

*Fourth ICRIER-KAS Financial Sector Seminar*  
*on*  
*Financial Sector Developments, Issues, and the Way Forward ,*  
*December 14, 2011*  
*Ashima Goyal*



# Structure of the Presentation

- Bank risks; GFC and relative ranking
  - ❖ More nuanced picture of risks in EM banks required
- Comparison: advanced and EMS
- Indian banking reforms
  - ❖ Structural change
- Risks and regulations
  - ❖ Lacunae in international regulatory reform
  - ❖ Impact on EMs
- Sources of risks for Indian banks
  - ❖ Markets and macroeconomic policy
    - ❖ **Assessment of risk**



# *A Relative Picture: MM and EM*



# A Relative Picture

## ➤ Scale

- ❖ 2010 UK: India; Banks no. 318:81; Assets 4 times UK output: 92% of Indian output
- ❖ Advanced country leverage 25:1; Indian 10:1

## ➤ Cross border exposures

- ❖ Short-term USD funding, FX swaps
- ❖ Cross currency mismatches

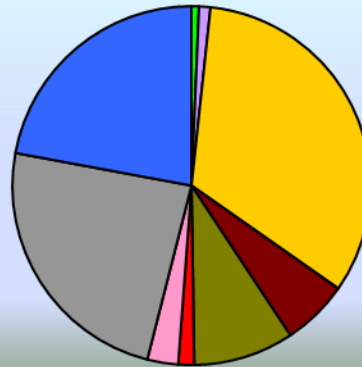
## ➤ Liquidity

- ❖ Leveraged balance sheets exceed deposit liabilities: endogenous expansion
- ❖ US liquidity creation  $\Rightarrow$  dollar carry trade even if EM banks traditional
- ❖ EM more conservative banks at receiving end



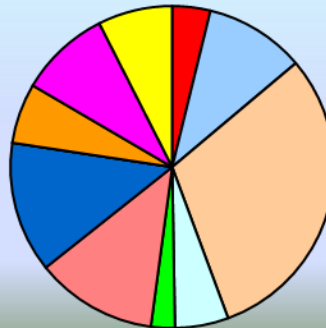
**Figure 1: External positions of reporting banks in developed countries:  
Liabilities (Total- 19307.35 USDb )**

■ Australia ■ Canada ■ Euro Area ■ France ■ Germany ■ Italy ■ Japan ■ UK ■ US



**Figure 2: External positions of reporting banks in emerging markets:  
Liabilities (Total- 2151.18 USDb)**

■ Argentina ■ Brazil ■ China ■ India ■ Indonesia ■ Mexico  
■ Russia ■ Saudi Arabia ■ South Africa ■ South Korea ■ Turkey



Source: Calculated from [http://www.bis.org/publ/qtrpdf/r\\_qa1103.pdf#page=7](http://www.bis.org/publ/qtrpdf/r_qa1103.pdf#page=7)



**Table 1: International positions by nationality of ownership of reporting banks.  
Amounts outstanding (USDb)**

<b>End-September 2010</b>		
<b>Parent country of bank</b>	<b>Assets</b>	<b>Liabilities</b>
<b>Developed Countries</b>		
Australia	421	751.3
Canada	885	749.3
Euro Area	NA	NA
France	4,443.80	4,233.70
Germany	4,552.80	3,598.40
Italy	1,025.70	1,046.70
Japan	3,637.70	2,039.80
UK	4,570.20	4,492.00
US	4,043.20	4,570.30



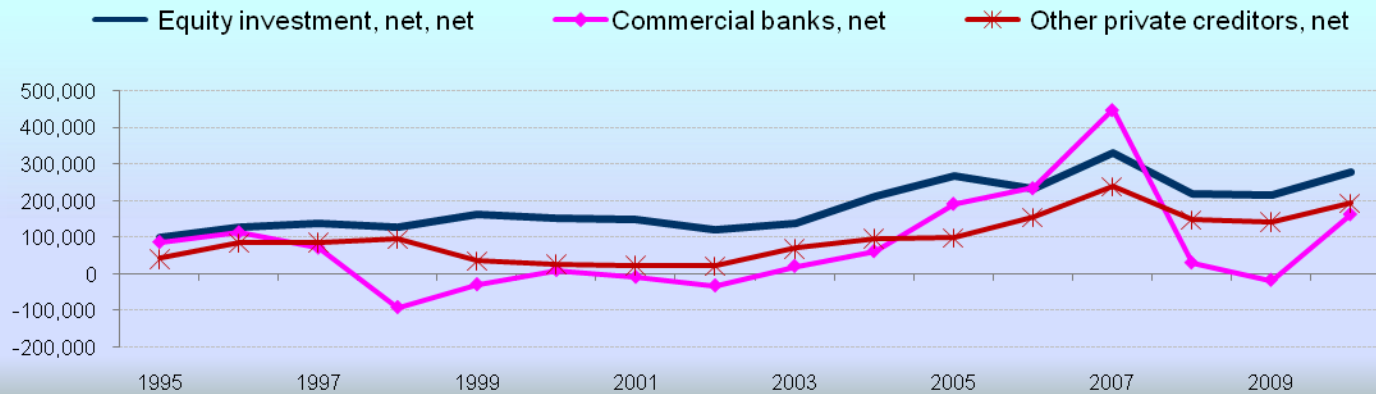
**Table 2: International positions by nationality of ownership of reporting banks.  
Amounts outstanding (USDb) (contd.)**

<b>End-September 2010</b>		
<b>Parent country of bank</b>	<b>Assets</b>	<b>Liabilities</b>
<b>Emerging Markets</b>		
Argentina	NA	NA
Brazil	202.3	223.8
Chinese Taipei	258.5	275.9
India	142.1	168.5
Indonesia	NA	NA
Mexico	44.8	45
Russia	NA	NA
Saudi Arabia	NA	NA
South Africa	78.6	78.3
South Korea	222.2	225.1
Turkey	163.4	196.5

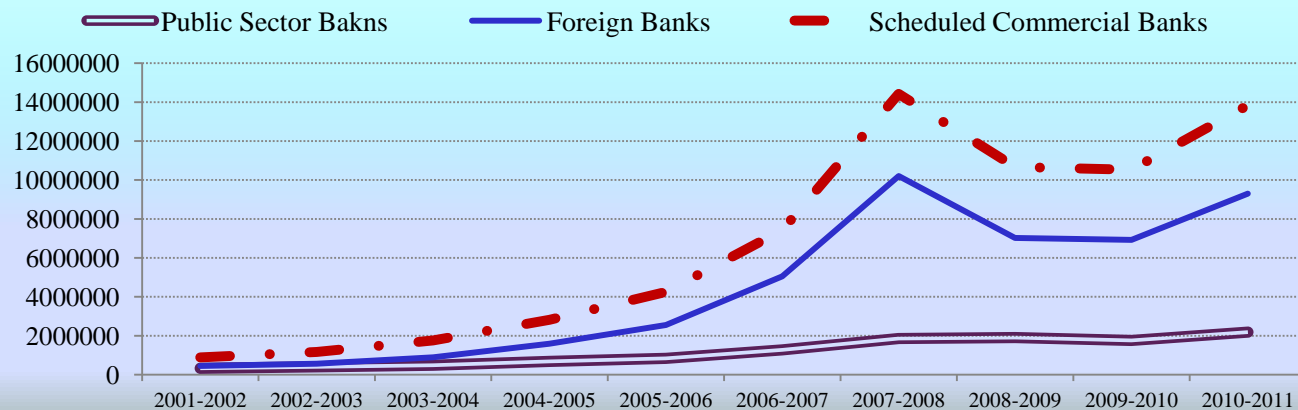
Source: Calculated from table 8A [http://www.bis.org/publ/qtrpdf/r\\_qa1103.pdf#page=7](http://www.bis.org/publ/qtrpdf/r_qa1103.pdf#page=7)



### Figure 3: Volatile constituents of capital flows



### Figure 4: Banks off -balance sheet items (Rs. Crs)



Source : Report on trend and progress of banking in India, RBI (2011)





# *Structural Transformation*



*Table 4: Changing Indian banks*

	<b>1991</b>	<b>2004</b>
CRR	15	4.5
SLR	38.5	25
RoA	0.15	1.01
CRAR	1.5	12.8
Public sec. deposits	92	75
Gross NPA	12.8*	2.4**

Note: \* Figure for 2000; \*\*2009-10



# Reforms

## ➤ Reversing financial repression

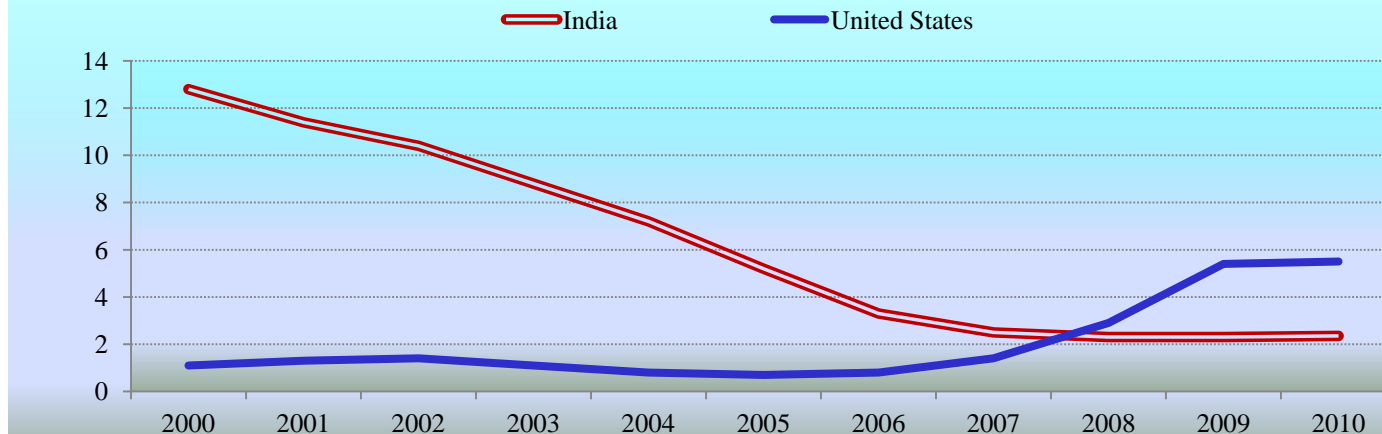
- ❖ From controls to markets

## ➤ Banks and markets

- ❖ Money markets
  - ❖ **LAF and its evolution:** ↓ in volatility of interest rates; ↑ transmission
- ❖ FX markets
  - ❖ **Turnover:** USD 3b in 2001; 34b in 2007; 60b in 2011
  - ❖ **OTC swaps, futures; NDF 50%**
- ❖ G-secs markets
  - ❖ **Interest rates discovered in markets—but thin markets**
  - ❖ **Large variation in the cost of G borrowing**
  - ❖ **Term structure weak—10 year G-secs most traded**
  - ❖ **SLR 25% statutory lower limit but 29% held so scope for OMOs**
  - ❖ **HTM reduces traded volumes, hedging, OMOs**
  - ❖ **Does it hold down the cost of Govt. borrowing? G debt 60% of GDP**
  - ❖ **Substantial risk free treasury income ⇒ hold at lower rates?**
  - ❖ **MTM procyclical**

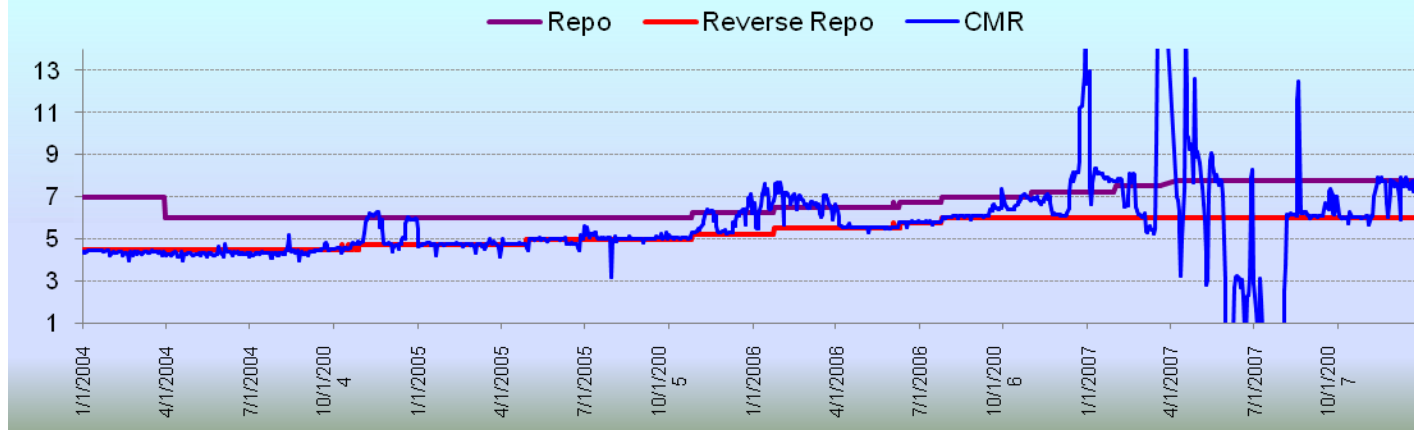


**Figure 5: Bank nonperforming loans to total gross loans (%)**

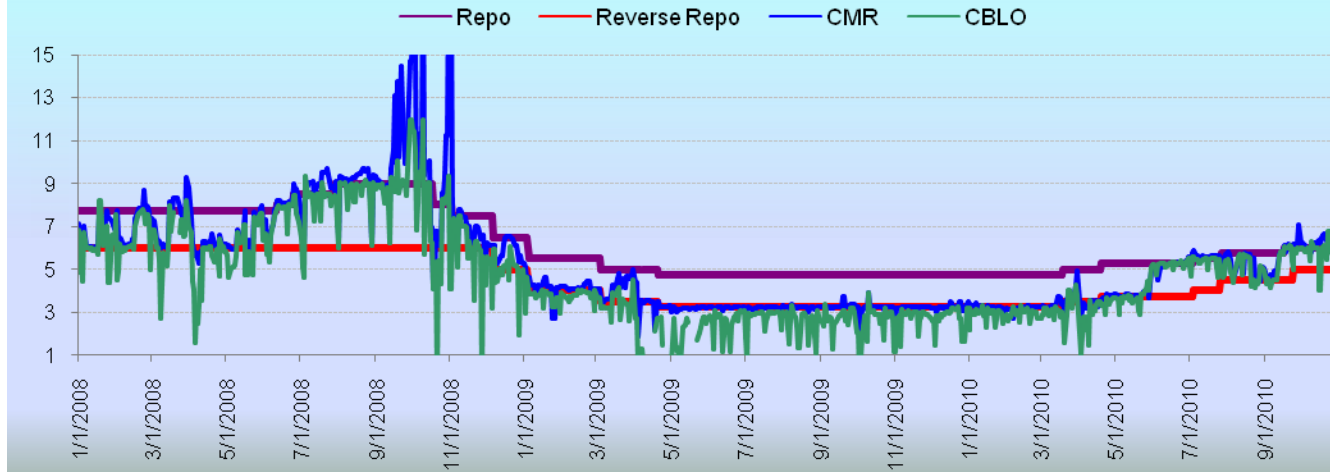


Source : Calculated from World Bank dataset

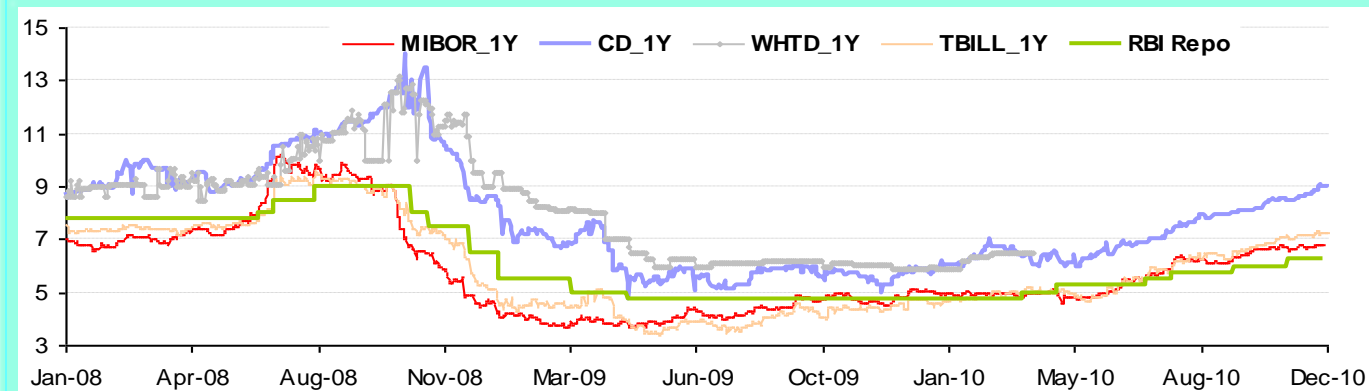
**Figure 6: LAF daily: 2004-07**



**Figure 7: LAF daily: 2008-10**



**Figure 8: Transmission of RBI repo rates**



Source : RBI (2011)



# Reforms

## ➤ Skills and technology

- ❖ Internal risk rating—VaR models
  - ❖ **Lacunae in data, industry benchmarks, implications of legal changes**
  - ❖ **Member of FATF; centralized KYC, UID**
- ❖ Strengths of traditional risk management
  - ❖ **Capital adequacy at Basel 111 levels already**

## ➤ Change from control philosophy

- ❖ Prudential norms plus supervision
- ❖ High growth, legal changes e.g. SARFAESI Act

## ➤ Outcomes

- ❖ Improvement in most parameters; NPAs historic low
- ❖ Entry: 27 public, 22 private, 32 foreign banks
  - ❖ **Skill differentials**
  - ❖ **Diversity and learning time**
- ❖ Retail and loan based business model; short-term wholesale funding ltd



# *Risks and Regulation*



# Typology of Risks

## ➤ Measurable uncertainty

- ❖ With some probability of loss
  - ❖ **Finance, volatility: expected values not realized**

## ➤ Types of financial risk

- ❖ Credit risk: borrower default
  - ❖ **Poor systems; moral hazard; G forces loans on non-commercial grounds**
  - ❖ **Slowdown**
- ❖ Market risk
  - ❖ **Interest and currency risk: thin markets**
  - ❖ **Liquidity and systemic risk: GFC**

## ➤ Fundamental trade-offs: incentive v. insurance criterion

- ❖ Too little and too much risk both reduce innovation; rewards ↑ with risk
- ❖ Who can control risk should bear it; but some transfer to risk aggregators who diversify
- ❖ These aggregators to the Govt: Retain the upside, pass on the downside thru bailouts
- ❖ But capital buffers ⇒ bear too much risk, reduce innovation too much; so alternative?





# Indian Regulation

- Shift from micro-intervention to macro-management
  - ❖ Focus on broad patterns rather than individual transactions
    - ❖ **Capital adequacy but also income recognition, asset classification, provisioning**
  - ❖ Real estate prices rose: provisioning for such loans ↑
- Good incentives in ↑ broad pattern prudential norms
  - ❖ LTV and countercyclical provisioning
    - ❖ **Sectoral provisioning requirements directly impact the Profit and Loss Account**
    - ❖ **Compared to risk weights**
  - ❖ Conservative accounting standards
    - ❖ **Provide for losses while ignoring gains: countercyclical**
  - ❖ Exposure limits for sectors
- So steady market development
  - ❖ Yet escaped GFC
  - ❖ ⇒ preserve some ↑ regulatory features even with modern risk management



# International Reforms

## ➤ US Dodd-Frank Act; Basel III; UK Vickers commission

- ❖ Too strong: capital buffers; Too weak: exemptions, delays, lags
  - ❖ **Systemic risk: spillovers, procyclicality; councils delays**
  - ❖ **Shadow banks: exemptions**
- ❖ Buffers lags: 2018, difficult to impose in bad times, reduce lending
  - ❖ **Risk based capital ⇒ high potential leverage; arbitrage increases risk**
  - ❖ **Euro sovereign bonds assigned zero risk weights**

## ➤ Broad ratios: LTV, taxes, position limits, margin reqts.

- ❖ Automatically countercyclical ⇒ improved incentives
- ❖ Simple, so can be universal, prevent competitive risky strategies
- ❖ Since reduce risk-taking without forcing too much risk on risk aggregators
- ❖ would improve financial stability yet protect financial innovation
  - ❖ ↓ **tendency to take too much risk in good times**
  - ❖ ↓ **financial boom bust cycles—observed over centuries**



# International Reforms

## ➤ Indian viewpoint

- ❖ BASEL III CRAR already satisfied but
- ❖ With development, scale, credit ratios to rise to international levels, so
  - ❖ **Bank focused regulation burdens EM bank-based financial sector**
  - ❖ **Does not address arbitrage through shadow banks**
  - ❖ **which create risks for EMs from volatile capital flows**
- ❖ SLR as source of liquidity and low risk for banks not recognized
- ❖ Also continued development burdens
  - ❖ **Priority sectors, unbanked population 60%**
- ❖ Use of regulatory ratios as substitute for capital adequacy?
- ❖ But this should be accepted globally, not as a special exemption
- ❖ Since it would fill existing gaps in international reforms



# *Risk Assessment: Indian Banks*



# *Risk Assessment for Indian Banks*

## ➤ Markets developed but still thin

- ❖ Large impact of shocks

  - ❖ **TED spreads high and erratic but liquidity related, new LAF may help**

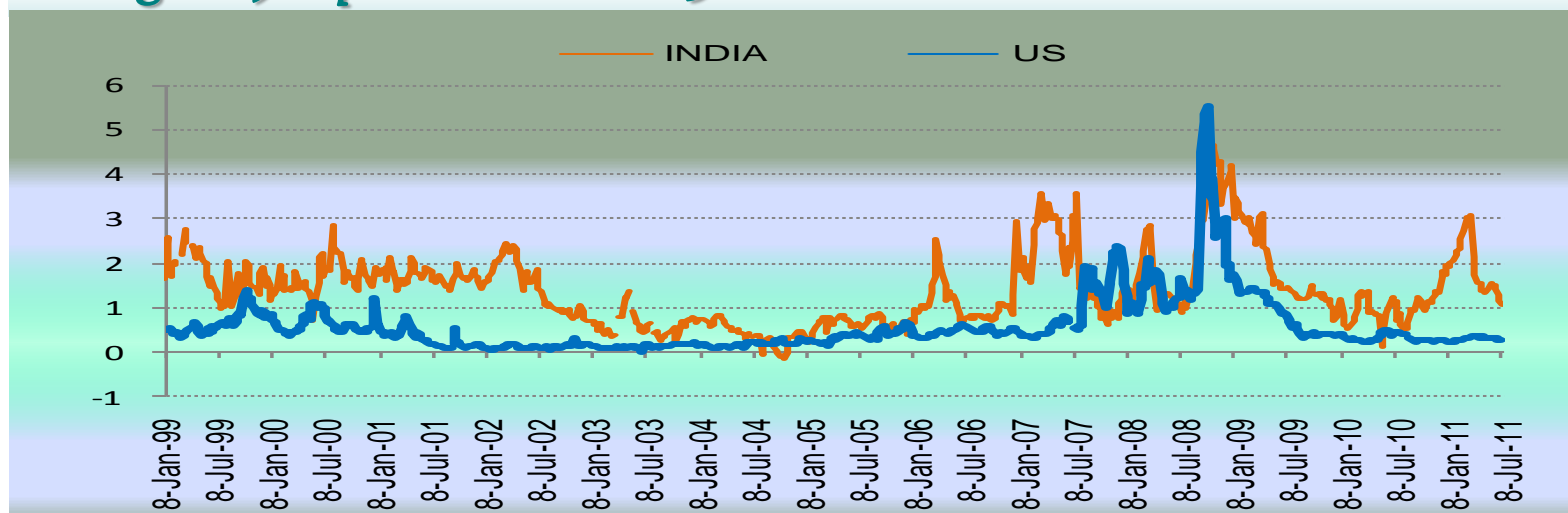
- ❖ Lending rates—wide gap

  - ❖ **Definitional change BPLR sharp fall in India-US gap**

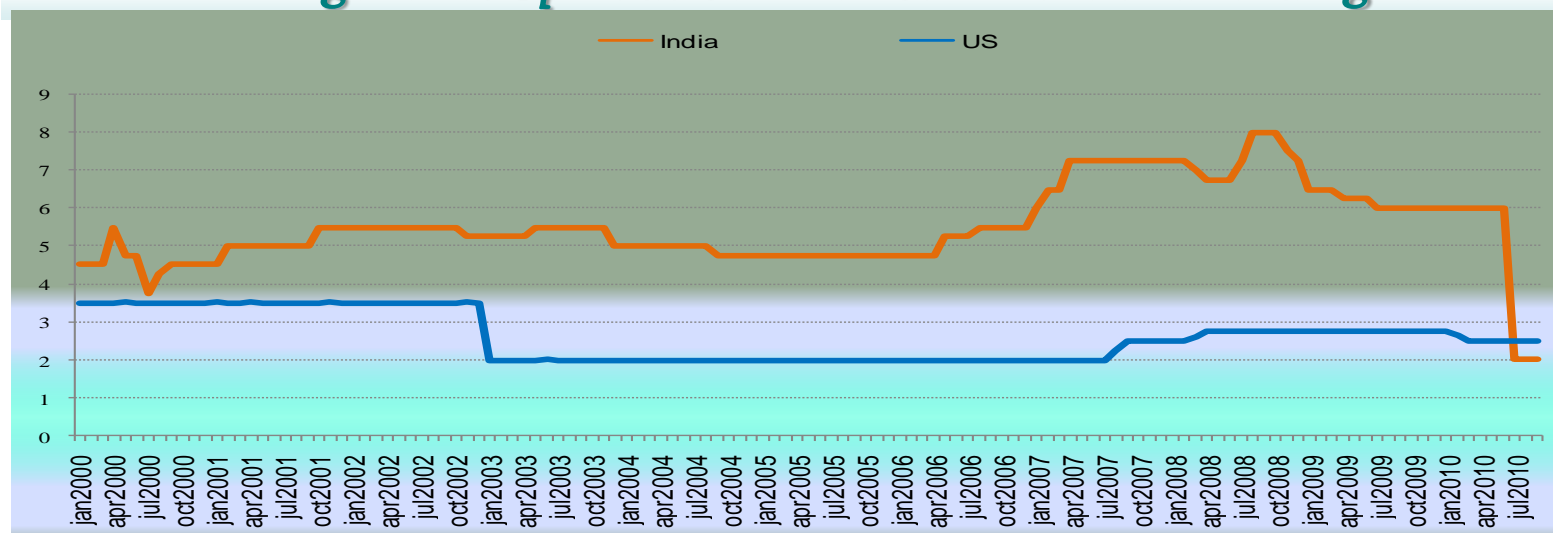
  - ❖ **Heterogeneous borrowers: lending rates very high for some**



**Figure 9: Spreads between 3 month T-Bill and inter-bank rates**



**Figure 10: Spreads between bank rate and lending rate**



Source : Calculated from RBI



# Risk Assessment for Indian Banks

## ➤ Monetary policy

- ❖ But levels of interest rates higher and more variation
- ❖ Pass through higher since of less competition in the banking sector
- ❖ More loan based activity so higher impact of interest rate changes
  - ❖ **Especially on modern sector, slowdown**
- ❖ Market determined exchange rate, volatility, shocks from capital flows
  - ❖ **Both interest and exchange rate rise adds to current cost shocks**
  - ❖ **Creates loan quality concerns**
- ❖ IMF overheating: repo 8.5 industry growth fall to 2.7 Q2 (-5 Oct.), inflation still high
  - ❖ **Oct. WPI 9.7%; manufacturing 7.7%**



## Table 3: Interest rate pass-through

Bank lending rate	For sectors						For bank types		
	Agriculture	Industry	Transport	Trade	Finance	Personal	Public sector banks	Private sector banks	Foreign banks
Call Rate	0.664 (0.030)**	0.733 (0.022)**	0.713 (0.029)**	0.701 (0.028)**	0.771 (0.028)**	0.565 (0.041)**	0.560 (0.027)**	0.583 (0.033)**	0.583 (0.059)**
Competitiveness	0.159 (0.012)**	0.146 (0.009)**	0.120 (0.012)**	0.111 (0.012)**	0.131 (0.012)**	0.114 (0.017)**	0.120 (0.011)**	0.142 (0.008)**	0.162 (0.006)**
Size	0.314 (0.070)**	0.237 (0.033)**	0.392 (0.063)**	0.154 (0.052)**	0.281 (0.054)**	-0.194 (0.075)**	0.256 (0.118)**	0.293 (0.066)**	0.266 (0.061)**
Observations	852	1039	894	999	991	1017	392	406	406

Source: Ansari and Goyal (2011)

Note: \*\* significance at 5%; p-values in brackets





# Risk Assessment for Indian Banks

## ➤ Structural risks reduce but cyclical rise

### ❖ Default risk

- ❖ **Govt. ownership but no cross border exposures**
- ❖ **Mild rise in NPAs from historic lows**
- ❖ **Some industries stressed but portfolio of industries larger now**
- ❖ **Average credit growth 18.6 pa: 29.6 in high growth period**

### ❖ Market risk

- ❖ **Policy tightening**
- ❖ **Sharp rise in interest, exchange rates**

### ❖ Loan based, thin markets policy must smooth rates

- ❖ **So IMF advice to raise rates sharply inconsistent: created risks**

## ➤ Heterogeneous impact so no systemic concerns

### ❖ Across banks and rating agencies: SBI NPAs and profits rise, ICICI both fall

- ❖ **Growth prospects better than most other countries; diverse demand sources**
- ❖ **Market cap of private banks ↑ since free to raise funds**



# Conclusion

- Sensitivity to where difference can be a strength
  - ❖ Awareness among analysts; policies also more nuanced and differentiated
- Some regulatory differences if included in reforms
  - ❖ Would fill international reforms gaps
- Easier CCLs and swaps: ↓ aggregate contagion costs
  - ❖ Since EMs at receiving end
  - ❖ Better regulations
    - ❖ **Smooth volatility of private capital**
    - ❖ **Allow further opening**

# Thank you

