Did Indian capital controls work?

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Outline

1. Motivation
2. India’s capital controls
   - International comparisons
   - The regulatory framework
   - Phase 1: Pegging with sterilised intervention
   - Phase 2: Emphasis on capital controls
4. Did the controls achieve their macroeconomic and financial stability objectives?
   - Our approach
   - Was India able to hold down the magnitude of capital inflows?
   - Was India able to uphold the exchange rate regime?
   - Was India able to achieve financial stability?
5. Current thinking on reforms of India’s capital controls
What can we learn from India?
What can we learn from the Indian experience?

- India has long had an extensive system of administrative controls.
- India fared relatively well in the global crisis.
- Can we juxtapose these two facts to conclude that controls made India more resilient?
Did the system of controls actually work?

To carefully answer this question we ask three questions:

1. Did the capital controls regime succeed in limiting inflows?
2. Did it preserve India’s exchange rate and monetary policy regime?
3. Did it assure financial stability?
Elaborate system of administrative capital controls
Chinn and Ito (2008) score based on IMF’s *Annual Report on Exchange Arrangements and Exchange Restrictions* (*AREAER*). 4 categories are considered:

1. presence of multiple exchange rates
2. restrictions on current account transactions,
3. capital account transactions
4. requirement of surrendering export proceeds

The index for capital account openness is the first standardized principal component of these four categories.
India and her peers

<table>
<thead>
<tr>
<th>Country</th>
<th>Openness Score (2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>-1.13</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.99</td>
</tr>
<tr>
<td>South Africa</td>
<td>-1.13</td>
</tr>
<tr>
<td>South Korea</td>
<td>0.18</td>
</tr>
<tr>
<td>Turkey</td>
<td>-1.13</td>
</tr>
<tr>
<td>BSST average</td>
<td>-0.27</td>
</tr>
<tr>
<td>China</td>
<td>-1.13</td>
</tr>
<tr>
<td>Russia</td>
<td>-0.09</td>
</tr>
</tbody>
</table>

*Source: Chinn and Ito (2008)*

India is much less open than most other major emerging markets like Brazil, South Korea and Russia, and about as closed as China.
The regulators involved

1. Ministry of Finance (for portfolio investment)
2. Ministry of Industry (for foreign direct investment)
3. Reserve Bank of India
4. Securities and Exchange Board of India
5. Forward Markets Commission
6. Insurance Regulatory and Development Authority
7. Pension Fund Regulatory and Development Authority
System of capital controls
India's capital controls

The regulatory framework

No single manual

- Foreign Exchange Management Act, 1999
- Regulations, notifications, circulars, master circulars of Reserve Bank of India
- Notifications of Ministry of Finance
- Rules differ according to asset class: listed equity, unlisted equity, debt, derivatives and foreign investment
- Rules differ according to investor class: Individual investors, foreign corporations and non-resident Indians are treated differently under the law from broad based funds, charitable trusts or university endowment funds.
India's capital controls

Intricacy of Indian capital controls

The Foreign Exchange Management Act and its regulations provide

- No appeals mechanism
- No indication of time limits for permissions or denial
- No obligation to provide reasons for denial of permission
- Decisions for publication not made public.
Characteristics of the system

- Overlapping, sometimes contradictory rules
- Regulatory arbitrage
- Lack of transparency
Listed equity: FII

Listed equity has the most liberal regime:

- FIIIs are allowed investment in listed equity under the portfolio investment scheme subject to specified investment ceilings applicable to listed or unlisted equity.
- There is a ceiling of 10 percent for each FII or sub-account.
- The investments of all FIIIs and sub-accounts in a given firm are capped at 24/98 percent.
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- The investments of all FIIs and sub-accounts in a given firm are capped at 24/98 percent.
- All manner of intricacies. Example:

  “If a sub-account belongs to an individual or foreign corporation (as opposed to a broad based fund, charitable trust or university fund, endowment, foundation or proprietary fund of a registered FII), then the limit is 5 percent.”
Listed equity: FVCI

Foreign venture capital funds (FVCI) are allowed to invest up to one-third of their funds in specified forms of listed equity.
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All manner of intricacies. Example:

“Foreign venture capital funds may invest in IPOs of venture capital undertaking where the shares are proposed to be listed, debt or debt instruments of venture capital undertakings where the foreign VC has already made an investment by way of equity and preferential allotment of equity shares of a listed company subject to a lock-in period of one year.”
Non Resident Indians

- Non-resident Indians (NRIs) are allowed restricted investment in listed equity through the Portfolio Investment Scheme up to 5 percent of the total paid value of shares issued by an Indian company subject to an aggregate 10 percent cap for all NRIs investing in that organization.

- NRIs are prohibited from purchasing shares of chit funds, nidhi companies or companies involved in agricultural, plantation, real estate or farm house construction as well as those dealing in Transfer of Development Rights.

- NRIs are allowed unlimited investment in unlisted equity, including through private placement, but only on a non-repatriable basis.
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- All manner of intricacies. Example:

  Regulation 5(4) and Schedule 5, Paragraph 2(1A)(i) and 2(2). Paragraph 2(1A)(i) allows unlimited NRI purchase of the shares of domestic mutual funds on a repatriation basis. Paragraph 2(2) allows the same on a non-repatriation basis.
Phase 1: Pegging with sterilised intervention
A System Under Strain, 1998-2008

Phase 1: Pegging with sterilised intervention

Share of foreign exchange reserves in reserve money in Phase I

![Graph showing the share of foreign exchange reserves in reserve money over time, from 1999 to 2003.]
Market Stabilisation Scheme

- In January 2004, Reserve Bank of India ran out of government bonds.
- Sterilisation bonds called the “Market Stabilisation Scheme” bonds were issued.
- Proceeds from the sale of bonds were sequestered in a separate account.
- Interest cost of these bonds was shown explicitly as an on-budget cost.
Phase 2: Emphasis on capital controls
Example 1: Hindering foreign borrowing

In 2004, a capital control was introduced upon this borrowing, where the interest rate paid by the borrower was capped. For loans of a maturity between three to five years, this ceiling was set to 200 basis points, and for loans of a maturity of above 5 years, this ceiling was set to 350 basis points.
Example 2: Hindering venture capital

- Tax pass-through for *all* venture capital was restricted to nine sectors: poultry, dairy, nanotechnology, biofuels, hotels and hospitality, seed research, etc.

- Permissions for opening FVCI bank accounts granted by the RBI were tied to requirements such as investment in only the nine sectors mentioned for tax-pass through treatment in the Income Tax Act.
Example 3: SEBI registration

- SEBI did not register investment managers as FIIIs even if they otherwise met SEBI’s norms for registration, if the investment manager was owned or substantially owned by NRIs.
- There is no explicit provision in SEBI regulations on this.
Example 4: Automatic route

- In certain situations, India had placed foreign investment on an “automatic route”.
- Meetings needed to be held by the RBI to approve the same.
- Inflows were controlled by not holding meetings for automatic route investments for many months. control inflows.
**Example 5: Restrictions on offshore derivatives**

- The term ‘participatory notes’ (PNs) refers to the market for OTC derivatives on Indian underlyings that trades offshore.
- The book runners on this market are registered FIIs in India, and they lay off the risk of their overall book using transactions on the onshore market.
- These overseas transactions are outside the jurisdiction of the Indian authorities.
- In October 2007, the Indian authorities restricted registered FIIs from their transactions overseas on this market.
Did the controls deliver?
Belief that large capital inflows would lead to
- asset price booms
- imprudent lending,
- currency mismatches
- interact with the pegged exchange rate to distort monetary policy
Objectives of capital controls

- modify the magnitude of capital flows
- help maintain the dollar peg
- help improve financial stability
We face an identification problem: We observe the treatment (India with a certain strategy for capital controls), and we observe the outcomes. We ask:

1. Did policy makers in India achieve the desired goal using the treatment?

2. How did India fare compared to other emerging markets which did not have the treatment (i.e., whose controls are generally not as restrictive as in India)
Did the controls deliver?
Was India able to hold down the magnitude of capital inflows?

Magnitude of capital inflows

Did Indian capital controls work?

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Impact of restrictions on foreign borrowing

<table>
<thead>
<tr>
<th>Quarter ended</th>
<th>Foreign curr. borr.</th>
<th>Other capital inflows</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun 2006</td>
<td>3,978</td>
<td>6,747</td>
<td>10,725</td>
</tr>
<tr>
<td>Sep 2006</td>
<td>1,760</td>
<td>6,100</td>
<td>7,860</td>
</tr>
<tr>
<td>Dec 2006</td>
<td>4,049</td>
<td>6,766</td>
<td>10,815</td>
</tr>
<tr>
<td>Mar 2007</td>
<td>6,316</td>
<td>9,487</td>
<td>15,830</td>
</tr>
<tr>
<td>Jun 2007</td>
<td>6,944</td>
<td>8,754</td>
<td>15,698</td>
</tr>
<tr>
<td>Sep 2007</td>
<td>4,217</td>
<td>29,007</td>
<td>33,224</td>
</tr>
<tr>
<td>Dec 2007</td>
<td>6,240</td>
<td>23,399</td>
<td>29,639</td>
</tr>
<tr>
<td>Mar 2008</td>
<td>5,209</td>
<td>22,815</td>
<td>28,024</td>
</tr>
</tbody>
</table>

Restrictions impacted the composition but not the magnitude of flows in that period. For a very short time.
Did the controls deliver?
Was India able to hold down the magnitude of capital inflows?

Comparison against other emerging markets

Net Capital Inflows
(In percent of GDP)

- India
- Brazil
- Emerging and developing economies

Source: IMF, WEO database.
Did the controls deliver? Was India able to uphold the exchange rate regime?

Rupee flexibility

Annualised volatility (Per cent)

23 May '03 23 Mar '07
4.74 years 3.84 years 3.95 years
8.82
2 4 6 8 10

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Did Indian capital controls work?

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The credit boom

Did the controls deliver?

Was India able to achieve financial stability?

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## Rupee flexibility and currency risk

<table>
<thead>
<tr>
<th>Period</th>
<th>Daily INR/USD volatility</th>
<th>Average currency risk of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 April 1993 to 17 February 1995</td>
<td>0.16</td>
<td>5.899</td>
</tr>
<tr>
<td>17 February 1995 to 21 August 1998</td>
<td>0.93</td>
<td>0.540</td>
</tr>
<tr>
<td>21 August 1998 to 19 March 2004</td>
<td>0.29</td>
<td>3.753</td>
</tr>
<tr>
<td>19 March 2004 to 31 March 2008</td>
<td>0.64</td>
<td>2.066</td>
</tr>
</tbody>
</table>
Lehman and money markets

Death of Lehman

- Call money
- Repo
- Reverse repo

Jan  | Mar  | May  | Jul  | Sep  | Nov

5    | 10   | 15   |      |      |
### Asset price boom

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Lowest</th>
<th>Highest</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Taiwan</td>
<td>5316.87</td>
<td>9809.88</td>
<td>1.85</td>
</tr>
<tr>
<td>2</td>
<td>Malaysia</td>
<td>781.05</td>
<td>1516.22</td>
<td>1.94</td>
</tr>
<tr>
<td>3</td>
<td>Chile</td>
<td>7074.51</td>
<td>15618.38</td>
<td>2.21</td>
</tr>
<tr>
<td>4</td>
<td>Israel</td>
<td>526.97</td>
<td>1189.04</td>
<td>2.26</td>
</tr>
<tr>
<td>5</td>
<td>Philippines</td>
<td>1388.15</td>
<td>3873.50</td>
<td>2.79</td>
</tr>
<tr>
<td>6</td>
<td>Argentina</td>
<td>839.93</td>
<td>2351.44</td>
<td>2.80</td>
</tr>
<tr>
<td>7</td>
<td>Korea</td>
<td>719.59</td>
<td>2064.85</td>
<td>2.87</td>
</tr>
<tr>
<td>8</td>
<td>Turkey</td>
<td>15922.44</td>
<td>58231.90</td>
<td>3.66</td>
</tr>
<tr>
<td>9</td>
<td>Russia</td>
<td>6378.83</td>
<td>26196.44</td>
<td>4.11</td>
</tr>
<tr>
<td>10</td>
<td>Brazil</td>
<td>17604.00</td>
<td>73517.00</td>
<td>4.18</td>
</tr>
<tr>
<td>11</td>
<td>Indonesia</td>
<td>668.48</td>
<td>2830.26</td>
<td>4.23</td>
</tr>
<tr>
<td>12</td>
<td>India</td>
<td>1388.75</td>
<td>6287.85</td>
<td>4.53</td>
</tr>
<tr>
<td>13</td>
<td>China</td>
<td>1011.50</td>
<td>6092.06</td>
<td>6.02</td>
</tr>
<tr>
<td>14</td>
<td>Peru</td>
<td>2493.81</td>
<td>23789.75</td>
<td>9.54</td>
</tr>
</tbody>
</table>
“While regulators should have the freedom to formulate policies specified in the law, applying policies to individual entities must be consistent, uniform, and transparent.
High capital inflows → higher rupee flexibility
Reducing dollar borrowing
Foreign debt: More liberal on dollar denominated debt

Dollar denominated: Companies other than financial intermediaries are eligible to borrow in foreign currencies within a variety of stipulated limits without prior approval. Company borrowing is capped at USD500 million under the automatic route with detailed restrictions on end-use, maturity and price.

<table>
<thead>
<tr>
<th>Year</th>
<th>Stock of ECB (USD billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>23.3</td>
</tr>
<tr>
<td>2006-07</td>
<td>41.1</td>
</tr>
<tr>
<td>2007-08</td>
<td>62.3</td>
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</tr>
</tbody>
</table>

- **Rupee denominated**: FII’s allowed to invest. There are caps on all India, all FIIs, total stock of rupee denominated corporate bonds:

<table>
<thead>
<tr>
<th>Period</th>
<th>Cap (USD billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Till Jan 2009</td>
<td>6</td>
</tr>
<tr>
<td>Till Sept 2010</td>
<td>15</td>
</tr>
<tr>
<td>From Sept 24, 2010</td>
<td>20</td>
</tr>
</tbody>
</table>
India’s policy direction: MoF Working Group
Capital controls should be seen as an integral part of financial regulation

All our thinking about good governance, as applied in financial regulation, is relevant for capital controls.

“While regulators should have the freedom to formulate policies specified in the law, applying policies to individual entities must be consistent, uniform, and transparent.”
A case for changes in the foreign investor regime

The report finds evidence that

- Distinctions between different classes of investors creates lack of transparency, uncertainty and violates rule of law.
- Prevention of money laundering laws and Know Your Client norms require a fresh set of rules.
Recommendations of WG

- Legal process: Appellate tribunal, public consultation, transparency, certainty, real time access to the law.
- Qualified foreign investor: Single window for portfolio investment, registration with DP. Possible for a retail investor to be QFI if she satisfies KYC norms.
- Outflows into equity: Entities structuring and offering equity rated products should register with SEBI.
- Debt: Numeric caps on rupee denominated corporate debt removed or replaced with percentage caps.
Budget 2011 announcements

- Increase in FII investment in cap corporate bonds from USD 20 billion to USD 40 billion
- Allow foreign retail investors to invest in Indian mutual funds
The importance of the Indian experience in the capital controls debate is huge. India is almost the only ‘evidence’ of a large country whose historical experience of capital controls and high growth make the case for capital controls. The Indian experience should have important lessons for other countries.
Thank you.