Global Financial Crisis: Impact on India

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ICRIER-INVENT Workshop
Current Developments in Indian Financial System
New Delhi
20 March 2009
Roots of Global Crisis

• Global macroeconomic imbalances
  – Results in huge cross-border capital flows from surplus to deficit countries
  – International financial system failed to intermediate these flows properly
    • Lending to sub-prime borrowers/ imprudent credit expansion
    • Lack of effective supervision and regulation
  – Debt crisis of 1980s, East Asian crisis of late 1990s and the present global crisis
  – Current one the severest and the impact so enormous and widespread
## Global Macroeconomic Imbalances

### Table 1: Current Account Balance as % of GDP, 1995-2007

<table>
<thead>
<tr>
<th></th>
<th>Australia</th>
<th>US</th>
<th>UK</th>
<th>Spain</th>
<th>China</th>
<th>Germany</th>
<th>Japan</th>
<th>Norway</th>
<th>Russia</th>
<th>Saudi Arabia</th>
<th>India</th>
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<tr>
<td>1995</td>
<td>-5.2</td>
<td>-1.5</td>
<td>-1.2</td>
<td>-0.3</td>
<td>0.2</td>
<td>-1.2</td>
<td>2.1</td>
<td>3.6</td>
<td>2.2</td>
<td>-3.7</td>
<td>-1.6</td>
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<tr>
<td>2000</td>
<td>-3.8</td>
<td>-4.3</td>
<td>-2.6</td>
<td>-4.0</td>
<td>1.7</td>
<td>-1.7</td>
<td>2.6</td>
<td>15</td>
<td>18</td>
<td>7.6</td>
<td>-1.0</td>
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<tr>
<td>2001</td>
<td>-2.0</td>
<td>-3.8</td>
<td>-2.1</td>
<td>-3.9</td>
<td>1.3</td>
<td>0</td>
<td>2.1</td>
<td>16.1</td>
<td>11.1</td>
<td>5.1</td>
<td>0.3</td>
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<td>2002</td>
<td>-3.7</td>
<td>-4.4</td>
<td>-1.7</td>
<td>-3.3</td>
<td>2.4</td>
<td>2.0</td>
<td>2.9</td>
<td>12.6</td>
<td>8.4</td>
<td>6.3</td>
<td>1.4</td>
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<td>2003</td>
<td>-5.3</td>
<td>-4.8</td>
<td>-1.6</td>
<td>-3.5</td>
<td>2.8</td>
<td>2.0</td>
<td>3.2</td>
<td>12.3</td>
<td>8.2</td>
<td>13.1</td>
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<td>2004</td>
<td>-6.1</td>
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<td>-2.1</td>
<td>-5.3</td>
<td>3.6</td>
<td>4.7</td>
<td>3.7</td>
<td>12.7</td>
<td>10.1</td>
<td>20.8</td>
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<tr>
<td>2005</td>
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<td>-2.6</td>
<td>-7.4</td>
<td>7.2</td>
<td>5.2</td>
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<td>2006</td>
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<td>17.3</td>
<td>9.5</td>
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<td>-1.1</td>
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<tr>
<td>2007</td>
<td>-6.2</td>
<td>-5.3</td>
<td>-3.8</td>
<td>-10.1</td>
<td>11.3</td>
<td>7.6</td>
<td>4.8</td>
<td>15.4</td>
<td>5.9</td>
<td>25.1</td>
<td>-1.4</td>
</tr>
</tbody>
</table>

**Source:** IMF.

- *Persistent deficits and surpluses among nations*
- *India not part of global imbalances*
Capital Inflows into India

Far exceeding the current account deficits!
India’s Reserve Build-up

*Turned out to be building up a war chest!*
Huge Stock Market Rally

Stock index rising from an average 5500 during 2004 to over 20,000 in January 2008
Remarkable Growth Performance

**GDP Growth Rates, 1997-98 to 2007-08 (Per cent)**

- Lifted to a new high growth trajectory
- Cheap and plentiful supply foreign capital partly behind high growth
Overheating of Indian Economy

Note: HP filter technique as proposed by Hodrick and Prescott (1997)

- GDP growth above potential rate in recent years
- Inflation above 5 per cent from 2003-04
Monetary Tightening from 2004

- Tightening from Sep 2004 became harder from 2006-07
Soft-landing of Indian Economy

Cyclical Slowdown of GDP Growth from Q3 2007-08

Slowdown of Q3 2007-08 to Q2 2008-09, RBI effect
Global Crisis
Reversal of Capital Flows from India

- Huge FII outflows from India since December 2007 due to US financial meltdown (Massive de-leveraging of US banks)
- FII equity outflows over US$ 15.4 bn from Jan 08
Stock Market Crash

- Plummeting from 20,873 on 8 Jan 08 to 9093 on 28 Nov, 56% fall
- NYSE stock price fall started earlier (November 07) but much less steeper than BSE
Stock of Reserves falling from $315 bn in May 08 to $246 bn in Nov 08
Rupee tumbling by 20% from end-Mar 08 to end-Nov 08
Liquidity Crisis

- Inter-bank call money rate spiking to 20% in October 08
- Drying up funds from domestic and foreign capital markets leading to pressure on bank financing
- Outflow through banking channels
Credit Crunch to Low Credit Demand

- In September and October 08, bank finance (loans & investments) rose to compensate for drying up funds from domestic and foreign capital markets.

- In November 08 onwards, bank finance expansion sharply lower as demand has fallen/bank averse to lending; and bank finance turned negative in Jan 09 and remained lower than last year level in February 09.
Aggressive Policy Response

• RBI loosening cost and availability of liquidity in a series of steps from mid-September 08
  – Initial reluctance due to high inflation and aggressive response from mid-October 08
RBI Policy Rate Changes

- Cash reserve ratio (CRR) brought down from 9% to 5%
- Statutory liquidity ratio (SLR) from 25% to 24%
- Repo rate reduced from 9% to 5% & reverse repo rate from 6% to 3.5%
- Special window for banks in their lending to mutual funds, NBFCs and housing finance companies
- Refinance facility for banks from the central bank & dollar swap arrangements, etc.
RBI Liquidity Injection

<table>
<thead>
<tr>
<th>Actual/Potential Release of Primary Liquidity since Mid-September 2008 (Rs crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
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<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td><strong>Total (1 to 7)</strong></td>
</tr>
</tbody>
</table>

**Memo**: Statutory Liquidity Ratio (SLR) Reduction | 40,000

*Nearly Rs. 4000 bn ($80 bn), over 7% of GDP of liquidity release*
Fiscal Stimulus

• Deterioration of the economy leading to Central government’s three packages of fiscal stimulus in early Dec 08, early Jan 09, early Mar 09
  – Direct fiscal burden of stimulus just 1.8% of GDP
    • Across-the-board excise duty reduction by 4 %age points
    • Additional plan spending of Rs. 200 billion
    • State governments allowed additional market borrowing of Rs 300 billion for plan expenditure
    • Assistance to export industries
    • 2 percentage point reduction in central excise and service tax
  – Non-fiscal measures in package (ECB and FII debt inflow relaxations, IIFL tax-free bonds, etc.)
  – Fiscal deficit (Central and States combined) rising sharply to 11% of GDP in 2008-09 (5.4% in 2007-08) and likely to be over 10% in 2009-10
    • Loose fiscal policy due to domestic compulsions
## Sharp Real Sector deterioration from September 2008

Global crisis impact on India’s real economy from September 08
Growth Prospects: 2008-09 and 2009-10
GDP Forecasts

• Methodology:
  – Use of an index of leading economic indicators (LEI)
  – Also a external shock in the form of a dummy variable
GDP Forecasts…

- LEI Consists of:
  - (i) production of machinery and equipment
  - (ii) non-food credit
  - (iii) railway freight traffic
  - (iv) cement sales
  - (v) net sales of the corporate sector
  - (vi) fuel and metal prices
  - (vii) real rate of interest
  - (viii) BSE sensex and
  - (ix) exports
Index of Leading Economic Indicators (LEI)....

- Composite index constructed for 1997-08 with quarterly growth series
- Principal component index (PCI) method
  - Weights assigned through iteration process based on the contribution to total variation in the composite index
- LEI predicts future growth based on the past, 5-quarter in advance
- Cannot capture the effects of sudden external shocks having immediate impact on growth
  - East Asia crisis, 1997-98
  - Dotcom bust and September 11 incident in 2000-01 and 2001-02
  - Crop failure in 2002-03
  - Current shock of US financial crisis in 2008-09 and 2009-10
External Shocks & India’s GDP Growth

External shocks bring down India’s growth sharply
The estimated equation for GDP growth forecast, given below, is satisfactory with adjusted R-square value of 0.65 and all the co-efficients significant at 99% level.

$$\text{GrGDP}_t = 7.98 + 1.34 \text{ LEI (t-5)} - 3.70 \text{ Dummy}$$

(4.70)  
(-7.56)
Growth Prospects of India

• Based on leading Indicators and a shock variable to incorporate the global crisis, the growth rates for 2008-09 and 2009-10 are projected as:

GDP Growth Forecast for 2008-09 and 2009-10

<table>
<thead>
<tr>
<th></th>
<th>No Shock</th>
<th>With Shock</th>
<th>Shock Moderated by Policy Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>7.9</td>
<td>6.3</td>
<td>6.3</td>
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<tr>
<td>2009-10</td>
<td>8.4</td>
<td>4.8</td>
<td>5.5</td>
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*Three scenarios of growth and third one assumes the impact of policy stimulus*
Concluding Remarks

- India is seriously affected by the global crisis
- Growth to come down sharply but not below zero
- Soundness of banking, cautious capital account opening, and high reserve level have saved the country
- Recovery possible in late 2009-10 or early 2010-11 provided the government is able to push through massive investment in social and physical infrastructure through public-private participation
- Structural and procedural reforms imperatives for restoring confidence and to raise the potential growth rate
- Huge fiscal deficits and record debt levels will damage recovery prospects
Thank You.
Deepening Global Integration
(Current Account & Capital Account as % GDP)

- Current account transactions rising from less than 20% of GDP to 50%
- Both current and capital account transactions from less than a third of GDP to over 115%