Macroeconomic constrains to financial sector development

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Macro-stability at last

Current account deficit

% of GDP

2012 2013 2014(F) 2015(F)

India
Indonesia
Brazil
South Africa
Turkey

CPI Inflation

% yoy

Jan 13 May 13 Sep 13 Jan 14 May 14 Sep 14

India
Turkey
Brazil
South Africa
Indonesia
...but growth remains in a funk

India: GDP growth

1H growth driven by agri and government

1H growth driven by agri and government

1H growth driven by agri and government

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...and agri and fiscal drags are on their way

Fiscal deficit

% of budgeted deficit reached

FY15
FY14
FY13

Kharif crop: first advance estimates

% y-o-y growth

Total Rice Course Cereals Pulses Oilseeds

Source: CSO, CEIC, JPM Calculations
Private investment remains the key

It's the composition, silly!

Source: CSO, CEIC, JPM Calculations
Implementation bottlenecks are the key; green shoots?

Stalled Projects

% of projects under implementation

Mar-96  Mar-98  Mar-00  Mar-02  Mar-04  Mar-06  Mar-08  Mar-10  Mar-12  Mar-14

Value

Volume

Project starts

No of projects announced

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Almost half the slowdown due to implementation bottlenecks and associated loss of confidence.

<table>
<thead>
<tr>
<th>Decomposition of Slowdown from 2010 to 2013</th>
<th>ppts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Growth Slowdown (ex agri, com serv)</td>
<td>695.0</td>
</tr>
<tr>
<td>Slowdown that can be explained</td>
<td>660.0</td>
</tr>
<tr>
<td>percent explained by</td>
<td>(%)</td>
</tr>
<tr>
<td>Slowing Trading Partner Growth</td>
<td>10.0</td>
</tr>
<tr>
<td>Higher Oil Prices ($)</td>
<td>11.0</td>
</tr>
<tr>
<td>Real Interest Rates</td>
<td>35.0</td>
</tr>
<tr>
<td>Implementation Bottlenecks (proxied by stalled projects)</td>
<td>28.0</td>
</tr>
<tr>
<td>Investor Confidence (proxied by projects starts)</td>
<td>16.0</td>
</tr>
<tr>
<td>Supply Bottlenecks and investor confidence</td>
<td>44.0</td>
</tr>
</tbody>
</table>

Source: JPM Calculations
But are we ready to finance a recovery in capex?

- How good a job is the financial system currently doing of “allocative efficiency”?
  - When infrastructure projects are cleared, will they be easily financed?
  - Can a capex recovery be financed from domestic savings?

- Is financial stability an issue?
  - Is there a build-up of underlying vulnerabilities?
  - Are segmented markets, and the absence of a bond-currency-derivative market nexus, responsible?
Symptom 1: A financial disintermediation post-Lehman

- Both “access” (financial inclusion) to financial assets and “attractiveness” of assets are drivers
- But the latter is a secular phenomenon and cannot explain sharp drop-off in recent years

![Graph showing Household savings as % of GDP with separate lines for Physical savings and Financial savings from 2003 to 2013.](attachment:image.png)
Driver 1: Stubbornly high inflation and inflation expectations...

CPI - Industrial Workers

Inflation expectations vs measured inflation

Year ahead expectation
Current perception
Resulted in consistently negative real rates of return on financial assets
And resulted in asymmetric monetary transmission

- Banks were reluctant to cut deposit rates for fear of triggering financial disintermediation
- PSU banks constrained by “deposit” targets
Implications for monetary policy: speculating on a neutral rate

India: Core CPI (IW)

Core Inflation Avg: 4.8%
(Apr 01 - March 07)

India: Real policy rates

%, deflated by CPI

Source: MOSPI, Bloomberg, CEIC
Implication: limited space to ease unless inflation remains at current levels

- Real rates need to stay positive for financial development
- Else any pick-up in investment will rely disproportionately on foreign, not domestic, savings pressurizing the CAD
- The higher the potential growth, the higher the needed real rate

<table>
<thead>
<tr>
<th>Uncomfortable monetary arithmetic</th>
<th>FY02-FY07</th>
<th>FY15-FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td>% average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed potential growth (%) oya</td>
<td>7.3</td>
<td>6.5</td>
</tr>
<tr>
<td>Realised inflation (%) oya</td>
<td>4.5</td>
<td>6.0</td>
</tr>
<tr>
<td>Growth-real rate gap</td>
<td>4.7</td>
<td>4.7</td>
</tr>
<tr>
<td>Derived real rate</td>
<td>2.6</td>
<td>1.8</td>
</tr>
<tr>
<td>Implied policy rate</td>
<td>7.1</td>
<td>7.75-8.0</td>
</tr>
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Symptom 2: But even as financial savings pick up, great reluctance to lend on the part of banks.

**Infrastructure credit growth**

- %yoy, 3mma

**Credit - deposit ratio**

- %

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Balance sheet problem – NPAs driving risk aversion; cyclical or structural?
Bank reforms needed but there’s a more fundamental issue at hand

- Microeconomic issues afflicting public sector banks is well known and don’t need repetition:
  - Governance reforms within PSBs
  - Did they systematically mis-price risk?
  - How do we improve real/financial restructuring and debt recovery
- More fundamentally: banks ill-suited to make long-term infrastructure investments given the ALM mismatch
- Fiscal constraints: current civilian capex of central govt budget = 1% of GDP
- Cannot escape the need for a vibrant corporate bond market?
Driver 2: A shallow corporate bond market

G-sec/Corp. mix is both a symptom but also cause of the problem

G-Sec
Corporate (fin and non-fin)

Stock of issuance

5 Quasi Sovereigns

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Corporate bonds constitute a very small fraction of fund-flow to non-financial entities.
Low turnover and secondary market liquidity

- “On-the-run” bid-ask spreads 2-5 bps for corp; 1 for G-secs; “off-the-run” 10-15 bps for corp bonds; 5 bps for G-secs
- Lower secondary market liquidity because of prevalence of buy-and-hold investors
Need a critical mass of heterogenous owners

- Expecting banks to hold a larger share is like asking the turkey to vote for Christmas
- FII's key to secondary-market liquidity
Plethora of microeconomic distortions but long term contractual savings is key for depth.
Need to boost market for long-term contractual savings

Insurance Penetration

% of GDP


Industry

Life

Non-life

Pension: investible assets

% of GDP

India United States

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

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And reduce fiscal crowding out

Source: Ratna Sahay, “India’s Capital Markets”, August 2014

Life Insurance Asset Allocation

- On first glance similar to U.S. Life Insurer’s
- But LIC holds 40% more government bond
- Leaves room for re-allocation towards corporate bonds
Financial repression: a relatively flat yield curve disincentivizes long-term savings

Source: CSDS Post-poll
Crowding out: letting the data talk

[Graph showing USD million on the y-axis and dates from March 2013 to December 2014 on the x-axis. The graph includes a line labeled "FII Corporate Bond Subscription" and another line labeled "G-Sec Utilization." The y-axis ranges from 0.3 to 1.1.]
Corporate bond market: cutting to the chase

- Yes, a variety of micro constraints distortions – stamp duty, disclosure requirements, bankcrupty code
- But a necessary condition for market depth and development
  - Increasing market for long-term contractual savings (pension insurance)
  - Reducing fiscal deficits to reduce crowding out
  - Obviating the need for financial repression (SLRs, LIC)
  - Which, in turn, would reduce yield curve distortions and incentivize long-term savings

Source: CSDS Post-poll
Financial stability: ground-hog day again?

ECB borrowing stock

USD bn

02 03 04 05 06 07 08 09 10 11 12 13 14

% of GDP

02 03 04 05 06 07 08 09 10 11 12 13 14

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A constant ratcheting down

INR has ratcheted down following every bout of weakness

USD/INR, reverse scale

Source: Bloomberg
Segmented markets, breakdown of BCD nexus, and financial vulnerability concerns

“Margin of temptation” (McKinnon’s “super risk premium”) not to hedge is large

Especially is you believe forwards always over-estimate spot in “normal times”

Dangerous to liberalize ECBs for those without a natural hedge
“Forwards over-predict spot in normal times”

- Should not be surprising
- Uncovered interest parity does not hold; but CIP expected to
- Existence of “currency risk premia”
- Risk neutral agents will stay uncovered
Segmented markets, breakdown of BCD nexus, and financial vulnerability concerns

- CIP completely breaks down in India
- Reflects segmented markets, lack of integration and incomplete capital account convertibility
- When “landed cost” higher than domestic cost, agents will stay open

Foriegn borrowed landed cost (post hedging) minus domestic cost of borrowing

Financial crisis

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Putting it all together

- Growth remains weak
- Infrastructure and investment remain the key
- But fiscal constraints preclude the government from doing the heavy lifting
- Private investment is the key
- But this would need (over time)
  - Positive and appropriate real rates of return to boost financial savings
  - Greater contractual (pension/insurance) savings
    - Lower fiscal deficits
    - Reduced financial repression
    - A less-distorted yield curve
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