

Bad News for Monetary Policy

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The 11/26/2002 issue of this Weekly Report featured an article entitled *Inflation Uncertainty* from Eduardo Loyo. The author persuasively argued that, everything remaining the same, more inflation variability, as currently happening, would require higher real interest rates to achieve the same inflation target.

The data released since then show that the situation is even worse than previously thought. Despite the recent hikes in the Selic target rate, the real interest rate has been nose-diving given the fast increase in inflation expectations. The Chart displays the relevant data.

The line that jumps discretely and sporadically is the target Selic rate set by the Monetary Policy Committee of the Brazilian Central Bank, whose meetings occur usually every month. This interest rate serves as a floor to all other interest rates in the economy.

The inflation target framework implemented by the Brazilian Central Bank requires that the real interest rate be raised when inflation expectation rises above the target. This, however, is not an exclusive property of the inflation target framework. Any macroeconomic policy that delivers stable inflation is required to produce a higher real interest rate when inflation is expected to rise. For example, the gold standard, which precluded the possibility of directly fixing interest rates, works this way. When inflation expectation rises, there is pressure to buy gold, since inflation means that the same amount of money will be able to buy less gold in the future. As the Central Bank steps in to sell gold to satisfy the higher demand, the amount of money decreases, and the interest rate rises.

Inflation expectations may be measured or estimated in different ways. Here, we resort to the data collected by the Brazilian Central Bank from more than one hundred financial institutions and economic consulting firms.² Despite all the deficiencies usually associated with surveys, these data reveal important changes in agents' behavior. For example, the inflation uncertainty addressed in the previous report may be confirmed by the fact that the standard deviation (a measure of variability) among forecasters in predicting inflation tripled since the beginning of the year.

There are several ways to compute the real interest rate. For example, despite the high level of the Selic nominal rate during 2002 (see Chart), the real rate computed by deducting the actual 2002 inflation measured by the CPI (IPCA) from the cumulative rate will probably be around 7%, a level much lower than previous years. However, this lower rate does not convey the right idea of how restrictive monetary policy really was. The reason is that

¹ Center for Research on Economic Development and Policy Reform.

² Available at <http://www.bcb.gov.br>.

forecast errors were very high this year. Nobody could think that the exchange rate would depreciate that much. Also, the amount of exchange rate depreciation that is transmitted to domestic inflation, the so-called pass-through coefficient, was also underestimated. Therefore, the ex post real interest rate (the one computed with actual numbers) will underestimate the ex ante real interest rate (the unknown one that reflects agents' expectations).

Using the Central Bank survey to unveil the expected future path of both the Selic Target Rate and the CPI Inflation, we can construct a measure of the ex ante real interest rate, which better reflects the rate relevant for agents to make their decisions to consume, save, produce and invest, just to name the most important ones.

The Chart shows that until recently, the real rate has followed closely the nominal rate, i.e., that when the Central Bank moved the Selic Target Rate (LHS scale), it was able to modify the ex ante real interest rate (RHS scale) in the same direction.

However, this has completely changed in the last two movements of the Selic Target rate. Despite an overall increase in the Selic Target of 400 basis points (4 percentage points), the ex ante real rate has dropped to its lowest level (see Chart).

This is very bad news for the monetary policy. It means that not only the same real interest rate is less effective in achieving the inflation target (remember Loyo's argument about the effect of inflation uncertainty), but also that despite the very high recent nominal rate increases in the Selic Target Rate, the ex ante real rate has fallen due to the intense rise in expected inflation.

Unfortunately, there was not much that the team currently at the helm of the Brazilian Central Bank could do to avoid such outcome. Monetary policy faced the joint force of two very negative shocks. First, the risk aversion in international financial markets increased substantially, as the world economy remained in recession and the US corporate scandals deeply affected capital markets. Second, the uncertainty about what economic policy would be followed by the new administration increased a lot the (option) value of waiting.

Now, the new team faces a very difficult challenge, but also a great opportunity. Since much of the effect on exchange rate and inflation was created by the uncertainty regarding the new policies, a heads-on attack on the rising inflation would create a very positive credibility shock. This contractionary monetary policy coupled with conservative fiscal policy could pay off handsomely in the future, as credibility for the new government is built and long term capital flows resume. If inflation is to remain controlled, there is only one way that nominal interest rates may follow in the near future, and it is not down.

Nominal and Ex Ante Real Interest Rates

