Macroeconomic Stability in the Aftermath of the Financial Crisis

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1. Benefits of macroeconomic stability
2. Monetary policy and macroeconomic stability
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Economic theory has associated macroeconomic stability with the following:

- (i) monetary stability, i.e., keeping inflation low and stable;
- (ii) financial stability, in particular acting as a lender of last resort to ensure adequate liquidity and a fluent functioning of the payments system;
- (iii) exchange rate stability and;
- (iv) output stability, keeping unemployment close to its natural rate.

In the pre-crisis period, a growing number of independent central banks adopted monetary strategies aimed at preserving price stability with exchange rate flexibility while keeping an eye on output.
The tenets of this framework based on price stability are uncontroversial:

- There is no permanent tradeoff between inflation and unemployment.
- High and volatile inflation depresses growth and distorts resource allocation.
- Inflation harms the poorest segments of society most, because they lack protection against its disruptive effects.
There is cross-country evidence in the growth literature that points to the importance of inflation for long-run economic performance...

Barro & Sala-i-Martin report a negative relationship between inflation and growth.

Easterly & Fisher (2000): “...direct measures of improvements in well-being of the poor... (are) negatively correlated with inflation.”
Several studies also point at macroeconomic stabilization as an important determinant of long-run performance:

Loayza & Hnatkovska (2003): “...macroeconomic volatility and long-run economic growth are negatively related.”
But, the nature of macroeconomic policies used to obtain stability matters,

Aghion & Banerjee (2005): “...countercyclical budgetary policies are growth-enhancing in countries with a lower level of financial development.”

Fatás & Mihov (2011): “…it is not enough to attain low inflation and low budget deficits on average, it is also necessary to have stable inflation and stable fiscal policy.”
Monetary policy and macroeconomic stability

- Monetary Policy
- Exchange Rate Policy
- Macro-prudential Policy
- Macroeconomic Stability
  - monetary
  - financial
  - exchange rate
  - output
- Long-run Growth
The Peruvian experience shows that macroeconomic volatility has been associated with lower output growth rates.

Nota: La volatilidad del crecimiento se calcula mediante la desviación estándar del crecimiento de los últimos 10 años.
During the 70s and 80s, periods of high macroeconomic and policy instability, per capita GDP in Peru decreased 52 per cent.

<table>
<thead>
<tr>
<th>Period</th>
<th>GDP growth (average)</th>
<th>Per Capita GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>60'</td>
<td>5,9</td>
<td>3,2</td>
</tr>
<tr>
<td>70'</td>
<td>3,6</td>
<td>0,6</td>
</tr>
<tr>
<td>80'</td>
<td>-1,0</td>
<td>-2,1</td>
</tr>
<tr>
<td>90'</td>
<td>4,0</td>
<td>1,3</td>
</tr>
<tr>
<td>01'-11'</td>
<td>5,8</td>
<td>4,5</td>
</tr>
</tbody>
</table>
Monetary policy in emerging economies has come a long way in the control of inflation in the last two decades. This, coupled with other factors, has fostered strong economic performance in the region.

Inflation
(annual % var)

Real GDP (PPP) – Developed and Emerging Economies
(% var)

Source: FMI-WEO, October 2012.
Since the beginning of the 1990s, dollarization has been a significant concern to Peru’s monetary authorities in view of its potential risks to the financial system.
Peru’s IT framework departs somewhat from international standards in that the BCRP uses other instruments in addition to policy interest rates, with an aim to reduce balance sheet effects associated with financial dollarization.

Objective: price stability

- Inflation target: 2%
- Operative target: interbank interest rate.

Conventional monetary policy

High reserve requirements on FX obligations to:
- Moderate credit cycles associated with capital inflows.
- Keep adequate FX liquidity in the banking system.

FX market intervention to:
- Reduce extreme exchange rate volatility, particularly associated with domestic agents’ transitory portfolio shifts.

Measures to control risks from financial dollarization

Non-conventional instruments
Additionally, high reserve requirements on foreign currency deposits contribute to: a) ensuring adequate liquidity; b) reducing pressure on bank credit; and c) internalizing dollarization risks. High reserve requirements on banks’ short-term foreign liabilities also reduce their exposure to “sudden stops”.

Peru’s experience

### Foreign Currency Reserve Ratios
(as percentage of total obligations subject to legal requirements)

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Rate</th>
<th>Marginal Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 2008 crisis</td>
<td>31%</td>
<td>38.8%</td>
</tr>
<tr>
<td>During 2008 crisis</td>
<td>45%</td>
<td>55.0%</td>
</tr>
<tr>
<td>After 2008 crisis</td>
<td>84%</td>
<td></td>
</tr>
</tbody>
</table>

### External Liabilities of banks entities
(Balance in US$ million and ratio in percentage)

- Long term external liabilities
- Short term external liabilities
- Long term external liabilities / Total external liabilities
FOREX intervention aims at reducing exchange rate volatility to prevent balance sheet effects, without any commitment on the exchange rate level.

Peru’s experience
The growing size of the BCRP’s balance-sheet has been supported by a solid fiscal position, the use of reserve requirements and, to a lesser degree, the placement of BCRP securities.

Peru: Central Reserve Bank Balance Sheet  
(As percentages of GDP. Figures of December 31, 2011)

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>International reserves</td>
<td>27,6</td>
</tr>
<tr>
<td>Public sector deposits</td>
<td>10,5</td>
</tr>
<tr>
<td>In domestic currency</td>
<td>6,7</td>
</tr>
<tr>
<td>In foreign currency</td>
<td>3,8</td>
</tr>
<tr>
<td>Reserve requirements</td>
<td>7,6</td>
</tr>
<tr>
<td>In domestic currency</td>
<td>2,6</td>
</tr>
<tr>
<td>In foreign currency</td>
<td>5,0</td>
</tr>
<tr>
<td>Central Bank instruments</td>
<td>3,6</td>
</tr>
<tr>
<td>Cash holdings</td>
<td>5,7</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>0,2</td>
</tr>
</tbody>
</table>

Peru’s experience
The BCRP’s Forex intervention has neither created real exchange rate misalignments nor prevented a sustained dedollarization process.

The estimation follows the BEER methodology with data until September 2012.
These policies have helped Peru attain sound macroeconomic outcomes.
We have learned from the crisis that macroeconomic stability demands an array of policies in order to anticipate and cope with shocks originating from multiple sources.

This requires both an institutional framework to establish the principles and instruments governing macro-regulation and a clear distinction between the roles of monetary and macro-regulatory policy.

In the face of various potential sources of destabilizing shocks for the economy, central banks require a set of instruments wider than the standard monetary policy toolkit.

Such instruments have the common objective of deterring economic agents from excessive risk taking and enhancing the resilience of the economy against low-probability but high-impact events.
Several central banks, especially in emerging market economies, have used instruments such as capital requirements, counter-cyclical provisioning, additional liquidity requirements, and debt limits to meet these objectives.

However, the use of these instruments represents an important challenge to the authorities, as they typically impose efficiency costs on financial intermediation, which nevertheless are lower than the benefits from preserving financial stability.

Shortcomings may be limited by using the right mix of instruments—especially distributing the burden of macro-prudential regulation among a wider set of tools.
It is fundamental to ensure adequate communication between the regulatory, supervisory, monetary and fiscal authorities to guarantee the effectiveness of macro-prudential policies.

For central banks in particular, it is important to keep in mind that macro-prudential policies can and must be implemented while preserving the two pillars of monetary policy; i.e., independence and the single mandate to preserve monetary stability.

Many challenges remain going forward. In particular, the limits between monetary and macro-prudential policy need to be further clarified; and additional work is required to identify areas where the complementarity between monetary and macro-prudential policies can be maximized.
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