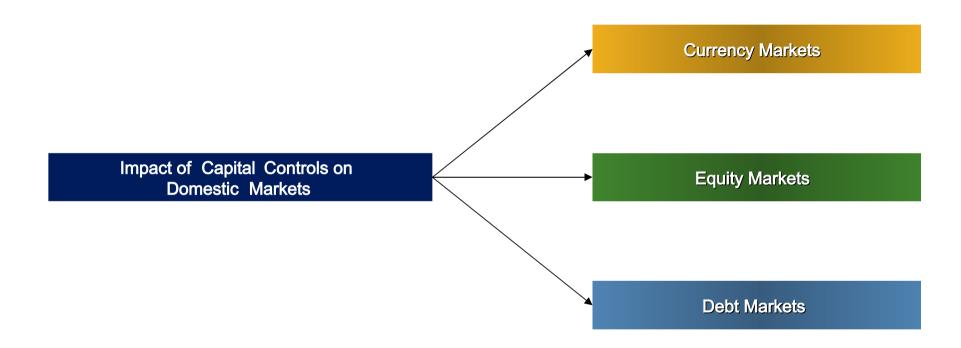
Presentation on:

Implications of Capital Controls for Domestic Capital Markets

March 28, 2008

CONFIDENTIAL

Contents



Currency Markets

- Foreigners don't have access to onshore dollar rupee market unless they have genuine underlying
- Two markets : Onshore and NDF
- Proposed are currency futures
- Is offshore market the driving force ??
- Well-diversified end-users onshore. Onshore market much deeper and well-diversified
- Comfort

<u>Conclusion</u>: Minimal impact of capital controls on domestic currencies market

Debt Market...

Players

- Structural issue is limited no. of players
- End-users in 5 categories but 80% of the market consists of < 20 players

Investor Class	Details
Banks	< 10 banks consist of 90% of the market
Insurance Cos.	One insurance company is 85% of the market
PFs	1 PF is around 45% of the market
MFs	AUM in debt funds is miniscule
FIIs	Restricted (caps by regulators)

- Major segment viz. banks are often doing similar business in same area
- Therefore the investor base is not really diversified
- To have a vibrant capital market, we need multiple diverse end-users : which is missing
- Structurally not possible to change market quickly. Easier and faster way to develop markets is to allow offshore players

Debt Market...

Products

Onshore

- Cash markets
- Interest rate swaps
- Credit derivatives (proposed)
- Interest rate futures (proposed)

Offshore

- Cash Bond markets
- Credit Derivatives (CDS, CLN etc.)
- Non-deliverable interest rate futures
- ECB caps and restrictions (pricing cap of L+250 bps and permitted end-use to be outside the country beyond US\$ 20 mm) have created significant funding constraints
 - Widening of rates in offshore markets make it impossible even for top rated Indian companies to raise funds offshore within the pricing cap

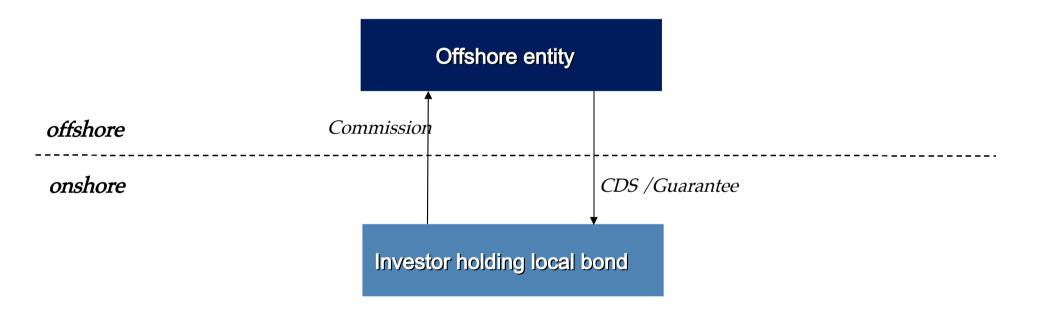
<u>Conclusion</u>: There is a huge impact of capital controls on Indian debt markets

Debt Market (Cont'd)

- Allowing foreigners in debt markets onshore creates flow volatility. Is it desirable ??
- However, some measures can be taken without getting into debate of desirability of capital flows and volatility
 - CDS / Guarantee
 - Interest rate derivatives

Flows in CDS

Normal Scenario (no default)

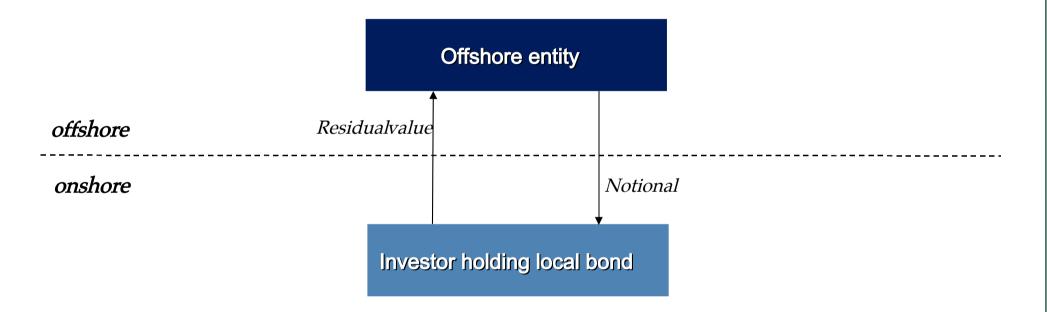


Inflow : Nil

Outflow : Restricted to amount of CDS premia / guarantee commission

Flows in CDS (Cont'd)

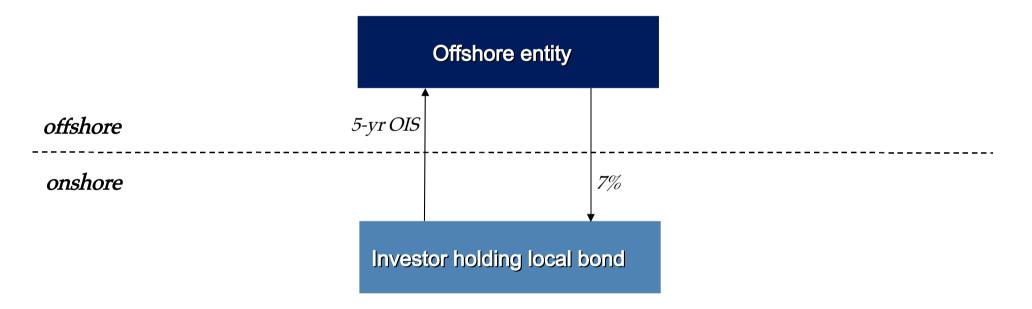
Default Scenario



<u>Conclusion:</u> Allowing CDS with offshore counterparties would not result in large net flows (inflow/outfbw)

Interest Rate Swaps

Example



- Net flow Difference of OIS and 7%
 - If OIS is nil, max. inflow is 7%
 - If OIS is 17% (lets say), outflow is 10%

Conclusion: Over the tenor of swap and on a per annum basis, flows would not be large

Debt Market (Cont'd)

- The offshore market is also important given, interalia, the quantam of funds that can be raised
 - Domestic markets are limited in so far as amount of funds that can be raised is concerned, given limited no. of players
- Domestic banks should be allowed to remit money to their offshore branches to meet offshore funding requirement of Indian corporates
 - Will address lack of funding options for these branches given global credit scenario

Equity Markets

- Liberalized at regular intervals starting 1994 for offshore investors
 - Some restrictions, but wide enough to enable fund raising/investment
- P-Note/ODI ban in Oct 2007 first significant step towards controls
 - Has created a distortion in markets and impacted market sentiment negatively
- Offshore players can still meet their requirements through shifting exposure to India-based products in other exchanges (Nifty Futures on Singapore Exchange, soon to be launched USFE)

....this shall result in "export" of Indian markets offshore

Equity Markets (Cont'd)

- Anomaly of asset managers being able to hedge on Indian markets while brokerages cannot needs to be addressed
- Onshore players should be allowed to exploit arbitrage with India-based products in offshore markets
- Reverse fungibility should be made more efficient for ADR/GDR
 - Will address the lack of liquidity/stagnancy of these markets post issuance
- Onshore players should be allowed to exploit arbitrage of ADR/GDR and underlying prices to address the distortion because of lack of liquidity

....these will address issue of price distortion and prevent export of onshore markets