Issues and Episodes in Monetary Policy

REPURCHASE AGREEMENTS IN THE BRAZILIAN MONEY MARKET

In recent times, the Brazilian money market has seen a huge increase in the total amount of repurchase agreements (repos) involving the Central Bank. In July 2013, the total stock of those transactions reached more than R$ 700 billion, which is equivalent to around 15.0% of the country's estimated annual GDP. This has called a great deal of attention and has led many analysts to believe that something wrong is going on. The purpose of this note is to discuss these recent events.

The first thing to notice is that repurchase agreement is an old type of transaction which can be viewed as a sort of "defensive" operation, conducted with the objective of equilibrating the volume of bank reserves in the system. The general expression used in Brazil ("operações compromissadas") is applied in reference to repo as well as reverse repo transactions. They are the instrument the Central Bank resorts to in order to avoid excessive fluctuation in the basic interest rate.

In the money market, when bank reserves are relatively scarce, there is a tendency for the rate of interest to go up. In the opposite situation, that is, when there is abundance of bank reserves, the basic rate tends to zero. It is exactly this sort of oscillation that the monetary authorities seek to avoid. If, for some reason, the Central Bank decided not to intervene through the mentioned transactions, the practical consequence would be that the operational target would become meaningless. In Brazil, the operational target is the so-called Selic rate. In other words, the Committee for Monetary Policy (the Copom) would define a target for the policy rate which would not be met.

In the Brazilian case, the tendency for the rate of interest to oscillate in the money market is particularly significant, the reason being that the day-to-day flows of bank reserves are often large in comparison to the total stock of reserves. One of the factors which contribute to this has to do with the fact that the Treasury is not allowed to have accounts in the commercial banks. In fact, the Treasury's cash movements flow

through its sole account, held at the monetary authorities. This means that when a private economic agent pays tax, there is a corresponding reduction in the volume of bank reserves. In this case, the bank where the agent has an account loses reserve to the Treasury, which has the corresponding amount deposited at the Central Bank. When the Treasury makes a disbursement, the opposite occurs. In the past, a great deal of uncertainty involved those transactions, but nowadays they are quite predictable.

Repo is an agile instrument, particularly useful to deal with unforeseen flows of bank reserves. The same is true as regards reverse repo. Flows especially difficult to predict are those involving international reserves. In fact, under a flexible exchange-rate regime, the Central Bank rarely knows when it is desirable to intervene, buying or selling dollars. The amounts of purchases or sales are also hard to anticipate. When the Central Bank acquires a large volume of dollars, the stock of bank reserves tends to increase substantially. And it may represent a considerable proportion of the total stock of bank reserves. In this case, the basic interest rate will tend to fall. To avoid such movement, the Central Bank sells part of its portfolio of government papers in the money market, with the objective of compensating the original expansionary flow. Acting this way, the Central Bank eliminates the excess reserve situation. And this is generally done by means of repurchase agreements, that is, the sale of the government security is accompanied by commitments to repurchase them, which are used as collaterals, at a negotiated interest rate, usually close to the basic rate. Most of these transactions are carried out on an overnight basis, but recently the Central Bank has opted for three-month transactions, negotiated at prefixed interest rates. Of course, when the stock of bank reserves shrinks, rather than expands, with the potential to affect the rate of interest in the money market, the Central Bank intervenes in the opposite direction, providing liquidity. In this case, it accepts government securities in the hands of market participants as collaterals for the supplied financing.

As regards the Brazilian recent experience, it is widely known that there has been years of high volumes of international reserve accumulation. This was particularly true in the period 2005-2007 and again in the years 2009-2011. In 2007 alone, the

monetary impact of international reserve acquisitions reached almost R$ 170 billion. In 2009-2011 the average monetary flow per year was R$ 73 billion.

Another factor which recently contributed to the large volumes of compensating transactions by the Central Bank has to do with the management of the public debt by the Treasury. The existence of fiscal deficits normally implies the issuance of new debt, in net terms. The interesting case occurs when the Treasury decides to redeem debt, in net terms. This may happen, for example, in periods of crisis, when investors show a strong preference for liquidity and opt for selling the securities they hold. Under these circumstances, the Treasury may judge that the rates of interest on its papers are rising too fast, causing substantial losses to investors and possibly leading to the freezing of the market. The solution would then be to buy back part of the securities previously sold. As the Treasury does this, there is an expansion in the volume of bank reserves.

An expansion of this nature may also occur if, for some reason, the Treasury wishes to modify the profile of its debt in a way not fully compatible with the demand from market participants. In other words, investors may wish to absorb the papers the Treasury wants to sell only at interest rates the issuer is unwilling to pay. Or, alternatively, the papers investors are eager to acquire are not those that the Treasury wishes to sell. Under such circumstances, there might be a net redemption of government securities.

Independently from the alternative which prevailed in recent years, the fact is that there has been a net redemption of government securities, by the Treasury, in each and every year since 2008. In the period 2008-2012, the average annual monetary impact of such policy was slightly higher than R$ 100 billion. In 2013, until July, the cumulative flow reached R$ 207 billion, greatly intensifying the need for compensatory transactions on the part of the Brazilian Central Bank.

If we observe the net flow of "operações compromissadas" since 2007, we notice that there was only one year in which the Central Bank operated with the objective of expanding liquidity, resorting to reverse repo transactions. That exception was 2010, when the Central Bank practically restored previously existing reserve requirements, which had been reduced during the acute phase of the international crisis. Actions

meant to withdraw part of the liquidity have been particularly intense in the last two years. The net flow of reserves in 2012 reached R$ 150 billion, while in 2013, until July, the monetary impact of repo transactions was as high as R$ 175 billion.

Thus, as argued above, independently from the factors behind the fluctuation of bank reserves in the money market, the Central Bank is forced to act. And repo (and reverse repo) is the adequate instrument for that. If, for some reason, the Central Bank refuses to intervene, the rate of interest in the money market will oscillate excessively, the result being that the operational target will not be met.

Under an inflation targeting (IT) regime, the final objective is to stabilize the rate of price growth around the specified target. For most practitioners of this regime, the final objective is expressed in terms of headline inflation. Since no central bank has direct control over short-term shocks which usually affect the behavior of inflation, it is wise to choose an intermediate target. Desirably, this should be sensitive to movements in the operational target (the Selic rate in the case of Brazil) and well correlated with the final objective. Under IT the variable which plays the role of the intermediate target is projected or expected inflation. The operational target is then set with the purpose of making projected inflation coincide with the final target, within the relevant time span. This means that the instrument chosen to equilibrate reserves in the money market is an indispensable tool for the proper work of the inflation targeting regime.

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