[54] While the excess liquidity actually allowed several banks to survive despite their unsoundness, it resulted in a surge in inflation.[55]

[54]Following the imposition of exchange and price controls, the CBV reduced the discount rate from 73 to 45 percent.

[55]For more details on the impact of the Venezuelan crisis on monetary policy, see García-Herrero, 1997.

The analysis of monetary conditions was complicated because the necessary adjustments to the monetary data after the closure of several banks were not made in a timely manner. In fact the monetary accounts continued to include the amount of deposits outstanding in the intervened banks at the time of their closure. This resulted in an overestimation of the available liquidity to depositors and, indeed, the underlying relationships between measured deposits and inflation changed. The statistical treatment of the off-shore market was further complicated when a large amount of off- balance sheet deposits appeared in the balance sheets of the banks closed from December 1994 to February 1995. Due to the inclusion of these off-balance sheet deposits in the monetary accounts, the reduction in the demand for deposits during the crisis seemed less than it actually was.

Fiscal policy

The closure of several banks through the payment of deposit guarantees and the nationalization of other banks substantially weakened the fiscal position of the public sector. In 1994, the cost of recapitalizing and supporting ailing institutions, as well as the payment of the guarantee on deposits, amounted to 13 percent of the GDP. The cost of the crisis in 1995 was equivalent to 4 percent of GDP. Largely as a result of the crisis, the domestic public debt rose from 7 percent of GDP in 1993 to 16 percent in 1995, thereby raising current and future obligations. An important share of the large increase in domestic public debt was contracted by the CBV in 1994 through the sterilization of the liquidity injected by FOGADE (Figure 13.e). Also, the stock of central bank securities rose from 1 percent of GDP in 1993 to 4.5 percent of GDP in 1994 and to 5 percent of GDP in 1994. This weakened the financial position of the CBV and its losses increased sharply from 0.2 percent of GDP in 1993 to 2 percent in 1994 and 1 percent in 1995.

The fiscal cost is crucial to understanding the authorities' several changes in the strategy taken to handle distressed banks. The weak fiscal situation and the problems encountered by the Venezuelan government to find external financing for the budget made the strategy of bank intervention and payment of the deposit guarantee too onerous after the experience with Banco Latino and the other eight banks intervened in 1994. This might have been the reason why the authorities decided to nationalize the banks that were found to be insolvent subsequent to the intervention strategy, hoping that these banks managed to stay afloat through a partial recapitalization and that nationalization would have a positive impact on public confidence. However nationalization turned out to be very costly as well because large amounts had to be injected to the nationalized banks so that they could operate. Probably, as a result, the authorities decided to migrate the deposits from the subsequent four banks affected by the crisis to the banks previously nationalized. Once the decision was taken to cover all depositors, migration was less costly because it did not require the recapitalization of the failed banks. Nor did it require the recapitalization of nationalized banks in the proportion of the depositors migrated to them. In fact, the authorities decided to give a temporary waiver to nationalized banks on their compliance with capital ratios. Eventually, this strategy cost Bs 600 billion in government bonds to cover the financial costs of the migrated deposits.[56]

Inflation and growth

The Venezuelan banking crisis had a large negative impact on inflation and growth (Figure 13. d). Inflation surged during the crisis because of lax monetary and fiscal policies conducted during that period. Apart from these, the change in the relation between the intermediate target of monetary policy (money and credit aggregates) and inflation further complicated the achievement of the inflation target (Figure 18).

Despite negative real interest rates during the crisis period, compared to the highly positive ones before the crisis erupted, credit to the private sector fell, which had a negative impact on the already distressed real sector. In 1994, the economy entered a sharp recession, with the oil sector being the only sector growing. The banking crisis affected the real economy not only through the reduction of credit but also through the authorities' decision to intervene nonfinancial enterprises related to the failed banks in a move that led to a wave of bankruptcies in the real sector as well. Furthermore, the imposition of exchange rate controls on the current account reduced imports substantially, which negatively affected economic growth.

D. Impact of the Crisis on the Banking System

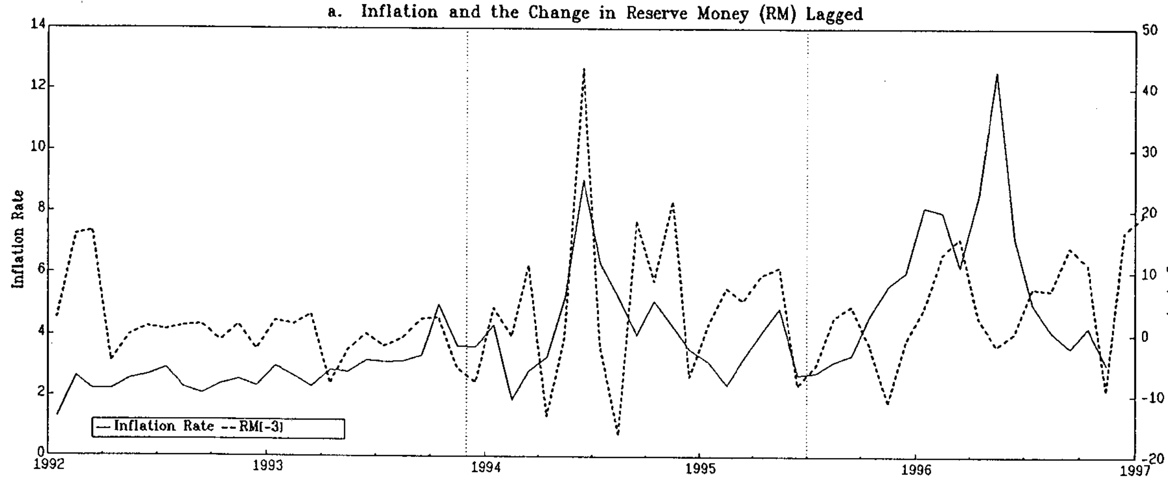
The asset structure of banks changed dramatically as a consequence of the banking crisis. While the share of loans to total assets fell, credit to the public sector, in the form of purchases of government and central bank paper, increased sharply. The government debt arising from the migration of deposits from failed banks to nationalized banks contributed to the increase in credit to the public sector (Figure 14.b). Credit to the private sector shrank significantly owing to the decline in the demand for bank loans associated with the protracted economic recession and to the banks' more conservative behavior toward lending. The degree of solvency of the whole banking system was affected by the economic recession, and a high level of nonperforming loans was maintained throughout the crisis, despite the negative real lending rates (Figure 16.b). After the banking crisis, bank profitability fell because of the reduction in the level of intermediation and the economic recession. Other reasons for the reduction in profitability were the introduction of a legal imposition to pay interest rates on highly liquid deposits and the existence of selective credit requirements.

---

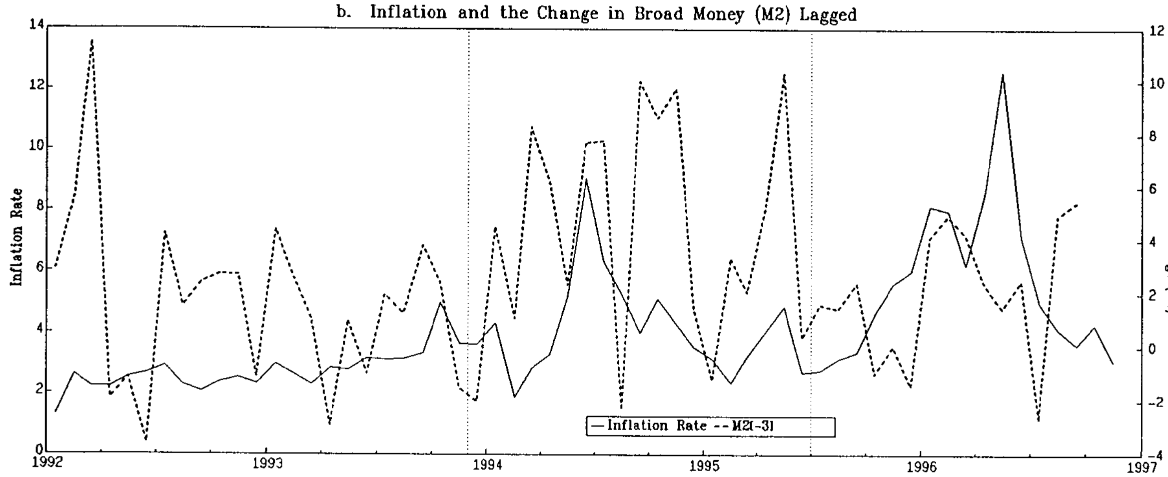
[56]The cost of the migrated deposits and other pending payments, such as the increase in the deposit guarantee from Bs 4 million to Bs 10 million for the eight banks intervened in June 1994, was covered not only by the Bs 600 billion government bonds but also by Bs 300 billion in bonds issued by FOGADE backed by the assets received from the failed banks.

FIGURE 18
VENEZUELA
RELATIONSHIP BETWEEN MONETARY AND CREDIT AGGREGATES, AND INFLATION 1/

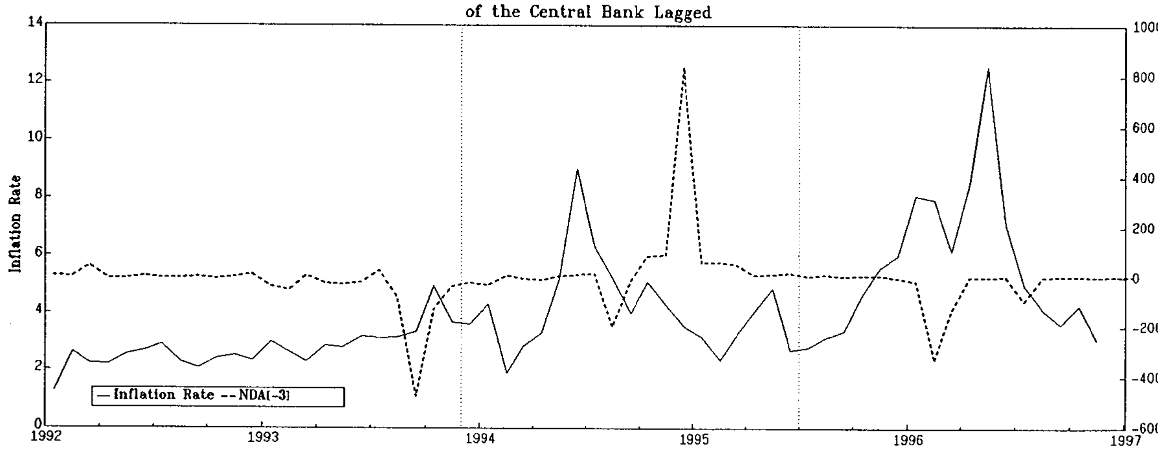
a. Inflation and the Change in Reserve Money (RM) Lagged



b. Inflation and the Change in Broad Money (M2) Lagged



c. Inflation and the Change in Net Domestic Assets (NDA) of the Central Bank Lagged



Source: International Financial Statistics.

1/ Monthly data has been used. The closest relation between monetary and credit aggregates, and inflation was found with a three month lag for monetary and credit aggregates.

The structure of the banking system also changed as a consequence of the crisis. The number of state owned banks and their share of deposits increased sharply because of the policy of nationalization. Also, the flight to quality tripled the share of deposits in foreign and government-owned banks before the crisis erupted. Foreign-owned banks were regarded as safer because of their higher capitalization levels and their access to credit-lines abroad in case of liquidity problems. Government-owned banks were perceived to have a full implicit guarantee by the government. Limits in capacity did not allow foreign and government-owned banks to increase their deposits even further, which could have reduced the amount of capital outflows. Private domestic banks shrank substantially in number and in their share of deposits (Table 12).

Table 12. Venezuela: Structure of the Banking System Before During and After the Crisis
(as a percentage of total commercial banks' deposits)

December 1993	%	December 1994	%	September 1996	%
Private banks	90.2	Private banks	58.4	Private banks	58.9
Public national banks	3.1	Public national banks	4.4	Public national banks	5.6
Foreign banks	0.7	Foreign banks	1.7	Foreign banks	2.0
Regional (public) banks	6.0	Regional banks	7.6	Regional banks 3/	9.4
		Intervened banks 1/	19.5	Nationalized banks	23.1
		Closed banks 1/ 2/	8.4	Intervened banks 4/	0.5
				Closed banks 4/	0.5

Source: National authorities, Fund documents, and author's calculations.

1/ It refers to the amount of deposits that these banks held just before being intervened or closed.
2/ Although only Banco Progreso was closed before end-1994, this amount reflects the deposits of all banks closed between December 1994 and January 1995.
3/ Some of the regional banks were privatized between December 1993 and September 1995.
4/ It refers to the remaining deposits in the balance sheets of the banks that were intervened or closed.

E. Developments in the Banking System After the Adoption of the Macroeconomic Program in 1996

Within the macroeconomic adjustment program adopted in March 1996, the authorities included a set of structural reforms related to the strengthening of the Venezuelan banking system, still affected by the crisis. Key elements of the program were the strengthening of supervision and regulation, the settlement of arrears on interest payments for the "migrated" deposits to the nationalized banks, the reprivatization of nationalized banks, the liquidation of all assets from the banks that were closed during the crisis, and the strengthening of the capital base of private banks. Distortions in banks' asset policies, such as minimum portfolio requirements and subsidized interest rates to agriculture, were to be abolished in 1997. Also, a consolidation fund was to be established to finance the payment of deposits covered by the deposit guarantee scheme, in case other banks needed to be closed or potentially viable banks needed to strengthen their capital base. One of the first measures taken by the authorities was the downsizing of Banco Latino through the sale of half of its branches. Also, a privatization schedule for all the banks nationalized during the crisis was set.

At the onset of the program, there were adverse expectations about the likely impact that the macroeconomic measures taken by the authorities could have on bank soundness. The authorities feared that the liberalization of the current and capital account increased the risks of massive deposit withdrawals. There was also a concern that the liberalization of interest rates could have a negative impact on banks margins and solvency ratios. A combination of fortuitous exogenous events, such as a sharp increase in oil prices, and policy decisions such as the easing of monetary policy right after being restricted sharply at the time of exchange rate liberalization, prevented the authorities' concerns from materializing.

On the contrary, banks improved their solvency and liquidity position substantially with the adoption of the macroeconomic program. One of the reasons for the banks' improved situation was that they widened interest rate spreads when interest rates and the exchange rate were liberalized. Also, the long position that most banks held in dollars helped them increase their profits when the bolivar was devalued. Through the recapitalization of these profits, banks clearly improved their solvency ratios.

References

Banco Central de la República Argentina, 1995, *Boletín Monetario y Financiero*, noviembre-diciembre.

______, *Informe Económico*, 1995, tercer trimestre, "Ministerio de Economía y Obras y Servicios Públicos Secretaría de Programación Económica," Diciembre, Año 4, No. 15.

Banco Central de Venezuela, 1980-1986, *Informe Económico*, Caracas, Venezuela.

Baliño, Tomás J.T. and V. Sundararajan, 1990, "Issues in Recent Banking Crisis," IMF Working Paper 90/19 (Washington: International Monetary Fund).

Baliño, Tomás J.T., 1991, "The Argentine Banking Crisis of 1980" in *Banking Crisis: Cases and Issues*, ed. by V. Sundararajan and Tomás J.T. Baliño (Washington: International Monetary Fund).

Baliño, Tomás J.T., and others, 1997, *Currency Board Arrangements Issues and Experiences,* IMF Occasional Paper No. 151 (Washington: International Monetary Fund).

Cañonero, Gustavo, 1996, "Bank Concentration and the Supply of Credit," Argentina *Recent Economic Developments* (Washington: International Monetary Fund).

Carrizosa, Mauricio, Danny M. Leipziger, and Hemant Shah, 1996, "The Tequila Effect and Argentina's Banking Reform," *Finance and Development*, March.

Catão, Luis, 1996, "Argentina: Bank Credit to the Private Sector," Argentina *Recent Economic Developments* (Washington: International Monetary Fund).

Fernandez, Roque, and Liliana Schumacher, 1996, "Does Argentina Provide a case for Narrow Banking," Conference on Preventing Banking Crisis in Latin America, World Bank.

Frenkel, Roberto, 1994, "El Fortalecimiento del Sector Financiero en el Proceso de Ajuste," Liberalización y Regulación, CEDES, Argentina.

García-Herrero, Alicia, 1997, "Monetary Impact of a Banking Crisis and the Conduct of Monetary Policy," IMF Working Paper 97/124 (Washington: International Monetary Fund).

Hausmann R. y Stark C., 1987, "Algunas Consideraciones para la Modernización del Sistema Financiero Venezolano," Revista del B.C.V. No. 3 Caracas, julio-septiembre.

Lindgren, Carl, Gillian Garcia, and Mathew Saal, 1996, "Bank Soundness and Macroeconomic Policy," (Washington: International Monetary Fund).

Krivoy, de Ruth, 1995, “Lessons from Financial Crises: Evidence from Venezuela," Conference on Bank Structure and Competition Federal Reserve Bank of Chicago, May 11.

Machinea, José Luis, 1996 “The Argentine Financial Crisis of the 1995: Causes, Characteristics, and Lessons,” mimeo.

Martín Guedez, R. Y Salcedo, D., 1987, “Bases para una Reforma del Sistema Financiero Venezolano,” *Revista del B.C.V.,* No. 2, Caracas, abril-junio.

Ministerio de Hacienda, 1900-1995, Superintendencia de Bancos, Regulaciones Prudenciales Dictadas por la Superintendencia de Bancos, Gacetas Oficiales varias.

Morris, Felipe, 1991, “Los Sistemas Bancarios de América Latina en los años 80s,” documento para discusión del Banco Mundial.

Rojas-Suárez, Liliana and Steven R. Weisbrod, 1995, *Financial Fragilities in Latin America.* The 1980s and 1990s,” IMF Occasional Paper No. 132 (Washington: International Monetary Fund

Romero Quintero, H., y Escobar Chirinos, J., 1992, “Notas Sobre el Proceso de Reforma del Sistema Financiero,” Caracas, *Revista B.C.V.,* No. 7, enero-marzo.

Sundararajan, V. and Baliño, T.J., 1991, *Banking Crises: Cases and Issues* (Washington: International Monetary Fund).

Tinoco, Perdo, 1992, “La Reforma Integral del Sistema Financiero Como Parte del Programa de Ajuste y Apertura Económica," Caracas, *Revista B.C.V.,* No. 7, enero-marzo.

Zarazaga, Carlos, 1995, “Argentina, Mexico and Currency Boards: Another Case of Rules Versus Discretion," Federal Reserve Bank of Dulles, Economic Review Fourth Quarter.