

# The *Real* Stabilization Plan and the Banking Sector in Brazil \*

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## 1. Introduction

Banking crises, actual or potential, have been a matter of deep concern in the 1990s to researchers, market participants and regulators. *The Economist* has pointed out that “[s]ince the Bretton Woods system of fixed exchange rates was abandoned in the early 1970s, the banking industry seems to have jumped from one drama to another [...]”.<sup>1</sup> Examples of such dramas abound: the Latin American foreign debt crisis, the US savings and loans debacle, the crisis of Scandinavian banks, difficulties in France, Spain and Italy, the continuing fragility of Japanese financial institutions, besides the numerous episodes in developing countries.

The notion of a banking crisis is evocative of *panic*, that is, of runs to convert deposits into cash, causing bank failures, disruptions in the payments and credit systems, and eventually leading to a deep recession or even a depression. Although nothing like this has actually taken place in practically any country since the Great Depression in the Thirties,<sup>2</sup> many believe that the absence of panics are to be explained by intervention by central banks as lenders-of-last-resort, de-

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\* Criticisms from two referees are gratefully acknowledged. This research was supported by the National Research Council of Brazil (CNPq).

<sup>1</sup> *The Economist*, “Survey on international banking”, 27 April 1996.

<sup>2</sup> In fact, something like panic has been verified in some of the so-called transition economies, such as Albania’s, where Ponzi schemes, like the pyramids, have burst. More recently, some Asian economies have also exhibited some instances of panic behavior.

posit insurance schemes or even the appeal to expansionary fiscal policies to sustain aggregate profits. These mechanisms are claimed to have provided external stabilizers to the operation of the financial system.

Banking crises have been explained mostly as the result of expansionary credit policies adopted after deregulation and financial liberalization increased competition in formerly protected market niches. Deregulation forced banks to face competition both for deposits and, because of securitization, for profitable placements. Abandoned by their best borrowers, such as large corporations that can borrow at better terms directly from capital markets, banks turned to riskier segments. The overall expansion of credit inflated prices of assets, particularly land and stocks. Crises ensued when asset price bubbles burst, increasing non-performing debts and devaluing collaterals. Most recently, deregulation and liberalizing institutional reforms, coupled with an acceleration of technical progress in information transmission and processing, have been generally blamed for a possible increase in the internal fragility of financial systems, particularly the banking sector. It is believed that both market agents and supervisors and regulators are still largely unaware of the new possibilities and competitive pressures created by these institutional and technical innovations. As a consequence, it is argued that deals are most likely being mispriced, particularly in what concerns largely misunderstood and, thus, probably mismeasured risks.<sup>3</sup>

Banking crises of varying intensity have also happened in developing countries in the last two decades. In these cases, deregulation, usually adopted as part of stabilization plans, has also led to credit expansion. Crises are generated by different ways, though: the rising credit supply sustains growing aggregate demand that leads to balance of payments problems, loss of reserves or exchange rate devaluations, increasing the burden of debt denominated in foreign currencies, leading to bankruptcies and financial losses. In these countries, banking crisis episodes came much closer to panic situations than those in the industrial countries. Panic was avoided, in most cases, by the inflow

<sup>3</sup> This concern has been consistently voiced by the Bank for International Settlements in its annual reports and quarterly bulletins on *International Banking and Financial Market Developments*. In fact, the reasoning is also applied to more traditional types of deals, like syndicated lending, where new terms and provisions are being currently accepted without proper consideration, in their view, of the risks they imply.

of foreign capital to make up for reserve losses and smooth out the devaluation process. In many instances, the ghost of a deeper crisis was only exorcised through the purchase of domestic problem banks by foreign financial institutions, as in Uruguay in the 1980s and Argentina after the Mexican crisis of 1994.

In developing countries the risk of banking crises was generally higher than in the case of industrial countries not only because of the generally poorer quality of supervision by the authorities but also because, in some cases at least, these expansionary pressures created by deregulation took place while banks were losing some important revenues as a result of price stabilization. Credit supply tended to grow even more quickly in these cases and an increase in financial fragility became a stronger possibility in this situation.

All these factors seemed to have concurred to trigger a banking crisis in Brazil in the aftermath of the stabilization plan implemented in July 1994. Banks experimented both the loss of inflationary revenues and credit expansion. Problems with balance of payments rapidly ensued and were made more serious with the Mexican crisis in late 1994. The response of the authorities, raising interest rates and imposing direct credit controls led to serious difficulties for banks in 1995, but panic and bank runs were avoided. By the end of 1996, the widespread view was that the worst was already over, although some serious difficulties remained to be attacked.

The performance of the Brazilian banking sector in the aftermath of price stabilization, the threat of a systemic crisis and the reasons why it has not actually occurred is the theme of this paper. To develop it, we begin, in the next Section, by briefly developing an approach to bank crisis as a possible result of credit expansion. The third Section will be devoted to the case of Brazil. A concluding Section presents then the main findings of this paper.

## 2. A theoretical approach to banking crisis

### 2.1. *Financial fragility and instability*

Baliño and Sundararajan (1991) identified three types of banking crisis theories:

1) the Minsky/Kindleberger approach, according to which financial crises are the endogenously-generated consequence of an expansion of credit leading to an increase in the fragility of balance sheets of both financial institutions and borrowers;

2) credit rationing theories that propose that quantity constraints are imposed by financial institutions as an alternative to rising interest rates, thus putting an end to boom conditions; and

3) the Friedman approach that blames the central bank's handling of the money supply for the cyclical fluctuations of market economies that would be, in the absence of these interventions, fundamentally stable.<sup>4</sup>

In fact, of these three views only the first really addresses the specific problem of banking crises.<sup>5</sup>

According to Minsky, it is not credit expansion per se, in fact, that is the root of banking or financial crises, but the changes in the terms under which credit is supplied as a boom develops. The problem is not growth itself, not even increasing indebtedness. The probability of a crisis is higher when credit expands because borrowers and financial intermediaries are supposed to become increasingly fragile as a result of issuing liabilities that imply, at least for some periods of time, cash outflows that are higher than expected inflows from assets. The point is that there emerges and widens a mismatch between the time profiles of cash flows expected to be generated by assets and liabilities as credit expands and the economy grows faster into a boom. At the same time, increasing optimism as to prospective earnings leads both investors and financial intermediaries to accept higher risks and reduce their liquidity. If balance sheets did not deteriorate in this sense with the increasing supply of credit, no banking crisis would be likely.

Minsky maintained that capitalist economies are cyclical because changes in balance sheets of the nature just described are endogenous. His model is well known, so we will only sketch it here.<sup>6</sup> In the aftermath of a crisis, banks are sober and cautious, lending conservatively only to those clients that can offer solid guarantees. It is assumed that

<sup>4</sup> For other classification of bank crisis theories, see Goldstein and Turner (1996) and Benston and Kaufman (1995).

<sup>5</sup> I owe this point to an anonymous referee.

<sup>6</sup> Detailed expositions of the model can be found in Minsky (1982 and 1986).

eligible borrowers are themselves very cautious in their borrowing decisions, only issuing liabilities that they expect, with a reasonable degree of belief, to be made good with the revenues to be earned from the assets being acquired. The low rate of default in these loans should, however, stimulate banks to take riskier opportunities to lend to more risk-prone borrowers, widening their markets and enjoying higher interest rates. These borrowers are those willing to issue liabilities they know cannot be honored at the agreed dates but that they expect to be refinanced when the redemption time comes.<sup>7</sup> Cyclical boom periods would be financed by banks supplying credit under increasingly risky conditions but also at increasing rates of return. The prosperity enjoyed by the economy would reduce everybody's (including banks') liquidity preference. At its peak, prosperity would be increasingly fed by riskier investments. The model postulate that at this point the economy is so fragile that many events should suffice to trigger a crisis. Banks could judge their position to be overextended in illiquid assets and try to limit or reduce their loans.<sup>8</sup> Alternatively, they could raise interest rates to distribute credit only to those willing to pay higher rates. It is unlikely that this would be the route chosen by banks, for the reasons given by the models of credit rationing. Besides, demand for credit becomes inelastic in a boom because of the significant number of Minskyan speculators, that is, those investors that borrowed short counting on the possibility of rolling over or even increasing their debts until their investment projects have matured. Another route to a crisis is that, in an overheated economy, the

<sup>7</sup> Minsky called the conservative borrower *bedgers* those who only assume debts with maturities and cash flow profiles that match that of their assets, so as to avoid having to roll over their liabilities. Investors who are supposed to mismatch their assets and liabilities, financing long-term investments with shorter-term liabilities speculating that roll over will be possible at reasonable terms are called *speculators*. A particular type of speculator are the *Ponzi* investors that would bet not only that roll over would be possible but that they could actually increase their debts under reasonable terms.

<sup>8</sup> Keynes (1971, p. 47), in his *Treatise on Money*, suggested that banks have to permanently face a trade-off between highly liquid but relatively unprofitable assets and less liquid placements that pay higher interest rates. Banks' liquidity preferences would be shown by the composition of their balance sheets and would change with the trade cycle and with the state of confidence. In his words, "[t]he problem before a bank is not how much to lend [...] but what proportion of its loans can be safely made in the relatively less liquid forms". Only under exceptional conditions, banks' liquidity preference would be shown by the accumulation of idle reserves. According to Morrison (1966), a great depression is one of these exceptional circumstances.

central bank could, and probably would, raise interest rates concerned with inflationary pressures. Finally, some borrowers could go bankrupt for any particular cause, scaring financial institutions and lenders. Any of these reasons, and many more, since Minsky explained how the probability of downturn increases but not the turning point itself, may put an end to the boom causing instability. In this view, however, whether a full-fledged crisis will actually occur depends on the course of action chosen by the central bank.<sup>9</sup>

A different way to describe the process emphasizes the behavior of the margins of safety involved in financial deals.<sup>10</sup> Borrowers would not only try to match the cash flow time profiles of their assets and liabilities but also to maintain a cushion of liquid assets or money to face unexpected revenue shortfalls. The value of these contingency reserves would be set having in mind the probabilities, calculated on the basis of past occurrences, of disappointment of revenue expectations. Safer, that is, more conservative, borrowers would maintain larger cushions than speculators. Again, a growing economy would require loans to be made not only to safe borrowers but also to speculators. The description of the trade cycle in this approach would be fundamentally the same as already presented.

In sum, the degree of financial fragility would increase as credit expands because the number of safe borrowers, Minsky's hedgers, is supposed to be limited. Banks would quickly realize that to increase their operations they had to lend to riskier borrowers. In an increasingly prosperous economy, it would seem unduly conservative to offer loans only to hedgers. With more optimistic expectations and stronger states of confidence, banks will lend to speculators and fragility will grow. As more initiatives are supported by banks, aggregate demand and profits rises, validating expectations and strengthening expectations and states of confidence and reducing liquidity preferences. This virtuous circle is interrupted when banks stop increasing their loans, causing aggregate demand to level off and making the new projects unprofitable. As a result, some loans become non-performing, prompting banks to cut their losses by further reducing credit

<sup>9</sup> In fact, according to Minsky, the government can avoid a crisis by compensating the fall of private expenditures with a raise in its own spending. In his view, that is why with postwar big government a depression, "it", as he called in one of his books, had become much less probable in modern times. See Minsky (1982).

<sup>10</sup> Cf. Kregel (1997).

and a vicious downward circle replaces the virtuous circle of growth. The worst scenario is that where borrowers and financial institutions are forced to sell assets to try to honor their liabilities and cause a collapse of assets markets. This is the moment when a banking crisis is most probable to take place.

## 2.2. Instability, distress, crisis

The financial fragility hypothesis explains how a given system grows more and more vulnerable to external shocks, such as a change in the monetary policy stance or an autonomous shift in liquidity preferences of banks. If the ensuing loss of *momentum* in the economy is to generate an actual banking crisis depends on many elements, such as the size of the safety margins maintained by borrowers and financial institutions, the stance of monetary and fiscal policies, the existence of compensatory international capital movements, public and private, etc. In fact, favorable combinations of these factors can even prevent a crisis from actually happening, as it is the case when the central bank effectively acts as a lender-of-last-resort or when the inflow of foreign capitals is sufficient to restore the liquidity levels the system needs. In these situations, the crisis is aborted, and the eventual failure of borrowers and of financial institutions does not evolve into a systemic crisis. In what follows we will reserve the term *crisis* to refer to those episodes in which non-performing loans accumulate to generate individual bank failures that are transformed into a systemic crisis. A debt deflation, as described by Fisher,<sup>11</sup> may or may not follow, but disruption in the credit and payments systems are serious enough to have a significant impact on the other sectors of the economy. We will use the term *distress* to describe, in contrast, those situations in which problems, even if non-negligible, are either restricted in nature to some financial institutions or have their sequels contained and, to some extent, neutralized by the action of the central bank as lender-of-last-resort. In other words, we will distinguish between *systemic crises* and *distress situations*, the latter comprising both the case in which disturbances are not serious enough to threaten the system as a whole and those in which a systemic crisis is a possibility, but the central

<sup>11</sup> On Fisher's concept of debt deflation, see Minsky (1982) and Tobin (1981).

bank is successful in preventing it. Thus, a distress situation may be the embryo of a banking crisis, but it does not have to develop in that direction. Banks in distress may eventually fail without impairing in a significant degree other banks' assets or without leading the general public to believe that the whole system is in danger.<sup>12</sup> This does not mean, on the other hand, that distress situations are not costly to the system, even in the best case in which deposits cashed in a bank in difficulty are entirely redeposited in another bank. It is generally accepted that bank loan markets are very imperfect. The collapse of a bank may cause deep distress to its borrowers besides the losses to its creditors. In any case, distress situations are not likely to cause relevant losses in the aggregate, and this is the sense in which we understand crises to be more serious threats to the operation of the economy as a whole.

### 3. The case of Brazil

#### 3.1. *The macroeconomics of Brazil in the 1990s*

From the early 1980s to 1994, the performance of the Brazilian economy was dominated by the repeated clashes between accelerating inflation and the (generally unsuccessful) attempts to control it. First, the country was submitted to IMF-inspired orthodox policies to contain aggregate demand. The inability to follow through with these policies led policy makers, from 1986 on, to begin trying a string of equally unsuccessful 'heterodox' stabilization plans, relying to a greater or smaller extent on mandatory price freezes to break inertial (feedback) components of the inflationary process. After each attempt at stabilization, inflation returned at higher rates than before. By late 1989, Brazil was facing a definite possibility of a hyperinflationary explosion, with monthly rates of inflation reaching about 70% by February 1990. A new federal administration was inaugurated in March of that year, implementing an exceedingly violent stabilization plan consisting in the temporary sequestering of almost 80% of the finan-

<sup>12</sup> Benston and Kaufman (1995) argue that this is most commonly the case. One should notice that the term distress is being given a different meaning than that attributed by those authors.

cial assets then outstanding. The hyperinflationary momentum was broken at the price of a severe disorganization of the economy and a 4.3% contraction of the GDP (see Table 1). Facing heavy political pressure, the administration gradually backed down and by the end of the 1990 the original plan was replaced by another anti-inflation initiative, itself scrapped shortly after in favor of a high-interest-rate policy that aimed purely at avoiding a new hyperinflationary explosion. By that time, the political crisis that led to the President's resignation was already unfolding and there was not much more that could be done but to wait for his successor. The high-interest-rate policy was able to delay the resumption of the rapid inflation of 1990 at the cost of stagnating the economy in 1991 and 1992. Vice-president Itamar Franco was sworn as President in 1993 to complete the original term. After some hesitation, during which the economy picked up steam and inflation accelerated, President Franco began implementing the Real Plan by December 1993. The Real Plan (after the name of the new currency, the *real*) consisted of a succession of steps that took about seven months to be completed. On July 1st 1994, the new currency was put in circulation as the last piece in the anti-inflation puzzle. Prices were increasing at monthly rates of up to 40% in the eve of the monetary reform. GDP was also increasing fast, with industrial production finally reaching the 1989 level (Table 1).

The economy's momentum was maintained through 1995, despite the repeated attempts to cool it off. Average annual inflation, as shown in Table 1, was about 71%, but this is mostly explained by the contamination of the price index by the high inflation of the first six months of 1994. Measured from December 1994 to December 1995, annual inflation was 14.8% (general price level).

The Real Plan was implemented in three steps. In December 1993, the federal government created an Emergency Fiscal Fund to help balance the budget in the next fiscal year. At the same time, a new money-of-account, the URV, was created to denominate all contracts in the economy. The URV was supposed to measure *current* inflation allowing contracts to maintain stable real values to break inflationary inertia fed by indexation and contract staggering.<sup>13</sup> When all contracts had been denominated in URV, one could assume an equili-

<sup>13</sup> For a discussion of feedback elements in high inflation regimes, see Carvalho (1993) and Feijo and Carvalho (1992).

TABLE 1  
BRAZIL - MACROECONOMIC DATA

Year	GDP growth rate	Implicit deflator annual rate	Industrial production index	Capacity utilization	Employment in manufacturing*	Consumer credit proposals*	Current transactions US \$ million	International reserves US \$ million
1990	-4.3	2595.6	91.1		97.9	82.68	-1407	8552
1991	0.3	421.2	88.72		90.27	84.28	6143	19008
1992	-0.8	988.4	85.41	72.29	84.48	75.86	-592	25878
1993	4.2	2087	91.82	75.23	81.35	74.86	-1689	36471
1994	6	2312.3	98.8	77.13	79.4	84.94	-17972	50449
1995	4.2	74.9	100.62	78.05	78.24	98.84	-24347	59039
1996	3	11.1	102.24	78.19	71.47	129.17		

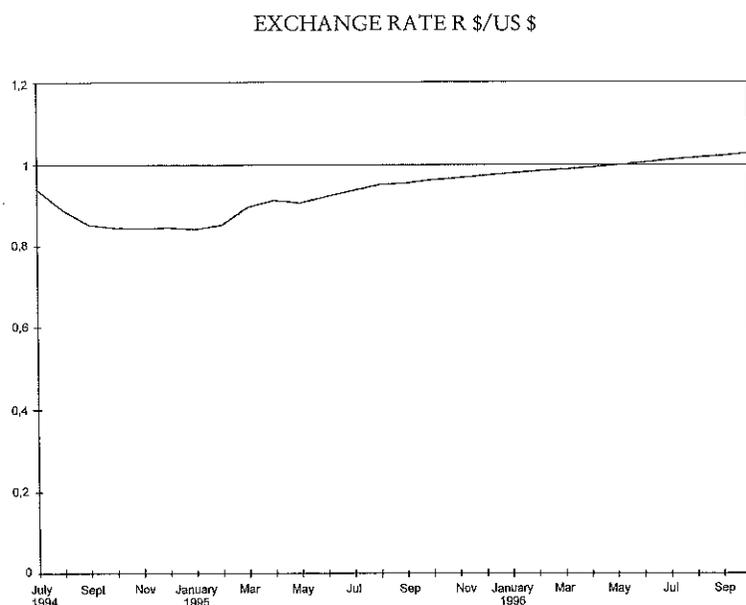
\* Data for São Paulo State. Industrial production, employment and consumer credit indices: 1989 = 100.  
Source: *Boletim do Banco Central do Brasil*, several issues.

brium vector of relative prices had been reached, removing further inflationary pressures arising from sellers' attempts to improve their relative position.<sup>14</sup> Allied to the maintenance of a balanced budget, this should be enough to eradicate inflation. A new currency was introduced to signal the beginning of a new era. The nominal value of contracts would be converted from being URV-denominated to real-denominated. In the preamble to the law that created the new currency, the government stated that the stock of reals would be backed by US dollar reserves (which made some believe that an Argentinean-style currency board was being created) but also that strict targets would be set for monetary aggregates, suggesting that a classically monetarist policy would be implemented. In fact, both announcements were just red-herrings. Stability was sought through a mix of exchange appreciation and import liberalization that first repressed inflationary pressures on tradables, and much later had a similar effect on non-tradables. The targeted exchange rate of the real against the US dollar was announced in the monetary reform law of July 1994 to be 1:1. In fact, as one can see from Figure 1, supported by very high domestic interest rates, the real was overvalued and the target exchange rate was only reached in June 1996. As a result, the trade surplus of about US \$ 10 billion in 1994 was converted into the deficit of US \$ 3.1 billion in 1995, a deficit that has actually grown in 1996. Current transactions deficits, shown in Table 1, sharply increased from US \$ 1.68 billion in 1994 to US\$ 24.35 in 1996.

During the second semester of 1994, despite the high interest rates that were imposed by the authorities, the economy grew very quickly. Aggregate demand was stimulated by the virtual elimination of the inflation tax, that hit in particular the lower-income groups; and the rapid expansion of domestic credit, resulting from the attempt by banks to occupy new markets to make up for the losses they expected to suffer with price stabilization and from the perception by the public that interest rates were now affordable. GDP grew at an annual rate of 6% in 1994, with industrial production growing 7.6%. The emergence of the first monthly trade deficits since the 1980s

<sup>14</sup> In fact, this goal was never really attained. Nevertheless, it served to control real wages without generating adverse reaction from labor, since monthly wage adjustments for current inflation was an old demand of the labor unions. See Sicsu (1996).

FIGURE 1



while capacity utilization rose by two points was interpreted as a sign of overheating. Policy makers began trying to cool off the economy still in 1994. Credit restrictions had some impact on loans to the manufacturing sector and to individuals from October 1994. The economy's response, however, to these measures was generally weak. Total credit maintained its growth rate and the economy kept its fast pace.

Under these conditions, the Mexican crisis sharply raised the stakes of a stabilization policy that relied heavily on the appeal to imports to contain domestic inflation. Haunted by the possibility of capital flight, the central bank sharply raised interest rates in March 1995. Required reserves were kept high and were extended also to loans. Credit supply kept growing, but at least a share of it was certainly distress borrowing by speculative and Ponzi borrowers.<sup>15</sup>

<sup>15</sup> According to Minsky, in the event of a raise in interest rates during a boom, credit demand does not fall at least for some time. In fact, it may even grow if demand expectations of hedgers, for example, are disappointed by the deceleration of growth or if rising interest rates transform speculators into Ponzi units. Unfortunately, available data do not allow us to investigate this possibility, although fragmen-

The policies adopted succeeded in breaking the economy's growth momentum. In fact, it soon became clear that the authorities had to face the opposite threat: a recession could be in the making, that could have a serious impact on a banking sector that had overexposed itself in the aftermath of the currency change supplying credit to private agents. Non-performing loans and loans in arrears grew exponentially from March 1995 to August 1995 when a systemic banking crisis became a concrete possibility. In fact, by July 1995, fears were widespread that a systemic banking crisis was in the works, heralded by the failures of two among the ten largest banks in the country plus the persistent rumors, later confirmed, that a third large bank was also in a fragile position. Several small banks and financial institutions had suffered intervention by the central bank since the monetary reform. The control over the two largest state-owned banks had also been seized by the central bank in late December 1994. Finally, it was largely known that the two main federal banks, Banco do Brasil and CEF (Federal Savings Bank) were plagued by bad debts. To avoid a collapse, relief measures were adopted, gradually removing restrictions on the supply of credit and on the rolling over of outstanding debts. Interest rates were also gradually reduced although with very small effects on the rates charged to borrowers. The recession was avoided, but to strengthen the financial sector would require other initiatives.

### 3.2. *The impact of the stabilization plan on the financial sector*

The Brazilian financial system of the 1990s is characterized by the dominance of universal banks. According to national accounts data, banks appropriated 86% of the incomes generated by the financial sector in 1995, of which 30.6% was due to commercial banks and 55.8% to universal (called 'multiple') banks, public and private. In fact, banks are even more important than these data suggest, since they own many of the other institutions operating in specific markets. Universal banks were authorized to operate in 1988.<sup>16</sup>

tary evidence gathered in the daily press in that period suggests the possibility to be worth considering.

<sup>16</sup> Until then, laws written in the mid-1960s imposed a US-style segmented financial system with specialized institutions.

Public banks have been declining in importance since the beginning of the decade. State banks, most of them currently in difficulty because of bad loans made for political reasons, are being privatized. Except for some small institutions, on the other hand, there are no known plans to do the same with federal banks. All large private banks are universal, operating in practically every segment of the financial system. In 1996, private commercial banks' deposits and assets represented less than 10% of deposits and assets of universal banks. All evidence points to a still increasing role for private universal banks in the future.

As a result of the changes brought about by the stabilization plan, followed by the restrictive measures adopted from October 1994 to January 1995 to cool off the economy and prevent capital flight, by mid-1995, the banking sector was generally perceived as being, at the very least, under threat. In fact, the stabilization plan hit the sector hard: from an average share of GDP of 12.7% in the period 1990-94, it fell to 6.9% in 1995. The multiplication of controls that inhibited the financial activity during 1995 was partially responsible for this fall. Probably more significant though was the loss of inflationary gains that had represented about 4% of GDP from 1990 to 1993 but fell to practically zero in 1995.<sup>17</sup>

In fact, inflation was a source of multiple forms of gains for the banking sector. In contrast to other national experiences with high inflation, currency substitution was never a relevant phenomenon in Brazil. Widespread indexation and payment systems innovation induced the general public to maintain their funds in the domestic banking system, opening for banks new business opportunities. The public demanded basically two things: an agile payment system that minimized the time needed for balances to be available for transactions, thus minimizing inflationary losses; and the opportunity to share the gains emerging from the arbitrage possibilities that an economy under high inflation generates continuously. As shown in a study prepared by the McKinsey Global Institute (1994), Brazilian banks were very agile to create ways to satisfy these demands. As a result, the use of checkable deposits became widespread in the economy, particularly through the payment of wages and salaries.

<sup>17</sup> These data were calculated by Brazil's Central Statistical Office (IBGE), and are available in IBGE/Andima (1997). Inflationary gains were estimated by calculating the impact of inflation on nominal assets and liabilities of banks.

For banks, this was a very favorable development because it augmented their capacity to gather deposits. A large share of demand deposits did not earn any form of interest or of compensation for inflation.<sup>18</sup> For those who held larger deposits, banks would pay some interest, although usually at rates that were lower than the inflation rate. Eager to obtain at least some compensation on their liquid assets for inflation, most of these depositors would not complain. Only those with enough balances to buy CDs would be fully protected against inflation.

Since banks were successful in maintaining their deposit base at relatively low cost, inflation actually offered them many opportunities of gain. Loans to the private sector could be made under very favorable conditions to banks. High rates of interest could be charged since, as is well known, under inflation private agents, and most of all firms, are permanently starving for money. These loans were generally short-term, since inflation was too high to allow agents to form expectations for longer periods. In fact, long-term funding could only be obtained by accumulation of internal funds or from federal institutions, such as the National Development Bank (BNDES). Another profitable opportunity was the purchase of government bonds. Most of the time they offered very high rates of return because the federal government wanted to compensate (some would say overcompensate) financial institutions for the risk of absorbing in their portfolios liabilities of an increasingly indebted entity. Besides paying high interest rates the federal government would also guarantee the liquidity of securities it issued. In fact, the central bank even created a safety net, known as *automatic zeroing*.<sup>19</sup> When a bank found itself with a larger portfolio of government securities than it could finance, given the funds at its command, the central bank would buy back the excess securities. In this way banks would not suffer losses either by having to sell securities at declining prices or to search for funds to borrow at higher interest rates. There was also a downside to the investment in

<sup>18</sup> There is a large number of low-balance current accounts in Brazilian banks due to the fact that wages and salaries both in the private and the public sectors are usually paid by directly depositing their value in the accounts of employees. Banks minimize their operational costs by denying those with low balances the right to checkbooks.

<sup>19</sup> A discussion (in Portuguese) of this mechanism can be found in De Paula (1996).

government securities, though. The risk of having the government to renege on their debts became very concrete after the Collor Plan of 1990. In a smaller scale, in fact, every 'heterodox' stabilization plan adopted since 1986 involved some unilateral change in terms of debt. In addition, the automatic zeroing mechanism was being operated in its last years by guaranteeing the repurchase of securities but not at remunerative prices. Finally, the perspective of a fiscal equilibrium being finally reached as an element of the stabilization plan induced banks to look for alternatives. In December 1992, during the high inflation period, credit and leasing operations represented 44% of total non-fixed assets of private universal banks, government securities 15% and private securities 6.5%.

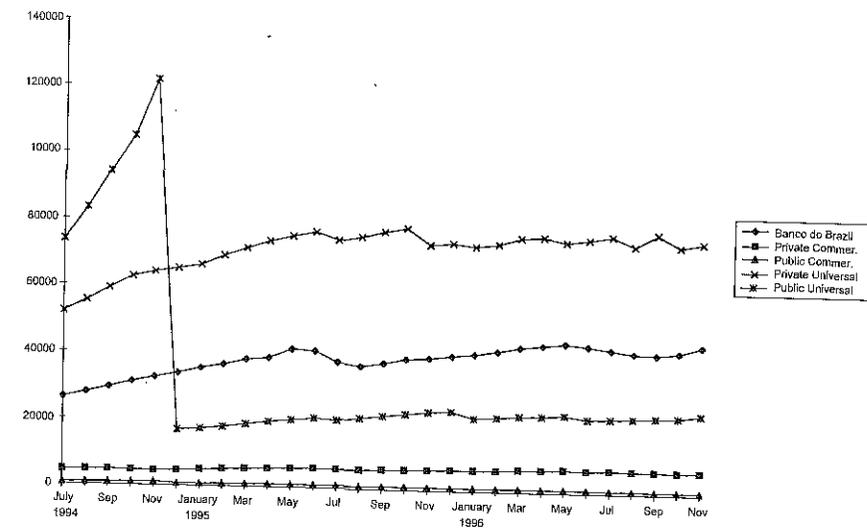
In sum, high inflation stimulated the proliferation both of bank branches searching to maximize the possibility of receiving low-cost deposits, and the creation of many small banks, known as 'Treasury Banks', dedicated almost exclusively to gather deposits to finance the acquisition of public securities.

The drastic reduction of inflation rates changed this picture, forcing banks to look for alternative strategies. The most promising field was generally agreed to be to increase the supply of credit to the private sector. In fact, Brazil, like other countries that suffered prolonged periods of high inflation, exhibits a relatively low credit/GDP ratio. Besides, all credit is supplied on a short-term basis. A growing economy, led by private entrepreneurs, was expected to increase and diversify the demand for credit which should require some extensive consolidation of the banking industry, strengthening the hand of large universal banks, already the leaders of the financial sector. As shown in Figure 2, banks began to increase their supply of credit immediately after the creation of the new currency, in July 1994. Private universal banks' credit rose very rapidly until October 1994, when it decelerates under the influence of the central bank's attempts to cool off the economy. Public universal banks, in contrast, increased the supply of credit very fast until December 1994, when intervention on the two major state banks, Banespa and Banerj, broke that trend. Figures 3 and 4 and Table 2 show that all segments of the economy benefited from credit expansion.

Quarterly balance sheet data in Figure 5 show that private universal banks not only increased their supply of credit to the pri-

FIGURE 2

## BANKING SECTOR: CREDIT SUPPLY



ate sector until the third quarter of 1995 but they also reversed a long-standing preference for public debt over private debt in the same period. By September 1995, the result of the strong restrictive policy adopted by the monetary authorities from October 1994 to January 1995 was being shown in the increase of the value of non-performing loans and in the difficulties of many banks. Under these circumstances, surviving banks turned again to government securities as a safe haven, reducing the value of credit operations and the purchase of private securities.

The impact of the central bank policy was not felt immediately. The sharp rise in money market interest rates in March 1995 (Figure 6 and Table 4) and the imposition of reserve requirements on loans did not stop at once the growth of credit, that only lost momentum in June 1995. Non-performing debts, however, began rising much sooner, indicating troubles to come. The manufacturing sector was most visibly hit, but all segments of the private sector suffered the impact of the measures (Figure 7).

TABLE 2

FINANCIAL SYSTEM LOANS  
End-of-period balances (R \$ million)

Month	Government	Value of loans to entrepreneurial activities							Total
		Industry	Commerce	Housing	Other services	Rural	Individuals	Total	
July 1994	19053	42397	14911	40101	25063	14278	7340	144090	163143
August	19766	44476	15428	40877	26083	14848	9940	151652	171418
September	19998	46380	16400	41265	26733	16112	12553	159443	179441
October	20566	47311	17209	42302	28086	17328	14019	166255	186821
November	21233	46781	18262	43677	29883	18289	14394	171286	192519
December	22102	46871	18956	45725	31150	18550	15005	176257	198359
January 1995	22991	49482	19761	46984	30865	18864	15506	181462	204453
February	23514	52494	20709	47990	32422	19600	14844	188059	211573
March	24230	53469	22087	47487	34308	20278	15614	193243	217473
April	25011	55667	23105	50487	31854	21091	15757	197961	222972
May	25962	57402	23968	51957	35647	21734	16184	206892	232854
June	25307	57924	25324	54222	36732	22439	15958	212599	237906
July	17059	58446	24644	51176	26990	22511	15756	199523	216582
August	17447	59641	25205	52652	25823	23696	15480	202497	219944
September	17848	60340	26254	53452	27993	24712	15326	208077	225925
October	18549	61825	26767	54721	28505	25831	15508	213157	231706
November	19989	63377	27802	56068	29838	26397	15471	218953	238942
December	20868	64506	28282	54993	31161	26732	16064	221738	242606

TABLE 2 (cont.)

FINANCIAL SYSTEM LOANS  
End-of-period balances (R \$ million)

Month	Government	Value of loans to entrepreneurial activities							Total
		Industry	Commerce	Housing	Other services	Rural	Individuals	Total	
January 1996	26914	64554	28806	54771	32695	25585	15865	222276	249190
February	27572	63911	29196	54758	33403	26283	16343	223894	251466
March	30513	66511	29668	55758	32820	26235	15787	226779	257292
April	29310	66725	29958	55965	34741	27205	15610	230204	259514
May	29748	67792	29721	55512	37614	27406	15118	233163	262911
June	29357	68580	30412	58672	36706	27386	16081	237837	267194
July	29851	68978	30569	61470	36744	25963	16860	240584	270435
August	30157	72051	31465	61652	36669	24589	18130	244556	274713
September	30714	71615	31600	61047	37066	23879	18968	245409	276123
October	30821	74328	28440	60338	37201	24318	19882	244507	275328
November	32010	74347	29036	61001	37698	24948	21667	248697	280707
December	31943	78330	29429	62329	38513	24414	23171	256186	288129
January 1997	32755	77865	28539	61931	38886	2740	24475	256436	289191
February	32872	78611	29021	61868	38951	25137	25446	259034	291906
March	33806	79647	29838	62130	39320	26015	26663	263513	297419
April	34395	80382	30485	62906	41065	27241	28003	270082	304477
May	35200	81520	31966	63730	42073	27262	28841	275392	310592

Source: Boletim do Banco Central.

TABLE 3

FINANCIAL SYSTEM LOANS - IN ARREARS AND NON-PERFORMING  
End-of-period balances - R \$ million

Month	Government	Entrepreneurial activities						Total	
		Industry	Commerce	Housing	Other services	Rural	Individuals		
July 1994	224	4342	930	1111	2921	2409	430	12143	12367
August	216	4608	1059	1109	2888	3225	471	13360	13576
September	219	4881	1057	1221	2963	3288	520	13930	14149
October	216	5062	1105	1253	2942	4305	543	15210	15426
November	341	4965	1196	1264	2953	4614	594	15586	15927
December	313	4943	1207	1266	2871	3131	653	14071	14384
January 1995	332	5251	1379	1337	3065	3272	760	15064	15396
February	42	5478	1517	1400	3311	3504	851	16061	16103
March	60	5946	1675	1448	3570	3746	1076	17461	17521
April	58	7202	1823	1528	3811	3960	1330	19654	19712
May	59	8086	2315	1524	3992	4289	1567	21773	21832
June	54	7891	2631	1780	4402	4996	1746	23446	23500
July	63	8433	3313	1958	4834	5649	2097	26284	26347
August	60	9149	4114	2158	3550	6578	2490	28039	28099
September	61	9600	4396	1791	3781	5012	2599	27179	27240
October	68	10094	4843	1875	4177	5275	2893	29157	29225
November	94	10604	4860	1849	4475	5303	2863	29954	30048
December	204	12155	5183	1942	5388	5240	3185	33093	33297

TABLE 3 (cont.)

FINANCIAL SYSTEM LOANS - IN ARREARS AND NON-PERFORMING  
End-of-period balances - R \$ million

Month	Government	Entrepreneurial activities						Total	
		Industry	Commerce	Housing	Other services	Rural	Individuals		
January 1996	265	12776	5680	2030	5346	5449	3359	34640	34905
February	360	12667	5932	1873	4936	5693	3453	34554	34914
March	208	13146	6187	1888	5102	5954	3599	35876	36084
April	150	13171	6305	1954	6376	6343	3379	37528	37678
May	118	13665	6402	2176	6473	6645	3249	38610	38728
June	139	14070	6606	2251	6136	6941	3294	39298	39437
July	163	14594	6856	2296	6136	6733	3108	39723	39886
August	249	17108	7712	2460	5874	6489	3346	42989	43238
September	239	17174	7375	2410	5569	6206	3355	42089	42328
October	336	15643	7377	2400	5347	6160	3298	40225	40561
November	1039	13866	7569	2394	5459	6253	3216	38757	39796
December	951	16134	7873	2446	5368	6136	3375	41332	42283
January 1997	1160	16547	8143	2789	5627	6319	3408	42833	43993
February	1234	16929	8419	2827	5769	6483	3600	44027	45261
March	882	17247	8658	3303	5844	6763	3803	45618	46500
April	1054	18017	9003	3176	6118	7042	4093	47449	48503
May	1229	18495	9260	2523	6236	7177	4331	48022	49251

Source: Boletim do Banco Central do Brasil, several issues.

FIGURE 3

BANKING SECTOR: TOTAL LOANS

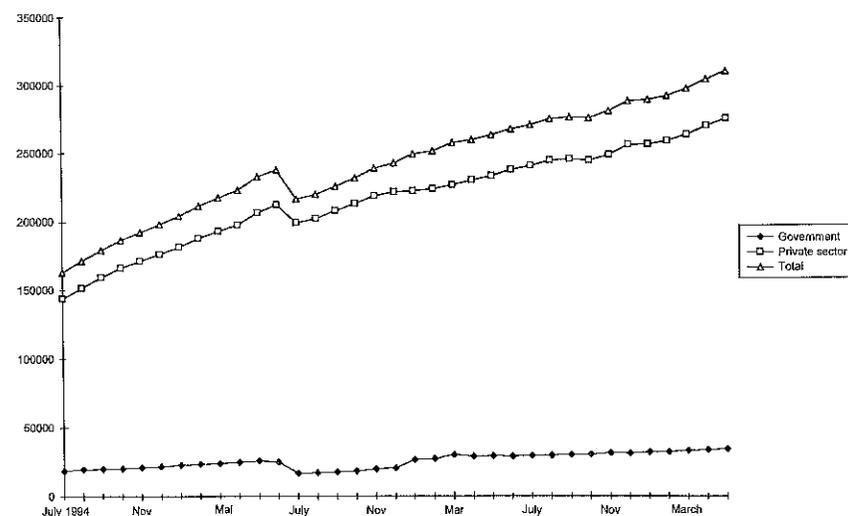


FIGURE 4

BANKING SECTOR: LOANS TO THE PRIVATE SECTOR

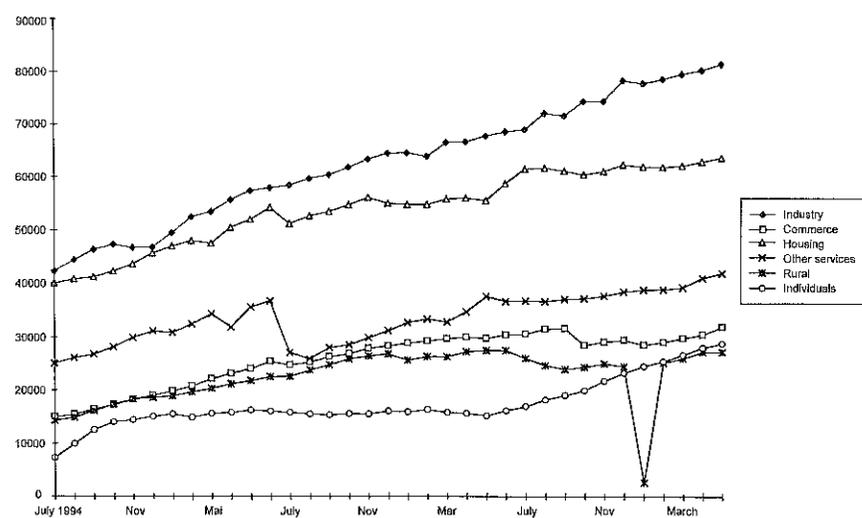
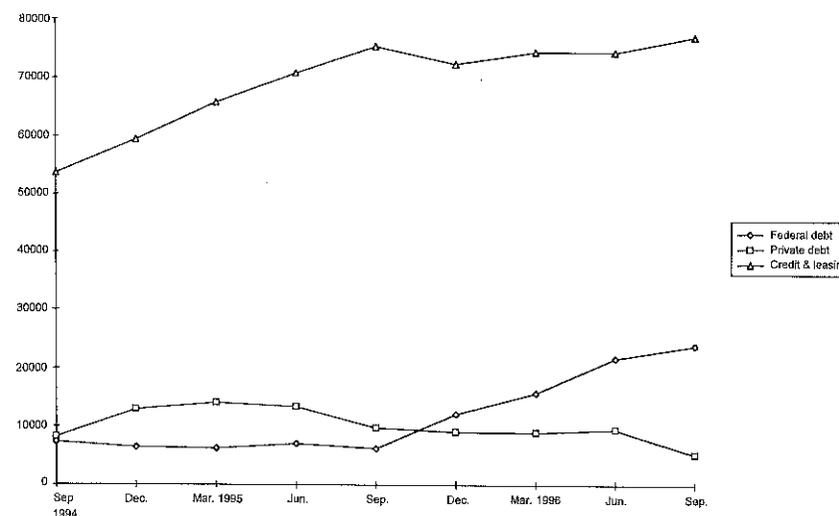


FIGURE 5

PRIVATE UNIVERSAL BANKS' ASSETS

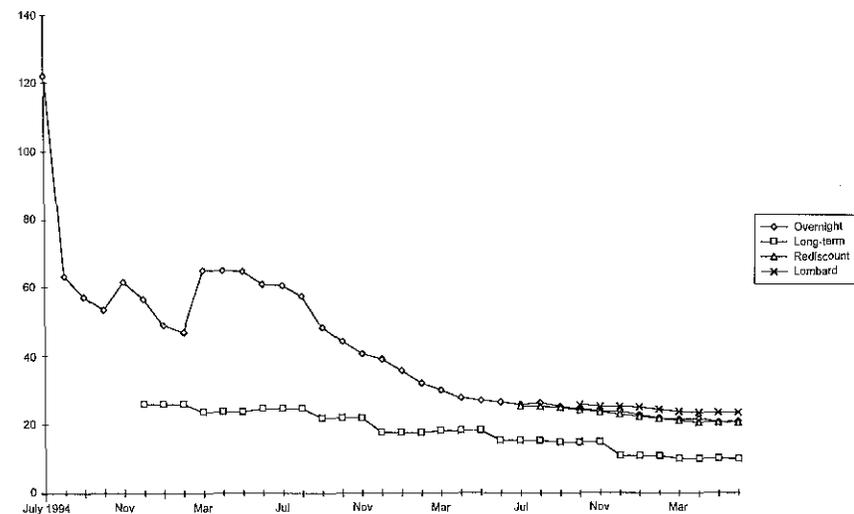


Though Table 3 and Figure 7 show a practically monotonously increasing rate of bad loans extending to the first months of 1997, the data shown in Figure 8 are probably more relevant to the analysis of bank fragility. In fact, the latter show that the rate of bad loans in the balance sheets of *private universal banks* actually levels off in the second semester of 1995, and falls significantly in the second quarter of 1996. Public banks, however, continue to see the quality of their assets deteriorating until the end of the series. The data in Figure 8 reflect measures taken by private banks to improve the quality of their assets, increasing their liquidity, reducing their supply of credit and provisioning against non-performing loans. It was precisely in this context that Economico and Nacional, two among the largest banks in Brazil, went broke. The increase in the liquidity preference of banks resulting from the increase in bad loans dried the interbank market pushing the central bank into seizing the control over insolvent banks and to actively operate as provider of liquidity assistance, in a context of volatile bank reserves (Figure 9).

At that moment, the fear of a systemic banking crisis reached its peak. Its most important sign was the disruption of the interbank market for reserves. The stronger banks, that had assets eligible for

FIGURE 6

## ANNUAL INTEREST RATES



rediscounting, refused to lend to riskier banks in need of reserves. As one sees from Figure 10, by November 1995 private universal banks increased their liquidity preference, retaining a larger proportion of fully liquid assets and substituting government securities for private securities again (Figure 5). The general public, in contrast, despite the constant flow of bad news divulged by the press, did not panic. In fact, one can see from Figure 11, showing data from Table 5, that there was a small reduction in demand deposits holdings, but no flight from money. Deposits as a ratio to GDP did decrease from 2.1% in February 1995 to 1.8% in March and 1.6% in May, but it recovered from this low point in the following months. The fall in the ratio is more likely to be explained by a flight from demand deposits toward financial placements, since the first months of 1995 were the ones in which interest rates were at their peak. In fact, the ratio of liquid financial assets (M4) to GDP oscillated around 32% during the first semester, to reach 35% in August 1995, rising steadily to 38% in December of that year. Most of the assets that define M4 are offered by banks. If there was a flight from bank liabilities, it should be reflected by a fall in M4. One should also keep in mind that because of the ma-

TABLE 4

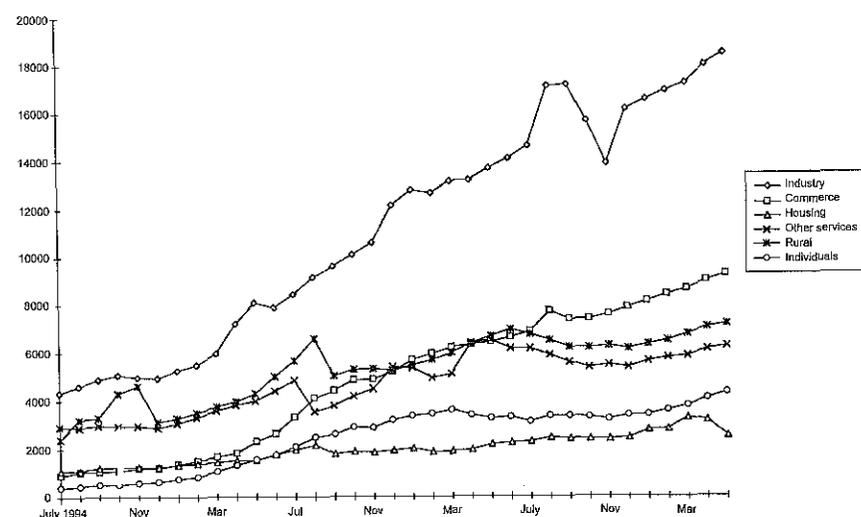
## INTEREST RATES - PERCENTAGE PER YEAR

Month	Overnight	Interbank overnight	Reference rate	Long-term for official loans	Financial basic rate	Rediscount	Lombard
July 1994	122	117.2	80.1				
August	63.3	63.2	28.8				
September	57.1	57.3	33.5				
October	53.3	53.8	35.4				
November	61.5	62.2	41.3				
December	56.4	57.1	40.5	26			
January 1995	48.9	50.7	28.3	26			
February	46.8	46.6	24.7	26			
March	65	67.8	31.4	23.7			
April	64.9	64.2	50.5	23.7			
May	64.7	65.2	46.7	23.7			
June	60.8	61	40.7	24.7			
July	60.5	60.3	42.4	24.7	59.7		
August	57.2	56.6	36.1	24.7	57.1		
September	48.1	46.8	25.9	21.9	45.3		
October	44.1	43.5	21.8	21.9	42.2		
November	40.5	39.9	18.7	21.9	38.6		
December	38.9	38.1	17.3	17.7	37		
January 1996	35.7	35.4	16.1	17.7	35.6		
February	32.1	31.5	12.2	17.7	31		
March	30.2	29.8	10.2	18.3	28.7		
April	27.8	27.3	8.2	18.3	26.4		
May	27	26.9	7.3	18.3	25.8		
June	26.5	25.9	7.6	15.4	24.2		
July	25.8	25.5	7.3	15.4	24.5	25.3	
August	26.3	26.1	7.8	15.4	24.4	25.3	
September	25.4	25.1	8.2	15	24.1	25	
October	24.7	24.7	9.3	15	23.9	24.2	25.8
November	23.9	23.8	10.2	15	23.4	23.6	25.3
December	23.9	23.7	11	11	22.8	23	25.3
January 1997	22.9	23	9.3	11	22.7	22.4	25.1
February	22	21.9	8.2	11	21.4	21.8	24.5
March	21.6	21.3	7.9	10.3	20.8	21.3	23.9
April	21.8	21.8	7.7	10.3	20.7	20.7	23.6
May	20.8	20.7	7.9	10.3	20.9	20.7	23.6
June	21.1	20.9	8.1	10.2	20.8	20.7	23.6

Source: Boletim do Banco Central do Brasil, several issues.

FIGURE 7

## BANKING SECTOR: BAD LOANS TO PRIVATE SECTOR



ny restrictions imposed by the central bank since October 1994 on loans, banks did not have a motive to try to keep deposits as before. Finally, we should remember that it was on demand deposits that the heavier reserve requirements were imposed. The ratio between currency outside banks to M1 indicates some degree of substitution of specie for demand deposits, but, again, it *precedes* the perception of crisis, and remains at the new levels until the end of 1996. Again, the more extensive use of currency instead of demand deposits can be more probably explained by the fact that banks began to compensate their losses with stabilization by charging for the services they offered to the public, stimulating the latter to economize in the use of demand deposits. In addition, as already noticed, demand deposits were penalized by heavy reserve requirements. Banks themselves would orient the public to place their deposits in money market funds, subject to lighter reserve requirements.

Despite the relative tranquillity with which the non-bank public dealt with the events of 1995, no one could say for sure that a panic would not occur. A distinct feeling of fragility and impending crisis was strengthened by the repeated interventions by the central bank on financial institutions. In 1996 the IMF reported:

TABLE 5

## MONEY SUPPLY - END-OF-PERIOD BALANCES AS PERCENTAGE OF GDP

	Demand deposits	M1	M2	M3	M4
July 1994	1.4	2.2	14.4	22.7	31.3
August	1.7	2.6	14.4	22.7	31.8
September	2	3.1	13.7	21.8	31.2
October	2.2	3.2	13.6	21.6	31.8
November	2.2	3.4	13.3	21.4	32.1
December	2.6	4.2	13.5	21.9	32.6
January 1995	2.1	3.3	12.5	20.8	33.1
February	2.1	3.5	12.8	21	33.4
March	1.8	2.9	11.7	19.9	32.5
April	1.7	2.9	11.6	20	32.2
May	1.6	2.7	11.5	20.2	31.9
June	1.7	2.8	11.9	20.8	32.1
July	1.7	2.8	12.8	21.8	32.9
August	1.7	2.8	14	23.1	35
September	1.8	3	14.5	23.7	36.1
October	1.9	3.2	14.6	23.8	36.5
November	2.1	3.4	15.6	24.8	37.3
December	2.6	4.4	16.4	26.1	38.3
January 1996	2.1	3.5	16.1	25.6	37.6
February	2	3.4	16.8	26.4	38.4
March	1.9	3.4	17.4	26.9	39
April	2	3.4	17.9	27.3	39
May	1.8	3.2	18.5	27.7	39.3
June	1.8	3.3	18.9	27.9	39.4
July	1.8	3.2	19.6	28.5	39.8
August	1.7	3.3	20	28.8	40.2
September	1.9	3.5	20.4	29.2	40.8
October	1.7	3.2	20.4	29.3	41.2
November	1.6	3.3	21.2	30.2	42.1
December	1.9	4	22.2	31.8	42.9
January 1997	2.6	4.4	22.9	32.9	42.9
February	2.9	4.7	23.2	33.3	43.1
March	3.1	4.8	23.3	33.5	43.3
April	2.9	4.6	23.5	33.7	43.4
May	2.9	4.6	23.5	33.7	43.5
June	3.1	4.7	23.5	33.8	44

Source: Boletim do Banco Central do Brasil.

FIGURE 8

PRIVATE UNIVERSAL BANKS:  
RATIO OF NON-PERFORMING CREDIT AND IN ARREARS TO TOTAL CREDIT

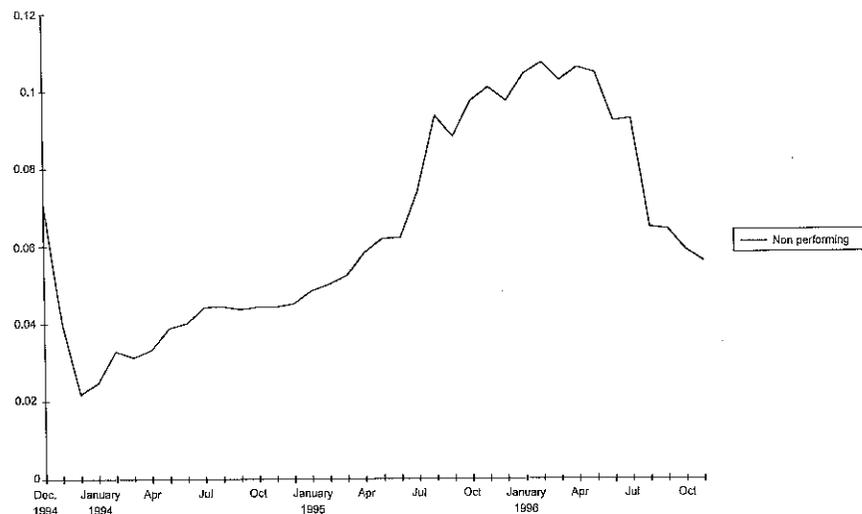


FIGURE 9

BANKING RESERVES AND LIQUIDITY ASSISTANCE BY THE CENTRAL BANK

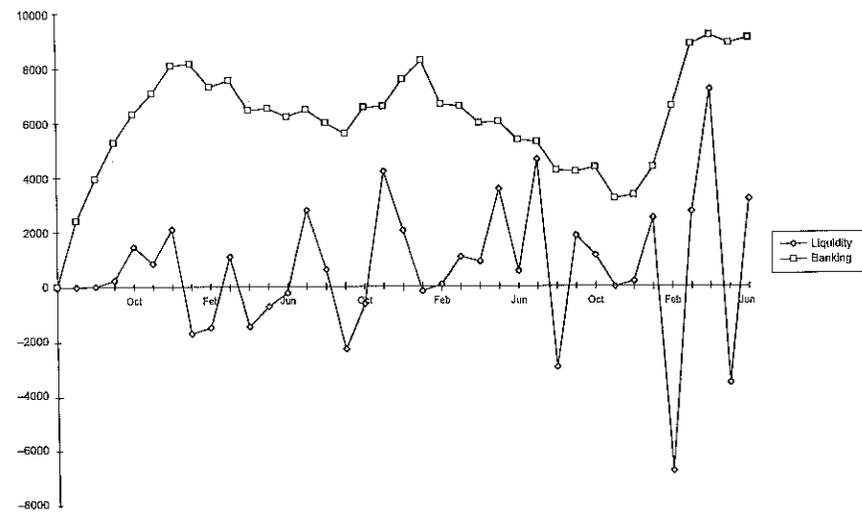


FIGURE 10

BANKING SECTOR: LIQUIDITY INDICES

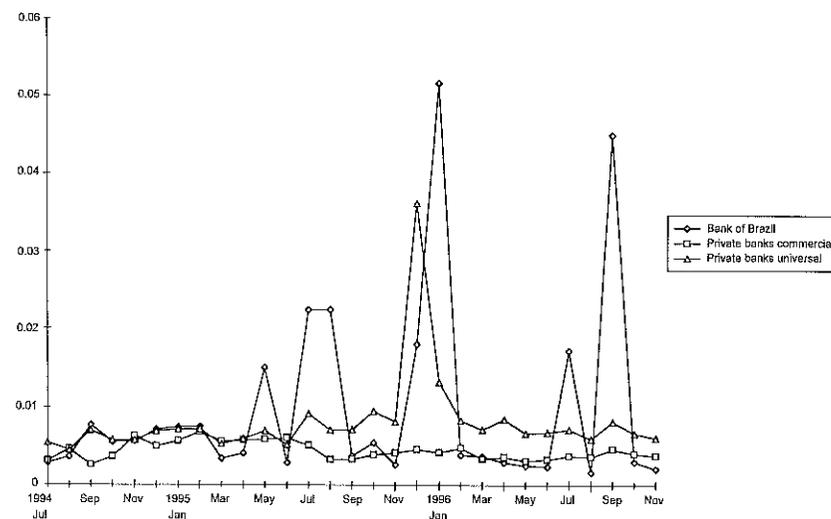
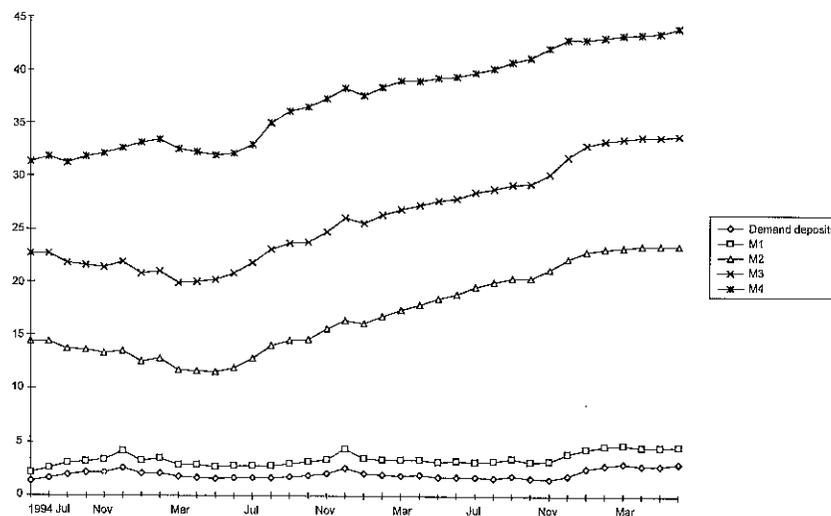


FIGURE 11

MONETARY AGGREGATES/GDP



"Since June 1994, the central bank has liquidated 19 private banks and has intervened in the activities of 4 private banks, including 2 large banks. [...] The central bank has also placed five state banks under temporary administration, including the two largest" (IMF 1996, p. 13).

In addition, the two largest federal banks, Bank of Brazil (a commercial bank, not to be confused with the Central Bank of Brazil) and CEF (Federal Savings Bank) also showed heavy losses in their balance sheets, the former actually becoming technically bankrupt, with current losses representing 143% of its net worth in 1994 and 160% in 1995.<sup>20</sup>

### 3.3. Crisis or distress?

By mid-1995 the possibility of a banking crisis was real. It was feared that other large banks could follow *Economico* and *Nacional*. The refusal of more conservative banks to lend reserves to other banks was seen as a sign of problems in the banks seeking funds. The mere rumor of an appeal to the discount window could trigger a run against a bank. Extensive fraud discovered in the balance sheets of the banks under intervention raised the possibility that institutions believed to be healthy could be, in fact, very fragile. In any case, even the reported data was enough to show that other banks could also be in danger. Finally, the reaction of the federal government and the central bank to the crisis in *Banco Economico* raised serious doubts as to the capacity of the authorities to deal with these problems.<sup>21</sup> Nevertheless, a systemic crisis did not materialize.

<sup>20</sup> Paradoxically, during the quasi-crisis of 1995, the public cashed their deposits in private banks perceived to be weaker and transferred them mainly to Bank of Brazil. There is wide agreement that the losses suffered by this bank are due to loans made because of political determinations and that the federal government would not allow its bank to go under. In fact, this perception was correct and the bank is being recapitalized by the Treasury to make up for those losses.

<sup>21</sup> After the central bank intervened in *Banco Economico*, which was an important regional bank, politicians of that region asked the President of Brazil, Fernando Cardoso, to overrule that intervention. Astonishingly, the President yielded to these demands. The strong reaction from all quarters forced President Cardoso to back down, and the intervention was maintained. The whole episode, however, raised many doubts as to the capacity of the authorities to understand bank problems and to be able to take the right decisions.

TABLE 6

## BANKING RESERVES AND LIQUIDITY ASSISTANCE

	Financial liquidity assistance	Banking reserves
July 1994	0	2412
August	18	3963
September	238	5294
October	1450	6330
November	831	7094
December	2092	8095
January 1995	-1684	8165
February	-1467	7326
March	1085	7565
April	-1433	6459
May	-699	6528
June	-228	6220
July	2787	6484
August	602	5984
September	-2256	5601
October	-617	6557
November	4210	6596
December	2035	7591
January 1996	-168	8276
February	71	6668
March	1064	6592
April	886	5966
May	3555	6011
June	541	5361
July	4637	5281
August	-2925	4229
September	1841	4183
October	1117	4337
November	-2	3207
December	176	3326
January 1997	2495	4354
February	-6738	6597
March	2742	8859
April	7221	9193
May	-3481	8911
June	3191	9094

Source: *Boletim do Banco Central do Brasil*.

According to Minsky, a financial system becomes more fragile as a boom develops because both financial institutions and borrowers reach increasingly speculative balance sheet positions. Speculative postures need the economy to keep growing so rising aggregate demand generates enough profits to allow payment of interest costs and to re-finance debts. Credit supply has to expand to support the required rise in aggregate demand. Credit expansion and boom conditions may be interrupted either by a restrictive monetary policy or by a rise in the liquidity preferences of banks fearing overexposure. Whether a full-fledged crisis ensues depends on the degree of balance sheet fragility of financial institutions and on whether or not the government steps in to contain the risks of a collapse.

In the case of Brazil, given the atrophy of medium- and long-term credit supply, any expansion of credit demand is speculative in Minsky's sense. Thus, in the special conditions of Brazil, rising credit supply per se increases financial fragility. Nevertheless, a crisis was successfully averted.

As we already mentioned, there is no significant evidence of a flight to cash or to foreign moneys, with the consequent loss of aggregate banking reserves, that could signal a systemic crisis in the sense of Benston and Kaufman (1995). A somewhat stronger evidence of crisis is the reduction of aggregate banking reserves in August and September 1995, together with a heavy demand for liquidity assistance from the central bank in July. As we see in Table 6, reserves began growing again from October on, although liquidity assistance was also heavy from that month on. There is, however, some ambiguity surrounding the data on reserves, because the central bank kept reducing the reserve requirements to alleviate the situation. On the other hand, the data on liquidity assistance may merely indicate the extent to which the central bank was supporting individual banks for which the interbank credit market could be closed, including the state banks under its own administration. This last interpretation is suggested by the fact noted above that there is no evidence that funds were actually fleeing from the banking system as a whole.

Less ambiguously, there was no sign of a debt deflation or of any snowballing increase of bankruptcies that could compromise the quality of the assets held by the stronger banks. In fact, Brazil's GDP increased 4.2% in 1995, with manufacturing output expanding about 2%.

Undeniably, deep uncertainties surrounded the future of the banking system by July to August 1995, but they had surprisingly little effect on the behavior of the private agents concerned in the following months. Even a bank generally known to be condemned, Bamerindus, one of the ten largest banks in the country, could keep its doors open while a solution was negotiated by the monetary authorities. What could have been a systemic crisis seemed to have become just a distress situation, albeit a severe one.

The two elements identified above as factors of systemic stability actually operated positively in this episode to avoid a systemic crisis. On the one hand, as already noted, there is, in the Brazilian banking sector, "a core segment, consisting of large and medium-sized private banks, that is essentially sound, well capitalized, and conservatively operated, which is demonstrated by its ability to respond quickly to serious pressure since the inception of the Real Plan" (IMF 1996).

This core is constituted by two tiers. In the first, there are two particularly strong private banks, Bradesco and Itau, that were able to sail through the critical months of 1995 virtually unscathed. Having avoided credit overexposure to credit risk, these banks reacted prudently to the threat of crisis, keeping high capital coefficients and overprovisioning for non-performing loans, emphasizing the strength of their financial condition. There is a second tier of banks who saw in the prospective crisis an opportunity to acquire problem banks and to strengthen their competitive position when the transition to price stability was completed. At the same time, a more liberal policy toward foreign banks attracted groups like HSBC and Santander to buy local banks, strengthening the position of this second tier. The strength of these banks allowed the avoidance of runs circumscribing the crisis to weaker institutions.

A second, and probably more important, factor was the strong reaction of the central bank to the threat of a systemic crisis. The authority of the central bank had been badly hurt by the mishandling of the intervention on Banco Economico. The fear that the central bank could be unable to take effective action against bankrupt banks because of political reasons quickly spread out. To confront this fear and to promote an orderly transformation of the banking system, the central bank launched PROER, a program to finance the absorption of problem banks by healthy ones. The program used funds from banks' re-

quired reserves to finance, at subsidized interest rates, the purchase of the healthy assets, and a corresponding value of liabilities, of banks in difficulties by other banks, collateralized by eligible assets including the ones being purchased. In addition, some possibilities of reducing corporate taxes were also offered. At the same time, it was decided to create a system of deposit insurance.<sup>22</sup> The unrecoverable assets remained under the responsibility of the central bank until they can be liquidated.

PROER was used to finance the absorption of banks in distress, including both *Economico* and *Nacional*, by other banks, smoothing and speeding up the process of elimination of unfit institutions. About US \$ 18 billion (R \$ 20 billion) were lent under the program, mostly in 1995 and 1996. The most positive impact of PROER was to allow control over problem banks to be transferred to other institutions without any interruption of its activities, that is, without causing any major disruptions to its clients. The risk of bank runs were definitely eliminated and no cause for potentially contagious panic episodes arose. Despite the criticisms the program received, accused of bailing out failed bankers, an inaccurate characterization anyhow, PROER was a key element to lull the public's disquietude, preventing the triggering of a full-fledged systemic banking crisis.

#### 4. Conclusions

The main proposition of this paper is that in contrast with other recent Latin American experiences, such as Argentina's and Mexico's in 1994 and 1995, the difficulties faced by the Brazilian banking sector in 1995 were basically bank-specific, not conforming to the generally accepted definitions of bank crisis. Banks perceived by the market as being overextended or downright reckless in their credit policies were denied funds in the interbank credit markets in a period in which the traditional instruments at the disposal of the central bank to support banks were no longer at hand. At first, there did emerge widespread fears that a significant number of banks could be unable to make the

<sup>22</sup> In fact, demand deposits were informally guaranteed by the government.

transition to price stability conditions. The central bank, however, after a period of hesitation, came out with a successful scheme to guide the process offering support to healthy banks willing to absorb assets from problem institutions. More recently, the modernization of rediscount facilities completed the set of instruments necessary to manage the system's liquidity under the new macroeconomic conditions.

One should notice, however, that the transition is far from over and normality has not been reached. Bad credits still abound, mostly in the balance sheets of public banks. The leading private banks kept their conservative stances, depressing the supply of credit. It is not known whether the banking sector could face another stress like the one of 1995, as may be the case in the aftermath of the Asian crisis of 1997. On the other hand, there are important structural changes ahead: firstly, because there are surviving bank institutions that were created mainly to enjoy the gains of inflation or because of tax advantages. In a stable environment, such institutions will have to transform themselves or to disappear. In fact, many already have disappeared, opening in the process a new channel for foreign institutions to set foot in the national financial market by purchasing the failing local banks. Secondly, changes have yet to take place in the Brazilian financial industry to adapt it to the process of financial and technological innovation that is reshaping the financial systems of more advanced countries. The unavoidable integration into global financial markets will force domestic institutions to face these innovations and change accordingly. Universal banks, able to deal with commercial and investment banking services in a global scale, and specialized wholesale banks seem to be the polar forms of bank organization that will survive in the future. These long-term strategic changes only now are beginning to take place in this country.

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