Crisis, recovery and monetary policy challenges in emerging markets

Madhusudan Mohanty
Bank for International Settlements
Basel, Switzerland

Presentation at the ICRIER and InWent conference on South Asian Financial System at a Crossroad
12 November 2009

Date
An outline

- The global economy since the crisis
- Possible divergence of monetary policy
- Challenges for emerging markets
Key features of the global economy since the crisis

- Near zero interest rates in G3 economies
- A return of global risk appetite
- Diverging global prospects
Real short-term interest rate in G3\(^1\)

\(^1\) Nominal rates less core inflation; weighted average based on 2005 GDP and PPP exchange rates; in per cent; three-month money market rates.
Return of risk appetite

Risk appetite measure

Global asset prices

1 Flow-based measure: the State Street Investor Confidence Index; Survey based: the Merrill Lynch Fund Manager Survey; standardised using mean and standard deviation over the sample beginning in January 2000. 2 MSCI World index; December 2006 = 100. 3 Option-adjusted spreads in basis points.
Growth forecasts for 2010

1 Made in successive months in 2009; average annual changes, in per cent. 2 Weighted average based on 2005 GDP and PPP exchange rates of major economies.
Emerging economy inflation rates

1 Twelve-month change in consumer prices, in per cent; dots represent forecasts.
Industrial economy inflation rates

1 Twelve-month change in consumer prices, in per cent; dots represent forecasts.
What might current prospects mean for monetary policy in emerging markets?

- Possible divergence of interest rates from G3 economies
- Increased possibility of currency “carry trades”
- Upward pressures on exchange rates
- Asset price booms
Policy rates\(^1\)

Emerging markets

Latin America

G3

Asia excl. China

\(^1\) Aggregate are weighted average based on 2005 GDP and PPP exchange rates; in per cent.
Carry-to-risk using US dollar as funding currency

1 Defined as the one-month interest rate differential (Korea, three-month) divided by the implied volatility derived from one-month (Korea, three-month) at-the-money exchange rate options; quintuple scale (e.g. the number 2 represents a ratio of 0.4).
Approaches to resolving the dilemma

- Exchange rate appreciation
  - Could stabilise inflation and may eventually allow the UIP to reassert itself (hence stops inflows)
  - But high uncertainty about the equilibrium exchange rate
  - Appreciation unmatched by neighboring countries leads to loss of competitiveness
  - Sudden changes in relative prices can be disruptive
Real effective exchange rate changes
Approaches to resolve the dilemma

- Sterilized intervention
  - Prevents appreciation and reasserts monetary independence (appears to be most preferred option in many countries).

  - Is sterilized intervention actually effective?
Emerging market foreign exchange reserves

1 Sum of major emerging market economies; in billions of US dollars.
## A stylized central bank balance sheet

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net foreign assets</td>
<td>Monetary liabilities</td>
</tr>
<tr>
<td>Net domestic assets</td>
<td>▪ Currency</td>
</tr>
<tr>
<td></td>
<td>▪ Bank reserves</td>
</tr>
<tr>
<td></td>
<td>Non-monetary liabilities</td>
</tr>
<tr>
<td></td>
<td>▪ Central banks securities</td>
</tr>
<tr>
<td></td>
<td>▪ Others</td>
</tr>
<tr>
<td></td>
<td>Equity capital</td>
</tr>
</tbody>
</table>

1 See Mohanty and Turner, *Foreign exchange reserve accumulation in emerging markets: what are the domestic implications?*, BIS Quarterly review, September 2006.
The concept of central bank financing gap

- Central bank financing gap = Foreign currency reserves (valued in domestic currency) – currency in circulation
- When this financing gap is small, sterilized intervention is likely to be successful.
- Large and persistent financing gaps, however, poses a very different challenge
Foreign exchange reserves minus currency held by the public as a percentage of:

M2\(^1\)

\[ \frac{\text{Foreign exchange reserves}}{\text{M2}} \times 100\]  

Public sector domestic debt

\[ \frac{\text{Public sector domestic debt}}{\text{M2}} \times 100\]

1 M2 is a broad measure of money which comprises, in addition to M1 (transferable deposits and currency outside deposit money banks), time, savings and foreign currency deposits of resident sectors other than central government. 2 Weighted average of major economies based on 2005 GDP and PPP exchange rates.
Possible monetary and financial distortions

- Sterilization is unlikely to be complete
- Leads to large expansion of easy money substitutes (short-term bills and notes) and loose monetary conditions
- High quasi-fiscal costs
- Incomplete portfolio adjustment and growing long-term monetary imbalances
Rounding up: key policy questions and challenges

- Is the recent growth divergence sustainable?
- Has the risk-adjusted return on EM assets shifted up permanently?
- What combination of monetary and exchange rate flexibility is most appropriate?
- To what extent monetary policy should take financial system perspective into view?
- How much should macro prudential instruments (reserve and liquidity requirements, leverage ratio, etc) be used?
The Brazilian way to exit: tax on portfolio inflows

Non-resident portfolio flows to Brazil\(^1\)

Real exchange rate\(^2\)

1 In billions of US dollars; positive figures indicate capital inflows or increase in foreign exchange reserves. 2 Real per US dollar.