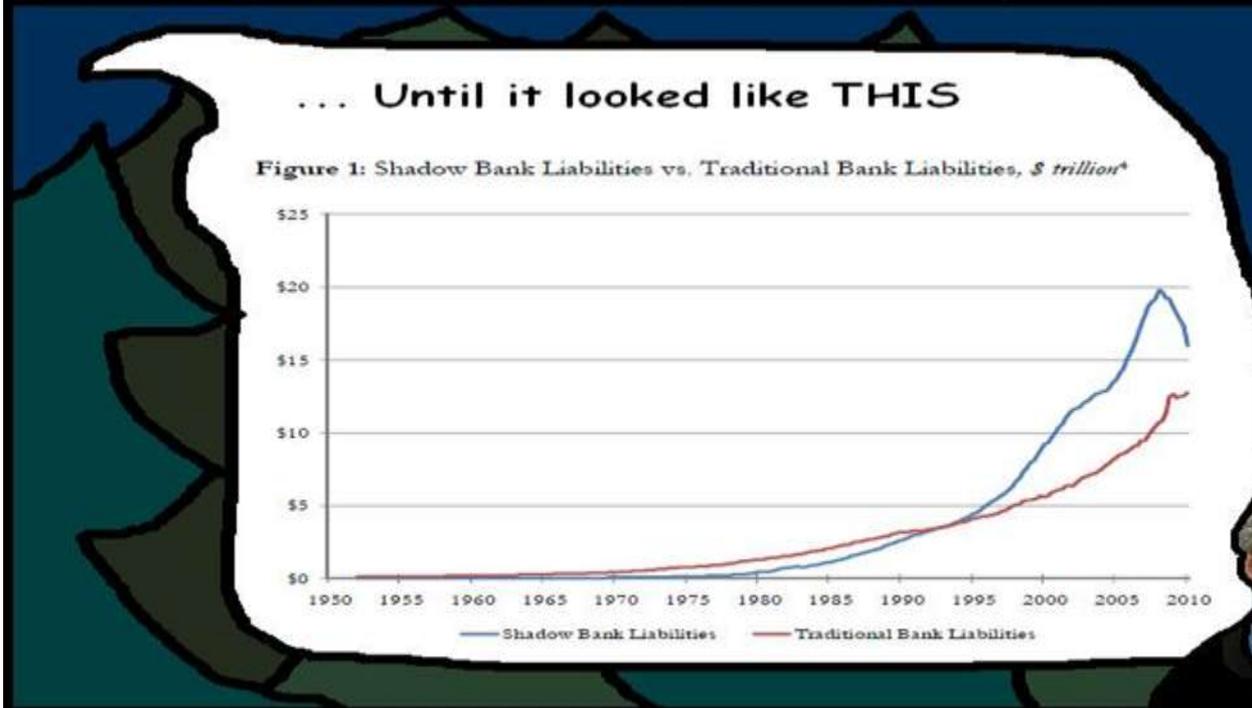
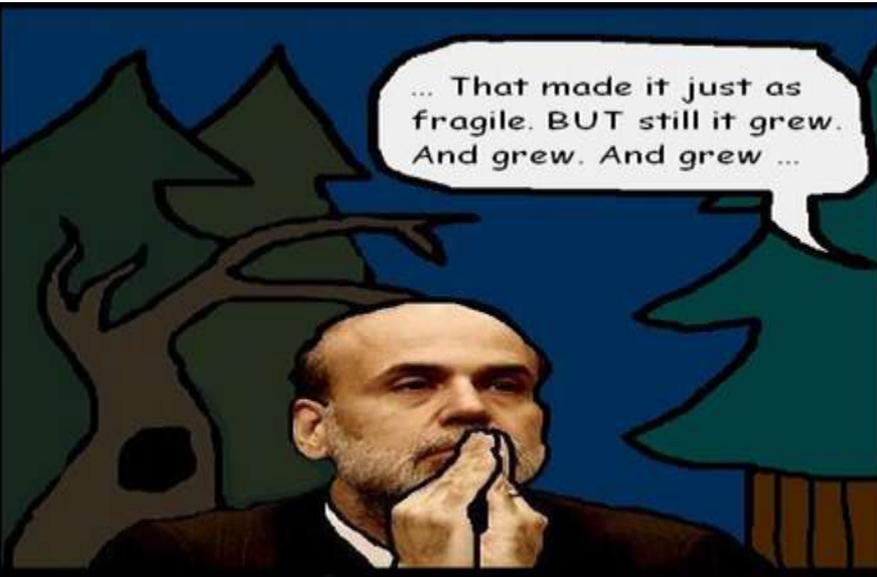


# Shadow banking –a cautionary tale told by Dick Fuld, Lehman’s last CEO



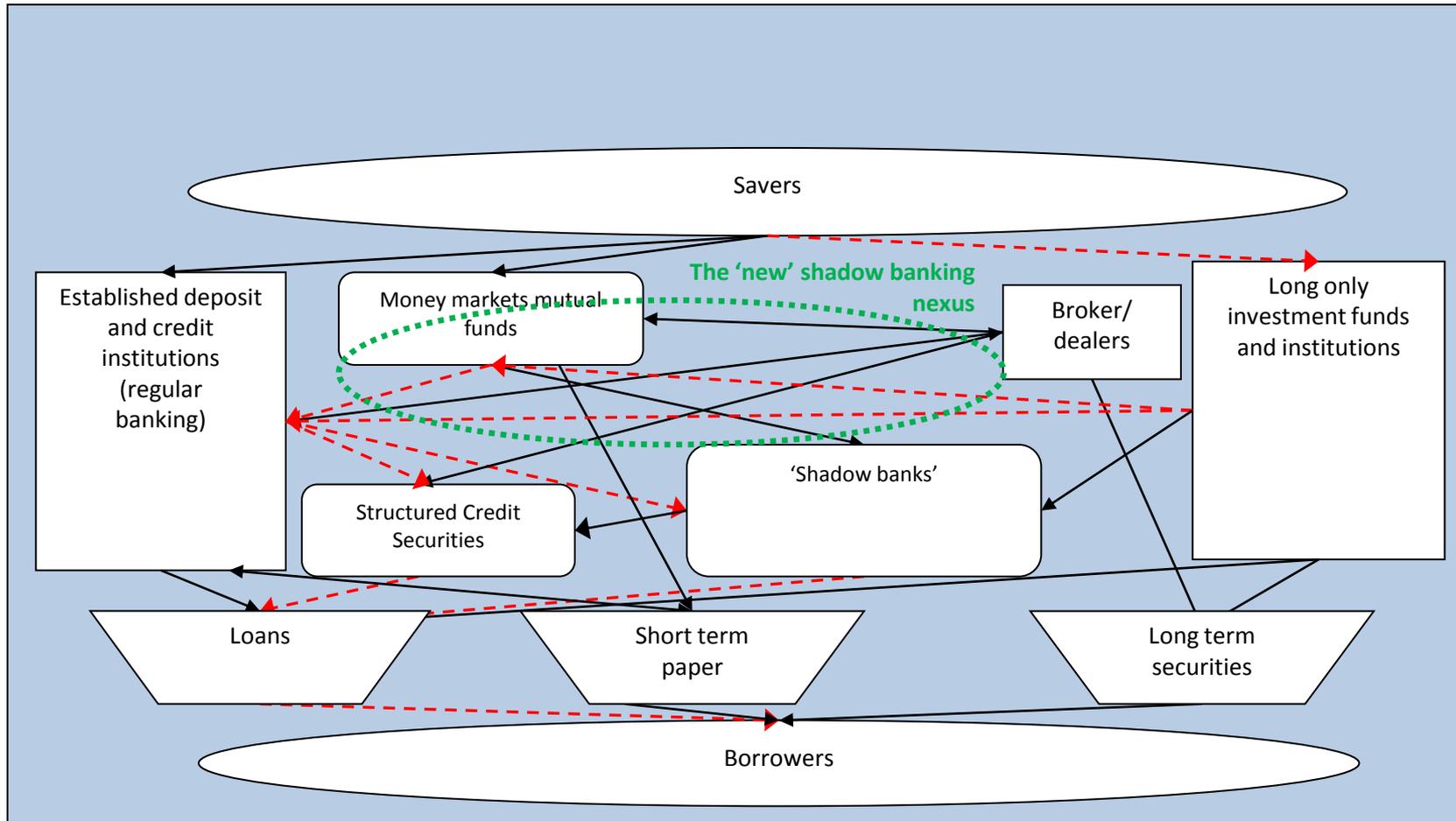
# Shadow banking –work in progress

- No consensus yet on definition.
- Financial stability Board--‘credit intermediation involving entities and activities (fully or partially) outside the regular banking system’.
- IMF – too broad a definition, includes many elements that does not constitute shadow banking
- More granular approach needed
- Claessens, Ratnovski – “all financial activities, except traditional banking, which require a private or public backstop to operate”
- Literature too US centric – not enough focus on other ‘shadow banks’ such as India (Non-bank Finance Companies) or China (wealth management products) for example

# Some estimates

- FSB's 'flow of funds' or top down approach to estimation
- Size of 71 trillion USD for 2012. This is about half the banking system's assets and 117 per cent of global GDP
- This masks the enormous variations across geographies
- Spain for instance saw a decline of 11 per cent in 2012 while China saw a growth of 42 per cent.
- Emerging markets as a whole saw a growth of 20 per cent

# Conventional banks and their shadows: 'what a tangled web we weave'

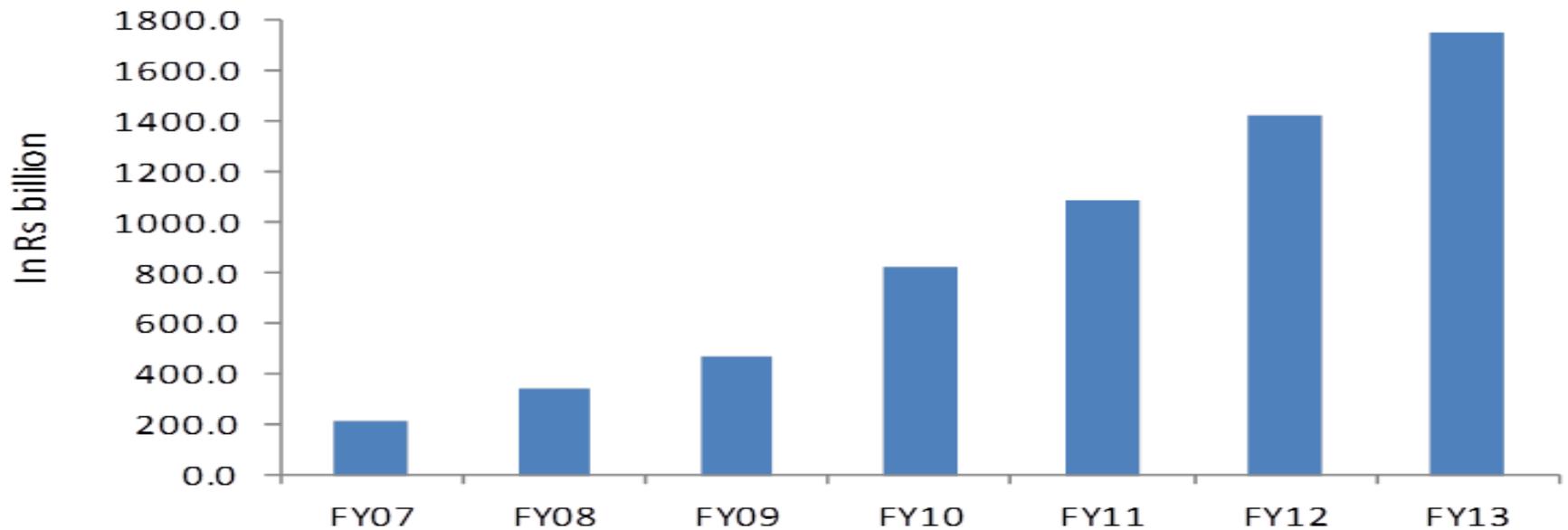


# The US experience of 2007-08: a long story cut really short

- Three key players --1)SPVs that facilitate securitization,2) money market mutual funds (MMMFs) that fund corporations or investment banks through the commercial paper route (ABCPs) and 3)the extensive use of repo mechanisms to lever up balance sheets.
- Mid-2007 -- ‘sudden stop’ in mid-2007 in investment in mortgage related products when large defaults on underlying mortgages, a shock to house prices led to a sudden loss in faith in structured products related to mortgages.
- 2008-Banking panic centered on the repo market and the markets for short term paper
- Market for structured products collapsed, depositors panicked, liquidity shrank, ‘haircuts’ on repos and repo rates spiked up sharply.

# Can we afford to ignore the US experience?

## Average Outstanding CPs in a year



# Can we afford to ignore the US experience ? (contd)

- Growing use of Commercial Paper (CPs) funded by 'liquid' funds
- Need for securitization – infrastructure, housing, retail. Basel-III norms will restrict bank lending, corporate bond market still small
- Need for short-term funding sources – growth in repo market. Fledgling inter-corporate repo market

## Shadow banking – regulatory arbitrage, forbearance or genuine economic demand?

- Greenspan – “I was aware that the loosening of mortgage credit terms for sub-prime borrowers increased financial risk. But I believed then that the benefits of broadened home ownership are worth the risk”
- Genuine economic benefits of ‘shadow banking structures’
- The case for ‘simple’ securitization – 1) bankruptcy remote 2) default protected through early amortization and 3) more transparent (if tranches are properly rated) than balance sheet of originator

# The global regulatory response

- **Convergence** -- Merge shadow banks into the conventional banking system and expanding the perimeter of the banking regulator to allow this 'convergence'
- **Ring-fencing**---Sever links with the traditional banking system particularly systemically important financial institutions, create firewalls and leave them relatively unregulated or create a specialized regulator that monitors some critical functions. (Vickers proposal, Volcker rule)
- **Regulate the supply of assets** that shadow banks provide to regulated entities with special charters, curbs on the degree of innovation or narrowly funded banks and narrow savings banks

# The global regulatory response -- risks

- Convergence – shadow banking more pro-cyclical and lower margin. Could compound riskiness of banking system
- Ring-fencing – Core banks could be protected but light regulation for shadow entities could add to macro-risk given large size
- Narrow banks --- need for close regulatory attention and specialized regulation.

# The Indian response -- eclectic

- Accept the fact that 'shadow banks' (Non-bank Finance Companies) are important to support growth and should be allowed to grow
- Full convergence or 'exact' banks not viable.
- However imposes regulatory norms similar to banks (in terms of capital adequacy ratios, risk-weights for assets)
- Lays down stringent liquidity norms in terms of mandatory holding of cash, liquid assets
- Tries to remove distortions in banking structure such as Priority Sector Lending status for lending to NBFCs
- Distinguishes between those entities that are **systemically important** and those that are not small.
- Large number of other shadow entities -- Nidhis, Chit Funds, commodity Trade financiers, plantation companies, pawn brokers, gold loan companies and so on – currently 'lightly monitored' by state governments but need to build more regulatory capacity in handling them
- **Current debate in India on who regulates the NBFCs.**
- **FSLRC model – convert deposit taking NBFCs into banks and place non-deposit systemically important NBFCs under a super regulator.**

# NBFCs

## Deposit Taking NBFC-D

Asset Finance Company

Loan Company

Investment Company

Residual NBFCs

## Non Deposit taking-Systemically Important NBFC-ND-SI

Asset Finance Company

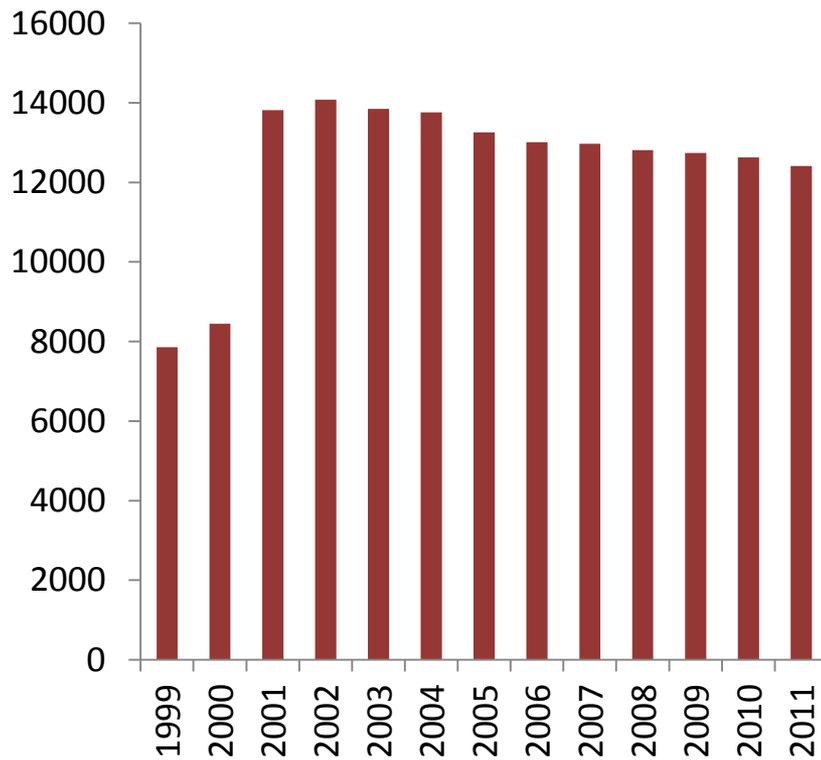
Loan Company

Investment Company

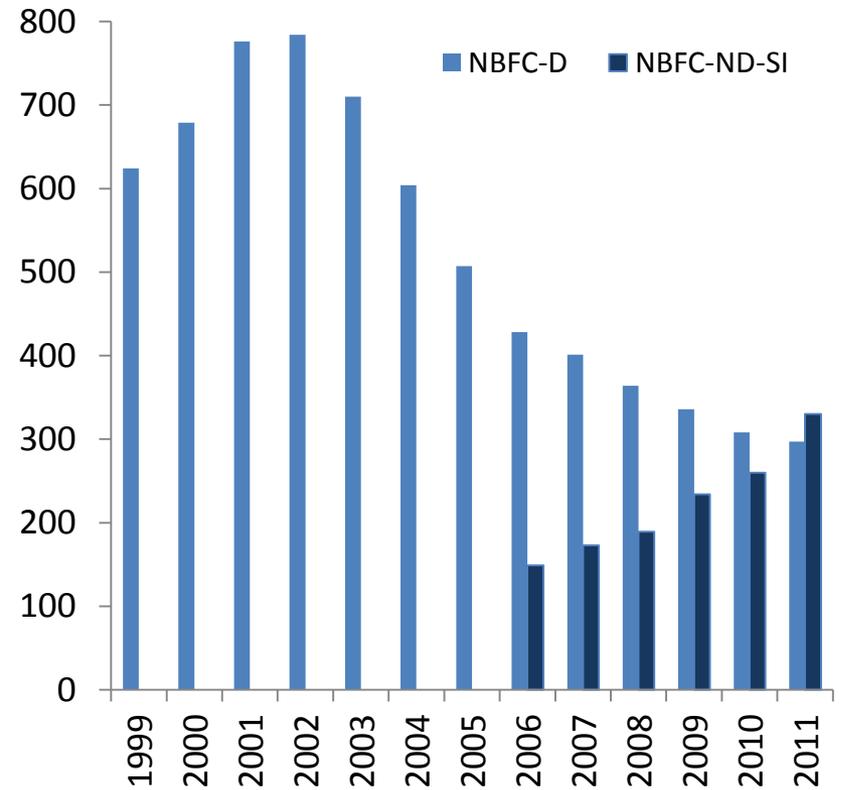
Core Investment Company

Infrastructure Finance Company

# Growth of the NBFC Sector – many in number but a small fraction systemically important



Number of All NBFCs



Number of NBFC-Ds and NBFC-ND-SIs

## Public deposits not a source of risk –but leverage + dependence on banks directly and through debentures a problem

	FY06	%FY06	FY10	%FY10	FY11	%FY11
<b>Liabilities</b>						
<b>Share Capital</b>	<b>0.2215</b>	<b>6.70%</b>	<b>0.4328</b>	<b>6.17%</b>	<b>0.4722</b>	<b>5.57%</b>
<b>Reserves &amp; Surplus</b>	<b>0.4774</b>	<b>14.44%</b>	<b>1.3931</b>	<b>19.88%</b>	<b>1.5868</b>	<b>18.73%</b>
Public Deposits	0.2284	6.91%	0.1735	2.48%	0.1196	1.41%
Borrowings	2.0760	62.79%	4.4986	64.18%	5.7075	67.37%
B&FI Loans	0.6231	18.85%	1.3172	18.79%	1.8384	21.70%
Current liabilities	0.3027	9.16%	0.5114	7.30%	0.5863	6.92%
<b>Total Liabilities</b>	<b>3.3060</b>	<b>100.00%</b>	<b>7.0094</b>	<b>100.00%</b>	<b>8.4725</b>	<b>100.00%</b>
<b>Assets</b>						
<b>Loans and Advances</b>	<b>1.6945</b>	<b>51.25%</b>	<b>4.1964</b>	<b>59.87%</b>	<b>5.3607</b>	<b>63.27%</b>
Bill Business	0.0005	0.01%	0.0005	0.01%	0.0009	0.01%
Hire Purchase Assets	0.4472	13.53%	0.4169	5.95%	0.5002	5.90%
<b>Investments</b>	<b>0.8163</b>	<b>24.69%</b>	<b>1.5218</b>	<b>21.71%</b>	<b>1.6413</b>	<b>19.37%</b>
Cash and Bank Balances	NA	NA	0.2586	3.69%	0.2988	3.53%
Other Current Assets	NA	NA	0.4057	5.79%	0.4244	5.01%
Other Assets	0.3476	10.51%	0.2097	2.99%	0.2462	2.91%
<b>Total Assets</b>	<b>3.3060</b>	<b>100.00%</b>	<b>7.0094</b>	<b>100.00%</b>	<b>8.4725</b>	<b>100.00%</b>

NBFCs include NBFC-D, NBFC-ND-SI and RNBCs

# Size matters – a comparison of banks and their shadow

	FY06	FY10	FY11	FY12	FY13
Number of NBFCs	13,014	12,630	12,409	12,385	12,225
Bank Credit of all Scheduled banks (Rs trn)	15.728	33.377	40.608	50.746	58.797
<b>NBFC Credit as a percentage of Bank Credit</b>	10.77%	12.57%	13.20%	13.76%	<b>14.31%</b>
Assets of all scheduled banks (Rs trn)	25.315	52.58	61.47	83.208	95.733
<b>NBFC Assets as a percentage of Bank Assets</b>	13.06%	13.33%	13.78%	12.80%	<b>13.06%</b>
Bank deposits of all Scheduled banks (Rs trn)	21.858	46.352	53.552	64.537	74.295
<b>NBFC Public Deposits as a percentage of bank deposits</b>	1.05%	0.37%	0.22%	0.15%	0.14%

NBFCs include NBFC-D, NBFC-ND-SI and RNBCs

Scheduled Banks include Commercial Banks and Cooperative Banks

**Size of NBFCs could lead to macro-stress if their balance sheets come under pressure**



# The reverse flow: India's own shadow crisis of August 2008

- Private banks used NBFCs more than public sector banks to meet mandated lending requirements, penetrate non-urban areas.
- Global financial crisis led to a run on private bank deposits since public sector deposits were seen to be 'government guaranteed'
- Severe liquidity shortage for NBFCs –difficulty in rolling over CPs
- Run on mutual funds that held NBFC CPs
- RBI Act could not allow direct liquidity support to NBFCs or MFs. Indirect liquidity support through special windows at banks and financial institutions.
- Banks not willing to lend short term fearing default led to escalation of crisis

## Responses, conclusions and the way forward

- Close link between banks and NBFCs make a case for the bank regulator to supervise both
- Besides need to ensure regulatory standard in line with banks also calls for a common regulator.
- Super-regulator also non deposit shadow banks might be forced to follow 'light touch'
- Specialized subsidiary of regulator need given size and importance of shadow banks.
- Formal liquidity backstop from central bank imperative but need to avoid 'moral hazard' issues

# The G-20 agenda for shadow banking

- Own specific character of each system makes co-ordination in the sense of seeking a common template for regulation somewhat futile.
- Yet there are ‘universal’ lessons and principles that can be drawn from recent history
- ‘Idiosyncrasy’ of each system should mean ‘insularity’
- Regulation is a political decision. Effort has to be be ensure that good politics does not mean ‘bad economics’
- Coordination is imperative given contagion and spillovers.