Public debt management and open market operations in Brazil

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1. Public debt management

An inflation targeting regime was introduced in Brazil in 1999, following a largely unexpected move from a fixed to a floating exchange rate regime; see Fraga (1999) and Fachada (2001). Supporting this new policy framework, the treasury and the central bank announced a series of guidelines regarding the management of their domestic debt. These included lengthening the average maturity of the debt, increasing the share of fixed rate securities in total debt outstanding and reducing simultaneously the share of dollar and overnight rate-linked securities, and fostering the secondary market for public debt.

The most important measures implemented under these guidelines were to:

- concentrate maturities using reofferings;
- hold auctions of long-term fixed income securities after presentation of firm bids by financial institutions;
- repurchase government securities through regular auctions by the National Treasury;
- allow separate trading of principal and coupons (strips);
- allow financial institutions to hold short positions in government securities;
- develop a registration system for forward operations with government securities;
- make flexible leverage limits for financial institutions in operations with government securities;
- change the selection process for central bank primary dealers in order to stimulate their market-making ability;
- enhance transparency through monthly press releases on public debt and open market operations;
- increase predictability through an advanced release of monthly auctions schedules;
- introduce electronic trading of government securities; and
- organise periodic meetings between the central bank, the treasury and primary dealers.

Backed by a sound fiscal policy, these guidelines for domestic debt have produced satisfactory results. The average maturity of domestic debt lengthened to 35 months in November 2001 from 27 in December 1999 (Graph 1). In the same period, the share of short-term (less than one-year) securities in the total outstanding declined to 26% from 53% (Graph 2). The liquidity in the secondary market has been increasing, albeit at a slow pace, but further improvement is expected to occur with the introduction in April 2002 of a new payments system, which has been designed to mitigate systemic risk. Finally, enhanced transparency has helped to lower financing costs for the Treasury and has allowed financial institutions to increase their exposure to government securities.

Nevertheless, the macroeconomic environment deteriorated in 2001 due to a diversity of adverse shocks suffered by the Brazilian economy - political turmoil and debt default in neighbouring

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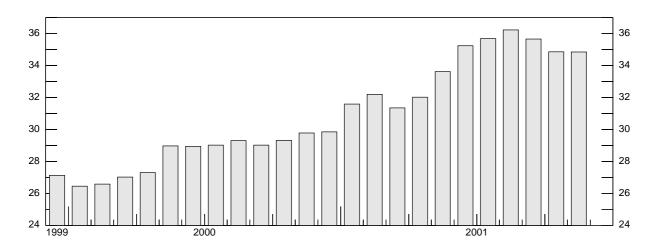
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Argentina, slowdown of world economy, the 11 September events, fall in capital flows and a domestic energy shortage that led the government to implement a severe rationing programme. These shocks forced an upward move in the slope of the domestic yield curve. The Treasury therefore faced a trade-off between lengthening the average maturity of the debt or increasing the share of fixed rate securities. The first option was chosen. Simultaneously, the central bank increased the issuance of dollar-indexed securities in order to contain the exchange rate overshooting. As a result, the share of fixed rate bonds returned to 8% in November 2001 (below the initial level of December 1999) after growing to 15% in December 2000. As for dollar-indexed securities, the share in public debt outstanding peaked in October (33%) from 22% in December 2000 (Graph 3), due not only to the net issuance of bonds but also to the exchange rate depreciation in the period.

Graph 1

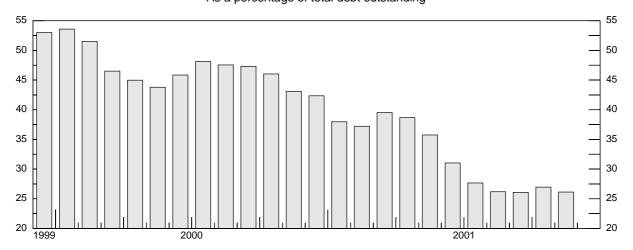
Average maturity of public debt outstanding
In months



Graph 2

Short-term debt

As a percentage of total debt outstanding

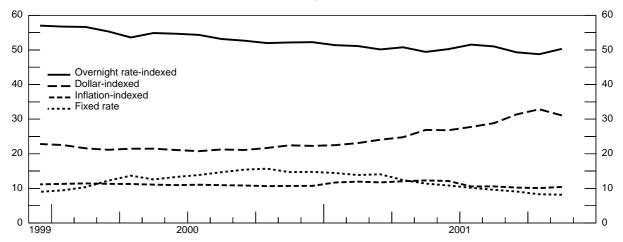


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Graph 3

Composition of public debt outstanding

As a percentage of the total



The currency depreciation, the increase in real interest rates and the decline in GDP growth in 2001 led to domestic public debt outstanding rising to more than 51% of GDP around September-October 2001, from 45% in December 2000. (However, about half of the rise was attributable to a transfer of bad assets from state-owned banks to the Treasury.) The subsequent exchange rate appreciation has already reduced the domestic value of outstanding debt, with the year-end exchange rate below the average issuance rate of BRL 2.44 per dollar for the whole year.

External debt management will be a responsibility of the Central Bank until 2003. The objectives have been to build up yield curves for sovereign bonds in different currencies (US dollar, euro and yen), to establish a benchmark for private sector bond placements, and to raise funds at appropriate costs and risk levels. Despite the deterioration in the external economic environment in 2001, the market remained open to Brazil's sovereign issues, and the country raised a total of US\$ 6.8 billion at reasonable spreads. The external debt profile continued to improve, and the share of external debt maturing within one year fell to 8% in June 2001 from 17% in December 1999, while the average maturity lengthened to 9½ years from below 8 years over the same period.

2. Open market operations

Brazil, like most countries adopting an inflation targeting framework for monetary policy, uses the overnight interest rate as the instrument for conducting monetary policy. The Monetary Policy Committee, therefore, sets the target for the overnight-Selic rate in its monthly meetings, and under the Committee's directives the open market trading desk adjusts market liquidity on a daily basis to maintain the effective overnight interest rate close to the target.

Open market operations are the main instrument for liquidity adjustment in the system. Standing facilities are not used to balance supply and demand for bank reserves. The demand for bank reserves is determined by reserve requirements on demand deposits, which, despite substantial reduction in the last two years (from 75% to 45%), are still high by international standards. On the supply side of bank reserves, factors affecting them are the usual: (i) currency held by the public; (ii) the central bank's operations in the foreign exchange market; (iii) tax revenue, government spending and budgetary endowments; (iv) placing and redemption of government securities; (v) discount window facilities; (vi) reserve requirement adjustments; and (vii) open market operations.

The Central Bank has been operating its open market desk through repurchase agreements, using as collateral national treasury and central bank securities. Outright operations are less frequent, as, depending on the volumes traded, they can cause volatility in bonds prices, and hence in the yield curve. On a daily basis, the central bank forecasts the market's liquidity needs, that is, it estimates whether there is shortage or excess of bank reserves, and carries out an informal auction aimed at

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balancing liquidity. Repo tenures usually vary from one to three days, and government securities are priced below market prices (with a haircut) to protect the lender against credit risk.

The Central Bank carries out open market operations directly with 25 primary dealers, selected twice a year among the more active institutions in the financial system. These dealers act as an interface with other market participants, and are chosen according to performance criteria, including each institution's performance in the primary and secondary markets for government bonds. As noted, open market operations are conducted only through primary dealers, but, unlike in other countries, all financial institutions can participate in the primary offerings of government securities, not just the primary dealers.

Participation in auctions is restricted to financial institutions keeping an account in the Sistema Especial de Liquidação e de Custódia (Selic), which is an electronic book-entry system that controls the custody of and registers all operations regarding domestic government securities. The two parties (buyer and seller) must input every transaction into Selic and the system makes a two-sided matching of their orders. The seller's position in securities and the buyer's position in bank reserves are checked. The transaction is settled on a DvP basis, if and only if securities and cash are immediately available.

Electronic trading received a major impulse with the implementation in August 2000 of Sisbex – Trading System of Public Bonds and other Assets – by the Rio de Janeiro Stock Exchange. In the second half of 2001, Sisbex accounted for around 20% of government securities market turnover, surpassing 30% in the November-December period.

Currently, the most heavily traded bonds issued by the Treasury are the Nota do Tesouro Nacional série D (NTN-D) indexed to the BRL/dollar exchange rate, the Letra Financeira do Tesouro (LFT) indexed to the Selic rate, and the Letra do Tesouro Nacional (LTN), a discount bond. The central bank, on the other hand, issues only the Nota do Banco Central - série E (NBCE), which has similar features to the NTN-D. More recently, the Central Bank interrupted their issue, anticipating a requirement of the Fiscal Responsibility Law, which prohibited the central bank from issuing its own bonds after May 2002.

Since August 2001, the shortage of bank reserves has been increasing because of the following factors: (i) the net selling of government securities, in particular those dollar-indexed; (ii) the policy of daily sales of foreign exchange reserves by the central bank in the spot market; and (iii) the primary surpluses of the public sector. In December 2001, this shortage exceeded BRL 20 billion. As the initiative on whether or not to provide bank reserves through open market operations rests with the central bank, though there is a presumption that this would be the case, the shortage of reserves in the system facilitates the conduct of a tight monetary policy.

3. Policy issues for the medium term

An important institutional reform is the project to restructure the payment system, which was fully implemented in April 2002. The main concern is to reduce systemic risk and to transfer credit risk from the central bank to the private sector. The new payment system has been designed by adopting internationally accepted standards and practices, including:

- a clear definition of the role of the central bank in the payment system and establishment of a well founded legal basis to allow better risk control devices;
- a large-value funds transfer system at the central bank operating on an RTGS basis and the monitoring of bank reserves in real time;
- clearing houses to ensure certainty of settlement through proper safeguard mechanisms;
- a clear definition of all the risks involved in every stage of the pre-settlement and settlement process.

Other initiatives aimed at strengthening the financial sector include stimulating market-making activity among market participants, modernising insolvency procedures for banks, introducing a new bankruptcy law, and restructuring the housing credit system.

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References

Fachada, P (2001): "Inflation targeting in Brazil: reviewing two years of monetary policy; 1999-2000", *Banco Central do Brasil working paper*, no 25.

Fraga, A (1999): "Monetary policy in a transition to a floating exchange rate: remarks on the recent Brazilian experience", in *New Challenges for Monetary Policy*, Jackson Hole conference, Federal Reserve Bank of Kansas City.

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