Presentation outline

1. Background notes
2. Monetary policy in 2003-06
   – 2003: disinflation and recovery
   – 2004: inflation rebound and policy response
   – 2005-06: consolidating disinflation
3. Inflation expectations
   – Lower inflation uncertainty
   – Convergence to the targets
4. Concluding notes
1. Background notes
Implementation of inflation targeting (IT) in 1999: hard challenges

Challenges

• Moment of great uncertainty, sharp exchange rate depreciation and concerns about fiscal dominance
  • Change in the fiscal regime in 1999

• To bring inflation down
  • 1999Q1: 2.9% (annual 12.0%), 1999: 8.9%, 2000: 6.0%

• To build credibility
  • Long process

• To build a technical supporting structure
  • Put in place fairly quickly
• Annual targets set by the National Monetary Council two years in advance
• Point targets with a ±2% confidence interval
• Headline inflation
• Open-letter to the Min. of Finance if targets are breached
• Minutes of the MPC meetings
• Quarterly Inflation Reports
• De facto autonomy of the Central Bank
Inflation expectations regular survey

- Conducted by the Central Bank of Brazil
- Around 100 professional forecasters
- Several macroeconomic indicators
- Incentives for accurate reporting of forecasts
Inflation, Targets and Expectations

- 14
- 12
- 10
- 8
- 6
- 4
- 2
- 0

% p.a.


- IPCA
- IPCA (Consensus)
- Targets
- Tolerance Intervals
IPCA Inflation

Average inflation rates:
- Avg. 2003: 0.74%
- Avg. 2004: 0.61%
- Avg. 2005: 0.46%
- Avg. 2006: 0.26%
2. Monetary policy in 2003-06
Monetary policy in 2003: disinflation and recovery

• **Context: 2002 confidence crisis**
  • Uncertainty about the maintenance of the regime
  • Huge exchange rate depreciation

• **Challenge**
  • To undertake major disinflation in an environment of limited credibility and facing a surge in inflation expectations

• **Implementation**
  • 2003S1: maintenance of the tightening
    • Inflation expectations: subsiding after April
  • 2003S2: easing
Mon. policy in 2004: reaction to inflation rebound

- **Mid-2004:**
  - Exchange rate depreciation
  - Fast economic growth
  - Rapid credit expansion
  - Deterioration of expectations

- **New tightening cycle**
Market Expectations for Inflation 2004-2006
Mon. policy in 2005-06: consolidating disinflation

- **2005S1**
  - Resilient expectations
  - Continuation of monetary policy tightening
- **2005S2**
  - Expectations back to the track
  - Economic cooling off
  - End of tightening cycle
- **2006**
  - Consolidation of disinflation
  - Inflation below point target
12-Month Ahead Inflation Expectations in 2005

- Jun 30
- Aug 31
- Oct 28
3. Inflation expectations
   - Lower inflation uncertainty
   - Convergence to the targets
12-Month Forecast Errors – Actual Minus Forecasted Inflation
Dispersion of Inflation Expectations – Coefficient of Variation (2001:12-2006:8)
12-Month Ahead Inflation Expectations and Targets
Estimation of Inflation Expectations – Several Specifications

<table>
<thead>
<tr>
<th>Regressors</th>
<th>Specifications</th>
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<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>Constant</td>
<td>1.81*</td>
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<tr>
<td></td>
<td>(1.03)</td>
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<tr>
<td>Inflation Target (12-month ahead)</td>
<td>0.80***</td>
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<td>(0.18)</td>
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<tr>
<td>Output Gap (-2)</td>
<td>0.09</td>
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<td>(0.11)</td>
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<tr>
<td>12-Month Inflation (-1)</td>
<td>0.20*</td>
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<td>(0.11)</td>
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<tr>
<td>Six-Month Nominal Exchange Rate Change (-1)</td>
<td>0.06***</td>
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<td>(0.01)</td>
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<td>Embi+ Brazil (-1)</td>
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<tr>
<td>Real Effective Exchange Rate Gap (-1)</td>
<td></td>
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<td></td>
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<tr>
<td>R-squared</td>
<td>0.2939</td>
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<tr>
<td>Adjusted R-squared</td>
<td>0.2849</td>
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</tbody>
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Notes: Standard errors—shown in parentheses—were corrected by Newey-West heteroskedasticity and autocorrelation consistent covariance matrix estimator since estimation residuals present autocorrelation and heteroskedasticity. *, **, *** indicate the coefficient is significant at the 10%, 5%, and 1% levels, respectively.
36-Month Rolling Window Regression – Constant Term

Beggining of the sample

Coefficient

Lower Bound - CI

Upper Bound - CI
36-Month Rolling Window Regression – Coefficient on the Inflation Target

Coefficient on the Inflation Target

Beggining of the sample

- Coefficient
- Lower Bound - CI
- Upper Bound - CI
36-Month Rolling Window Regression – Constant Term

Beginning of the sample

Coefficient

-12 Jan
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
00 00 00 00 01 01 01 01 02 02 02 02 03 03 03

Beginning of the sample

Coefficient

Lower Bound - CI

Upper Bound - CI
36-Month Rolling Window Regression – Coefficient on the Inflation Target

Begin of the sample

Coefficient

Lower Bound - CI

Upper Bound - CI
36-Month Rolling Window Regression – Coefficient on Output Gap

Coefficient
Lower Bound - CI
Upper Bound - CI

Jan 00  Apr 00  Jul 00  Oct 00  Jan 01  Apr 01  Jul 01  Oct 01  Jan 02  Apr 02  Jul 02  Oct 02  Jan 03  Apr 03  Sep 03
0.7 0.6 0.5 0.4 0.3 0.2 0.1 0 0 -0.1 -0.2 -0.3

Beggining of the sample

Coefficient
Lower Bound - CI
Upper Bound - CI
36-Month Rolling Window Regression – Coefficient on Past Inflation

Coefficient on Past Inflation
36-Month Rolling Window Regression – Coefficient on Exchange Rate Change

Beggining of the sample

Coefficient  Lower Bound - CI  Upper Bound - CI

00    00    00    00    01    01    01    01    02    02    02    02    03    03    03
4. Concluding notes
Monetary policy and the improvement in macroeconomic fundamentals have contributed substantially to create a more stable and predictable environment

- Disinflation consolidation
- Inflation at low levels
- Lower inflation uncertainty
- Anchored inflation expectations