

Discussion: Capital Flows Volatility and Financial Safety Nets

Abhijit Sen Gupta

Senior Economics Officer,
India Resident Mission,
Asian Development Bank

Global Cooperation for Sustainable Growth and Development

Outline

1 Capital Controls

2 Global Safety Nets

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- According to the Chinn-Ito measure India has been at the low end of the spectrum in terms of capital account openness. [▶ De Jure Measure](#)
- However, *de facto* measure indicate significant increase in the extent of financial integration despite *de jure* measure showing no change. [▶ Measures](#)
- Chinn Ito index is based on AREAER which continues to classify a market as closed even if it retains some minimal controls in cases of flows which have been significantly liberalized.
- Consequently, the measure is not sensitive to the imposition of controls that the paper alludes to.
- Can a more sensitive country specific measure be created?

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Comment 2: Impact of Capital Controls

- The path towards capital account liberalization was driven by shift towards non-debt creating flows, dissuade volatile inflows and gradual liberalisation of outflows.
- Longer term evidence suggests that Indian capital control regime was successful in altering the composition of flows. ▶ Composition
- India's ranking in terms of non-debt creating flows is also better than its overall ranking. ▶ Non Debt
- A global comparison of the impact of recent capital flows do suggest that they helped in moderating the growth of asset price bubble and mitigate currency appreciation pressures. ▶ Capital Controls
- A plausible reason for weak impact of capital controls in recent years could be increased level of financial development. ▶ Financial Development

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Comment 3: Negotiating the Trilemma

- Countries also resort to capital controls to negotiate the trilemma, in absence of which they can be forced into a corner solution.
- Following the methodology outlined in Aizenman et al (2010) one can trace the path India has traversed in dealing with the trilemma. [▶ Trilemma](#)
- Over the last two decades India has juggled the various policy objectives under the trilemma. [▶ Diamond Plots](#)
- Reliance on the various policy objectives in recent years have shifted depending on the demands of the macroeconomic situation. [▶ Policy](#)

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Comment: Global Financial Safety Nets

- Despite the recent surge, GFSNs continue to cover a small part of external assets and liabilities. ▶ GFSNs
- With bulk of the GFSNs dependent on central bank reserves global imbalances are likely to persist in the near future.
- While the additional swap lines and enhanced IMF toolkit are encouraging, their impact on markets will have to be seen. ▶ Spreads

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Comment: Global Financial Safety Nets (contd.)

- An effective GFSN needs to clearly outline the extent and conditions under which the issuer of last resort would be willing to provide liquidity to the rest of the world? [► Swaps](#)
- The various IMF proposals need to iron out wrinkles related to automatic access on ground and clarity in definition.
- Calculation of the potential costs in the analytical framework?

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THANK YOU !!

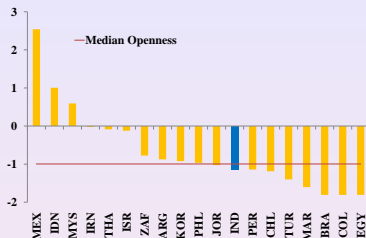
Appendix Outline

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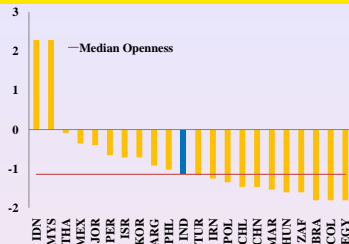
Appendix

- De Jure Measures of Openness
- Change in Composition of Capital Flows
- Evolution of Non Debt Creating Flows
- Capital Controls
- Trilemma Diamond Plots
- Financial Openness and GFSNs
- Change in Spreads
- Inclusion in Fed Swap Arrangements

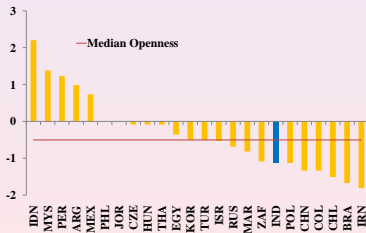
Cross Country Comparison of De Jure Openness



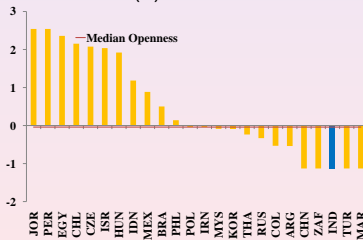
(a) 1970s



(b) 1980s



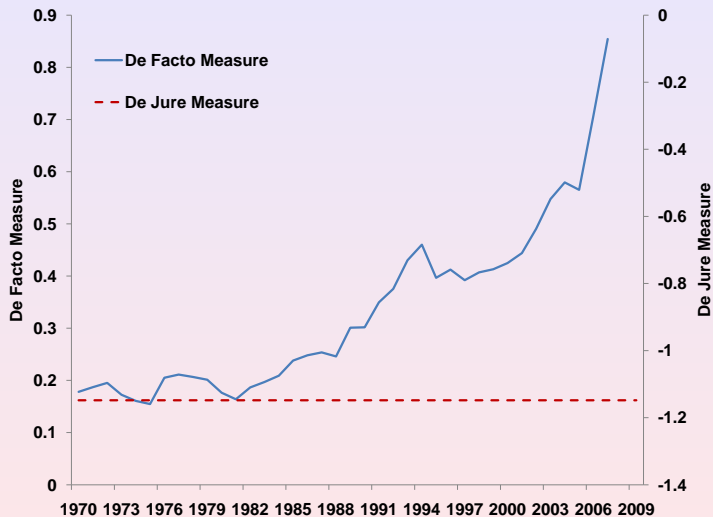
(c) 1990s



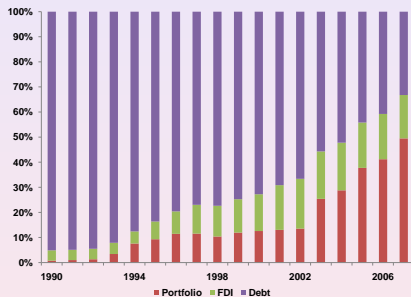
(d) 2000s

► De Jure Measure

De Facto & De Jure Measures of Openness



Change in Composition of Capital Flows



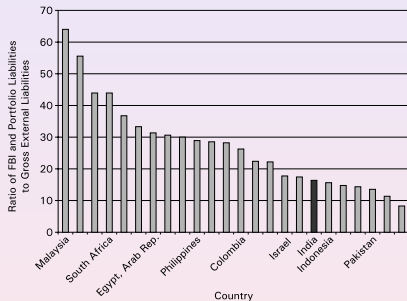
(a) India



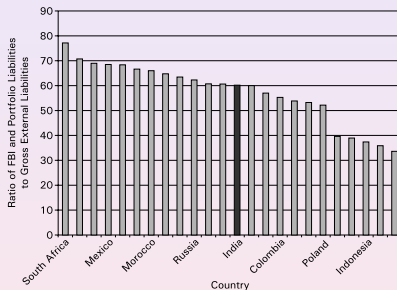
(b) Chile

► Composition

Evolution of Non Debt Creating Flows



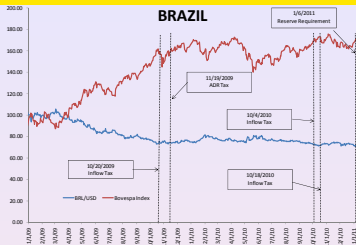
(a) 1996



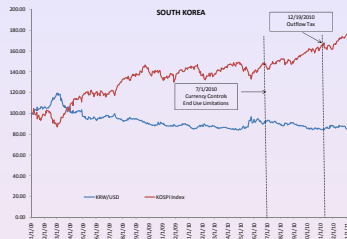
(b) 2006

► Non Debt

Cross Country Comparison of Capital Controls



(a) Brazil



(b) South Korea



(c) Taiwan



Aizenman *et al.* Methodology

- Monetary independence is measured as the inverse of the annual correlation of the monthly interest rates between India and the United States.

$$MI = 1 - \frac{\text{corr}(i, i^*) - (-1)}{1 - (-1)} \quad (1)$$

- The index for Exchange Rate Stability is calculated using the annual standard deviations of the monthly exchange rate between India and the United States.

$$ERS = \frac{0.01}{0.01 + \sigma(\Delta(\epsilon))} \quad (2)$$

- Aizenman *et al* (2010) use *de Jure* measure developed in Chinn and Ito (2008) to calculate the extent of capital account openness.
- We use the ratio of net capital flows to GDP to capture Capital Account Openness.

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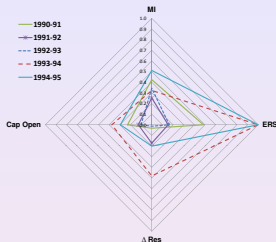
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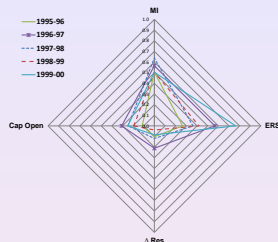
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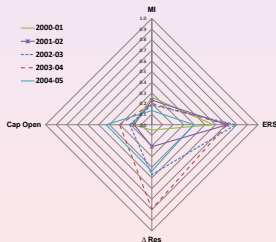
Trilemma Diamond Plots



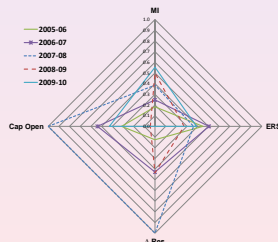
(a) 1990-91 to 1994-95



(b) 1995-96 to 1999-00

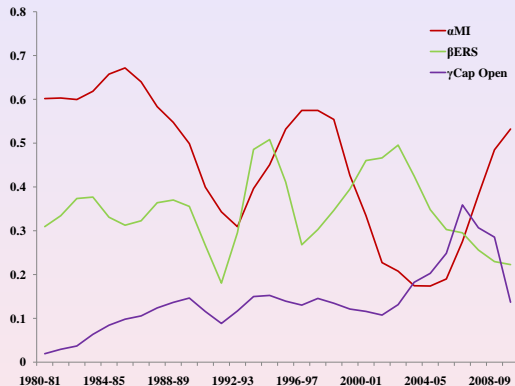


(c) 2000-01 to 2004-05



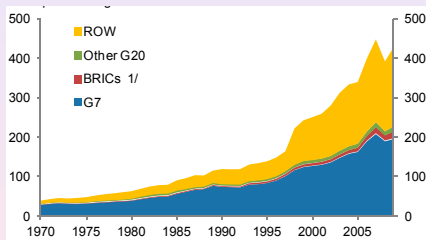
(d) 2005-06 to 2009-10

Evolution of Policy Choices under the Trilemma



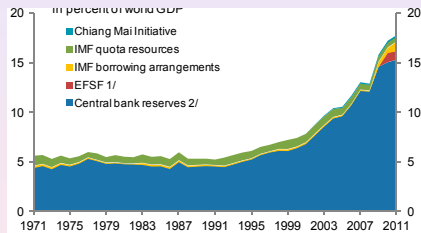
$$1 = \alpha MI + \beta ERS + \gamma CapOpen \quad (3)$$

Financial Openness and GFSNs



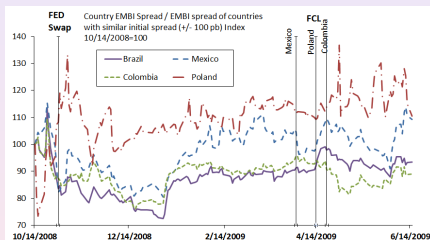
(a) Assets & Liabilities

► GFSN Source: IMF (2011)

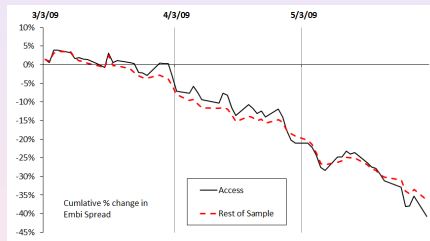


(b) GFSN

Change in Spreads



(a) Fed Swap & FCL



(b) London Summit

► GFSN Source: Levy-Yeyati & Fernandez-Arias(2010)

Inclusion in Fed Swap Arrangements

Table 3: Multivariate Probit Regressions for explaining inclusion in Fed Swap Arrangements

| | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|-------------------|---------------------|----------------------|-------------------|-------------------|
| USBankExpShare2007 | 160.1 (108.2) | 114.8** (51.85) | 116.2** (47.40) | 154.5 (106.3) | 3969 (0) |
| KOpen2004 | 0.039 (0.034) | | | 0.037 (0.035) | 1.567 (324.5) |
| years_default_c1800 | | -0.003 (0.041) | | | 2.034 (1615) |
| ustrd_share2007 | | | -6.159 (19.33) | -2.671 (26.07) | 322.4 (0) |
| Constant | -6.185 (4.108) | -2.874** (1.234) | -2.758*** (0.992) | -5.896 (4.296) | -214.9 (30314) |
| Observations | 26 | 23 | 25 | 25 | 21 |
| Pseudo R-squared | 0.72 | 0.61 | 0.64 | 0.72 | 1.00 |
| Percent Explained Correctly | 92 | 87 | 88 | 92 | 100 |

(a) Explaining Fed Swaps

Table 1: Mean values and tests of difference in means

| | US Bank Exposure Share, 2007 | Capital Account Openness 2004 (Edwards, 2006) | US Trade Share 2007 | Years in Default since 1800 |
|---------------------|------------------------------------|---|---------------------------|-----------------------------------|
| Non-Swap Recipients | 0.007 | 56.25 | 0.012 | 17.98 |
| Swap Recipients | 0.034 | 65.63 | 0.042 | 17.5 |
| (p-value) | 0 | 0.25 | 0.08 | 0.96 |

(b) Mean Difference

► GFSN Source: Aizenman & Pasricha (2010)