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Auctioning Discounts

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The objective of this note is to propose an improvement in the method of controlling the monetary base in Brazil. We call the proposal "auctioning discounts" and argue that auctioning is a flexible instrument to control the amount of monetary base supplied by discounts. Improved control of discounts enables the central bank to remain closer to the targets in the monetary budget. An added benefit is that the discount rate adjusts to the open market rate on LTN's. This assures that gains from money creation, "seignorage," accrue to the monetary authorities and not to the commercial banks, avoiding undesirable pressures to increase the monetary base. It also permits the maturities of the discounts to adjust to the needs of the market.

The proposal is firstly made under the assumption that there are no selective discounts in Brazil. We then adjust it for the existing Brazilian discount mechanisms.

The Proposal

Each week (or daily if preferred) the Central Bank should collect a schedule of bids from each commercial bank showing the amount of discounts the bank demands at each of a series of discount rates, for different maturities of the discounts (7 day, 14 days or any multiple of 7). The schedule of bids should include all discounts and advances. Each bank must bid or it can discount only in the event of an emergency.

The Central Bank adds the bids and constructs a demand curve for discounts. The amount of base money to be supplied and the discount rates of different maturities at which it is supplied are then fixed for the week (or day).
choosing the rate of interest and quantity at each maturity, the central bank must rely on the term structure of interest rates in the market. Discounts cannot exceed the amount of the bids, except in emergencies. Unused quotas can be sold to other banks.

In order to adjust for the existing discount system in Brazil, a difference between the auction of loans and advances, and selective discounts should be made.

1. The Central Bank should collect a schedule of bids from each commercial bank for loans and advances, as described above.
2. The Central Bank should collect a schedule of bids for selective discounts, stating the interest rate to the final borrower that will prevail and also the total sums to be auctioned.

An exception to the policy must be permitted. A central bank must function as "lender of last resort" to the market. When there is a crisis -- caused by bank failures, unforeseen risks or some random shock -- that induces a flight from banks to currency, the central bank should lend freely to solvent banks or financial institutions.

Some Criticisms of the Proposal

Three principal criticisms of the proposal are:

1. The proposal discriminates in favor of large and against small banks;
2. The large banks would collude to reduce the discount rate; and
3. The proposal would not be effective because most rediscounts are selective loans made at rates below the discount rate.

This section discusses the objections.

If the rate small banks offer for rediscounts is always below the discount rate chosen as a cutoff point by the central bank, small banks effectively lose the privilege of discounting. This criticism implies that the present system provides a larger subsidy to small banks than to large.

The empirical basis of the criticism is weak. Large and small banks coexist in several countries. France relies on discounting as the principal means of supplying reserves, and in Germany borrowing from the central bank is an important source of reserves. In both countries, large and small banks compete. Moreover, in Brazil, small banks appear to accept greater risk and charge higher rates than large banks. Hence, small banks are unlikely to be prevented from borrowing.

The proposed policy transfers the rent from money production to the central bank. If the banks collude and bid below market rates, the large banks operating as a cartel can extract part of the rent. But collusion of this kind is discovered easily. The rate bid for the right to discount for a specific term should be equal to the rate on open market paper for that term plus or minus any difference in transaction cost between open market operations and rediscounts. The reason is that, for a bank, the return from holding securities in portfolio should not exceed the cost of borrowing.

In 1975, loans and advances constituted a small fraction of the total volume of the Central Bank credit to the financial institutions. Most of
the loans were selective with pre-fixed interest rates (Table 1). The adjustment of the proposal takes this fact into consideration. If the central bank restricts the total amount of discounts and advances by the auction technique, increases in selective discounts have an opportunity cost -- the amount of regular discounts foregone.

**Conclusions**

The proposed system of auctioning discounts suggests a means by which the market can be used to control the volume of base money issued by discounting. We recognize, however, that the Central Bank as lender of last resort to the financial system must supply additional reserves in periods of financial crisis. Discounts may be made outside the auction method at such times.

The proposal does not seek to solve, and does not solve, many problems of monetary control in Brazil. Our aim is more limited. We believe that improved control of the monetary base is desirable, and this proposal is a step in that direction.
# TABLE 1

Monetary Authorities

Credits to Financial Institutions (balances in Cr$ millions)

<table>
<thead>
<tr>
<th>Item</th>
<th>1974</th>
<th>1975</th>
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<tbody>
<tr>
<td>a) Discounts (Selective)</td>
<td>4.677</td>
<td>9.908</td>
</tr>
<tr>
<td>b) Loans and Advances</td>
<td>10.389</td>
<td>13.851</td>
</tr>
<tr>
<td>c) Transactions with resources of financing funds and various programs</td>
<td>16.928</td>
<td>32.740</td>
</tr>
<tr>
<td>d) Other Transactions</td>
<td>1.789</td>
<td>4.341</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>33.783</td>
<td>60.840</td>
</tr>
</tbody>
</table>

SOURCE: Central Bank Report - 1975, p. 64
FOOTNOTES

1 The idea originated at the Banca d'Espagna where it was proposed to solve the problem of controlling money stock in the absence of a well organized financial market. We have been told that the idea was proposed by Dr. Angel Rojo.

2 For reasons of safety there should be an operational limit for each bank similar to the present one which is based on the bank's demand deposits.

3 In order to contract the base, the Central Bank would decrease the amount to be sold and collect the repayments. Faster contractions can be achieved through the use of open-market operations.

4 Banks should be permitted to fail if failure is the result of bad judgment or excessive risk-taking. Failure should not be allowed to spread to other banks and financial institutions.

5 The effective rate on loans by small banks does not seem to be as closely controlled by the Central Bank, as the rates at large banks. See João Sayad, "Controle dos Juros e Saldos Médios," paper presented at the Seminário de Pesquisa Econômica I, Escola de Pós-Graduação em Economia, FGV, June, 1976.

6 The analysis applies only to LTN above the amount held as required reserves.