Capital controls

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Part I

Costs of capital controls

Controls come in the way

- All world history till 1914: No capital controls.
- Capital controls were introduced in India a long time ago.
- We have got used to them.
- By definition, controls prevent individuals or households from achieving their full goals.

Consequences for macro

- Investment $>$ Saving to the extent of the current account deficit
- The difficulty: ‘sudden stops’ / ‘capital reversals’
- Current account deficit requires sustained financing
- Mature market economies have : an open environment that attracts long-term interest from global capital, that supports a large CAD, where there are no hiccups.

Consequences for micro

- Convertibility generates global competition for the local finance industry
- Exactly like trade reforms for traded goods: induce global competition, greater specialisation.
- Convertibility induces superior global diversification and thus risk reduction.
- Finance is the ‘brain’ of the economy: a better brain helps GDP growth.

Distortions to micro directly caused by controls

Black economy
: Households and firms try to evade controls; Corruption / rent seeking; Evasion increases the black economy - diminishes the tax base, worsens corporate governance.

Bias in corporate finance
: Big firms are more effective at evading controls - skews cost of capital for big vs. small companies.

Mistakes in financial regulation / policy
: Under convertibility, local players have more choices when local regulators try to block innovation. Hence, such mistakes are less likely.

Loss of financial markets
: With controls, local financial markets tend to migrate offshore, thus fragmenting liquidity and reducing the strength of local finance.

Relationship between opening current & capital account

- Now-popular strand of anti-globalisation: “Opening the current account is good but opening the capital account is bad.”
- Internationally, there has been a two-way relationship between opening the current account and opening the capital account: each feeds on the other. “Finance follows trade”.

Three papers which illuminate this

Wei & Zhang, 2006 A one standard deviation change in capital controls is roughly equivalent to a 11-15 percentage point reduction in tariffs in terms of the adverse impact on trade.

Aizenman and Noy, 2004 A one standard deviation increase in the commercial openness index is associated with a 9.5 percent increase in international financial flows as percent of GDP.

Aizenman, 2003 “the strongest argument for financial opening may be the pragmatic one. Like it or not, greater trade integration erodes the effectiveness of restrictions on capital mobility. Hence, for successful emerging markets that engage in trade integration, financial opening is not a question of if, but of when and how.”

Modern views on convertibility

- In India, on average, each 3.5% of GDP of investment gives roughly 1% of GDP growth.
- The macro impact: a current account deficit of 3.5% of GDP gives an increased 1% of GDP growth.
- The micro impact: convertibility increases the very ratio, the bang for the buck of converting investment into growth.
- The modern view: the micro impact dominates.

Part II

India's path

Lessons of 1980-1991

- We want a current account deficit so as to be able to do investment $>$ savings.
- This requires stable, sustainable capital flows.
- It was felt that equity flows are good.
- So, India opened up to FDI and Portfolio (equity) flows.

India's integration with the world, 1992-93 to 2005-06

	Billion USD			Percent to GDP	
	1992-93	2005-06	Growth (%)	1992-93	2005-06
Net capital flows	5.16	24.69	12.79	2.36	3.41
Loans	0.41	4.74	20.69	0.19	0.65
Banking capital	3.83	1.37	-7.58	1.75	0.19
FDI (inbound)	0.32	7.69	27.86	0.14	1.06
FDI (outbound)	0.00	-1.96		0.00	-0.27
Portfolio equity	0.24	12.49	35.44	0.11	1.72
Rupee debt servicing	-0.88	-0.57		-0.40	-0.08
IMF	1.29	0.00		0.59	0.00
Other	-0.04	0.93		-0.02	0.13

India's integration with the world (Gross flows)

	Billion USD			Percent to GDP	
	1992-93	2005-06	Growth (%)	1992-93	2005-06
Gross Flows					
Current account	59.93	403.13	15.79	27.41	55.62
Capital account	43.32	253.91	14.57	19.81	35.03
Metric of integration	103.25	657.04	15.30	47.22	90.65

Part III

FDI vs. FII

Traditional view: “FDI is good”

- FDI is supposed to be “bolted down”
- Portfolio flows are supposed to be footloose.

Complexities

- FDI is not locked down - e.g. an FDI firm can borrow and take capital out in a crisis environment.
- (In any case, the #1 source of capital flight in a crisis environment is the locals).
- Portfolio flows have been much more stable than claimed.
- E.g. India's difficulties in 1998.

Getting portfolio flows is actually harder

- FDI primarily requires good infrastructure (and a lack of restrictions against FDI).
- It does not require a complex legal and institutional framework.
- Portfolio flows require a rich web of market design, regulation, legal protection, corporate governance, etc.
- It is a huge leap of faith to send your money across the world into securities, which are (after all) merely a raft of legal contracts.
- Example: Trusting an Indian GOI long-dated bond is trusting India's seriousness about inflation deep into the future.

Part IV

Original sin

Unhedged foreign currency borrowing

- A central danger in financial globalisation is currency mismatches of borrowing by governments / firms.
- Generic disaster: Government / firms have unhedged foreign currency borrowing; there is a big depreciation; repayment is impossible.

Three ways to solve original sin

1. Micro-manage borrowers and use a system of capital controls to make sure that original sin does not come about.
2. Don't use pegged exchange rates - borrowers will be scared of currency fluctuations.
3. Build local currency bond market; encourage foreign capital to go into it.

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India is doing the wrong thing on each of three ways.

India is doing exactly wrong

- ECB is foreign currency denominated; is often unhedged. FII investment in local bond market is sharply circumscribed.
- Worst scenario would be: the firms build up currency exposure, then they start lobbying that government must deliver a pegged exchange rate.
- We need to urgently reverse the policy bias: place FII investment into bonds on par with equity.
- We need to be particularly careful about offshore borrowing by banks.

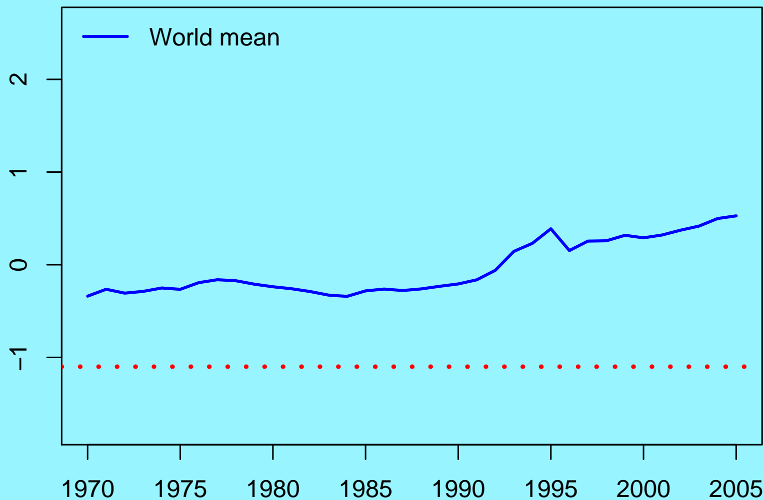
Part V

De jure convertibility

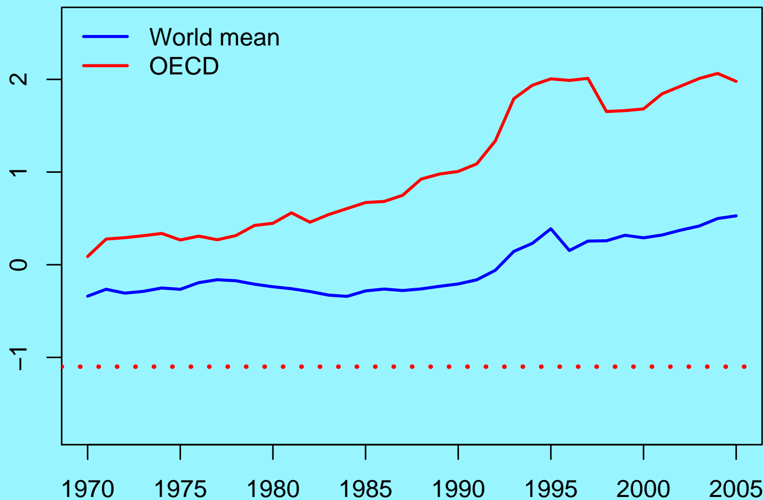
Chinn-Ito measure

- A consistent database for many countries, for many years
- Based on processing responses of countries to the IMF, also called the AREAER database.
- IMF asks a question, the country scores 1 for saying “yes” and 0 for supplying a long paragraph.
- Chinn-Ito measure the state of *de jure* convertibility.
- India has been at -1.1 all through (the dotted red line in the following graphs) except for a glitch in 2000.

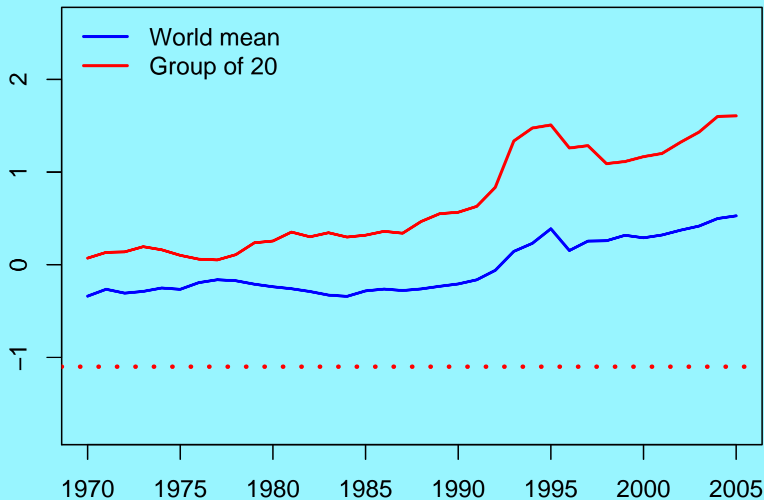
World mean Chinn-Ito score



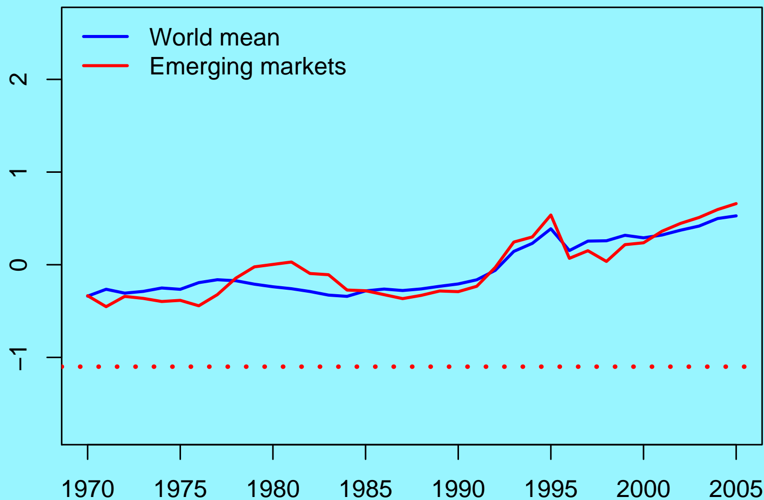
OECD countries opened up



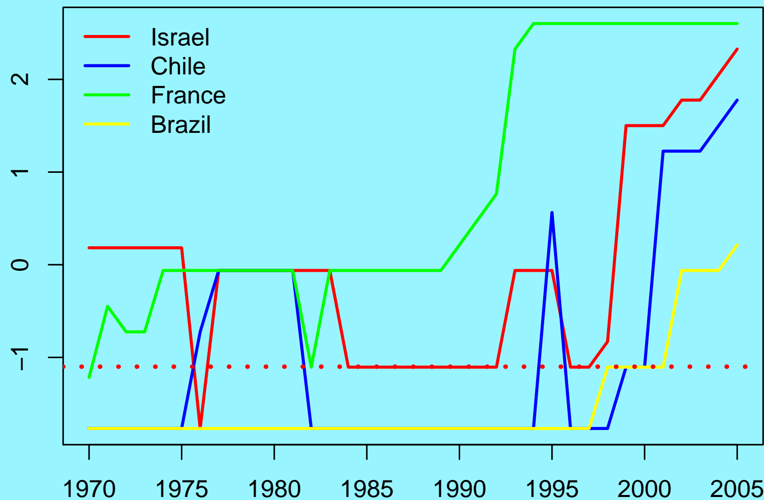
G-20 countries



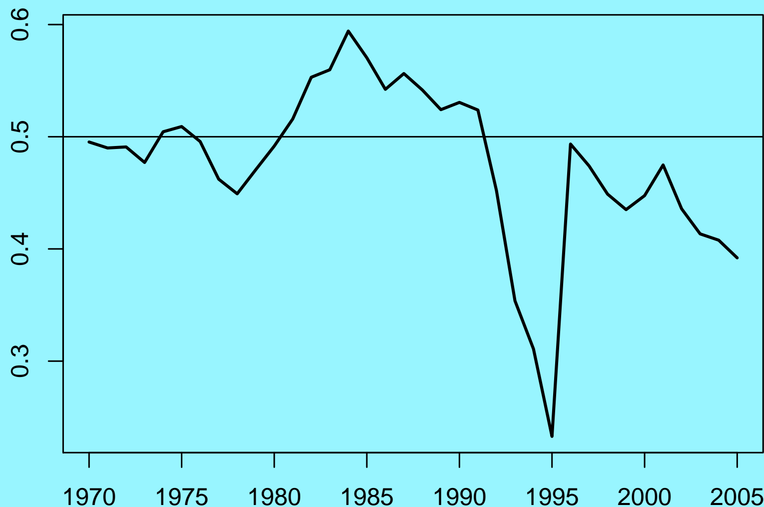
Emerging markets



How countries open up



What fraction of countries are laggards with India



Part VI

De facto vs. de jure convertibility

The distinction

- A country can setup a baroque system of controls - that's the lack of *de jure* convertibility.
- Ultimately, the private sector can succeed in moving substantial capital across the boundary, resulting in *de facto* convertibility.
- This can be partly legal avenues and partly illegal avenues.

De facto convertibility by legal means

- After a lot of paperwork and permissions, India gives out *de facto* convertibility for:
  1. FII flows on the equity market
  2. Inbound and outbound FDI.
- ECB is also substantially open.
- Example of Indian license-permit raj in action: Participatory notes. We say “only FIIs shall operate in India”, they earn revenues by renting out their permit.

Misinvoicing

- There is a bias in favour of *understating* the value of imports in order to evade customs.
- Misinvoicing of both imports and exports can be used for capital flows.
- FDI dimension - intra-firm pricing for products / tasks where there is no public reference price.
- Rough calculation: if gross flows on current account are 50% of GDP, if misinvoicing is 10%, then 5% of GDP can flow across the boundary through this.

In a crisis, how much capital can move?

- Through current account - perhaps $50 billion
- Through FII and FDI - perhaps another $50 billion
- Adds up to “capital flight” of $100 billion or 10% of GDP.
- We are paying the full consequences in terms of macroeconomic vulnerability caused by convertibility.
- We are not reaping the full microeconomic benefits of convertibility.

Part VII

Summary

Key messages

- Capital controls induce distortions.
  Adverse *micro* impact through competition policy in finance, and through reduced global risk diversification.
- India chose to open up to equity flows in order to fund the current account deficit.
- FDI vs. FII - question popular preconceptions
- Original sin - India is doing exactly wrong
- De facto vs. de jure convertibility. Misinvoicing.
- India lags far behind peers on de jure convertibility
- Gross flows to GDP has grown sharply
- Substantial de facto convertibility.

Further reading

Costs of Capital Controls *The microeconomic evidence on capital controls: No free lunch*, by Kristin Forbes, in book edited by Sebastian Edwards, NBER, 2007.

Mumbai International Financial Centre (MIFC) report, Sage Publications, 2007.

Wei and Zhang, *Collateral damage: exchange controls and international trade*, Jnl Intl Money Fin, 2007.

On the hidden links between financial and trade opening, Joshua Aizenman, NBER WP, 2003. And, Aizenman and Noy, NBER WP, 2004.

Financial globalisation: A reappraisal, Kose, Prasad, Rogoff, Wei, NBER WP, 2006.

Further reading (continued)

India's path
: *India's experience with capital flows: The elusive quest for a sustainable current account deficit*, by Shah & Patnaik, in book edited by Sebastian Edwards, NBER, 2007.

FDI and FII
: *FDI: Good cholesterol?* by Ricardo Hausmann and Eduardo Fernandez-Arias, 2000.

Original sin
: Hausmann and Eichengreen, 1999 coined the phrase. Also see the MIFC report.

De jure convertibility
: Chinn & Ito, Jnl Dev Ec, 2005.

De facto convertibility
: *Trade misinvoicing and capital flight from India*, by Patnaik & Vasudevan, Jnl of Intnl Ec Stud, 2000.

Thank you.