

## Financial stability regulation in Brazil (1998-2008)

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A useful starting point for this discussion may be the acknowledgment of some key features of the Brazilian Financial System (BFS):

i. The BFS is a bank-based system, led by financial conglomerates organized around large public and private banks;

ii. Large banks are organized as universal banks (called *multiple* banks) but there are two other important segments in the banking system: stand-alone investment banks and medium/small banks. Investment banks deal with securities markets, asset management, derivatives, M&A, and other more sophisticated instruments and businesses. Small and medium banks cater to regional demands and to specialized segments of the credit market, dealing particularly with consumer credit;

iii. Contrary to other experiences with high inflation, the BSF actually thrived during the about 25 years in which the Brazilian economy exhibited sustained rapid rates of price increases, since the late 1960s to the mid-1990s. The survival, and more than that, actually strong performance of the banking segment of the financial system in the period is due to a combination of factors: widespread indexation, which prevented dollarization and the flight toward dollar-denominated financial assets that could not be created or managed by domestic financial institutions; permanent availability of high-yield financial assets, in the form of public debt securities to sustain profitability for the financial industry and to remunerate investors; the innovative drive of banking firms, particularly in relation to payments systems, which strengthened the use of demand deposits by clients worried with the effect of high inflation on the real value of “in-transit” deposits; legal restrictions on the domestic expansion of foreign banks;

iv. the ample availability of public debt securities, protected against practi-

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cally all types of risk and the strong demand for liquidity generated by high inflation allowed the development of a strong and liquid securities markets.

The result of this combination of forces was the development of a strong and dynamic domestic banking system and of a thriving, if unbalanced securities markets (because of the failure in developing markets to deal with private securities). The strong point of the industry was the provision of payments services, the weak point was the provision of credit, under appropriate terms, to private borrowers, firms and consumers. Shaped by practices created specifically to allow life to go on under permanently high (but rarely explosive) high inflation, when price stabilization finally arrived, with the Real Plan in 1994, financial institutions in general, and banks in particular, were entirely adapted to inflation. The collection of inflation taxes by the banking sector was estimated by the Brazilian Central Statistical Office (IBGE) in about 4% of GDP. The financial sector as a whole represented about 12% of GDP (against about 7% after price stabilization).

In the immediate of the launching of the Real Plan, two immediate sources of pressures fell on the banking sector: (i) it was believed at the time that with price stabilization public deficits would fall to zero (it was believed that most of the budget deficit was explained by the “Tanzi Effect”), which would reduce the supply of public securities, forcing the banking sector to search for other types of earning assets; (ii) the fall in inflation taxes increased dramatically consumers’ incomes and led to a boom which signaled to financial institutions that credit to private borrowers could substitute for lending to the state.

The Mexican crisis of late 1994-early 1995 put an end to the boom when it led the Central Bank to sharply raise policy interest rates to fight a rapidly growing balance of payments deficit. The rise in interest rates put pressure on the banks that led the increase in credit to the private sector, threatening the solvency of the weaker ones. Three among the ten largest banks got into trouble, forcing the Central Bank to intervene, by establishing procedures to the transfers of the “healthy” assets of problem banks to stronger institutions, while absorbing the “rotten” set of assets and opening bankruptcy processes. This program became known through its acronym PROER.

The crisis was controlled and a bank run was avoided, although a debate remains about the costs of the program. At the time of the crisis, the Brazilian banking system was beginning its process of adaptation to Basel I rules. The Central Bank had determined that adaptation should take place between 1995 and 1998. The 1995 banking distress just referred seemed to have strengthened the resolve to implement the new prudential regulation strategy. In fact, the Central Bank soon determined that banks operating in Brazil had to constitute a regulatory capital of 11% of their assets weighted by risks, in line with the Core Principles issued by the Basle Committee that proposed that banking systems in emerging economies should follow stricter rules than those in developed countries.

The main prudential strategy pursued between the 1995 crisis and 1998, besides proceeding with the implementation of Basel I, was the encouragement of merger and acquisitions in the domestic banking systems, frequently by allowing

foreign institutions to buy problem banks. Entry of foreign institutions had been frozen by the 1988 Constitution. Foreign banks could be allowed to create local subsidiaries in a case by case basis to fulfill specific needs. The Central Bank wanted to merge smaller institutions already in trouble, or in risk to be, but seemed to fear the increase in concentration that would result from having the local champions taking the initiative of approaching those institutions. The way out of this dilemma was to demand that willing foreign banks should pay a “toll” to enter, through the purchase of problem banks. What is important to notice is that wholesale entry of foreign banks was never allowed and the constraints remain in place.

Thus, after the 1995 distress, threats to the safety of the financial system either didn't materialize or were managed by the Central Bank so that a financial crisis only became a concern in 1999, when Brazil went through a balance of payments crisis. On the other hand, both the expectations that arose in 1994 showed themselves to be wrong: public deficit and public debt remained important enough to allow banks to operate mainly as lenders to the public sector; credit to private borrowers didn't take off, remaining rationed and very expensive.

Again, the BFS survived well to the turbulences of 1998, mainly because of the availability of public securities that not only offered very good interest rates but also because these securities allowed banks to hedge against all the major risks affecting the Brazilian economy. A large proportion of public securities was indexed to short term interest rates, hedging their capital value, therefore, against future changes in the interest rate. There was also a type of security denominated in US dollars, which allowed to hedge against exchange rate risks. There was, of course, no credit risk involved since these were securities issued by the National Treasury, payable in domestic currency. Finally, the Central Bank, informally but actively, acted to eliminate liquidity risks, standing by to purchase unwanted securities if necessary.

During this time, the Central Bank implemented prudential measures related to market risks, particularly with respect to currency mismatches in banks' balance sheets, as well as pushing for the wider adoption of internal risk management systems in banks, in accordance with the Basle Committee amendment of 1995 on market risks. Use of in-house risk measurements apparatuses, however, was maintained very limited.

The period between 1999 and 2008 was relatively uneventful as far as financial stability is concerned. After publication of the second Basle Agreement, known as Basle II, the Central Bank announced an adhesion chronogram, according to which banks should be completely adapted to the new rules by 2011. Basle II was modified for domestic implementation in many respects. Among the most important aspects of this adaptation, particularly in light of the events that marked the financial crisis in the United States in 2007 and 2008, was the rejection of the use of external ratings to measure risks in the calculation of capital coefficients for credit risks. Basle II established that less sophisticated banks (the Standardized Approach) should accept the risk assessment of rating agencies when examining their credits. In the Brazilian case, the Central Bank announced that risks in the Standardized

Approach would be set by the Central Bank itself, along similar lines to the ones adopted in Basel I. This choice was not to be explained by any lack of confidence on rating agencies, but the still very restricted reach of such entities in the Brazilian economy.

The first stages of the US financial crisis, even after contagion to major European banks, in early to mid-2008, did not have any major impact on the Brazilian economy and on the domestic financial system. It was only in the last quarter of the year that shock waves finally appeared in the form of the unraveling of some derivatives deals made under the prevailing expectation so far that the local currency would continue to appreciate with respect to the US dollar. The deepening of the crisis in the United States, particularly after the Lehman Brothers episode, had caused a reversal of capital flows away from the country. As a result, the real devalued forcing buyers of those derivatives to close their positions and absorb losses that, in some cases, were quite heavy. A few high profile cases of large firms that lost money in these deals contributed to magnify the negative impact on expectations for a while, particularly because of the usual opacity of the over-the-counter markets where such derivatives are traded. One major bank seemed to have been weakened by this episode, but it was more or less rapidly absorbed by the second largest private bank in the country, facilitating the effort at crisis management.

As it became well known, the impact of the crisis on the Brazilian economy was relatively small and short-lived when one has in mind that this is considered to be the deepest crisis since the 1930s, and that many countries, particularly the US, are still unable to solve it.

The BFS, and the banking system in particular, suffered some pressures and went through some changes but, overall, the episode was certainly less serious in its threats and consequences than, for instance, the bank distress of 1995. One large bank, as already mentioned, disappeared, absorbed by another large bank, increasing somewhat the degree of concentration in the upper layers of the banking system. Small and medium banks, particularly in the period of more pessimistic expectations suffered serious liquidity problems, with the loss of deposits in favor of larger banks, considered to be safer. But, on the whole financial stability seems to have not been seriously threatened.

At least four factors can be singled out to explain this performance.

Firstly, the Federal Government quickly reacted to the imported crisis through the implementation of strong ant-cyclical policies, both macroeconomic and microeconomic. Investments were expanded, in the context of the Growth Acceleration Program, which added new stimuli to the demand-supporting social programs that have been in place in recent years. But also microeconomic support measures were also taken, such as the concession of tax exemption to new car buyers and other similar measures. Of more difficult classification, since they are certainly not classic means of macroeconomic intervention, but that were decided with the goal of supporting aggregate demand, is the expansion of credit in the federal credit institutions, notably BNDES, Banco do Brasil and the National Savings Bank (CEF).

Secondly, the Central Bank was slow to accept the convenience of reducing interest rates, but liquidity support was maintained and enlarged, through, for instance, the release of compulsory deposits of banks, and new measures were taken to alleviate liquidity pressures on small and medium banks, such as the possibility of selling their loan portfolios to larger institutions.

Thirdly, the Central Bank has insistently repeated the argument that the banking system in Brazil was in a very solid position at the outset of the crisis, as a result of the efforts made since the mid-1990s to modernize banking supervision and to lead the industry toward the adoption of tighter financial stability precautions, particularly along the lines emanating from the Basle Committee. On the whole, as already suggested, the Central Bank has indeed been implementing tougher versions of the Committee's determinations. However, one has also to remember that the financial crisis, especially in the United States and Western Europe, has shown that the prudential strategy embedded in the Basle Agreements showed itself to be powerless to limit the fragility of the banking systems in those areas. Basle III is, at the same time, a confession of failure and a bet that it was not the strategy that was inadequate but the toughness of its manifestations.

Fourthly, although the Central Bank may be right when insisting in the efficacy of its own work in banking supervision, it is also important to remember that exposure of domestic banks to the more threatening crisis factors in this episode was limited by idiosyncratic elements that are not necessarily durable. Brazilian banks and financial investors had no reason, for instance, to invest in subprime mortgage-based securities when they could buy public securities paying very attractive rates of interest (in a currency that was appreciating in a sustained fashion for a long time), with a next-to-nothing risk exposure. On the other hand, domestic private securities markets are still small and, it seems, kept under reasonable discipline by CVM (the local equivalent of the SEC), which has increased and improved its activity in recent years. Currently, CVM is beginning to work with the notion of systemic risk with respect to securities markets with a view to identify possible prudential rules that may be appropriate.

It is not yet clear what other arguments may be relevant to the examination of the stability properties of the Brazilian banking system and what was the contribution of each of these factors to the relatively benign performance of the industry when the international crisis hit the country. In prospective terms, perhaps the main concerns in what relates to financial stability may be two: (i) how solid the Brazilian banking system will be when the shift away from public lending and towards private credit provision advances substantially (in other words, what is the relative importance of arguments three and four above); (ii) how to contain systemic risk originating in securities markets as private securities markets expand.

Behind particularly the first concern, actually, we find another one: how far the Basle strategy is adequate to contain fragility and avoid major financial crises (there included, of course, Basle III)?