Unprecedented Expansion of Central Bank Balance Sheets – Implications for India

Dr. Jaimini Bhagwati
RBI Chair Professor, ICRIER, New Delhi
Expansion of balance sheets of major central banks in the wake of global financial crisis

Balance Sheets as % of GDP

Note: GDP used is the IMF nominal GDP forecast
Source: Thomson Reuters Datastream
Note: MBS stands for Mortgage Backed Securities
Source: Federal Reserve, Yardeni Research
Total Assets of the Bank of England

Source: Bank of England, Yardeni Research
Total Assets of the ECB

Source: ECB, Yardeni Research
Total Assets of the Bank of Japan

Note: 102.42 Yen = 1 USD as of 31 January, 2014
Source: Bank of Japan & Japan Macro Advisors
Central bank target interest rates remain low

Note: Interest rates shown are nominal rates
Source: Bloomberg; Milken Institute 2013 Global Conference
Inflation (annual average consumer prices) remains subdued for developed countries

Source: WEO, IMF
Note: X-Axis (Maturity) is not to scale; * Real yield = Nominal yield - CPI
Source: US Department of Treasury
US & UK Government Bond Yields

Note: *As on 16.01.2014
Source: Bloomberg
German and Japanese Government Bond Yields

Note: *As on 16.01.2014
Source: Bloomberg
US & UK
Nominal & Real Yields

Note: Yields as of 16.01.2014: Annual average CPI numbers from WEO were used to estimate inflation adjusted yields
Source: Bloomberg and WEO, IMF
Germany & Japan
Nominal & Real Yields

Note: Yields as of 16.01.2014; Annual average CPI numbers from WEO were used to estimate inflation adjusted yields
Source: Bloomberg and WEO, IMF
Note: Monthly All India CPI prices from the source mentioned below were used to calculate inflation adjusted yields
Source: RBI
Indian Government Security Benchmark Yield

- Yield on inflation protected 10 year Rupees 500 crores Government bonds which were issued on 29 January 2014 was 1.44%

- In comparison, yield on regular 10 year Government bond as of 29 January was 8.74%

- Yield on 5 year Government bond as of 30 January was 8.09%

- CPI for December 2013 stood at 9.87%

Source: RBI
Nominal Rupee/USD Exchange Rate

Source: RBI
Rupee/USD Real Effective Exchange Rate

Note: The graph depicts 6 - Currency Trade-based weights REER with Base 2004-05=100 ; P - Provisional
Source: RBI
Goods Trade - India's Exports & Imports
(in US$ Million)

Note: Monthly data may not add up to the total due to revisions in data for previous months
Source: RBI
## Price/Earning (P/E) on major indexes

<table>
<thead>
<tr>
<th>Dow Index, as of Jan 30, 2014</th>
<th>30.01.2014</th>
<th>Year ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dow Industrial</td>
<td>15.25</td>
<td>15.29</td>
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<thead>
<tr>
<th>Other Indexes, as of Jan 24, 2014</th>
<th>Year ago</th>
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<tbody>
<tr>
<td>Nasdaq 100</td>
<td>21.68</td>
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<tr>
<td>S&amp;P 500</td>
<td>18.20</td>
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<th>Sensex Index, as of Nov 29, 2013</th>
<th>Year ago</th>
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<tr>
<td>Sensex 30</td>
<td>17.6</td>
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</tbody>
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Source: Wall Street Journal and BSE India
Subsidy for NRI Deposits (1/2)

• NRI deposits of US$35 billion with maturities from 3-5 years (FCNR-B window from 06/09/2013 – 30/11/2013)

• Rupee cost of funds for banks is 3.5% (RBI’s swap rate is equivalent to an exchange rate guarantee)

• These funds were probably lent at an average interest rate of around 9.5%
Subsidy for NRI Deposits (2/2)

- Modified duration \( \frac{dP}{dY} \) of loans around 2.5 years

- Present value of subsidy 15\% \( (9.5-3.5) \times 2.5 \)

- 15\% of $35 billion is $5.25 billion and at exchange rate of Rs 62.5 per dollar amounts to Rupees 32,800 crores
Real GDP Growth Rates

Source: WEO, IMF