

# Monetary policy operating procedures in Brazil

Central Bank of Brazil

## Overview

Monetary policy-making has undergone major changes in response to recent key developments in the Brazilian economy.<sup>1</sup> The high inflation of the 1980s led to various unsuccessful stabilisation attempts, mostly through government intervention and price freezes. Following the normalisation of financial relations with the international community and in step with the trade and financial liberalisation movement of the early 1990s, the Real Plan (*Plano Real*) brought about a sharp and continuous reduction in inflation, from an annual rate of over 5,000% in June 1994 to under 4% in mid-1998. Both pronounced gains in real income and the subsequent recovery in economic activity have been associated with the abolition of the inflationary tax and the reduction in the degree of uncertainty faced by economic agents.

The monetary policy of the Real Plan is marked by the high priority placed on initially accomplishing and thereafter maintaining price stability. In July 1994, quarterly targets for the monetary aggregates were introduced aimed at creating confidence that there would be no inflationary financing of the government deficit. In order to prevent the upturn in private spending (stemming from pent-up demand) from adversely affecting prices, credit expansion was initially constrained by the imposition of a 100% marginal reserve requirement. Subsequently, restraints were placed on various forms and maturities of credit operations. The swift growth of narrow monetary aggregates at the outset of the Real Plan was mainly determined by the large increase in the transactions component of the demand for money, which in turn

<sup>1</sup> Most of this paper was prepared prior to the period of financial turmoil which followed in the wake of the Russian financial crisis in mid-August 1998 and which necessitated a number of adjustments in monetary policy operating procedures.

was caused by the sharp decline in the opportunity cost of holding cash balances in a low-inflation environment.

Monetary policy was given increased flexibility by the adoption of a floating exchange rate regime in July 1994, replacing the decade-long regime of fixing the real exchange rate. As a result, volatility of international reserves was reduced and its impact on the monetary base smoothed out. The floating exchange rate regime was altered in the aftermath of the Mexican crisis in March 1995, when a band was introduced as a means to reduce exchange rate volatility. International reserve accumulation triggered by large subsequent foreign capital inflows, however, exerted a significant impact on monetary growth.

Short-term interest rates, the monetary policy operating target chosen by the Central Bank of Brazil, remained high throughout the second half of 1994 and most of 1995. Only from late 1995, following the phasing-out of credit controls, did interest rates continuously trend down until 30th October 1997, when the Bank decided to raise the basic rates as a first line of defence against the spreading crisis in the Asian financial markets. As pressures eased, the Bank was able to progressively reduce its interest rates until the Russian crisis of mid-August 1998 again precipitated a period of financial turmoil and rising interest rates.

Major changes have taken place in the operation of monetary policy. Active reliance on open market interventions was replaced by greater use of standing facilities as the primary policy tool of the Bank to steer interest rates. This move was made effective by the introduction of an interest rate corridor in 1996, bounded by the two basic interest rates set by Bank's Monetary Policy Committee (COPOM).

## **Monetary policy operational issues**

The Bank has relied on monetary programming to establish intermediate targets and to communicate its intentions to the market. It publishes quarterly targets (within an acceptable margin of error) for the monetary base, for the amplified monetary base, which includes federal securities in the market and reserve requirements at the central bank, for M1 and for M4, the broadest monetary aggregate concept. Targets for these aggregates are chosen so as to supply the market and economic agents with additional information on the Bank's intentions with regard

to the desired interest rate path. The monetary programming exercise is carried out by the Research Department (DEPEC) and, following its approval by the National Monetary Council (CMN), is submitted to Congress for evaluation.

The operational target for monetary policy chosen by the Bank is the effective monthly interest rate on federal securities transactions (SELIC rate), which is supposed to stay within a corridor defined by the two rates set by the Monetary Policy Committee: the TBC rate (lower bound) and the TBAN rate (upper bound). Since January 1998, official interest rates have been expressed on an annual basis. The change was made to induce a lengthening of the maturity of federal securities and credit operations of the banking system.

The TBC rate is the main determinant of the cost of funding of the banking system. It therefore serves as a basis for other interest rates. The overnight (one-day only) segment of the money market is the most liquid and is most influenced by the Bank. The overnight rate is, *ceteris paribus*, the rate used by private participants as the benchmark for pricing the short-term end of the yield curve.

The monetary policy operating procedures adopted in 1996 have aimed at broadening financial institutions' access to the discount window, thus reducing the need for Bank intervention in the interbank market. The open market system is composed of 25 primary dealers, of which six are major commercial banks and five medium-sized ones, and 14 brokers. This organisation does not constrain the intervention activities of the Bank in the open market. Financial institutions may operate in the interbank market. However, banks and other institutions which do not hold bank reserves should operate through a bank as a custodian institution. Bank reserves are settled with federal securities on the same day as the transaction; the feasibility of interbank operations depends solely on the size and creditworthiness of participating institutions.

As of October 1997, the stock of demand deposits at commercial banks was around R\$ 25 billion, and bank reserves summed up to R\$ 10 billion. The size of the money market – understood as the sum of free federal securities held by financial institutions and easily convertible into bank reserves – was R\$ 47 billion. The most important instruments are bills and notes issued by the Treasury or the Central Bank, interbank deposits and other securities. Daily turnover in the federal securities-based settlement system (Sistema Especial de Liquidação e de Custódia

– SELIC) was around R\$ 100 billion. The high reserve requirement ratio applied to demand deposits (currently 75% of net demand deposits) has tended to inhibit activity in the interbank market somewhat.

### **Residual role of direct measures**

There are no credit controls in place other than specific restrictions imposed on: (i) the amount of credit concessions to state companies (CMN Res. 2444, of 19th November 1997), and (ii) interest rates charged by the banks on loans to the agricultural sector (CMN Res. 2398, of 25th June 1997), currently a variable long-term interest rate based on yields of long-term government bonds (TJLP – Taxa de Juros de Longo Prazo), plus a fixed spread of 9% per year for Treasury funds, as well as fixed interest rates for controlled resources that banks are obliged to put aside for agricultural financing.

Although the Bank has a constitutional right to impose controls on credit operations, such controls are now much less employed than in the past. Limits have been placed on the financing of credit card and term purchases. Apart from the credits to the agricultural sector, interest rates on credit operations are freely determined by the financial institutions.

Credit controls typically have been used in Brazil as an instrument to alleviate price pressures triggered by a surge in household consumption. In 1995, for example, credit controls were imposed in order to offset the wealth effect associated with the abolition of the inflationary tax (following the introduction of the Real), borne especially by poorer households, which threatened price stability and might have put pressure on the current account. Moral suasion is not used to influence credit expansion.

### **Impact of State savings banks and the recycling of public sector bank deposits**

Interest rates on time deposits and other liabilities of State banks, commercial or multiple banks are not influenced by the monetary authorities. Brazilian State banks are currently undergoing a process of modernisation, removal of political influence and submission to the

market discipline imposed by global institutions. A large number of State banks are expected to be privatised, transformed into development agencies, or liquidated according to the terms of the State bank restructuring programme (PROES).

At the federal government level, large transfers in the deposits of the Treasury at the Bank are rare, since most of the Treasury's deposits are scheduled in advance, making account flows more predictable. Nonetheless, whenever large transfers are made, they are notified to the Bank in advance.

State government and social security deposits are held by government-controlled banks (official financial institutions). Deposit flows of state governments and entities are independently managed and do not exhibit large fluctuations in the aggregate. The planning of monetary policy is thus not affected by such flows. Finally, excess cash of federal government-controlled companies is invested in federal government securities through a special segment of the open market, known as "extra-mercado" and operated by Banco do Brasil, rather than through private financial institutions.

## **Demand for bank reserves**

The binding variable largely determining the demand for central bank reserves is the high reserve requirement ratio (75% of net demand deposits). Though to a lesser extent, the demand for central bank reserves is also determined by the evolution of the intra-period overnight rate. Settlement balances represent around 40% of the reserve requirements.

In Brazil, banks target small settlement balances whose amounts appear to be highly insensitive to movements in the overnight interest rate. The amounts are largely dictated by the Bank's policy towards the provision of end-of-day marginal financing (given the terms and conditions of central bank assistance). Until now, technical and institutional characteristics of payment and settlement arrangements have not been very crucial. The Bank has tried to ensure that sufficient funds are available in the system so that participants do not need to turn to it for assistance. If necessary, however, banks can have recourse to end-of-day assistance which is granted at posted rates. It is possible (although this

is not likely) to apply for this type of assistance through discretionary open market operations at a penalty rate.

Excess reserves are not remunerated in Brazil.<sup>2</sup> Banks have to maintain a reserve account with the Bank (banks are not permitted to have an account with other banks). They are therefore required to settle in the books of the Bank (the settlement agent).

The Bank closely monitors the financial position of the main institutions throughout the day. If, even after resorting to the discount (TBC) window or the TBAN window, an institution still encounters difficulties in financing its positions, the Bank may contact the open market dealers and try to find a lender for the institution in difficulty. Only after this fails may the central bank provide direct assistance to the institution through a repo operation, provided the proper guarantees are offered. It could be argued that the wide and relatively inexpensive discount window (in normal circumstances priced below interbank interest rates) promotes banks' recourse to central bank credit, away from the interbank market. This applies especially to institutions with large demand deposits and an ample stock of federal securities. Indeed, recourse to the TBC assistance line by major commercial banks happens almost every day and in considerable amounts. One major exception was the period between early September and mid-December 1998 when financial turmoil compelled the Bank to close its cheaper TBC window and force the banks to the more expensive TBAN window for liquidity assistance.

## **Supply of bank reserves**

Changes in operating procedures in 1996 have tended to make the Bank's standing facilities the main monetary policy instruments in Brazil. Prior to the middle of 1996, recourse to the Bank's rediscount window was tantamount to being almost insolvent for a financial institution, resulting in difficulties in financing its everyday position in the interbank market. This situation was modified by Resolution 2308 (June 1996) of

<sup>2</sup> The Bank created a remunerated deposit facility designed to hold the excess reserves of the banking system on 2nd December 1998. Outstanding balances are remunerated at the TBC rate minus 0.25%. Since the introduction of this deposit facility, in particular following the closure of the TBC facility on 19th January 1999, average balances in these deposit accounts have remained low.

the National Monetary Council. The revised discount window rules greatly widened the access and eased the terms on which an institution could obtain central bank credit via the discount window. Greater reliance on standing facilities as a major instrument of monetary policy was made possible by the relatively stable internal and external environment at that time.

The volume of central bank assistance commercial banks can obtain from the TBC discount facility – provided they have federal securities to use as collateral for the credit taken – is related to the amount of bank reserves held at the Bank.<sup>3</sup> Noteworthy is that the TBC rate, even though it theoretically represents the floor of the interest rate corridor, is not a deposit rate. Given that potential assistance through the discount window is similar in magnitude to the total amount of bank reserves, potential liquidity problems in the system are minimised.

The Bank currently manages day-to-day bank liquidity by guiding primary central bank debt auctions so as to maintain the open market systematically in an oversold position. Financial institutions are thus forced to access the standing facilities. Use of repo operations has been progressively reduced, being limited to special or emergency situations. At the end of the day, however, the open market desk can offer through the primary dealers and at a wide interest rate spread either deposits at or loans from the central bank. Institutions would accept these facilities only when conditions made it absolutely necessary. Forex swaps are not used in Brazil.

An important consideration with regard to the interest rate corridor, set every five to six weeks by the Monetary Policy Committee, is to signal the trend of the main operating target of the Bank. Another objective of the rediscount facilities has been to stimulate interbank lending from banks holding sizable stocks of federal securities (that could be used as collateral for central bank credit) to those having small portfolios of rediscountable securities. In order to support the development of the interbank market, the discount window as a standing facility was therefore designed to provide a wide availability of funds at a lower cost than the overnight rate. This liquidity management mechanism coupled with adjustments made by the Monetary Policy

<sup>3</sup> Up until mid-1998, the volume of financial assistance was close to the amount of bank reserves. When financial turmoil affected the economy in late 1998, access to central bank facilities was significantly reduced.

Committee in the basic rates communicates the main intentions of the monetary authorities. However, market participants know that alternative instruments such as repo operations may always be used whenever required.

Central bank debt auctions are conducted each Thursday. The main purpose of the auction is to fine-tune the supply of bank liquidity via the discount window and also provide the market with additional signalling with regard to the desired level of short-term interest rates. Debt auctions are basically of three types: nominal bonds, bonds and notes indexed to the SELIC-rate and dollar-indexed notes.

The standard maturity of the auctioned nominal debt increased from one month in 1994–95 to 6.5 months in early 1998. Financial turbulence in late 1997 and 1998, however, forced a reduction of the maturities. Dollar-indexed bonds usually have a 12 to 36-month maturity and carry an annual coupon of 6%, payable in two half-yearly tranches.

Auction procedures allow each institution to submit five different bids with varying interest rates and volumes. No institution may individually buy more than 10% of the amount offered at an auction of nominal bonds. The Bank ranks the volumes bid in increasing interest rate (decreasing price) order and each institution pays the price it has bid (discriminatory price auction). The Bank reserves the right not to allocate the entire amount offered and takes every precaution to identify instances of non-competitive practices during the auctions, paying particular attention to variables such as the dispersion of the bids, the demand/offer ratio, etc. Following each auction, maximum and average prices (with the associated minimum and average interest rates) as well as total demand are disclosed to the market.

The Bank also conducts the auctions of Treasury paper, which normally take place on Tuesdays. The conditions and procedures are very much the same as for the central bank debt auctions, except that a single institution may purchase the entire amount offered as long as its bid is at a rate compatible with this situation. In addition to dollar-denominated debt and nominal debt, the Treasury also auctions debt indexed to the interest rate offered on bank certificates of deposits and to the SELIC-rate.<sup>4</sup>

<sup>4</sup> Financial instability in the second half of 1998 led to the creation of additional central bank and Treasury securities indexed to the exchange rate, while the issuance of securities indexed to the overnight rate, which had been dormant in preceding years, was resumed. Moreover, new securities were issued, the yield of which was partly pre-set and partly variable.



## **Central bank open market operations**

Central bank open market operations in the secondary market (repos or outright operations) have been largely discontinued since the introduction of the interest rate corridor in mid-1996. As already stated, these operations take place only in conditions of excess liquidity or in emergency situations. Both central bank and Treasury securities may be the underlying instrument in such operations.

One example of such operations related to the sale of a major Brazilian commercial bank in early 1997 which involved a substantial inflow of foreign exchange. A repo operation was necessary to sterilise the surge in bank reserves. Moreover, as already described, the crisis in several East Asian countries adversely affected the Brazilian stock and money markets. Two major outright operations of longer-term federal securities were conducted and overnight repo operations were resumed by the open market desk to provide liquidity to the system and signal the new level of the basic interest rates. In the wake of the Russian crisis repo operations assumed again the importance they had had in the past as a major tool of liquidity management.

## **Transparency and signalling**

Monetary policy-making has been geared towards more transparency. Various actions have been directed at making the policy stance more effective, such as the setting of basic rates and the Monetary Policy Committee procedures. However, the Bank avoids imposing policy-making rigidities so as to ensure that the necessary degree of flexibility in the process of liquidity management and interest rate steering is maintained.

Signalling is done mainly by the Monetary Policy Committee through the setting of the basic rates of the Bank. Additional signalling information is imbedded in the price and maturity of central bank debt auctions, as well as in the daily management of the price at which the Bank accepts its own and Treasury bonds in the conduct of repos and as collateral in rediscount operations. The careful handling of the latter signal has proved to be especially important in moments of crisis.