The Brazilian Economy in Rough World Seas

These are tough times for every country. Little luck for Brazil, whose economy has improved remarkably in the last ten quarters. The fiscal stance has changed since October, 1998, with all IMF targets being met since then. The floating of the BRL in January, 1999, brought about a much less crisis-prone regime, as can be seen if one compares Brazil and Argentina today. Other very important microeconomic changes (privatization, fiscal reform, labor reform) have progressed much slower than one would like, but are not stalled. Nevertheless, the current rough seas of the international capital markets have consistently kept all relevant risk premia above what they were before the Asian crisis, back in 1997.
Since the floating of the BRL, the Brazilian central bank has officially adopted an inflation targeting (IT) monetary policy regime. According to the IT framework, the central bank is required to manage the interest rate so that the inflation target is met. For 2001, the target is 4% (plus or minus 2%), measured by a broad consumer price index (IPCA). For 2002, the year of the presidential election, the target is 3.5%.
There has been much controversy on what exactly is new about IT. Certainly, the transmission channels of monetary policy are still the same, and central bank actions become effective through these channels, as before. Nevertheless, the IT framework assigns a much clearer job for the central bank, and also provides a much more transparent view of what the central bank does. This is very important to build reputation, an essential input for central bank's successful interventions.
The Brazilian central bank has made its basic IT framework available through a series of publications.[1] By studying the models contained in these publications, one can analyze the current tradeoffs faced by the Brazilian monetary authorities.
The most basic IT model used by the Brazilian central bank has three parts. The first part (the IS curve) deals with the estimation of the effect of the interest rate (and other variables, as the fiscal deficit) on the GDP gap. In other words, it models the effect of the interest rate on aggregate demand. Despite the very high real interest rate (above 10%), demand has been quite strong, compatible with a GDP expansion between 4% to 5% in 2001.
The second part models the inflation behavior through a "Phillips curve." In the short run, inflation reacts to the output gap: more aggregate demand will bring about more inflation and vice-versa (there is no long run trade off). In this Phillips curve equation, the most important element, however, is the exchange rate. Exchange rate depreciation feeds in inflation very quickly through the "pass-through" coefficient.
The pass-through coefficient measures how much of the exchange rate depreciation is eventually transformed into domestic inflation. Studies have shown that this pass-through coefficient is highly variable in different international experiences. It varies **positively** with the level of inflation (the higher the inflation, the higher the passthrough), the status of the business cycle (when demand is high, it becomes easier for firms to pass the cost increases caused by depreciations to their prices), and the degree of openess of the economy. It varies **negatively** with the degree of overvaluation of the currency (an already very depreciated currency will tend to display a high pass-trough). All these determinants point to a higher pass-through coefficient today than the one observed two years ago when the BRL was devalued (the pass-through coefficient for the 1999 devaluation was around 15%).
The last part of the IT framework is how the interest rate affect the exchange rate, given world interest rates and the prevailing risk premium for Brazil. Given the Brazil´s risk premium, the international interest rate, and the expected inflation differential between Brazil and abroad, a higher domestic interest rate will attract capital flows, which will appreciate the BRL. This condition is known as uncovered interest parity (plus the country risk).
Since the year end, the BRL has depreciated more than 10% with respect to the USD. While this depreciation is certainly good news for the ailing trade balance, it poses a tough challenge to the monetary policy, as can be seen through the IT framework just reviewed. If the exchange rate settles down at the current level (above 2.1 BRL/USD), the effect of the recent devaluation on domestic inflation—measured by the pass-through coefficient—may seriously threaten this year

[1] These publications are available at the Brazilian central bank's web site (http://www.bcb.gov.br).

inflation target. As we have seen, 15% is probably a lower bound for the pass-through coefficient. Even hypothesizing this low value for the pass-through coefficient, the current depreciation would add 1.5% to inflation, which is 37.5% of the 4% inflation target!

This would prompt the central bank to keep the real interest rate at the current, or even at a higher, level. A higher interest rate would be very deleterious to the fiscal accounts, since the majority of the domestic debt is instantly indexed to the basic interest rate. It might attract capital flows, which would help to counteract the depreciation, but this is not certain given the extremely high degree of risk aversion that currently prevails in international markets.

What a higher real interest rate would certainly do is to contain aggregate demand, and this would help the inflation target in two ways. The first is through the short run trade-off between inflation and activity. The second, and currently more important channel, is through the trade balance. Imports have been rising very fast, reacting to the recent GDP expansion. A slowdown of the economy would probably forestall the import expansion (and also help exports in the short run), thereby decreasing the pressure in the exchange rate market. The ensuing appreciation of the BRL would certainly help the central bank to achieve the inflation target.

In summary, despite the many improvements of the Brazilian economy, the very tough world financial markets currently pose a very difficult task to the Brazilian monetary authorities, who might be called to halt the incipient growth process that had just begun.

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