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Inflation targeting in Brazil: constructing credibility under exchange rate volatility

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Abstract

This paper assesses the challenges faced by the inflation-targeting regime in Brazil. The inflation-targeting framework has played a critical role in macroeconomic stabilization. We stress two important challenges: construction of credibility and exchange rate volatility. The estimations indicate the following results: (i) the inflation targets have worked as an important coordinator of expectations; (ii) the Central Bank has reacted strongly to inflation expectations; (iii) there has been a reduction in the degree of inflation persistence; and (iv) the exchange rate pass-through for "administered or monitored" prices is two times higher than for "market" prices.

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1. Introduction

This paper assesses the inflation-targeting regime in Brazil adopted in June 1999, examining the main challenges it has faced over its first three-and-a-half years. In particular, we stress two important challenges that are also common in other emerging market economies: construction of credibility, and high exchange rate volatility.

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The inflation-targeting mechanism has played a key role in macroeconomic stabilization in Brazil. In spite of large inflationary shocks, the inflation rate has been maintained at a low level. Exchange rate depreciations in 2001 and 2002 were stress tests for the regime. In particular, in 2002, monetary policy faced a confidence crisis in the future performance of the Brazilian economy and an increase in risk aversion in international markets. Rollover rates of domestic public debt securities diminished considerably, and the Brazilian economy experienced a "sudden stop" in capital inflows to the country, generating a significant nominal depreciation of the exchange rate.

Inflation targeting in emerging market economies has been a more challenging task than in developed economies. The conduct of monetary policy has to build credibility and reduce inflation rate levels, and simultaneously deal with a greater vulnerability to shocks. In fact, one basic task of the Central Bank of Brazil has been to build credibility as a monetary authority committed to price stability in the context of large inflationary shocks. This requires actions consistent with the inflation-targeting framework combined with high levels of transparency and communication with the public.[1] Credibility implies further that if private agents' expectations do diverge from the targets we see an eventual return. We present evidence on: (i) the behavior of the central bank; (ii) the behavior of private agents' expectations; (iii) change in inflation dynamics; and (iv) exchange rate volatility and pass-through.

Specifically, we estimate the central bank's reaction function, and find that monetary policy has been reacting strongly to inflationary pressures. In particular, the Central Bank reacts to inflation expectations, thus providing evidence that monetary policy is conducted on a forward-looking basis.

We show that private sector inflation expectations did not depart significantly from the country's inflation targets until September 2002, even when faced with inflationary shocks. We present evidence that the inflation targets have worked as an important coordinator of expectations. The end of 2002 and beginning of 2003 in turn represents a period dominated by uncertainties concerning the future conduct of economic policy. We also find some evidence of a change in inflation dynamics, namely a reduction in the degree of inflation persistence, which however seems to have shown some signs of resurgence at the end 2002. We also stress the significant inflationary pressures stemming from exchange rate volatility. We estimate the pass-through from exchange rate changes to the inflation rate using a VAR estimation, showing the higher pass-through for "administered or monitored" prices.

The following section presents an overview of the first three and half years of inflation targeting. Section 3 assesses the different challenges for the inflation-targeting regime. Section 4 deals with exchange rate volatility. A final section concludes the paper.

[1] For the importance of transparency and communication, and an assessment of inflation targeting in emerging market economies, see Fraga et al. (in press).