Global Financial Crisis: Impact on India

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ICRIER-INVENT Workshop

Current Developments in Indian Financial System

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Roots of Global Crisis

- Global macroeconomic imbalances
  - Results in huge cross-border capital flows from surplus to deficit countries
  - International financial system failed to intermediate these flows properly
    - Lending to sub-prime borrowers/ imprudent credit expansion
    - Lack of effective supervision and regulation
  - Debt crisis of 1980s, East Asian crisis of late 1990s and the present global crisis
  - Current one the severest and the impact so enormous and widespread

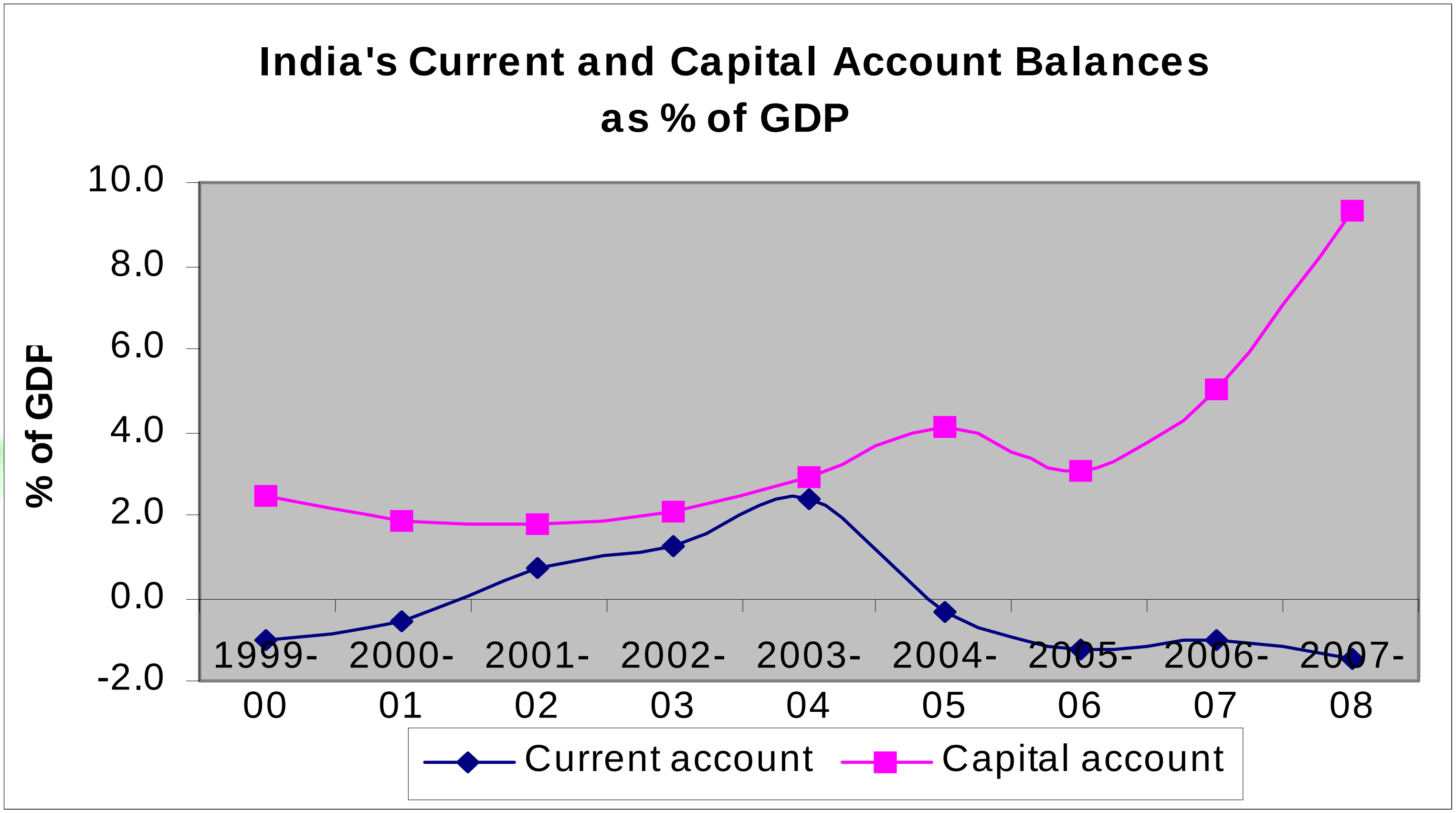
Global Macroeconomic Imbalances

Table 1: Current Account Balance as % of GDP, 1995-2007											
	Australia	**US**	**UK**	**Spain**	**China**	**Germany**	**Japan**	**Norway**	**Russia**	**Saudi Arabia**	**India**
1995	-5.2	-1.5	-1.2	-0.3	0.2	-1.2	2.1	3.6	2.2	-3.7	-1.6
2000	-3.8	-4.3	-2.6	-4.0	1.7	-1.7	2.6	15	18	7.6	-1.0
2001	-2.0	-3.8	-2.1	-3.9	1.3	0	2.1	16.1	11.1	5.1	0.3
2002	-3.7	-4.4	-1.7	-3.3	2.4	2.0	2.9	12.6	8.4	6.3	1.4
2003	-5.3	-4.8	-1.6	-3.5	2.8	2.0	3.2	12.3	8.2	13.1	1.5
2004	-6.1	-5.3	-2.1	-5.3	3.6	4.7	3.7	12.7	10.1	20.8	0.1
2005	-5.8	-5.9	-2.6	-7.4	7.2	5.2	3.6	16.3	11	28.7	-1.3
2006	-5.3	-6.0	-3.4	-8.9	9.4	6.1	3.9	17.3	9.5	27.9	-1.1
2007	-6.2	-5.3	-3.8	-10.1	11.3	7.6	4.8	15.4	5.9	25.1	-1.4

Source: IMF.

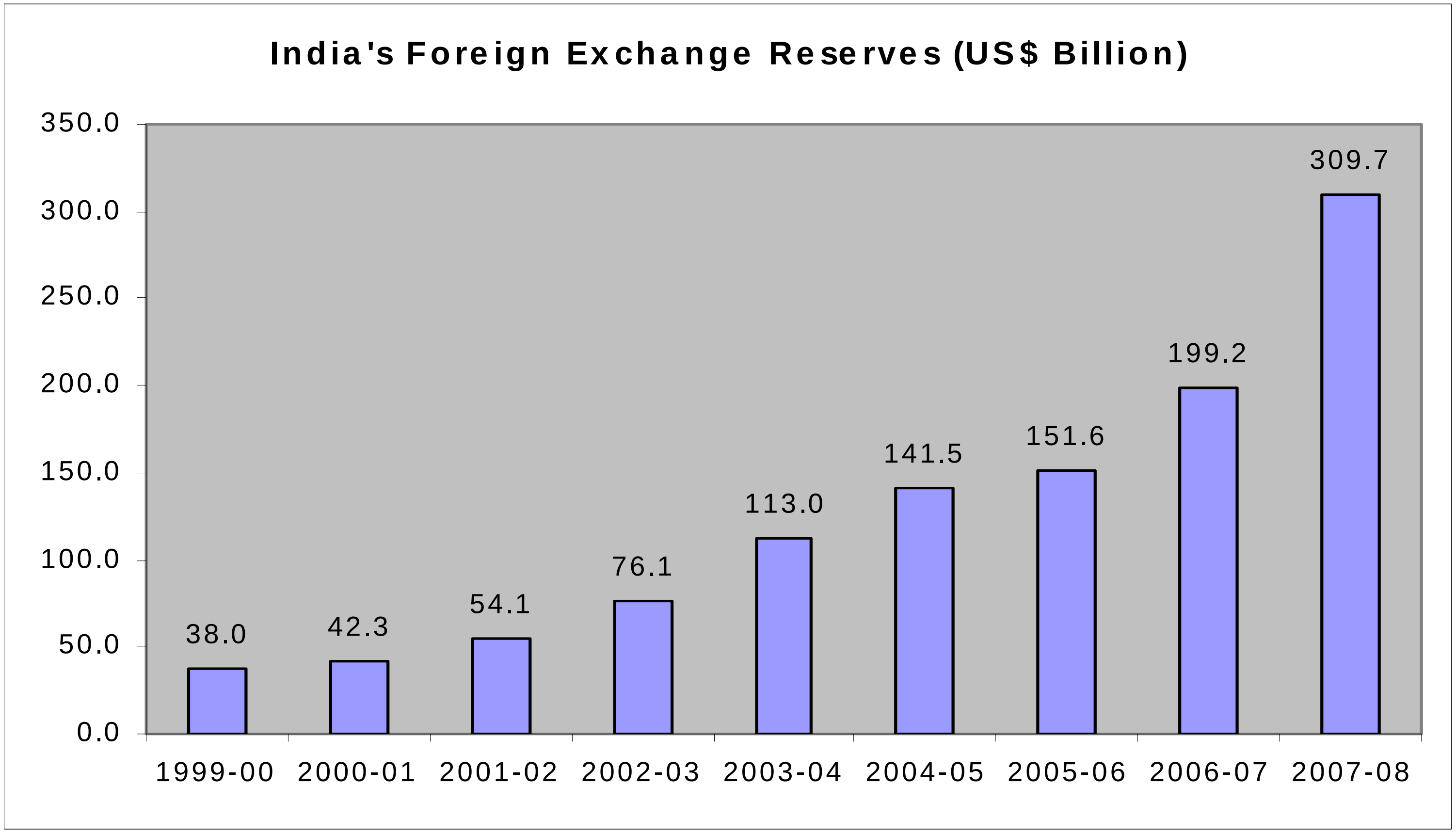
- *Persistent deficits and surpluses among nations*
- *India not part of global imbalances*

Capital Inflows into India



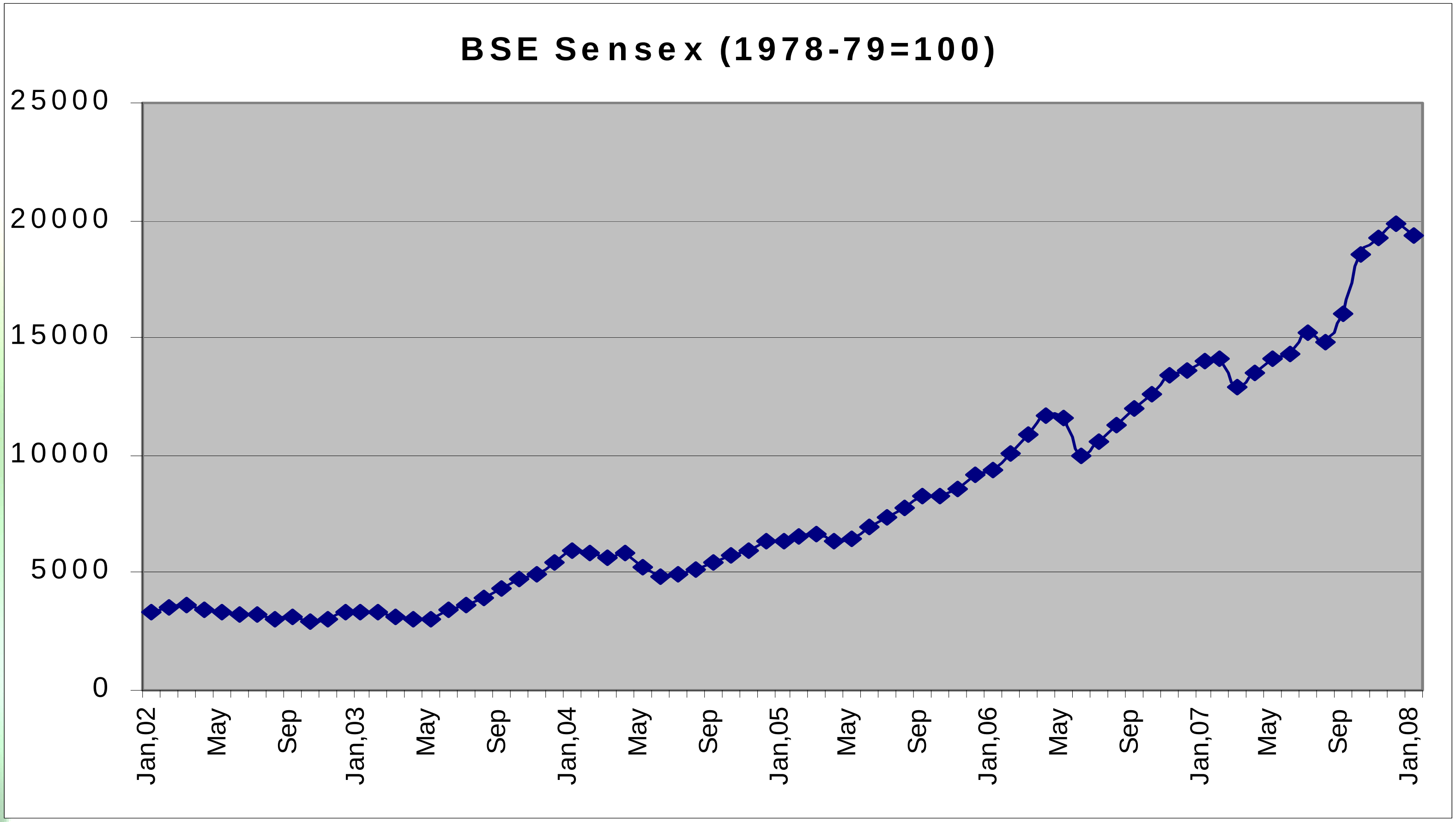
Far exceeding the current account deficits!

India's Reserve Build-up



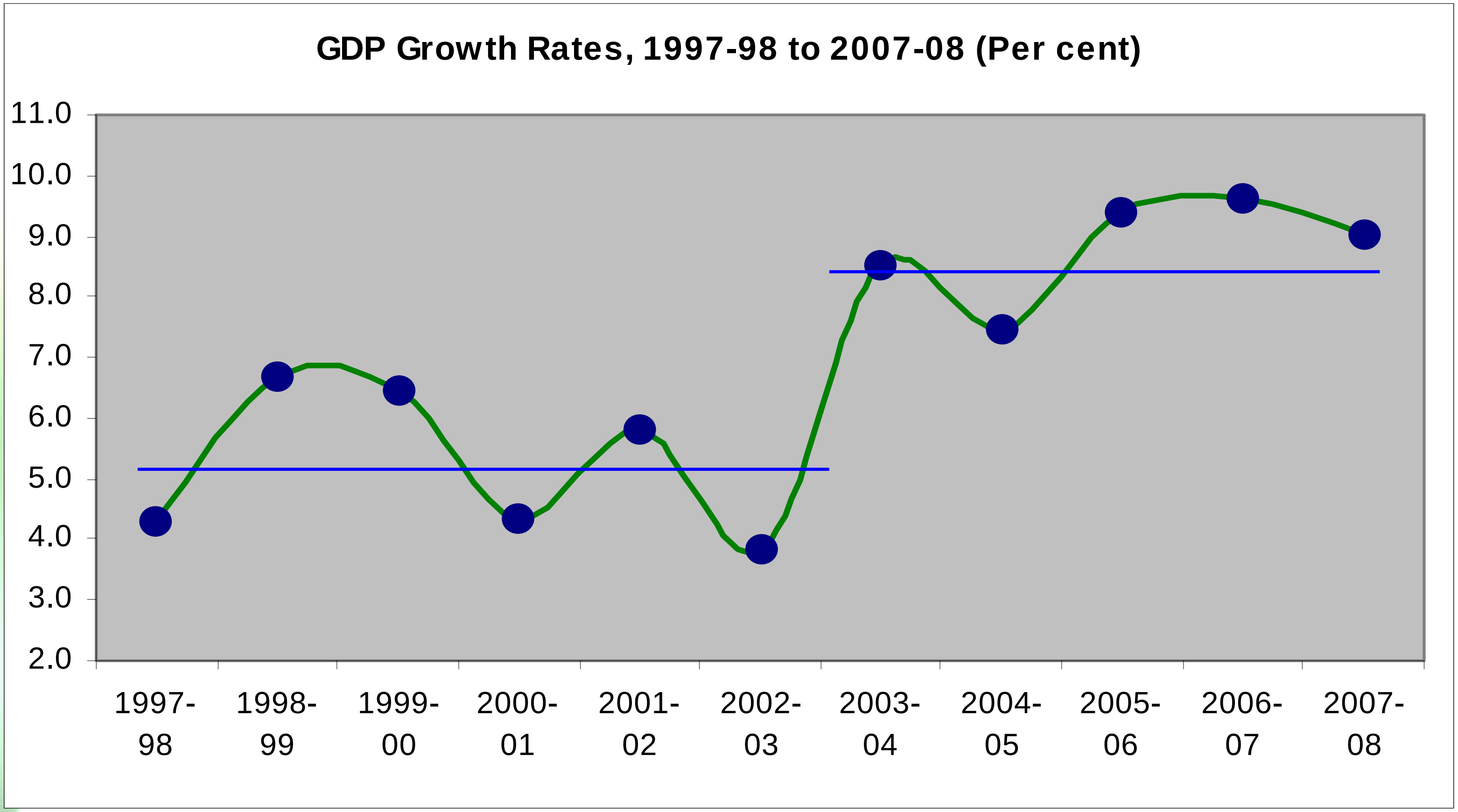
Turned out to be building up a war chest!

Huge Stock Market Rally



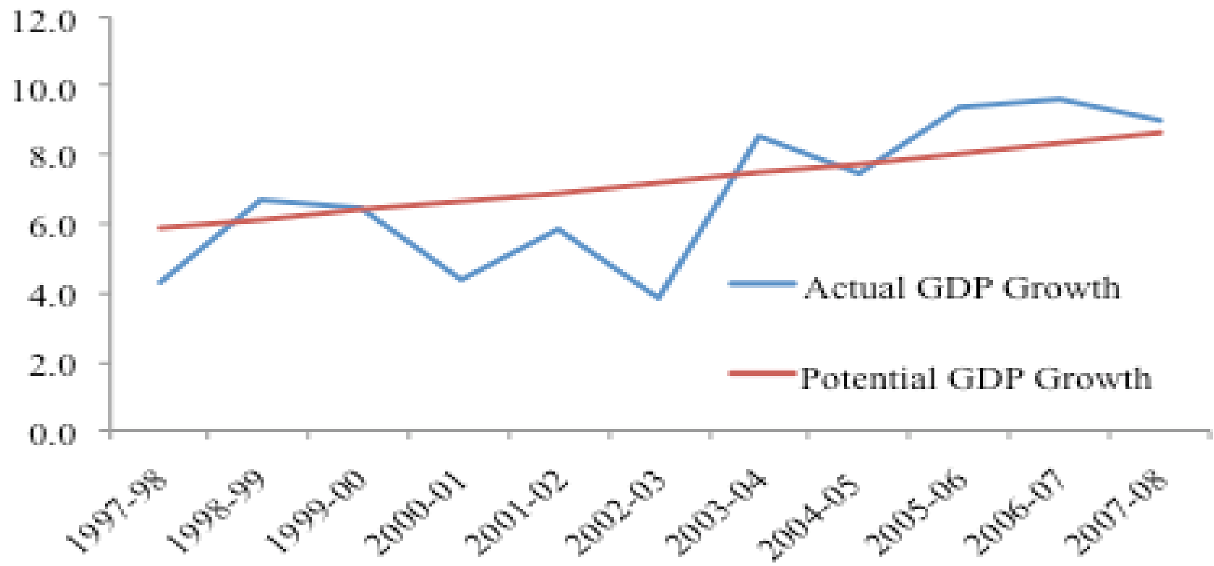
Stock index rising from an average 5500 during 2004 to over 20,000 in January 2008

Remarkable Growth Performance



- *Lifted to a new high growth trajectory*
- *Cheap and plentiful supply foreign capital partly behind high growth*

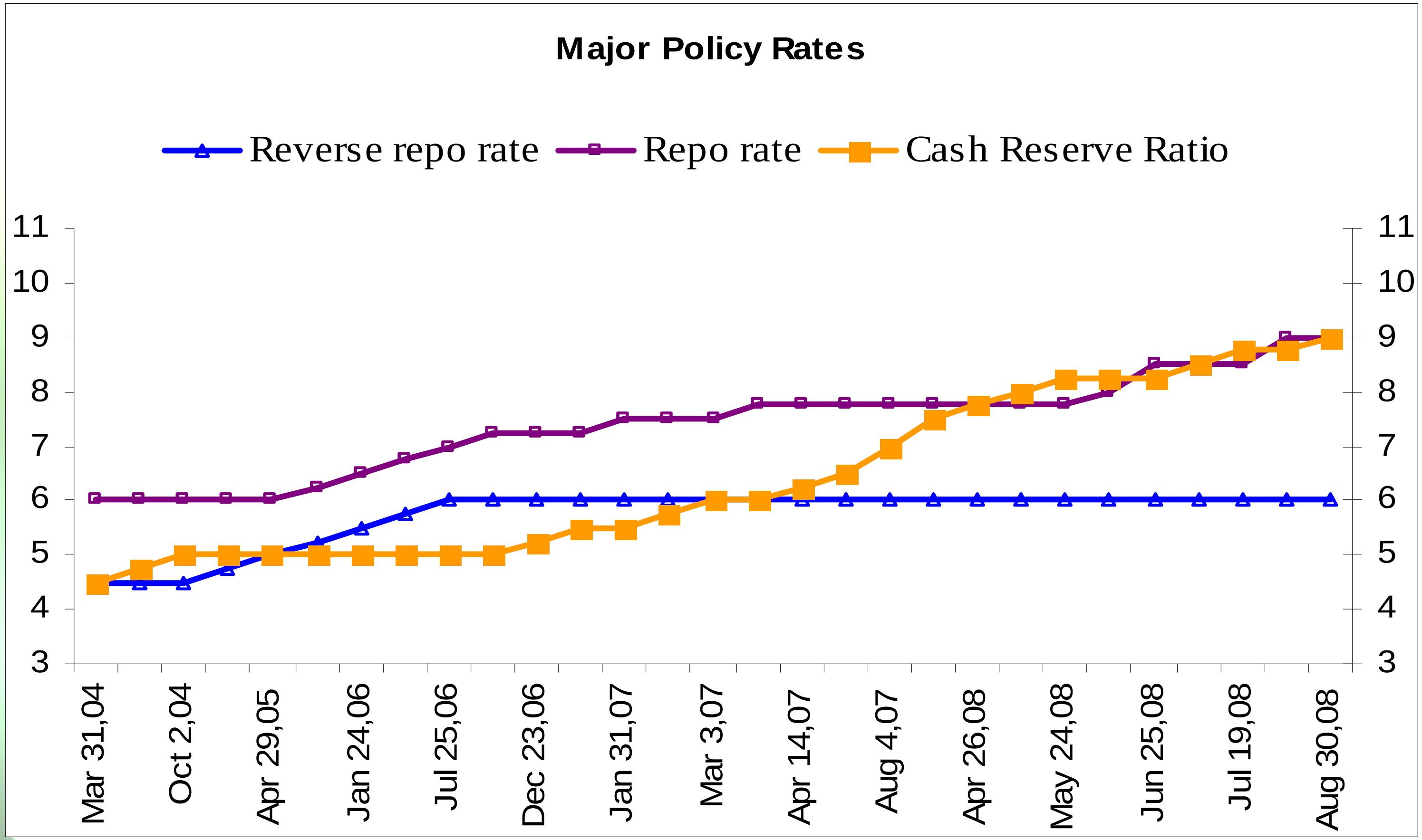
Overheating of Indian Economy



Note: HP filter technique as proposed by Hodrick and Prescott (1997)

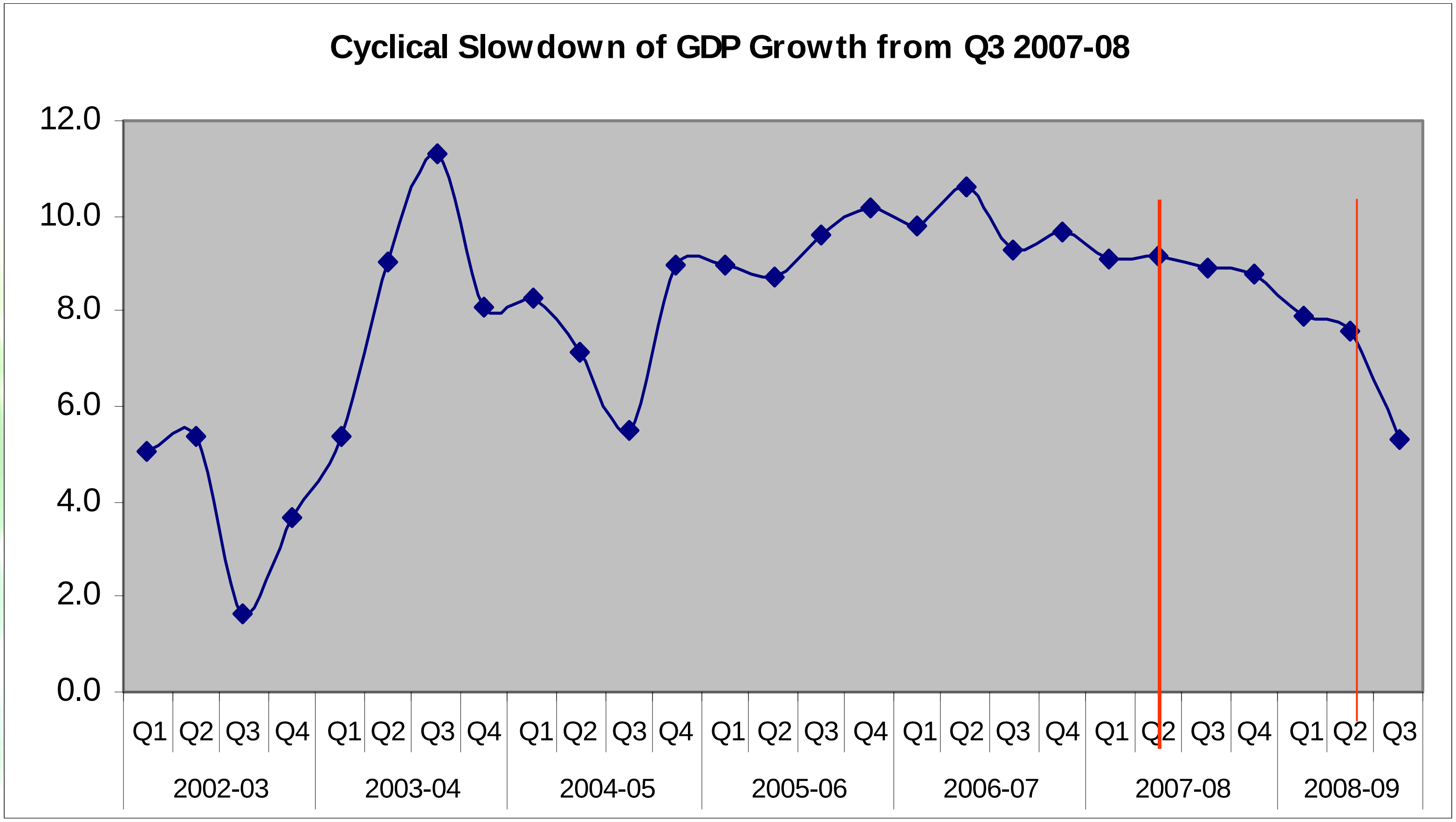
- *GDP growth above potential rate in recent years*
- *Inflation above 5 per cent from 2003-04*

Monetary Tightening from 2004



- *Tightening from Sep 2004 became harder from 2006-07*

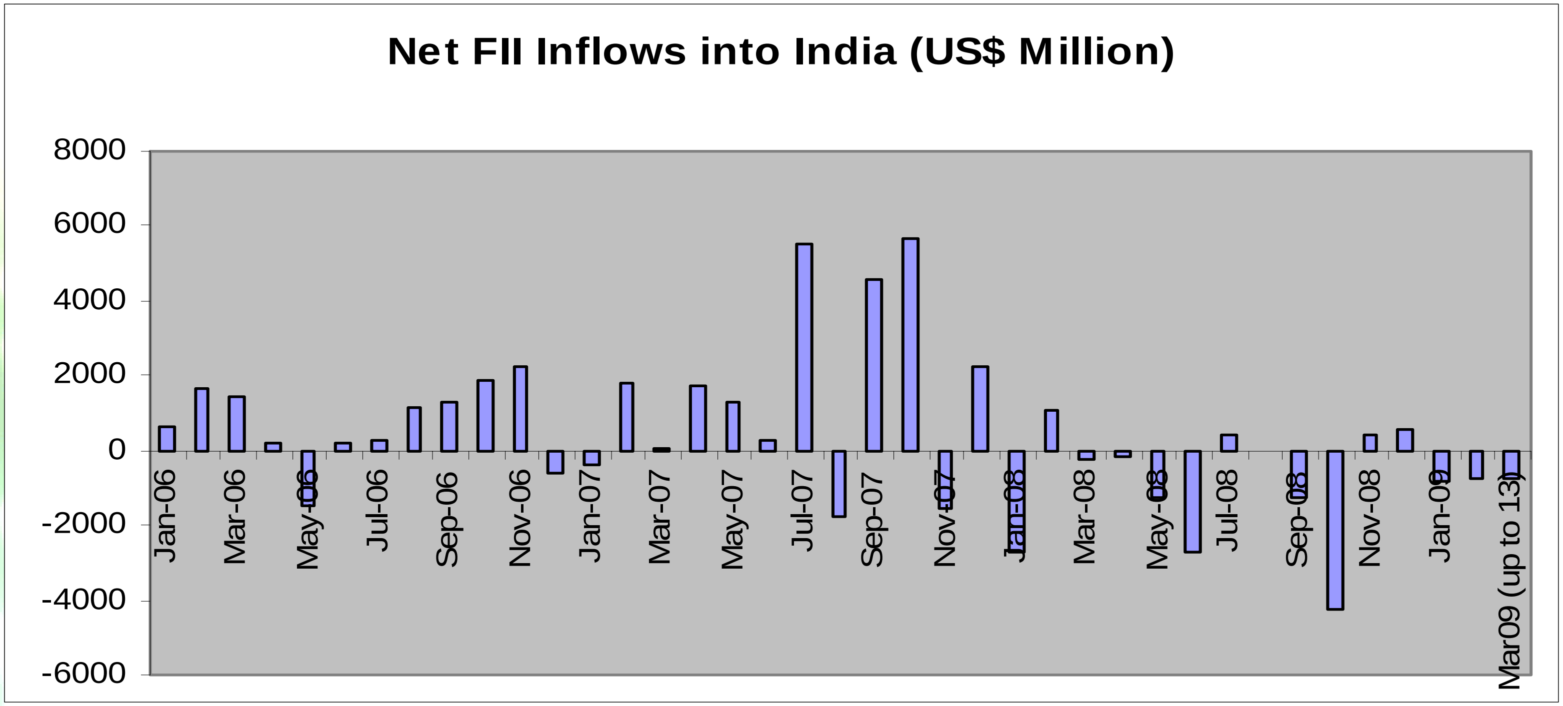
Soft-landing of Indian Economy



Slowdown of Q3 2007-08 to Q2 2008-09, RBI effect

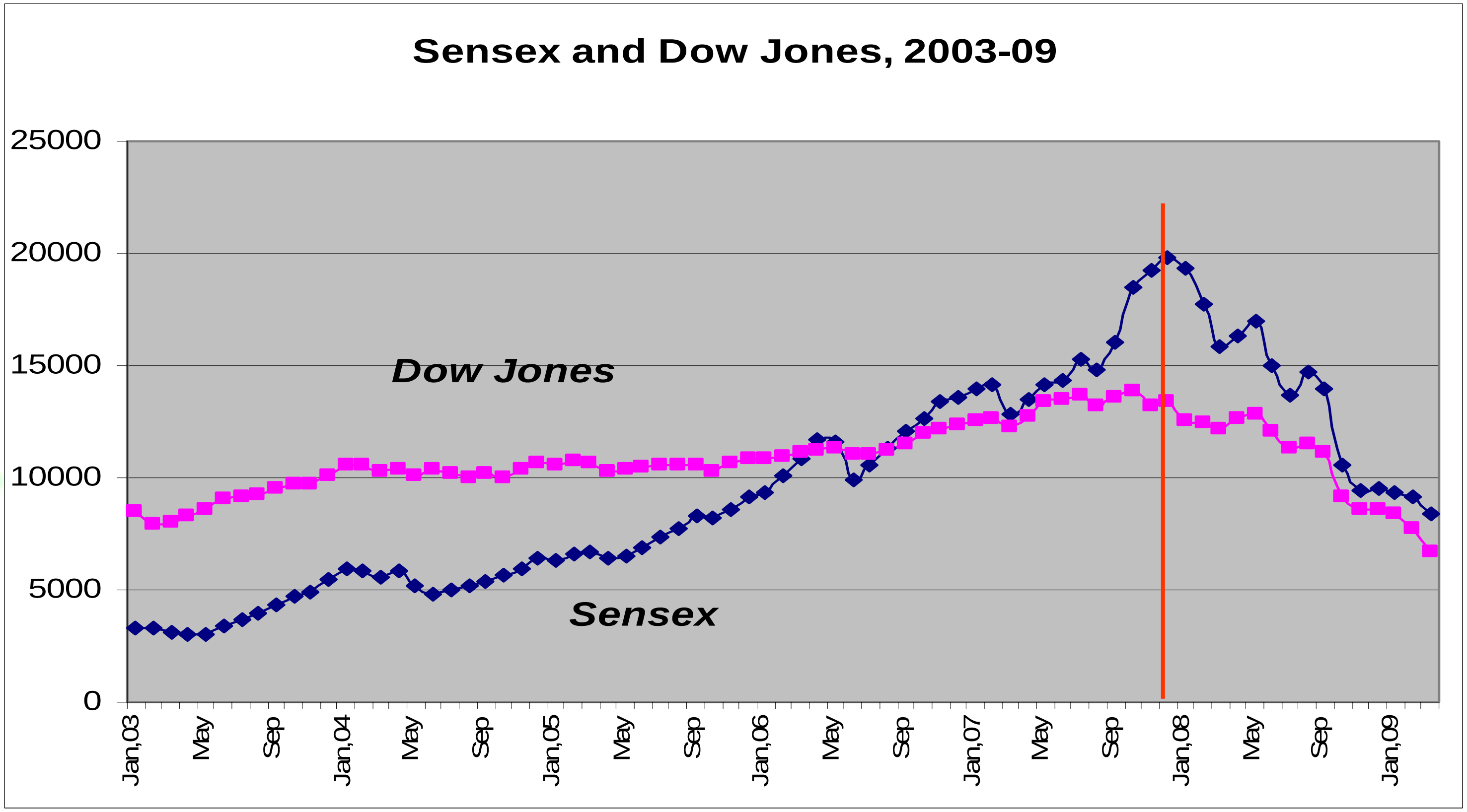
Global Crisis

Reversal of Capital Flows from India



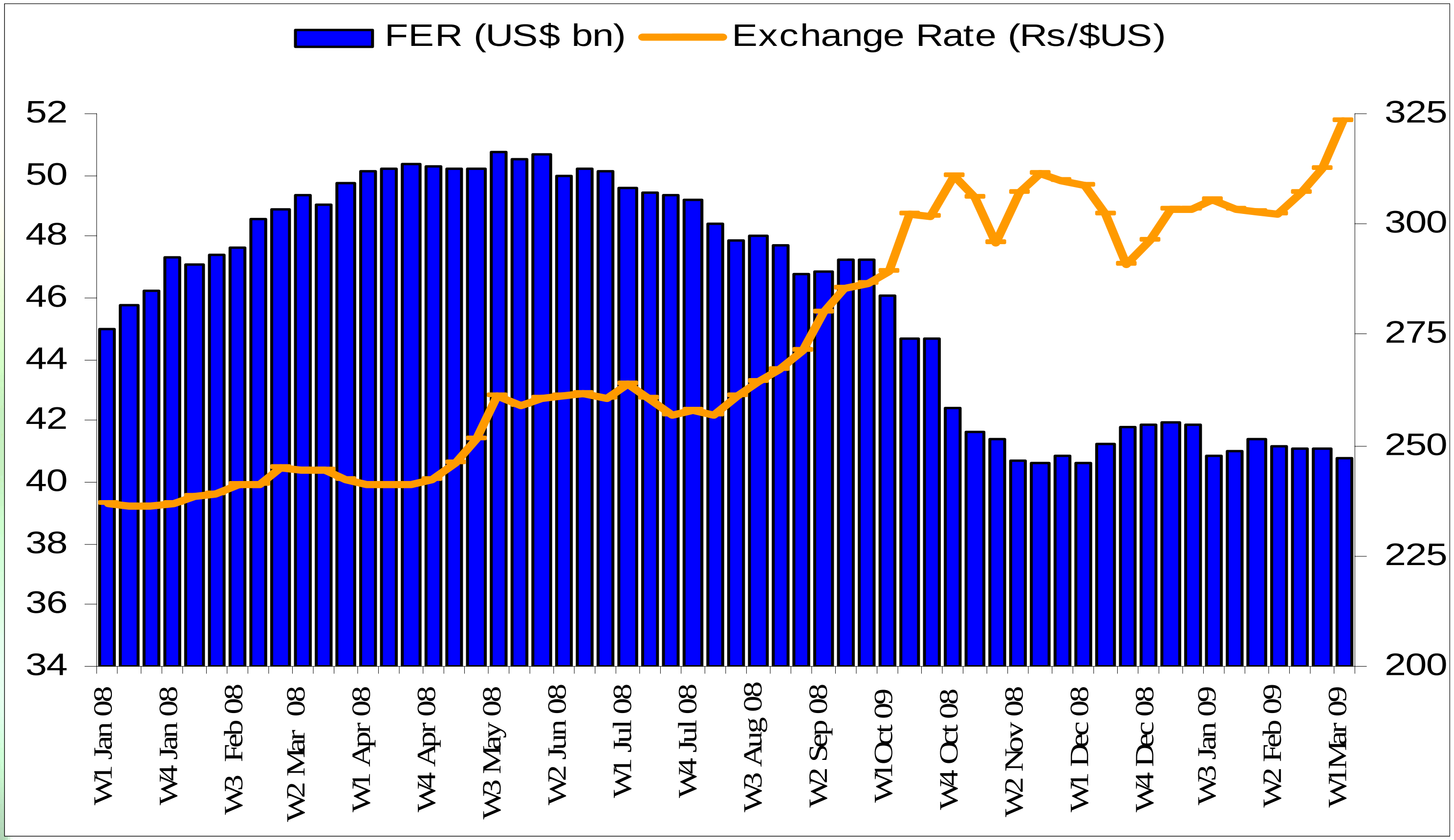
- *Huge FII outflows from India since December 2007 due to US financial meltdown (Massive de-leveraging of US banks)*
- *FII equity outflows over US$ 15.4 bn from Jan 08*

Stock Market Crash



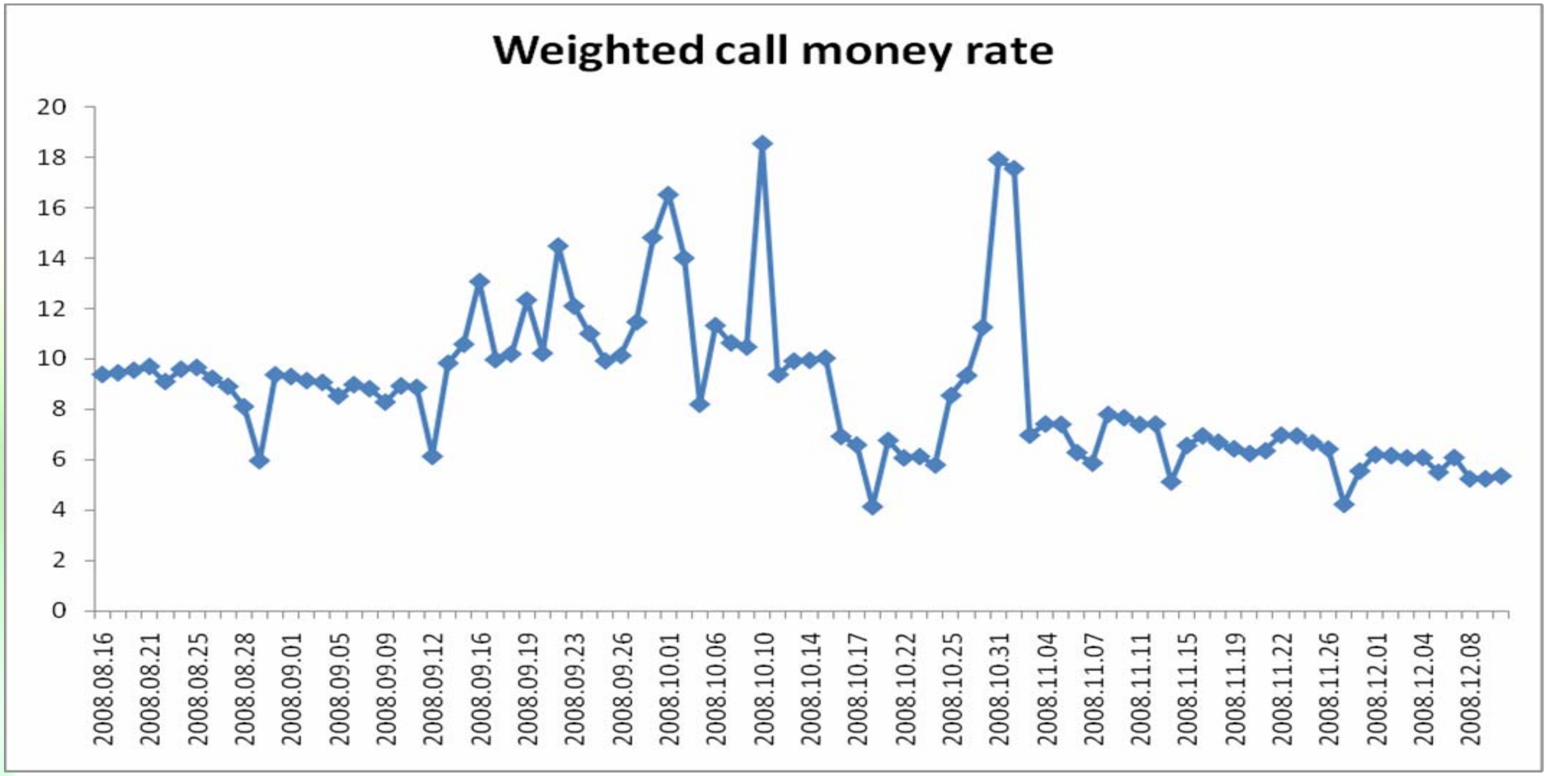
- *Plummeting from 20,873 on 8 Jan 08 to 9093 on 28 Nov, 56% fall*
- *NYSE stock price fall started earlier (November 07) but much less steeper than BSE*

Foreign Reserves & Exchange Rate



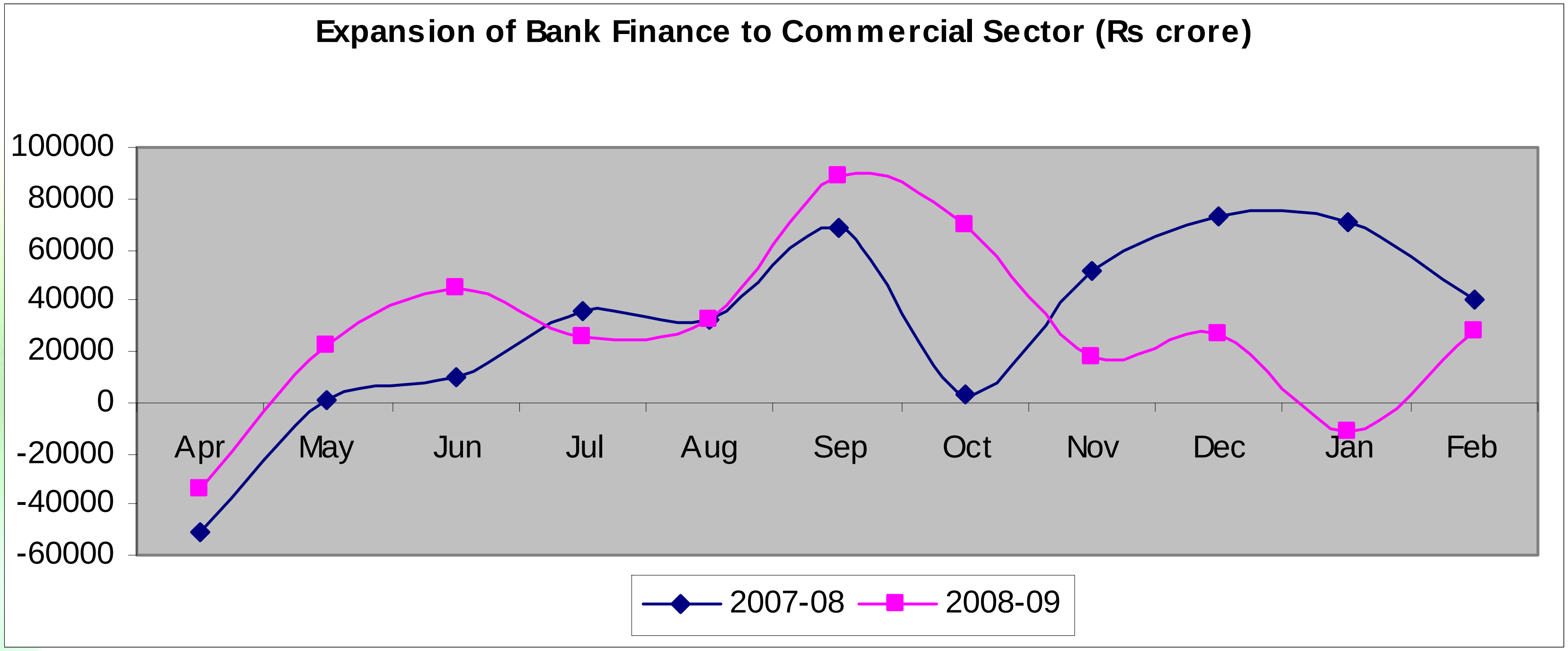
- *Stock of Reserves falling from $315 bn in May 08 to $246 bn in Nov 08*
- *Rupee tumbling by 20% from end-Mar 08 to end-Nov 08*

Liquidity Crisis



- *Inter-bank call money rate spiking to 20% in October 08*
- *Drying up funds from domestic and foreign capital markets leading to pressure on bank financing*
- *Outflow through banking channels*

Credit Crunch to Low Credit Demand

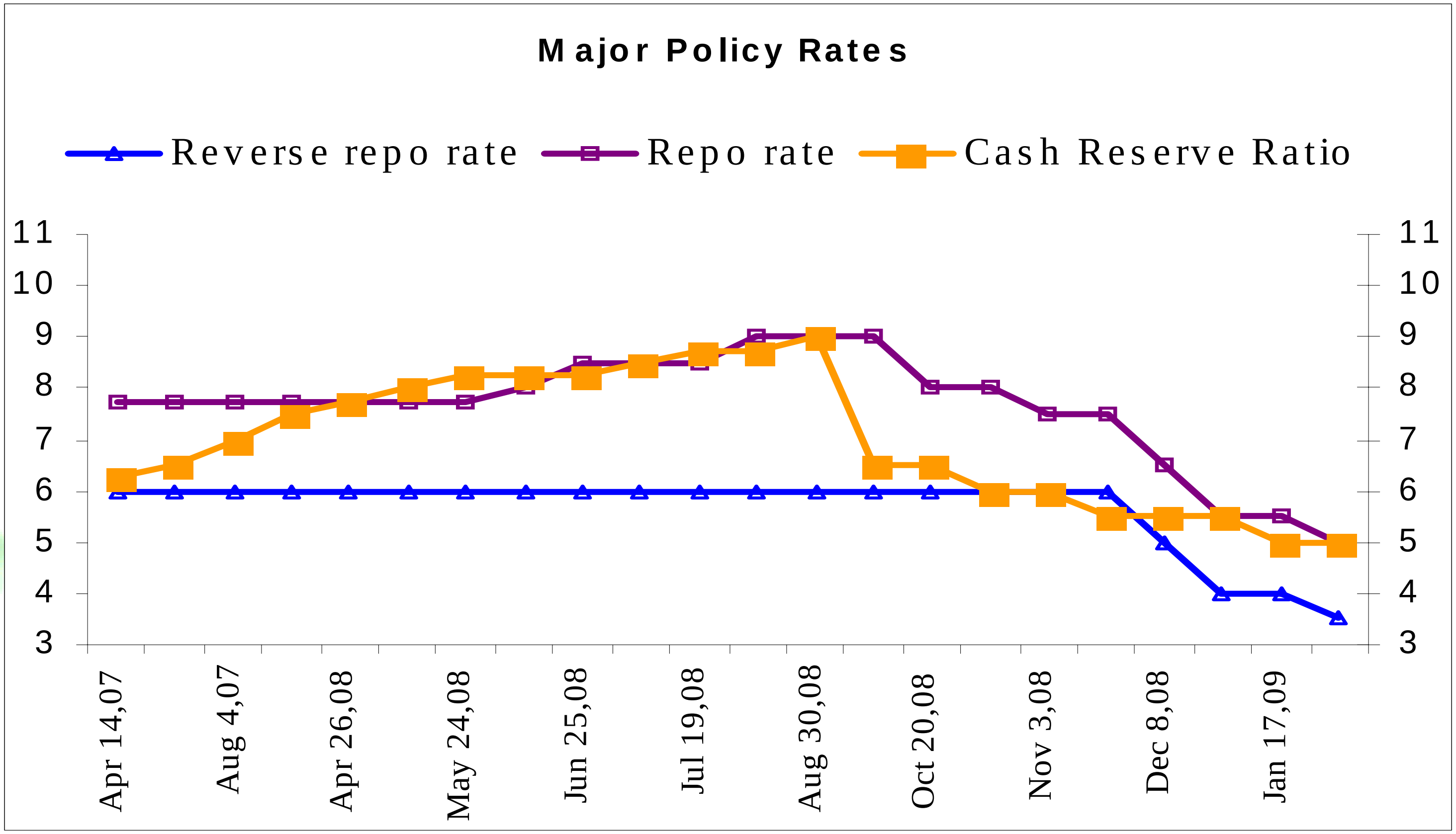


- *In September and October 08, bank finance (loans & investments) rose to compensate for drying up funds from domestic and foreign capital markets*
- *In November 08 onwards, bank finance expansion sharply lower as **demand has fallen/ bank averse to lending; and bank finance turned negative in Jan 09 and remained lower than last year level in February 09***

Aggressive Policy Response

- RBI loosening cost and availability of liquidity in a series of steps from mid-September 08
  - Initial reluctance due to high inflation and aggressive response from mid-October 08

RBI Policy Rate Changes



- *Cash reserve ratio (CRR) brought down from 9% to 5%*
- *Statutory liquidity ratio (SLR) from 25% to 24%*
- *Repo rate reduced from 9% to 5% & reverse repo rate from 6% to 3.5%*
- *Special window for banks in their lending to mutual funds, NBFCs and housing finance companies*
- *Refinance facility for banks from the central bank & **dollar swap arrangements**, etc.*

RBI Liquidity Injection

Actual/Potential Release of Primary Liquidity since Mid-September 2008 (Rs crore)		
1	Cash Reserve Ratio (CRR) Reduction	1,60,000
2	MSS Unwinding	63,045
3	Term Repo Facility	60,000
4	Increase in Export Credit Refinance	25,500
5	Special Refinance Facility for SCBs (Non-RRB)	38,500
6	Refinance Facility for SIDBI/NHB/EXIM Bank	16,000
7	Liquidity Facility for NBFCs through SPV	25,000
	Total (1 to 7)	**3,88,045**
Memo: Statutory Liquidity Ratio (SLR) Reduction		40,000

Nearly Rs. 4000 bn ($80 bn), over 7% of GDP of liquidity release

Fiscal Stimulus

- Deterioration of the economy leading to Central government's three packages of fiscal stimulus in early Dec 08, early Jan 09, early Mar 09
  - Direct fiscal burden of stimulus just 1.8% of GDP
    - Across-the-board excise duty reduction by 4 %age points
    - Additional plan spending of Rs. 200 billion
    - State governments allowed additional market borrowing of Rs 300 billion for plan expenditure
    - Assistance to export industries
    - 2 percentage point reduction in central excise and service tax
  - Non-fiscal measures in package (ECB and FII debt inflow relaxations, IIFL tax-free bonds, etc.)
  - Fiscal deficit (Central and States combined) rising sharply to 11% of GDP in 2008-09 (5.4% in 2007-08) and likely to be over 10% in 2009-10
    - Loose fiscal policy due to domestic compulsions

Sharp Real Sector deterioration from September 2008

Growth in Selected Economic Indicators (% Change, Y-O-Y)							
	Apr-Aug 08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09
Industry	4.8	6.0	0.1	1.7	-0.6	-0.5	
Exports	35.1	10.4	-12.1	-9.9	-1.1	-15.9	-13.7
Imports	37.7	43.3	10.6	6.1	8.8	-18.2	-18.2
Railway freight traffic	8.6	8.2	-0.1	1.3	3.0	2.9	
Major ports traffic	8.7	1.1	-5.7	-4.6	0.0	-0.4	
Commercial vehicle sales	3.9	-0.6	-34.9	-48.0	-58.2	-52.3	-31.7
Airport passenger traffic	-0.8	-14.0	-7.7	-13.6	-12.6		
Central government tax revenue	25.0	26.0	-4.6	-3.5	-18.6		
	Q3 07-08	Q4 07-08	Q1 08-09	Q2 08-09	Q3 08-09		
Real GDP	**8.8**	**8.8**	**7.9**	**7.6**	**5.3**		
Corporate sales	18.5	24.0	31.4	34.6	13.3		
Corporate profit (2520 companies)	21.2	7.1	4.7	-25.4	-25.6		
Source: CSO, Ministry of Commerce, CMIE and Economic Times.							

Global crisis impact on India's real economy from September 08

Growth Prospects: 2008-09 and 2009-10

GDP Forecasts

- Methodology:
  - Use of an index of leading economic indicators (LEI)
  - Also a external shock in the form of a dummy variable

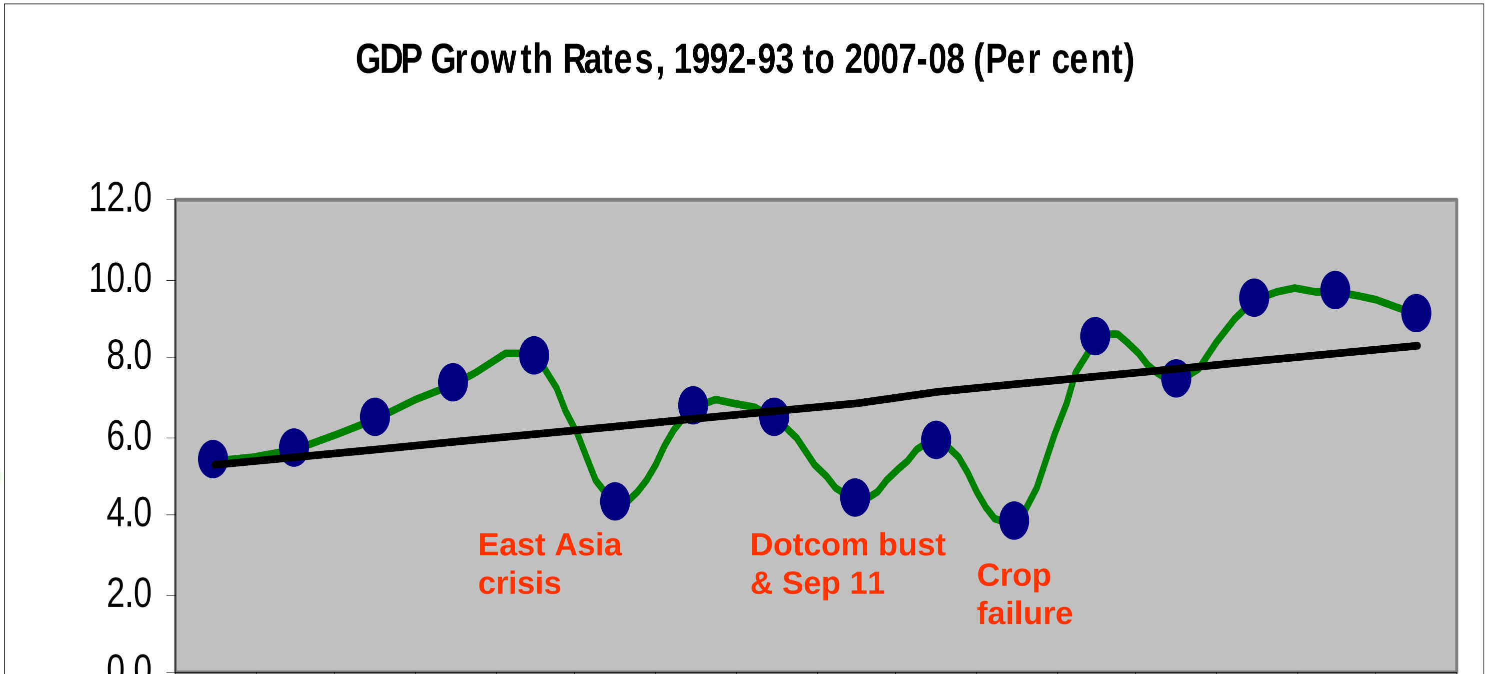
GDP Forecasts…

- LEI Consists of:
  - (i) production of machinery and equipment
  - (ii) non-food credit
  - (iii) railway freight traffic
  - (iv) cement sales
  - (v) net sales of the corporate sector
  - (vi) fuel and metal prices
  - (vii) real rate of interest
  - (viii) BSE sensex and
  - (ix) exports

Index of Leading Economic Indicators (LEI)….

- Composite index constructed for 1997-08 with quarterly growth series
- Principal component index (PCI) method
  - Weights assigned through iteration process based on the contribution to total variation in the composite index
- LEI predicts future growth based on the past, 5-quarter in advance
- Cannot capture the effects of sudden external shocks having immediate impact on growth
  - East Asia crisis, 1997-98
  - Dotcom bust and September 11 incident in 2000-01 and 2001-02
  - Crop failure in 2002-03
  - Current shock of US financial crisis in 2008-09 and 2009-10

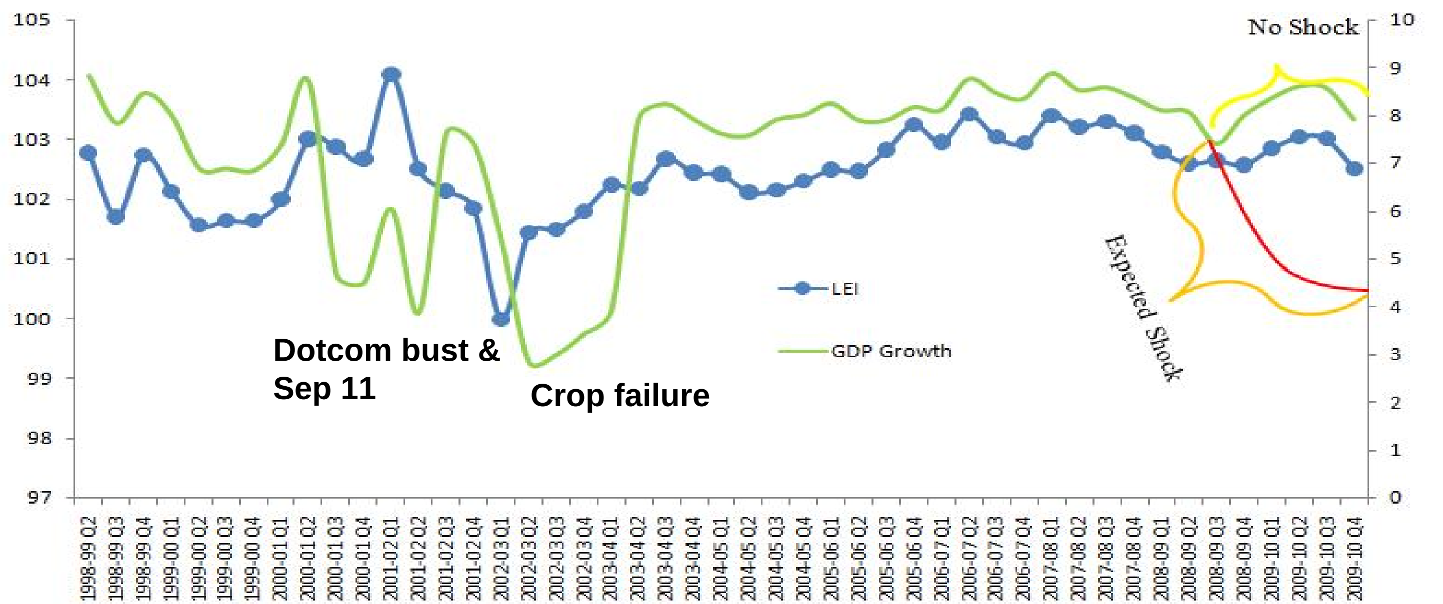
External Shocks & India's GDP Growth



	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
GDP	5.4	5.7	6.4	7.3	8.0	4.3	6.7	6.4	4.4	5.8	3.8	8.5	7.5	9.5	9.7	9.0

External shocks bring down India's growth sharply

Projection of Growth Rate through Index of Leading Indicators & a Shock Variable



The estimated equation for GDP growth forecast, given below, is satisfactory with adjusted **R-square** value of **0.65** and all the **co-efficients** significant at **99% level**.

$$GrGDPt = 7.98 + 1.34\ LEI\ (t\text{-}5) \quad - 3.70\ Dummy$$
$$\qquad\qquad (4.70) \qquad\qquad (-7.56)$$

Growth Prospects of India

•Based on leading Indicators and a shock variable to incorporate the global crisis, the growth rates for 2008-09 and 2009-10 are projected as:

GDP Growth Forecast for 2008-09 and 2009-10

	No Shock	With Shock	Shock Moderated by Policy Response
2008-09	7.9	**6.3**	6.3
2009-10	8.4	**4.8**	5.5

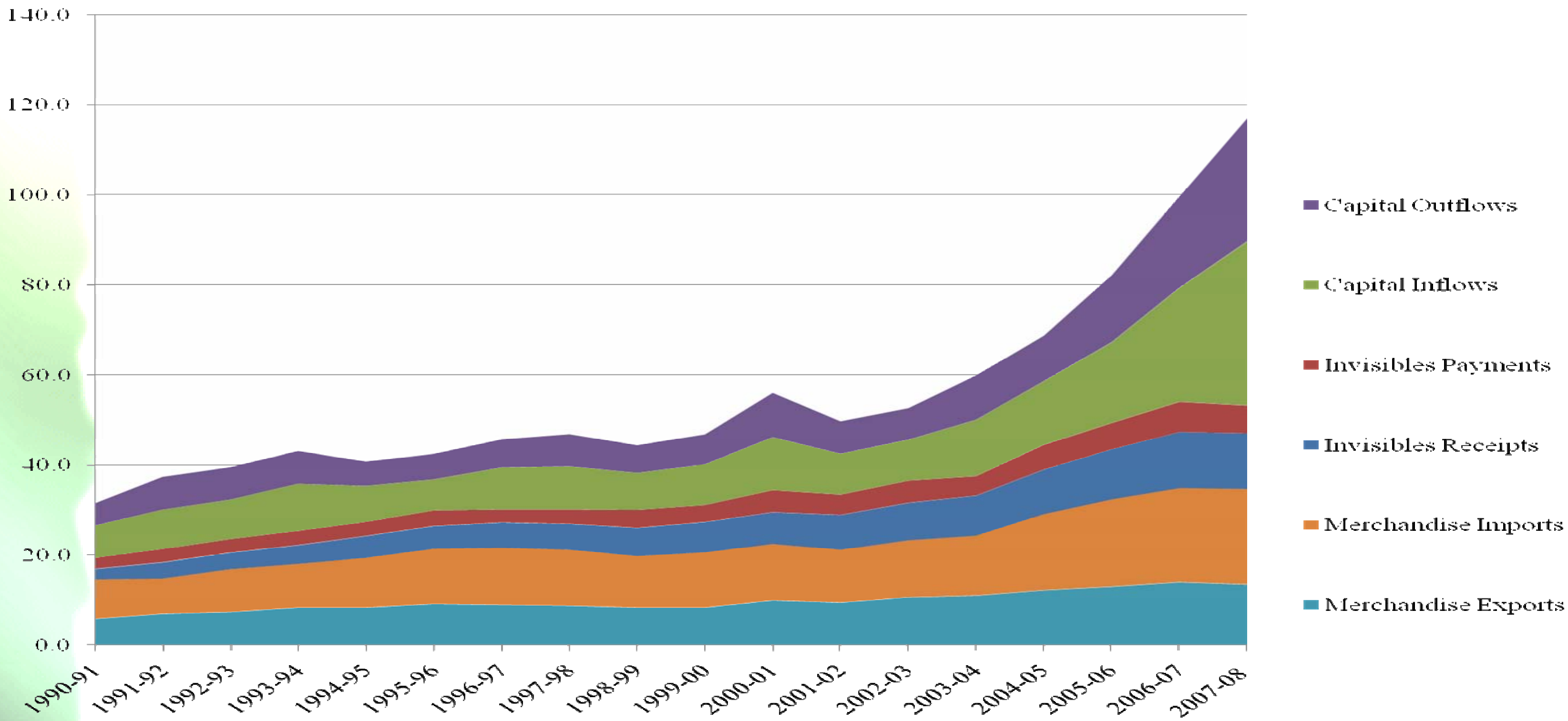
Three scenarios of growth and third one assumes the impact of policy stimulus

Concluding Remarks

- India is seriously affected by the global crisis
- Growth to come down sharply but not below zero
- Soundness of banking, cautious capital account opening, and high reserve level have saved the country
- Recovery possible in late 2009-10 or early 2010-11 provided the government is able to push through massive investment in social and physical infrastructure through public-private participation
- Structural and procedural reforms imperatives for restoring confidence and to raise the potential growth rate
- Huge fiscal deficits and record debt levels will damage recovery prospects

Thank You.

Deepening Global Integration
(Current Account & Capital Account as % GDP)



- *Current account transactions rising from less than 20% of GDP to 50%*
- *Both current and capital account transactions from less than a third of GDP to over 115%*