CHALLENGES TO DISINFLATION: THE BRAZILIAN EXPERIENCE

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The views expressed herein are solely the responsibility of the authors and should not be interpreted as reflecting the views of the Federal Reserve Bank of San Francisco or the Board of Governors of the Federal Reserve System.
This paper

• Disinflation efforts worldwide with uncertain costs
  • Large literature for developed economies, many pre-date inflation targeting

• Brazil offers a laboratory to study disinflation in an inflation targeting regime

• Two previous bouts of inflation and disinflation:
  • Fiscal concerns and unanchoring of inflation expectations
  • Regaining credibility entailed sizable monetary tightening and change in policies
  • Disinflation proved lengthy and economically costly

• Insights for Brazil and others going forward
  • Similarities to current episode suggest need for policy shift in Brazil
  • Brazilian experience adds to the literature that point to costly disinflation
Three episodes of high inflation

Inflation targeting since 1999

Inflation expectations \( (\pi_e^{t+2,3}) \)
Three episodes of unanchoring of inflation expectations

Unanchoring index

- Unanchoring index (Abib et al., 2022):
  \[ U_t = \begin{cases} 
  1, & \pi_{t+2,3}^e > \pi_{t+2,3}^{max} \\
  \frac{\pi_{t+2,3}^e - \pi_{t+2,3}^*}{\pi_{t+2,3}^{max} - \pi_{t+2,3}^*}, & \pi_{t+2,3}^* \leq \pi_{t+2,3}^e \leq \pi_{t+2,3}^{max} \\
  0, & \pi_{t+2,3}^e < \pi_{t+2,3}^* 
  \end{cases} \]

- Unanchored if \( U_t > 0.1 \)
- Expectations from the BCB Focus Survey
- Daily sample: Jan 2, 2002 to Jan 20, 2023
Episode 2: fiscal concerns, unanchoring, tightening, policy shift, recession

- Years of unsustainable fiscal and quasi-fiscal practices
- Abrupt monetary policy reversal led to unanchoring (Abib et al., 2022)
- BCB only backtracked after inflation and expectations were well above target
- Fears of fiscal dominance, sovereign downgrade and a presidential impeachment
- New government introduced an ambitious reform agenda and fiscal consolidation
- Unanchoring lasted 5 years and the country faced a severe recession
Current episode: fiscal concerns, unanchoring, tightening

- Increasing unanchoring despite inflation decline and BCB’s considerable tightening
- Further deterioration in expectations since first round elections of Oct. 2022
- Once again, heightened fiscal concerns
Stronger correlation between expected inflation and debt since unanchoring

<table>
<thead>
<tr>
<th></th>
<th>Pre-unanch. (01/22/2018 - 08/31/2021)</th>
<th>Since unanch. (09/01/2021 - 01/20/2023)</th>
<th>Since 1st round (10/03/2022 - 01/20/2023)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\rho(\pi_{t+2,3}^e - \pi_{t+2,3}^*, D_{t+5} - D_{t+1})$</td>
<td>0.4***</td>
<td>0.68***</td>
<td>0.76***</td>
</tr>
<tr>
<td>Level</td>
<td>0.03</td>
<td>0.33***</td>
<td>0.59***</td>
</tr>
<tr>
<td>$\Delta$ 30-day</td>
<td>0.28***</td>
<td>0.74***</td>
<td>0.72***</td>
</tr>
<tr>
<td>$\Delta$ 30-day</td>
<td>0.09*</td>
<td>0.27***</td>
<td>0.3*</td>
</tr>
</tbody>
</table>

- Since 2018, survey projections for debt/GDP path
- Correlations between $(\pi_{t+2,3}^e - \pi_{t+2,3}^*)$ and $(D_{t+h} - D_{t+1})$, $h = \{5, 8\}$
  - Sharp increase in correlations since unanchoring
  - Additional step-up close to Oct. 2022 election
Conclusion

- Brazil provides a laboratory to study disinflation in inflation targeting regimes
  - High-inflation episodes involved fiscal concerns and unanchoring of expectations
  - Reanchoring entailed tight monetary policy and shift to sound fiscal stance
  - Both episodes were lengthy and led to recessions
- Remains to be seen what the current episode will bring to Brazil and others
  - Episodes suggest need for policy shift and point to a costly disinflation in Brazil
  - Evidence that policy credibility can also be challenged in advanced economies
- Episodes in Brazil add to the literature that point to costly disinflations
Fears of debt default led to sharp depreciation, rise in inflation and unanchoring
BCB tightened policy considerably raising the specter of fiscal dominance
New government surprised introducing reforms and fiscal targets
Unanchoring lasted 3 years and the country faced a mild recession
Evidence of credibility challenges in advanced economies

- U.S. inflation expectations remain well anchored since the pandemic
- But unanchored in the aftermath of the GFC:

\[
\pi^e_{t+5,10}
\]

- U.K. long-term expectations rose and fell following fiscal announcements
- Survey shows concerns about fiscal policy affected inflation projections
- Policy credibility can be challenged in advanced economies


