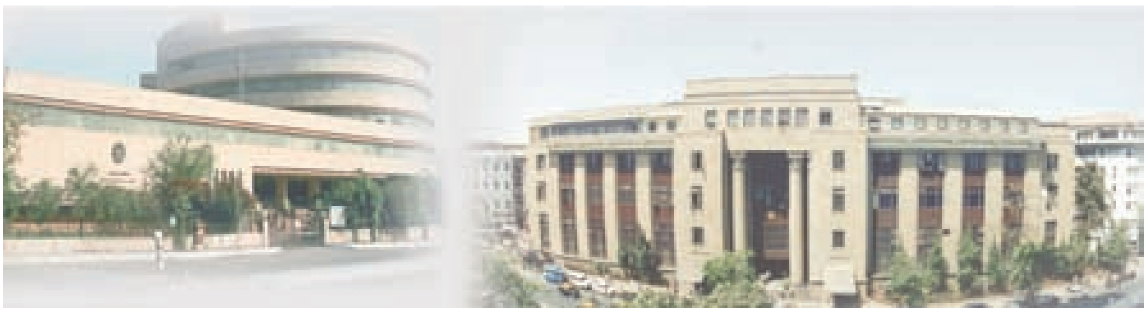
RESERVE BANK OF INDIA

BULLETIN

MAY 2009



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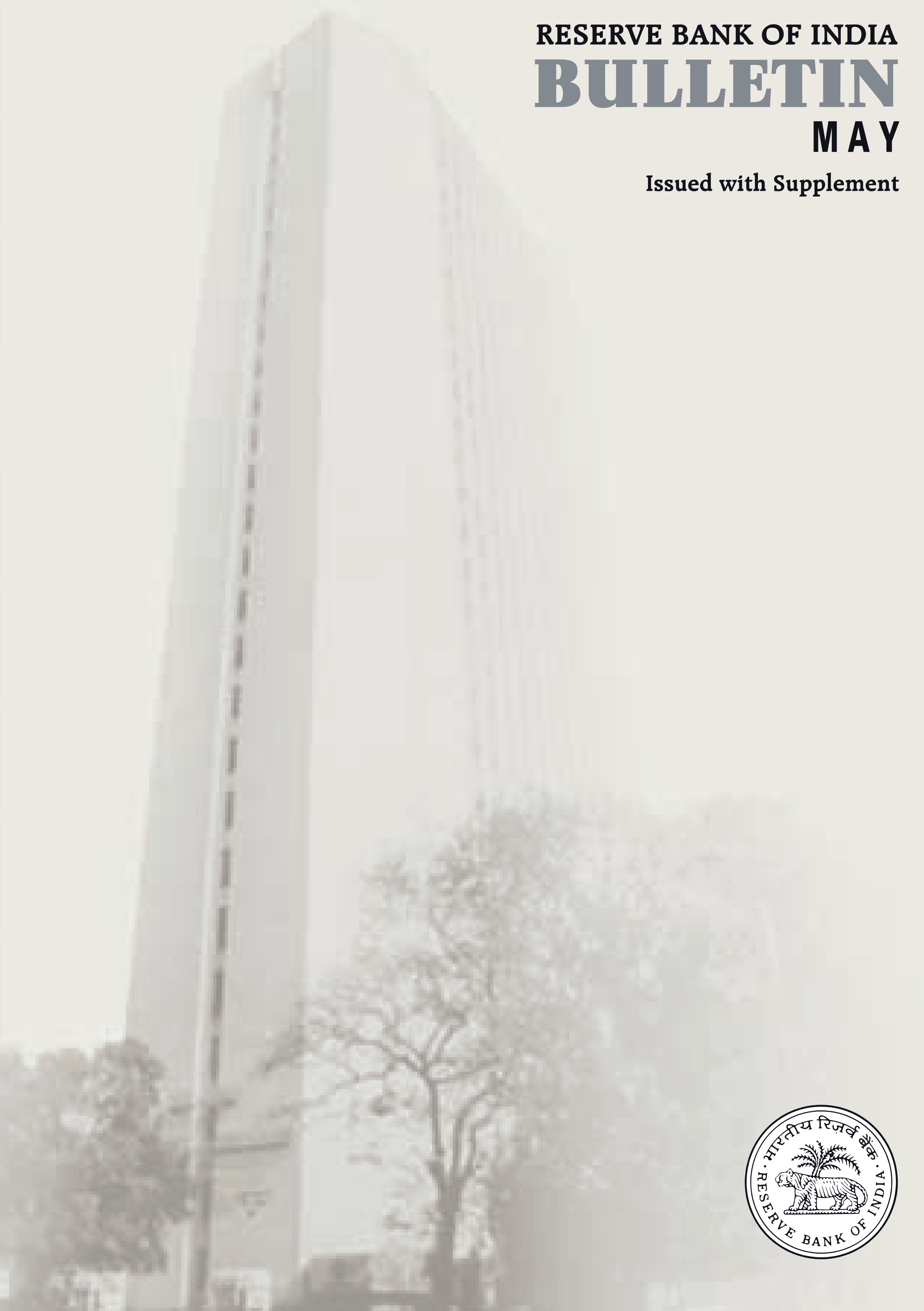

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Governor

Annual Policy Statement 2009-10 by Dr. D. Subbarao, Governor, Reserve Bank of India

This annual policy statement for 2009-10 is set in the context of exceptionally challenging circumstances in the global economy. The crisis has called into question several fundamental assumptions and beliefs governing economic resilience and financial stability. What started off as turmoil in the financial sector of the advanced economies has snowballed into the deepest and most widespread financial and economic crisis of the last 60 years. With all the advanced economies in a synchronised recession, global GDP is projected to contract for the first time since the World War II, anywhere between 0.5 and 1.0 per cent, according to the March 2009 forecast of the International Monetary Fund (IMF). The World Trade Organisation (WTO) has forecast that global trade volume will contract by 9.0 per cent in 2009.

2. Governments and central banks around the world have responded to the crisis through both conventional and unconventional fiscal and monetary measures. These measures have been criticised for their size, timing, sequencing and design as also, more importantly, for their economic and ideological underpinnings. The most voluble criticism has been that 'purely national responses' are inadequate to address a virulent global crisis. In recognition of a pressing need for global co-ordination and co-operation, particularly in order to inspire the trust and confidence of economic agents around the world, leaders of the G-20 group of nations met twice in the last six months. At their recent meeting in early April 2009, the G-20 leaders collectively committed to take decisive, co-ordinated and comprehensive actions to revive growth, restore stability of

the financial system, restart the impaired credit markets and rebuild confidence in financial markets and institutions.

3. Despite some apprehensions prior to the meeting, the overall impact of the G-20 meeting in managing market perceptions has been positive. Even so, the global financial situation remains uncertain and the global economy continues to cause anxiety for several reasons. There is as yet no clear estimate of the quantum of tainted assets, and doubts persist on whether the initiatives underway are sufficient to restore the stability of the financial system. There is continued debate on the adequacy of the fiscal stimulus packages across countries, and their effectiveness in arresting the downturn, reversing job losses and reviving consumer confidence. Many major central banks have nearly or totally exhausted their conventional weaponry of calibrating policy interest rates and are now resorting to unconventional measures such as quantitative and credit easing. Given the erosion of the monetary policy transmission mechanism, there are concerns about when and to what extent monetary response, admittedly aggressive, will begin to have an impact on reviving credit flows and spurring aggregate demand.

4. Like all emerging economies, India too has been impacted by the crisis, and by much more than what was expected earlier. The extent of impact has caused dismay, mainly on two grounds: first, because our financial sector remains healthy, has had no direct exposure to tainted assets and its off-balance sheet activities have been limited; and second, because India's merchandise exports, at less than 15 per cent of GDP, are relatively modest. Despite these mitigating factors, the impact of the crisis on India evidences the force of globalisation as also India's growing two-way trade in goods and services and financial integration with the rest of the world.

5. After clocking annual growth of 8.9 per cent on an average over the last five years (2003-08), India was headed for a cyclical downturn in 2008-09. But the growth moderation has been much sharper because of the negative impact of the crisis. In fact, in the first two quarters of 2008-09, the growth slowdown was quite modest; the full impact of the crisis began to be felt post-Lehman in the third quarter, which recorded a sharp downturn in growth. The services sector, which has been our prime growth engine for the last five years, is slowing, mainly in construction, transport and communication, trade, hotels and restaurants sub-sectors. For the first time in seven years, exports have declined in absolute terms for five months in a row during October 2008-February 2009. Recent data indicate that the demand for bank credit is slackening despite comfortable liquidity in the system. Dampened demand has dented corporate margins while the uncertainty surrounding the crisis has affected business confidence. The index of industrial production (IIP) has been nearly stagnant in the last five months (October 2008 to February 2009), of which two months registered negative growth. Investment demand has also decelerated. All these indicators suggest that growth will moderate more than what had been expected earlier.

6. Despite the adverse impact as noted above, there are several comforting factors that have helped India weather the crisis.

By Dr. D. Subbarao
Governor

First, our financial markets, particularly our banks, have continued to function normally. Second, India's comfortable foreign exchange reserves provide confidence in our ability to manage our balance of payments notwithstanding lower export demand and dampened capital flows. Third, headline inflation, as measured by the wholesale price index (WPI), has declined sharply. Consumer price inflation too has begun to moderate. Fourth, because of mandated agricultural lending and social safety-net programmes, rural demand continues to be robust.

7. Both the Government and the Reserve Bank responded to the challenge of minimising the impact of crisis on India in co-ordination and consultation. The Reserve Bank shifted its policy stance from monetary tightening in response to the elevated inflationary pressures in the first half of 2008-09 to monetary easing in response to easing inflationary pressures and moderation of growth engendered by the crisis. The Reserve Bank's policy response was aimed at containing the contagion from the global financial crisis while maintaining comfortable domestic and forex liquidity. Taking a cue from the Reserve Bank's monetary easing, most banks have reduced their deposit and lending rates.

8. The Central Government launched three fiscal stimulus packages during December 2008-February 2009. These stimulus packages came on top of an already announced expanded safety-net programme for the rural poor, the farm loan waiver package and payout following the Sixth Pay Commission report, all of which too added to stimulating demand.

9. This annual policy statement for 2009-10 is organised in two parts. Part A covers *Monetary Policy* which provides an assessment of the *Macroeconomic and Monetary Developments* (Section I), the *Stance of Monetary Policy* (Section II) and *Monetary Measures* (Section III). Part B on *Developmental and Regulatory Policies* covers *Financial Stability* (Section I), *Interest Rate Policy* (Section II), *Financial Markets* (Section III), *Credit Delivery Mechanism and other Banking Services* (Section IV), *Prudential Measures* (Section V) *and Institutional Developments* (Section VI). This statement should be read and understood together with the analytical review of *Macroeconomic and Monetary Developments* released yesterday.

Part A. Monetary Policy Statement 2009-10

I. Macroeconomic and Monetary Developments

Global Outlook

10. The global outlook has continued to deteriorate in the last quarter with projections for global growth in 2009 undergoing rapid downward revision. According to the IMF's March 2009 forecast, global growth is projected to shrink by 0.5 to 1.0 per cent in 2009 in contrast to an expansion of 3.2 per cent in 2008. Other projections are even more dire. The World Bank estimates global GDP to contract by 1.7 per cent and the OECD by as much as 2.7 per cent. In the US, economic activity has declined sharply, driven mainly by the decline in consumption and exports. The Euro area

too is in a severe and synchronised contraction. Reflecting sharp demand contraction, consumer price inflation has reached near zero in several advanced countries, raising concerns about sustained deflation on the way forward. The unemployment rate in the US has risen to 8.5 per cent, the highest since 1983. Unemployment rates in the Euro area, the UK and Japan too increased significantly. The WTO projects that global trade will shrink by 9.0 per cent in volume terms in 2009, down from an increase of 2.0 per cent in 2008. Between 1990 and 2007, global trade grew twice as fast as global GDP; in a sharp reversal of this 'trade as the engine of growth' paradigm, in 2009 global trade is projected to shrink twice as much as global GDP.

11. In advanced countries, substantial injection of liquidity and successive cuts in the policy rates have resulted in the softening of short-term interest rates, particularly in the overnight segment. However, the transmission to the credit market has been impaired, suggesting that the process of deleveraging is incomplete, asset prices have yet to stabilise and that credit spreads need to narrow further. Banks and financial institutions are still in the process of recognising losses arising out of off-balance sheet exposures. This raises concerns about the extent of required recapitalisation, and this uncertainty is inhibiting fresh lending. Most importantly, the global financial system is yet to recover the forfeited trust and confidence. Under the G-20 initiative, efforts are underway to strengthen the global financial architecture and restore the global growth momentum through co-ordinated actions.

Emerging Market Economies

12. The IMF projects that the GDP growth of EMEs will decelerate to a range of 1.5-2.5 per cent in 2009, down from 6.1 per cent in 2008. This downturn is clear evidence that the forces of globalisation are too strong for the decoupling hypothesis to work. Even across EMEs, there are wide variations: several countries are likely to post negative growth, while significant positive contributions are expected from China and India. The crisis spread from advanced countries to EMEs, as is now clear, through both trade and finance channels. The slump in export demand and tighter trade credit caused deceleration in aggregate demand; reversal of capital flows led to equity market losses and currency depreciations; global liquidity tightening resulted in lower external credit flows to EMEs; and market rigidities and erosion of confidence led to widening of credit spreads. Like advanced countries, EMEs too responded to the challenge of managing the crisis through fiscal and monetary actions, but these measures will not have full impact until the global situation stabilises and trade and credit flows are restored. The G-20 commitment to desist from all forms of protectionism and to maintain open trade and investment regimes is a source of comfort to EMEs in an otherwise discouraging external environment.

Domestic Outlook

13. Economic activity in India slowed down in Q1 and Q2 of 2008-09 as compared with over 9.0 per cent growth in the previous three years. However, growth decelerated sharply in Q3 following the failure of Lehman Brothers in mid-September 2008

and knock-on effects of the global financial crisis on the Indian economy. Consequently, the growth rate during the first three quarters (April-December) of 2008-09 slowed down significantly to 6.9 per cent from 9.0 per cent in the corresponding period of the previous year (Table 1). The advance estimates of the Central Statistical Organisation (CSO) released in February 2009 have placed the real GDP growth for 2008-09 at 7.1 per cent.

14. The last Annual Policy Statement of the Reserve Bank released in April 2008 placed real GDP growth for 2008-09 in the range of 8.0-8.5 per cent. Around that time, the IMF had projected the global growth to be at 3.7 per cent in 2008. As the year progressed and the crisis unfolded, economic prospects globally deteriorated rapidly and at home in India in Q3 2008-09. Beginning July 2008, the IMF made frequent reductions in its growth forecasts for 2008. The Reserve Bank too reflected the deteriorating outlook by revising downward its growth projection for India for 2008-09 to 7.5-8.0 per cent in the Mid-Term Review (October 2008) and further down to 7.0 per cent with a downward bias in the Third Quarter Review (January 2009). The downside risks have since materialised and the GDP growth for 2008-09 is now projected to turn out to be in the range of 6.5 to 6.7 per cent.

Agriculture

15. The second advance estimates of the Ministry of Agriculture released in February 2009 have placed total foodgrains production in 2008-09 at 227.9 million tonnes, lower than the production of 230.8 million tonnes in the previous year. Subsequent information on good sowing for *rabi* crops and the trend in procurement suggests that agricultural production during 2008-09 may turn out to be better than earlier anticipated.

Industry

16. During 2008-09 so far (April-February), industrial growth based on the index of industrial production (IIP), decelerated to 2.8 per cent, down by more than two-third from 8.8 per cent in the corresponding period of the previous year. While IIP growth was 5.0 per cent in the first half of 2008-09, the average growth in the following five months was insignificant (0.2 per cent). There, however, have been some incipient positive signs. Although the IIP contracted by 1.2 per cent in February 2009, machinery and equipment (other than transport

Table 1: Real GDP Growth (%)

Sector	Q1 (April-June)		Q2 (July-September)		Q3 (October-December)		April-December	
	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
Agriculture	4.4	3.0	4.4	2.7	6.9	-2.2	5.5	0.6
Industry	8.5	5.2	7.5	4.7	7.6	0.8	7.9	3.5
Services	10.7	10.2	10.7	9.6	10.1	9.5	10.5	9.7
Overall	**9.1**	**7.9**	**9.1**	**7.6**	**8.9**	**5.3**	**9.0**	**6.9**

Source: Central Statistical Organisation (CSO).

equipment) exhibited double digit growth. In terms of use-based classification, capital goods production too registered double digit growth.

Demand Components of GDP

17. Private consumption and investment demand decelerated during Q3 of 2008-09. Government consumption demand, however, registered a sharp increase, reflecting the partial payout of the Sixth Pay Commission Award and other fiscal stimulus measures. As a result, the share of government consumption demand in GDP increased significantly. Deceleration in net exports growth in the successive quarters of 2008-09 had an adverse impact on the overall GDP growth (Table 2).

Corporate Performance

18. After registering robust growth during the five year period 2003-08, the performance of the private non-financial corporate sector deteriorated in the first three quarters of 2008-09. Sales growth of companies, which continued to be strong in Q1 and Q2, decelerated sharply in Q3 of 2008-09. Net profits, which recorded an average annual growth of over 40 per cent during 2003-08, recorded a significantly lower growth in the first quarter of 2008-09. In the second quarter, net profits declined, although gross profits continued to increase, *albeit* marginally. In the third quarter, even gross profits declined sharply (Table 3). Profit margins were eroded by higher input costs, increased interest outgo, significant drop in non-sales income and losses on foreign currency related transactions. While moderation in internal accruals has an adverse effect on corporate investment, decline in input prices and reduction in borrowing costs may have a favourable impact on profitability going forward.

Business Confidence

19. The Industrial Outlook Survey of the Reserve Bank for January-March 2009 indicates a further worsening of perception for the Indian manufacturing sector. The

Table 2: Demand Components of GDP

Item	2008-09 Advance Estimates	2008-09		
		Q1	Q2	Q3
	y-o-y Growth Rate (%)			
Private Final Consumption Expenditure	6.8	7.7	6.9	5.4
Government Final Consumption Expenditure	16.8	7.1	7.9	24.6
Gross Fixed Capital Formation	8.9	10.1	15.1	5.3
Net Exports	-60.5	-231.5	-63.8	-54.2
	Share in GDP (%)			
Private Final Consumption Expenditure	57.0	59.8	58.0	59.5
Government Final Consumption Expenditure	10.6	10.3	8.7	10.0
Gross Fixed Capital Formation	32.1	32.3	35.3	31.0
Net Exports	-6.5	-2.5	-10.7	-7.5

Source: Central Statistical Organisation (CSO).

Table 3: Private Corporate Sector – Growth Rates (%)

Item	2006-07	2007-08	2008-09		
			Q1	Q2	Q3
Sales	26.5	18.3	29.3	31.8	9.5
Expenditure	24.7	18.4	33.5	37.5	12.6
Gross Profits	44.7	22.8	11.9	8.7	-26.7
Net Profits	44.0	26.2	6.9	-2.6	-53.4

overall business and financial sentiment, which touched a seven-year low in the preceding quarter, slid below the neutral 100 mark, for the first time since the compilation of the index began in 2002. According to the survey, the demand for working capital finance during January-March 2009 from external sources dropped due to slowdown in business, even as the availability of finance eased. The business confidence surveys conducted by other agencies are also consistent with these findings.

Lead Indicators

20. In terms of lead indicators of the economy, economic activity in several services sectors has been moderating. Cargo handled at major ports, passengers handled at airports, railway freight traffic and arrival of foreign tourists registered lower/negative growth. Strong rural demand, lagged impact of monetary and fiscal stimuli, softening of domestic input prices, investment demand from brown-field projects and some restructuring initiatives are expected to have a positive impact on industrial production in the months ahead.

Inflation

21. Headline inflation, as measured by year-on-year variations in the wholesale price index (WPI), decelerated sharply from its intra-year peak of 12.91 per cent on August 2, 2008 to 0.26 per cent by March 28, 2009. In terms of relative contribution to the fall in WPI inflation since August 2008, mineral oils and basic metals (combined weight 15.3 per cent in WPI) together accounted for over 83 per cent of the decline reflecting global trend in commodity prices. The prices of food articles, however, are still ruling high. The inflation based on various consumer price indices (CPIs) continues to be near double-digit level mainly reflecting a firm trend in prices of food articles (Table 4). WPI inflation declined further to 0.18 per cent as on April 4, 2009.

22. The analysis of the last four years suggests that WPI inflation and CPI inflation moved, by and large, in tandem till April 2007. Thereafter, inflation measured in WPI and CPI tended to diverge. However, the divergence in the recent period has been unusually high reflecting the volatilities in commodity prices which have a higher weight in WPI (Chart 1). With the decline in WPI inflation, CPI inflation is expected to moderate in the coming months. For its overall assessment of inflation outlook for policy purposes, the Reserve Bank continuously monitors the full array of price indicators.

Fiscal Scenario

23. The finances of the Central Government in 2008-09 deviated significantly from the Budget Estimates (BE). Higher revenue expenditure together with lower revenue receipts led to a sharp increase in the revenue and fiscal deficits. The deviation of deficit indicators from the targets stipulated under the Fiscal

Table 4: Annual Inflation Rate (%)		
Wholesale Price Index (WPI)	**March 29, 2008 (y-o-y)**	**March 28, 2009 (y-o-y)**
WPI - All Commodities	7.75	0.26
WPI - Primary Articles	9.68	3.46
WPI - Food Articles	6.54	6.31
WPI - Fuel Group	6.78	-6.11
WPI - Manufactured Products	7.34	1.42
WPI - Manufactured Food Products	9.40	7.51
WPI - Excluding Fuel	8.01	2.01
WPI - Excluding Food Articles and Fuel	8.38	0.95
Consumer Price Index (CPI)	**February 2008 (y-o-y)**	**February 2009 (y-o-y)**
CPI - Industrial Workers	5.47	9.63
CPI - Agricultural Labourers	6.38	10.79
CPI - Rural Labourers	6.11	10.79
CPI - Urban Non-manual Employees #	4.84	10.38

: Pertains to January.

Responsibility and Budget Management (FRBM) Rules was on account of several fiscal stimulus measures undertaken by the Government to boost aggregate demand. The financing gap was met by enhancement of market borrowings (Table 5).

24. Because of the fiscal stimulus packages as also additional post-budget items of expenditure, Central Government's borrowing during 2008-09 was substantially above the initial budget estimates. In fact, the actual net borrowing was more than two and half times the initial budget estimate (Table 6).

25. The net amount raised by the government by way of dated securities, additional Treasury Bills and MSS de-sequestering aggregated Rs.2,98,536 crore during 2008-09. In addition, special securities (oil and fertiliser bonds) issued

Chart 1: Inflation Rates - WPI and CPI-IW

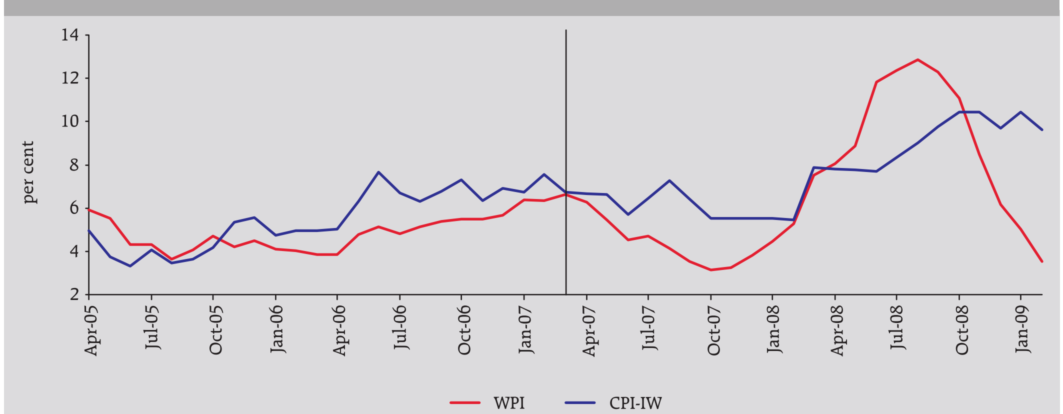


Table 5: Fiscal Position of the Central Government: 2008-09			
Item	**Amount (Rs. crore)**		**Difference (per cent)**
	Budget Estimates	**Revised Estimates**	
1. Revenue Receipts	6,02,935	5,62,173	-6.8
2. Capital Receipts	1,47,949	3,38,780	129.0
of which: Market Loans	1,00,571	2,61,972	160.5
3. Non-Plan Expenditure	5,07,498	6,17,996	21.8
4. Plan Expenditure	2,43,386	2,82,957	16.3
5. Revenue Expenditure	6,58,119	8,03,446	22.1
6. Capital Expenditure	92,765	97,507	5.1
7. Revenue Deficit	55,184 (1.0)	2,41,273 (4.4)	337.2
8. Fiscal Deficit	1,33,287 (2.5)	3,26,515 (6.0)	145.0

Notes : (i) The receipts are net of repayments.
(ii) Figures in parentheses are percentages to GDP.
Source: Interim Budget 2009-10 of the Central Government.

by the Central Government outside the market borrowing programme amounted to Rs.95,942 crore in 2008-09. As against the initial estimate of Rs.47,044 crore, the State Governments raised a net amount of Rs.1,03,766 crore during 2008-09 (Table 7). The combined market borrowings of the Central and State Governments in 2008-09 were nearly two and half times their net borrowings in 2007-08. Even as the increase in borrowing was large and abrupt, it was managed in a non-disruptive manner through a combination of measures such as unwinding under the market stabilisation scheme (MSS), open market operations and easing of monetary conditions. The weighted average yield of Central Government dated securities issued during 2008-09 was lower at 7.69 per cent as compared with 8.12 per cent in the preceding year. The weighted average maturity of these securities was 13.80 years, which was lower than 14.90 years in 2007-08.

Table 6: Central Government Borrowings: 2008-09			
			(Rs. crore)
Item	**BE (February 2008)**	**RE (March 2009)**	**Actual**
Gross Borrowing *	1,76,453	3,42,769	3,18,550
Net Borrowing	1,13,000	3,29,649	2,98,536

* Pertains to dated securities and 364-day Treasury Bills.

26. Reflecting the continued need for fiscal stimulus in 2009-10, the borrowing requirements of both the Central and State Governments are estimated to be higher as compared with 2008-09 (Table 8).

27. According to the borrowing calendar released for the first half (April-September) of 2009-10, net market borrowings of the Central Government are likely to be of the order of Rs.2,07,364 crore. However, after adjusting for MSS unwinding and the Reserve Bank's support by way of open

Table 7: Net Market Borrowings of the Central and State Governments

(Rs.crore)

Item	2007-08	2008-09
A. Central Government	**1,08,998**	**2,98,536**
i. Dated Securities	1,10,671	2,16,972
ii. Additional 364-day T-Bills	-1,167	13,345
iii. Additional 182-day T-Bills	-76	10,995
iv. Additional 91-Day T-Bills	-431	45,224
v. MSS De-sequestering	0	12,000
B. State Governments	**56,224**	**1,03,766**
Total (A+B)	**1,66,895**	**4,02,302**
Memo Items:		
i. Special Securities Issued outside the Market Borrowing Programme	38,050	95,942
ii. Net Issuances under MSS	1,05,691	-81,781

market operations, net supply of fresh securities is expected to be of the order of Rs.85,364 crore. Although the fresh supply of securities will be higher than the first half of the last year, it will be of much lower order as compared with the first half of 2007-08 (Table 9).

28. Keeping in view the large budgeted government market borrowing in 2009-10 coming on top of a substantial expansion in market borrowing in 2008-09, it was important for the Reserve Bank to provide comfort to the market so that the borrowing programme is conducted in a non-disruptive manner. Accordingly, the Reserve Bank simultaneously indicated its intention to purchase government securities under open market operations (OMO) for an indicative amount of Rs.80,000 crore during the first half of 2009-10.

Table 8: Borrowings of the Central and State Governments: 2009-10

(Rs. crore)

Item	2008-09	2009-10
Central Government		
Gross Market Borrowings	3,18,550	3,98,552
Net Market Borrowings	2,98,536	3,08,647 *
State Governments		
Net Market Borrowings	1,03,766	1,26,000 **
Total Net Market Borrowings	**4,02,302**	**4,34,647**

* Interim Budget Estimates.

** Estimated. The State Governments have been allowed an additional 0.5 per cent of Gross State Domestic Product (GSDP) as a part of the fiscal stimulus package.

29. To contain the growth slowdown during 2008-09, the Central Government announced three fiscal stimulus measures during December 2008-February 2009. The Government had also provided additional expenditure of Rs.1,48,093 crore (2.7 per cent of GDP) through two supplementary demands for grants during October-December 2008. The total revenue loss due to tax reductions amounted to Rs.8,700 crore (0.2 per cent of GDP) in 2008-09 and Rs.28,100 crore (0.5 per cent of GDP) in 2009-10. The additional stimulus measures during 2008-09 work out to about 2.9 per cent of GDP. Furthermore, the revenue collection was adversely impacted by the economic slowdown. Consequently, the Interim Budget for 2009-10 revised the estimates for 2008-09 – revenue deficit to 4.4 per cent and the fiscal deficit to 6.0 per cent of GDP as against the budget estimates of 1.0 per cent and 2.5 per cent, respectively. In addition, special bonds amounting to 1.8 per cent of GDP were issued to oil marketing companies and fertiliser companies during 2008-09.

30. As per the Interim Budget 2009-10, the revenue deficit and the fiscal deficit are projected to decline only moderately to 4.0 per cent and 5.5 per cent, respectively during 2009-10. The Government in its

Table 9: Central Government Borrowings: First Half of the Fiscal Year (Dated Securities)

(Rs. crore)

Item	First Half (April-September) Borrowings		
	2007-08	2008-09	2009-10
Gross Market Borrowings	**97,000**	**1,06,000**	**2,41,000**
Less: Repayments	30,554	44,028	33,636
Net Market Borrowings	**66,446**	**61,972**	**2,07,364**
Less: OMO Purchases	0	0	80,000
Less: MSS Unwinding*	0	0	42,000
Add: MSS Issuances (net)*	69,077	5,263	0
Net Supply of Fresh Securities	**1,35,523**	**67,235**	**85,364**

* Includes dated securities and Treasury Bills.

macroeconomic framework statement, indicated that in view of the compelling need to adjust the fiscal policy to take care of exceptional circumstances through which the economy is passing, the fiscal consolidation process has to be put on hold temporarily. The process of fiscal consolidation should resume once there is an improvement in economic conditions.

31. Currently available information indicates that the consolidated budgeted revenue surplus of the States in 2008-09 may not materialise. Consequently, the consolidated fiscal deficit of the States is expected to rise to around 3.0 per cent of GDP. The combined fiscal deficit of the Central and State Governments during 2008-09 would be about 9.0 per cent of GDP. Accounting for special securities issued by the Central Government outside the market borrowing programme, the combined fiscal deficit works out to about 10.8 per cent of GDP. While some of the increase in the revenue and fiscal deficits is on account of post-budget expenditure commitments such as payment of arrears resulting from the Sixth Pay Commission Award, a substantial increase is also due to the economic downturn arising from the impact of the global financial crisis. Although the fiscal stimulus packages have meant deviation from the roadmap laid out by the FRBM Act, reversing the consolidation process of the last several years, they were warranted under the prevailing circumstances. It is critically important, however, that the Centre and States re-anchor to a revised FRBM mandate once the immediacy of the crisis is behind us.

Monetary Conditions

32. Growth in key monetary aggregates – reserve money (RM) and money supply (M_3) – in 2008-09 reflected the changing liquidity positions arising from domestic and global financial conditions and the monetary policy response. Reserve money variations during 2008-09 largely reflected the increase in the currency in circulation and reduction in the cash reserve ratio (CRR) of banks.

33. As indicated in the Third Quarter Review, reduction in the CRR has three

inter-related effects on reserve money. First, it reduces reserve money as bankers' required cash deposits with the Reserve Bank fall. Second, the money multiplier rises. Third, with the increase in the money multiplier, M3 expands with a lag. While the initial expansionary effect is strong, the full effect is felt in 4-6 months. Reflecting these changes, the year-on-year increase in reserve money in 2008-09 was much lower than in the previous year. However, adjusted for the first round effect of CRR reduction, deceleration in reserve money growth was less pronounced. The annual M3 growth in 2008-09, though lower compared with the previous year, was also below the trajectory projected in the Third Quarter Review of January 2009 (Table 10).

34. Monetary management during 2008-09 was dominated by the response to the spillover effects of global financial crisis and the need to address slackening of domestic demand conditions, especially during the third quarter. As the Reserve Bank had to provide foreign exchange liquidity to meet the demand from importers and contain volatility in the foreign exchange market arising out of capital outflows by foreign institutional investors (FIIs), its net foreign exchange assets (NFEA) declined. This had an overall contractionary effect on rupee liquidity. The Reserve Bank addressed this issue by providing rupee liquidity through expansion of net domestic assets (NDA) by (i) conventional open market operations; (ii) special 14-day term repo facility for banks; (iii) buy-back of securities held under the market stabilisation scheme; (iv) special market operations, including the purchase of oil bonds; (v) enlargement of export credit refinance window; (vi) special refinance facility for banks for addressing the liquidity concerns of NBFCs, mutual funds and housing finance companies; (vii) special refinance facility for financial institutions (SIDBI, NHB and Exim Bank); and (viii) funding to NBFCs through a special purpose vehicle (SPV). Thus, a notable feature of monetary operations during the second half of 2008-09 was the substitution of foreign assets by domestic assets. Consequently, liquidity conditions have remained comfortable since mid-November 2008 as reflected in the LAF window being generally in the absorption mode and the call/notice rate remaining near or below the lower bound of the LAF corridor consistent with the stance of monetary policy.

Table 10: Annual Variations in Monetary Aggregates

(Per cent)

Item	Annual Variations	
	2007-08	2008-09
Reserve Money	31.0	6.4
Reserve Money (adjusted for CRR changes)	25.3	19.0
Currency in Circulation	17.2	17.0
Money Supply (M3)	21.2	18.4
M3 (Policy Projection)	17.0-17.5 *	19.0 **
Money Multiplier	4.33	4.82

* Policy projection for the financial year as indicated in the Annual Policy Statement 2008-09 (April 2008).

** Policy projection for the financial year as indicated in the Third Quarter Review of Monetary Policy 2008-09 (January 2009).

Credit Conditions

35. During 2008-09, the growth in non-food bank credit (year-on-year basis) decelerated from a peak of 29.4 per cent in

October 2008 to 17.5 per cent by March 2009. At this rate, non-food credit expansion was lower than that of 23.0 per cent in 2007-08 as also the indicative projection of 24.0 per cent set in the Third Quarter Review of January 2009. The intra-year changes in credit flow could be attributed to several factors. First, the demand for bank credit increased sharply during April-October 2008 as corporates found that their external sources of credit had dried up, and shifted that demand to domestic credit. Second, there was a sharp increase in credit to oil marketing companies by Rs.36,208 crore during April-October 2008 as compared with a decline of Rs.1,146 crore in the corresponding period of the previous year. In the subsequent period, however, the demand for credit moderated reflecting the slowdown of the economy in general and the industrial sector in particular. Working capital requirements had also come down because of decline in commodity prices and drawdown of inventories by the corporates. The demand for credit by oil marketing companies also moderated. In addition, substantially lower credit expansion by private and foreign banks also muted the overall flow of bank credit during the year (Table 11).

36. Commercial banks' investment in SLR securities, adjusted for LAF, declined marginally from 28.4 per cent of NDTL in March 2008 to 26.7 per cent in March 2009.

37. According to the data at a disaggregated level drawn from 49 banks accounting for 95.0 per cent of total bank credit, the year-on-year growth in bank credit to industry as of February 2009 was broadly similar to that in the previous year. While credit flow to agriculture and real estate was significantly higher, it was lower for housing. As a result, industry's share in total credit flow increased significantly in 2008-09 (Table 12).

38. Significant variations have also been observed in the flow of credit to different

Table 11: Bank Group-wise Growth in Deposits and Credit

(Per cent)

Bank Group	As on March 28, 2008 (y-o-y)	As on March 27, 2009 (y-o-y)
	Deposits	
Public Sector Banks	22.9	24.1
Foreign Banks	29.1	7.8
Private Sector Banks	19.9	8.0
Scheduled Commercial Banks*	22.4	19.8
	Credit	
Public Sector Banks	22.5	20.4
Foreign Banks	28.5	4.0
Private Sector Banks	19.9	10.9
Scheduled Commercial Banks*	22.3	17.3

* Including RRBs.

Table 12: Annual Sectoral Flow of Credit

Sector	As on February 15, 2008 (y-o-y)			As on February 27, 2009 (y-o-y)		
	Amount (Rs. crore)	% share in total	Variations (per cent)	Amount (Rs. crore)	% share in total	Variations (per cent)
Agriculture	34,013	9.2	16.4	52,742	13.0	21.5
Industry	1,67,819	45.2	25.9	2,13,261	52.5	25.8
Real Estate	11,361	3.1	26.7	34,533	8.5	61.4
Housing	26,930	7.3	12.0	19,012	4.7	7.5
NBFCs	20,979	5.7	48.6	26,651	6.6	41.7
Overall Credit	**3,71,053**	**100.0**	**22.0**	**4,06,304**	**100.0**	**19.5**

Notes: 1. Credit growth for February 2008 is calculated with outstanding as on February 15, 2008 to obtain variation over comparable 26-week data.
2. Data are provisional.

sectors by the three broad bank groups during 2008-09. Credit growth by public sector banks to industry accelerated in 2008-09. However, credit growth to personal loans and services decelerated. Credit by all the three bank groups to real estate accelerated significantly, while that to small enterprises decelerated (Table 13).

Table 13: Sectoral Deployment of Credit: Bank Group-wise

Item	Variation (y-o-y) (%)					
	Public Sector Banks		Private Sector Banks*		Foreign Banks*	
	As on February 15, 2008	As on February 27, 2009	As on February 15, 2008	As on February 27, 2009	As on February 15, 2008	As on February 27, 2009
Non-food Gross Bank Credit (1 to 4)	**22.3**	**23.9**	**19.0**	**9.1**	**28.8**	**1.6**
1. Agriculture and Allied Activities	**19.3**	**19.2**	**- 1.3**	**39.0**	**NA**	**NA**
2. Industry	**23.2**	**31.0**	**35.2**	**7.4**	**35.0**	**6.5**
3. Personal Loans	**15.6**	**11.6**	**8.5**	**7.4**	**14.5**	**-8.1**
of which:						
Housing	13.2	10.0	13.5	4.9	- 2.1	-4.4
4. Services	**28.6**	**24.4**	**28.5**	**4.5**	**41.2**	**6.9**
of which:						
Real Estate Loans	47.9	79.1	6.9	13.9	- 36.0	40.5
Non-Banking Financial Companies	53.0	44.8	14.0	38.1	64.0	20.8
Memo Item						
Small Enterprises**	49.0	36.7	209.5	23.2	190.4	59.5

* The share of some private sector banks and foreign banks in total bank credit to agriculture and small scale enterprises is small.

** Includes small manufacturing and service enterprises.

NA: Not Available.

Note: See also footnotes to Table 12.

Total Flow of Resources to the Commercial Sector

39. The flow of resources from non-bank sources to the commercial sector throughout 2008-09 was lower than that in the previous year, reflecting depressed domestic and international capital market conditions. However, till mid-January 2009, higher bank credit growth compensated for the decline in resources from non-banks. Beginning from the fortnight ended January 16, 2009, non-food bank credit growth turned lower than the previous year. Reflecting moderation in both bank credit and funds from other sources, the total flow of resources to the commercial sector from banks and other sources during 2008-09 was significantly lower than that in the previous year (Table 14).

Interest Rates

40. Since mid-September 2008, the Reserve Bank has cut the repo rate by 400 basis points and the reverse repo rate by 250 basis points. The CRR was also reduced by 400 basis points of NDTL of banks (Table 15).

Table 14: Flow of Financial Resources to the Commercial Sector

(Rs. crore)

Item	2007-08	2008-09
From Banks	4,44,807	4,14,902
From Other Sources*	3,35,698	2,64,138
Total Resources	**7,80,505**	**6,79,040**

* Includes borrowings from financial institutions and NBFCs as well as resources mobilised from the capital market and by way of ECBs, FCCBs, ADRs/GDRs, FDI and short-term credit as per the latest available data, adjusted for double counting.

Note: Data in this table also include gross investments by LIC in corporate debt and infrastructure and social sector, which were not included in the corresponding table presented in Third Quarter Review, January 2009.

Table 15: Monetary Easing by the Reserve Bank since mid-September 2008

(Per cent)

Instrument	As at		Extent of Reduction (basis points)
	Mid-September 2008	Early March 2009	
Repo Rate	9.00	5.00	400
Reverse Repo	6.00	3.50	250
Cash Reserve Ratio @	9.00	5.00	400

@ Percentage of NDTL.

41. Taking cues from the reduction in the Reserve Bank's policy rates and easy liquidity conditions, all public sector banks, most private sector banks and some foreign banks have reduced their deposit and lending rates. The reduction in the range of term deposit rates between October 2008 - April 18, 2009 has been 125-250 basis points by public sector banks, 75-200 basis points by private sector banks and 100-200 basis points by five major foreign banks. The reduction in the range of BPLRs was 125-225 basis points by public sector banks, followed by 100-125 basis points by private sector banks and 100 basis points by five major foreign banks (Table 16).

Table 16: Reduction in Deposit and Lending Rates (October 2008 - April 2009*)

(Basis points)

Bank Group	Deposit Rates	Lending Rates (BPLR)
Public Sector Banks	125-250	125-225
Private Sector Banks	75-200	100-125
Five Major Foreign Banks	100-200	0-100

* As on April 18, 2009.

Table 17: Movements in Deposit and Lending Rates

(Per cent)

Interest Rates	October 2008	March 2009	April* 2009	Variation** (basis points)
Term Deposit Rates				
Public Sector Banks				
a) Up to 1 year	2.75-10.25	2.75-8.25	2.75-8.00	0-225
b) 1 year up to 3 years	9.50-10.75	8.00-9.25	7.00-8.75	200-250
c) Over 3 years	8.50-9.75	7.50-9.00	7.25-8.50	125-125
Private Sector Banks				
a) Up to 1 year	3.00-10.50	3.00-8.75	3.00-8.50	0-200
b) 1 year up to 3 years	9.00-11.00	7.50-10.25	7.50-9.50	150-150
c) Over 3 years	8.25-11.00	7.50-9.75	7.50-9.25	75-175
Five Major Foreign Banks				
a) Up to 1 year	3.50-9.50	2.50-8.00	2.50-8.00	100-150
b) 1 year up to 3 years	3.60-10.00	2.50-8.00	2.50-8.00	110-200
c) Over 3 years	3.60-10.00	2.50-8.00	2.50-8.00	110-200
BPLR				
Public Sector Banks	13.75-14.75	11.50-14.00	11.50-13.50	125-225
Private Sector Banks	13.75-17.75	12.75-16.75	12.50-16.75	100-125
Five Major Foreign Banks	14.25-16.75	14.25-15.75	14.25-15.75	0-100

* As on April 18, 2009.
** Variation of April 18, 2009 over October 2008.

42. The reduction in deposit rates was more pronounced in respect of deposits of up to three year maturity. The range of BPLRs of public sector banks, private sector and five major foreign banks declined between October 2008 and April 18, 2009 (Table 17).

43. The reduction in BPLRs by most public sector banks was in the range of 125-200 basis points, followed by 50-150 basis points reduction by most private sector banks and 50 basis points reduction by foreign banks (Table 18).

Table 18: Reduction in BPLR by SCBs – Frequency Distribution (April 18, 2009 over October 2008)

(Number of banks)

Bank Group	25 bps	50 bps	75 bps	100 bps	125 bps	150 bps	175 bps	200 bps	225 bps	250 bps	Total
Public Sector Banks	–	–	1	–	8	8	2	7	–	1	**27 (27)**
Private Sector Banks	1	7	3	2	1	2	–	–	1	–	**17 (22)**
Foreign Banks	–	4	1	1	–	–	–	2	–	–	**8 (28)**

Note: Figures in parentheses indicate total number of banks operating in India.

44. The efficacy of the monetary transmission mechanism hinges on the extent and the speed with which changes in the central bank's policy rate are transmitted through the term-structure of interest rates across markets. While the response to policy changes by the Reserve Bank has been faster in the money and government securities markets, there has been concern that the large and quick changes effected in the policy rates by the Reserve Bank have not fully transmitted to banks' lending rates. During the second half of 2008-09, while the Reserve Bank has reduced its lending rate (repo rate) by 400 basis points, most banks have lowered their lending rate in the range of 50-150 basis points.

45. The adjustment in market interest rates in response to changes in policy rates gets reflected with some lag. However, the transmission to the credit market is somewhat slow on account of several structural rigidities. In this context, banks have brought out the following constraints in their discussions with the Reserve Bank. First, the administered interest rate structure of small savings acts as a floor to deposit interest rates. Without reduction in deposit rates, banks find it difficult to reduce lending rates exclusively on policy cues. Second, while banks are allowed to offer 'variable' interest rates on longer-term deposits, depositors have a distinct preference for fixed interest rates on such deposits which results in an asymmetric contractual relationship. In a rising interest rate scenario, while depositors retain the flexibility to prematurely withdraw their existing deposits and re-deploy the same at higher interest rates, banks have to necessarily carry these high cost deposits till their maturity in the downturn of the interest rate cycle. Third, during periods of credit boom as in 2004-07, competition among banks for wholesale deposits often hardens deposit interest rates, thereby further increasing the cost of funds. Fourth, the linkage of concessional administered lending rates, such as for agriculture and exports, to banks' BPLRs makes overall lending rates less flexible. Fifth, the persistence of large volumes of market borrowing by the government hardens interest rate expectations. From the real economy perspective, however, for monetary policy to have demand-inducing effects, lending rates will have to come down.

46. The changes in BPLR do not fully reflect the changes in the effective lending rates. During the pre-policy consultations with the Reserve Bank, banks pointed out that lending rates should not be assessed only in terms of reduction in BPLRs since as much as three-quarters of lending is at rates below BPLR which includes lending to agriculture, export sector, and well-rated companies, including PSUs. The weighted average lending rate, which was 11.9 per cent in 2006-07, increased to 12.3 per cent (provisional) in 2007-08. According to the information collected from select banks, the average yield on advances, a proxy measure of effective lending rate, in 2008-09 was around 10.9 per cent. As most of the commercial banks have cut their BPLRs in the second half of 2008-09, the effective lending rate towards the end of 2008-09 could be even lower than 10.9 per cent. Nevertheless, it may be noted that current deposit and lending rates are now higher than in 2004-2007, although the policy rates are now lower than in that period. This is reflective of the hysteresis in the system.

Reduction in public sector banks deposit rates in 1-3 year maturity from 9.50-10.75 per cent in October 2008 to 7.00-8.75 per cent by April 2009 has not been commensurate with the moderation in inflation. Judging from the experience of 2004-07, deposit rates can be lower and should come down.

47. Notwithstanding the above factors, there is still a scope for banks to reduce their lending rates. Pointing to the current WPI inflation rate near zero, some have argued that real lending rates are very high. The point-to-point variations in WPI exaggerate the level of real interest rate due to divergence between various price indices as also the inflation expectations. Notwithstanding computational challenges, even when inflation is taken as 4.0-4.5 per cent based on the underlying trend, real lending rates would still appear to be high. Banks, therefore, must strive to reduce their lending rates further.

Financial Markets

48. Since October 2008, interest rates have declined across the term structure in the money and government securities markets (Table 19). The call/notice rates have remained near or below the lower bound of the LAF corridor from November 2008. While the secondary market yield on the 10-year government security touched an intra-year low of 5.11 per cent on December 30, 2008, it then generally increased in the wake of the large market borrowing programme of the Government, reaching 7.08 per cent on March 30, 2009. The yield has subsequently declined on account of substantial easing of liquidity and reduction in inflation.

49. During 2008-09, the rupee, with significant intra-year variation, generally depreciated against major currencies except pound sterling on account of widening of trade and current account deficits as well as capital outflows. During the current fiscal year (up to April 17, 2009), the rupee has generally remained steady (Chart 2).

50. During 2008-09, equity markets weakened in tandem with global stock markets, reflecting general deterioration in sentiment, FII outflows, slowdown in industrial growth and lower corporate

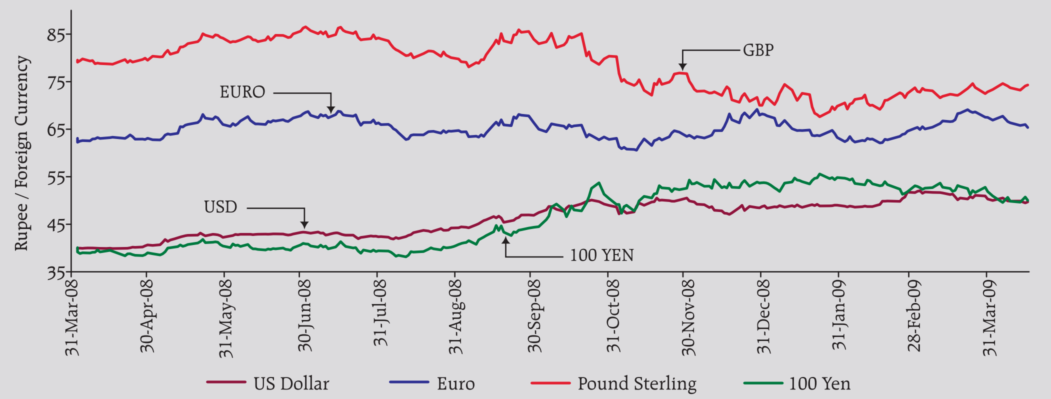
Table 19: Interest Rates - Monthly Average

(Per cent)

Segment/Instrument	March 2008	October 2008	January 2009	March 2009	April 17, 2009
Call Money	7.37	9.90	4.18	4.17	3.47
CBLO	6.37	7.73	3.77	3.60	2.60
Market Repo	6.72	8.40	4.27	3.90	2.86
Commercial Paper	10.38	14.17	9.48	9.79	7.00
Certificates of Deposit	10.00	10.00	7.33	6.73#	4.00
91-day Treasury Bills	7.33	7.44	4.69	4.77	4.09
10-year Government Security	7.69	7.80	5.82	6.57	6.41

Pertains to mid-March 2009.

Chart 2: Exchange Rate Movements



profits. The BSE Sensex declined to 8160 on March 9, 2009 from a peak of 20873 recorded on January 8, 2008; it closed higher at 11023 on April 17, 2009.

External Sector

51. India's current account deficit (CAD) widened during 2008-09 (April-December) in comparison with the corresponding period of the previous year. As net capital inflows declined sharply, the overall balance of payments (BoP) position turned negative resulting in drawdown of reserves (Table 20).

Table 20: India's Balance of Payments

(US $ billion)

Item	April-December	
	2007-08	2008-09
Exports	113.6	133.5
Imports	182.9	238.9
Trade Balance	-69.3	-105.3
Invisibles, net	53.8	68.9
Current Account Balance	-15.5	-36.5
Capital Account*	82.7	16.1
Change in Reserves#	-67.2	20.4

* Including errors and omissions.
# On a BoP basis (*i.e.*, excluding valuation):
(-) indicates increase; (+) indicates decrease.

52. The overall approach to the management of India's foreign exchange reserves takes into account the changing composition of the balance of payments and endeavours to reflect the 'liquidity risks' associated with different types of flows and other requirements. As capital inflows during 2007-08 were far in excess of the normal absorptive capacity of the economy, there was substantial accretion to foreign exchange reserves by US$ 110.5 billion. As capital inflows reduced sharply, the foreign exchange reserves declined by US$ 53.7 billion from US$ 309.7 billion as at end-March 2008 to US$ 256.0 billion by end-December 2008, including valuation losses. Excluding valuation effects, the decline was US$ 20.4 billion during April-December 2008. India's foreign exchange reserves were US$ 252.0 billion as at end-March 2009 which increased to US$ 253.0 billion by April 10, 2009.

II. Stance of Monetary Policy

53. The policy responses in India since September 2008 have been designed largely to mitigate the adverse impact of the global financial crisis on the Indian economy. The conduct of monetary policy had to contend with the high speed and magnitude of the external shock and its spill-over effects through the real, financial and confidence channels. The evolving stance of policy has been increasingly conditioned by the need to preserve financial stability while arresting the moderation in the growth momentum.

54. The thrust of the various policy initiatives by the Reserve Bank has been on providing ample rupee liquidity, ensuring comfortable dollar liquidity and maintaining a market environment conducive for the continued flow of credit to productive sectors. The key policy initiatives taken by the Reserve Bank since September 2008 are set out below:

Policy Rates

- The policy repo rate under the liquidity adjustment facility (LAF) was reduced by 400 basis points from 9.0 per cent to 5.0 per cent.
- The policy reverse repo rate under the LAF was reduced by 250 basis points from 6.0 per cent to 3.5 per cent.

Rupee Liquidity

- The cash reserve ratio (CRR) was reduced by 400 basis points from 9.0 per cent of net demand and time liabilities (NDTL) of banks to 5.0 per cent.
- The statutory liquidity ratio (SLR) was reduced from 25.0 per cent of NDTL to 24.0 per cent.
- The export credit refinance limit for commercial banks was enhanced to 50.0 per cent from 15.0 per cent of outstanding export credit.
- A special 14-day term repo facility was instituted for commercial banks up to 1.5 per cent of NDTL.
- A special refinance facility was instituted for scheduled commercial banks (excluding RRBs) up to 1.0 per cent of each bank's NDTL as on October 24, 2008.
- Special refinance facilities were instituted for financial institutions (SIDBI, NHB and Exim Bank).

Forex Liquidity

- The Reserve Bank sold foreign exchange (US dollars) and made available a forex swap facility to banks.
- The interest rate ceilings on non-resident Indian (NRI) deposits were raised.
- The all-in-cost ceiling for the external commercial borrowings (ECBs) was raised. The all-in-cost ceiling for ECBs through the approval route has been dispensed with up to June 30, 2009.
- The systemically important non-deposit taking non-banking financial companies (NBFCs-ND-SI) were permitted to raise short-term foreign currency borrowings.

Regulatory Forbearance

- The risk-weights and provisioning requirements were relaxed and restructuring of stressed assets was initiated.

55. A detailed listing of various policy measures undertaken by the Reserve Bank since September 2008 is set out in Annex I.

Liquidity Impact

56. The actions of the Reserve Bank since mid-September 2008 have resulted in augmentation of actual/potential liquidity of over Rs.4,22,000 crore. In addition, the permanent reduction in the SLR by 1.0 per cent of NDTL has made available liquid funds of the order of Rs.40,000 crore for the purpose of credit expansion (Table 21).

57. The liquidity situation has improved significantly following the measures taken by the Reserve Bank. The overnight money market rates, which generally hovered above the repo rate during September-October 2008, have softened considerably and have generally been close to or near the lower bound of the LAF corridor since early November 2008. Other money market rates such as discount rates of CDs, CPs and CBLO softened in tandem with the overnight money market rates. The LAF window has been in a net absorption mode since mid-November 2008. The liquidity problem faced by mutual funds has eased considerably. Most commercial banks have reduced their benchmark prime lending rates. The total utilisation under the recent refinance/liquidity facilities introduced by the Reserve Bank has been low as the overall liquidity conditions remain comfortable (Table 22). However, their availability has provided comfort to the banks/FIs, which can fall back on them in case of need.

58. The Reserve Bank has multiple instruments at its command such as repo and reverse repo rates, cash reserve ratio (CRR), statutory liquidity ratio (SLR), open market operations, including the market stabilisation scheme (MSS) and the LAF, special market operations, and sector-specific liquidity facilities. In addition, the Reserve Bank also uses prudential tools to modulate flow of credit to certain sectors consistent with financial stability. The availability of multiple instruments and flexible use of these instruments in the implementation of monetary policy has

Table 21: Actual/Potential Release of Primary Liquidity – since Mid-September 2008

Measure/Facility	Amount (Rs. crore)
1. CRR Reduction	1,60,000
2. Unwinding/Buyback/De-sequestering of MSS Securities	97,781
3. Term Repo Facility	60,000
4. Increase in Export Credit Refinance	25,512
5. Special Refinance Facility for SCBs (Non-RRBs)	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)	**4,22,793**
Memo: Statutory Liquidity Ratio (SLR) Reduction	40,000

* Includes an option of Rs.5,000 crore.

Table 22: Utilisation of Various Liquidity Facilities Available from the Reserve Bank – As on April 16, 2009

Refinance Facility	Availability of Facility: Terminal Dates	Amount (Rs. crore)		Outstanding as per cent of Limit
		Limit	Outstanding	
i) Export Credit Refinance Facility	Standing Facility	36,446	590	1.6
ii) Special Refinance Facility for Scheduled Commercial Banks (excluding RRBs)	30.09.2009	38,429	1,380	3.6
iii) Special Term Repo Facility to Banks (for funding to MFs, NBFCs and HFCs)	30.09.2009	60,000	90	0.2
iv) Refinance Facility to SIDBI	31.03.2010	7,000	5,819	83.1
v) Refinance Facility to NHB	31.03.2010	4,000	3,220	80.5
vi) Refinance Facility to EXIM Bank	31.03.2010	5,000	2,800	56.0
vii) Liquidity Facility for NBFCs through SPV Route	30.06.2009	25,000*	750	3.0
Total (i to vii)		**1,75,875**	**14,649**	**8.3**
Memo Item:				
Forex Swap Facility to Banks	31.03.2010	For tenor up to three months	1,030	–

* The total support from the Reserve Bank is limited to Rs.20,000 crore with an option to raise it by a further Rs.5,000 crore.

enabled the Reserve Bank to modulate the liquidity and interest rate conditions amidst uncertain global macroeconomic conditions.

Growth Projection

59. The India Meteorological Department in its forecast of South-West monsoon expects a normal rainfall at 96 per cent of its long period average for the current year. The fiscal and monetary stimulus measures initiated during 2008-09 coupled with lower commodity prices could cushion the downturn in the growth momentum during 2009-10 by stabilising domestic economic activity to some extent. However, any upturn in the growth momentum is unlikely in view of the projected contraction in global demand during 2009, particularly decline in trade. While domestic financing conditions have improved, external financing conditions are expected to remain tight. Private investment demand is, therefore, expected to remain subdued. On balance, with the assumption of normal monsoon, for policy purpose, real GDP growth for 2009-10 is placed at around 6.0 per cent.

Inflation Projection

60. On account of slump in global demand, pressures on global commodity prices have abated markedly around the world. The sharp decline in prices of crude oil, metals, foodgrains, cotton and cement has influenced inflation expectations in most

parts of the world. This is also reflected in the domestic WPI inflation reaching close to zero. Prices of manufactured products have decelerated sharply, while that of the fuel group have contracted, though inflation on account of food articles still remains high. Keeping in view the global trend in commodity prices and domestic demand-supply balance, WPI inflation is projected at around 4.0 per cent by end-March 2010.

61. The WPI inflation, however, is expected to be in the negative territory in the early part of 2009-10. However, this should not be interpreted as deflation for policy purposes. This expected negative inflation in India has only statistical significance and is not a reflection of demand contraction as is the case in advanced economies. This transitory WPI inflation in negative zone may not persist beyond the middle of 2009-10. The consumer price inflation as reflected in various indices is expected to moderate from its present high level but would continue to remain in positive territory through 2009-10 unlike WPI inflation. Moreover, it may also be noted that the sharp decline in WPI inflation has not been commensurately matched by a similar decline in inflation expectations.

62. It would be the endeavour of the Reserve Bank to ensure price stability and anchor inflation expectations. Towards this objective, the Reserve Bank will, as always, continue to take into account the behaviour of all the price indices and their components. The conduct of monetary policy would continue to condition and contain perception of inflation in the range of 4.0-4.5 per cent so that an inflation rate of around 3.0 per cent becomes the medium-term objective, consistent with India's broader integration into the global economy and with the goal of maintaining self-accelerating growth over the medium-term.

Monetary Projection

63. Monetary and credit aggregates have witnessed deceleration since their peak levels in October 2008. The liquidity overhang emanating from the earlier surge in capital inflows has substantially moderated in 2008-09. The Reserve Bank is committed to providing ample liquidity for all productive activities on a continuous basis. As the upside risks to inflation have declined, monetary policy has been responding to slackening economic growth in the context of significant global stress. Accordingly, for policy purposes, money supply (M_3) growth for 2009-10 is placed at 17.0 per cent. Consistent with this, aggregate deposits of scheduled commercial banks are projected to grow by 18.0 per cent. The growth in adjusted non-food credit, including investment in bonds/debentures/ shares of public sector undertakings and private corporate sector and CPs, is placed at 20.0 per cent. Given the wide dispersion in credit growth noticed across bank groups during 2008-09, banks with strong deposit base should endeavour to expand credit beyond 20.0 per cent. As always, these numbers are provided as indicative projections and not as targets.

Overall Assessment

64. The global financial and economic outlook continues to be unsettled and uncertain. The latest assessment by major international agencies projecting sharp contraction in global trade volumes in 2009 has exacerbated the uncertainty. The

current assessments project little chance of global economic recovery in 2009. Despite large scale recapitalisation, write-offs and asset substitutions, sizeable chunks of assets of systemically important banks and financial institutions remain impaired. It is also not clear if the deleveraging process is complete. In such a scenario, external financing conditions for emerging market economies may continue to remain tight and constrain their growth prospects.

65. Governments and central banks all over the world have responded to the ongoing global financial crisis by initiating several large, aggressive and unconventional measures. There is, however, a contentious debate on whether these measures are adequate and appropriate and when, if at all, they will start showing the desired results. There is a separate debate on whether the measures taken so far, responding as they are to short-term compulsions, are eroding long-term sustainability. Many difficult issues will need to be addressed going forward. There is unprecedented co-ordinated policy action on monetary, fiscal, regulatory and institutional reforms to address the ongoing financial and economic crisis and strengthen the international financial architecture. In this context, the initiatives by the leaders of the G-20 announced in April 2009 to: (i) restore confidence, growth, and jobs; (ii) repair the financial system to restore lending; (iii) strengthen financial regulation to rebuild trust; (iv) fund and reform the international financial institutions to overcome the crisis and prevent future ones; (v) promote global trade and investment and reject protectionism to underpin prosperity; and (vi) build an inclusive, green and sustainable recovery, should help overcome the uncertainty surrounding the financial and economic outlook.

66. Here in India, there are several immediate challenges facing the economy which would need to be addressed going forward. First, after five years of high growth, the Indian economy was headed for a moderation in the first half of 2008-09. However, the growth slowdown accentuated in the third quarter of 2008-09 on account of spillover effects of international developments. While the moderation in growth seems to have continued through the fourth quarter of 2008-09, it has been cushioned by quick and aggressive policy responses both by the Reserve Bank and the Government. Notwithstanding the contraction of global demand, growth prospects in India continue to remain favourable compared to most other countries. While public investment can play a critical role in the short-term during a downturn, private investment has to increase as the recovery process sets in. A major macroeconomic challenge at this juncture is to support the drivers of aggregate demand to enable the economy to return to its high growth path.

67. The second challenge going forward is meeting the credit needs of the non-food sector. Although, for the year 2008-09 as a whole, credit by the banking sector expanded, the pace of credit flow decelerated rapidly from its peak in October 2008. This deceleration has occurred alongside a significant decline in the flow of resources from non-bank domestic and external sources. The deceleration in total resource flow partly reflects slowdown in

demand, drawdown of inventories by the corporates and decline in commodity prices. The expansion in credit, however, has been uneven across sectors. There is, therefore, an urgent need to boost the flow of credit to all productive sectors of the economy, particularly to MSMEs, to aid the process of economic recovery. The Reserve Bank continues to maintain and will maintain ample liquidity in the system. It should be the endeavour of commercial banks to ensure that every creditworthy borrower is financed at a reasonable cost while, at the same time, ensuring that credit quality is maintained.

68. It may be noted that bank credit had accelerated during 2004-07. This, combined with significant slowdown of the economy in 2008-09, may result in some increase in NPAs. While it is not unusual for NPAs to increase during periods of high credit growth and downturn in the economy, the challenge is to maintain asset quality through early actions. This calls for a focused approach, due diligence and balanced judgment by banks.

69. Third, the Reserve Bank was able to manage the large borrowing programme of the Central and State Governments in 2008-09 in an orderly manner. The market borrowings of the Central and State Governments are expected to be higher in 2009-10. Thus, a major challenge is to manage the large government borrowing programme in 2009-10 in a non-disruptive manner. Large borrowings also militate against the low interest rate environment that the Reserve Bank is trying to maintain to spur investment demand in keeping with the stance of monetary policy. The Reserve Bank, therefore, would continue to use a combination of monetary and debt management tools to manage government borrowing programme to ensure successful completion of government borrowings in a smooth manner. The Reserve Bank has already announced an OMO calendar to support government market borrowing programme through secondary market purchase of government securities. During the first half of 2009-10, planned OMO purchases and MSS unwinding will add primary liquidity of about Rs.1,20,000 crore which, by way of monetary impact, is equivalent to CRR reduction of 3.0 percentage points. This should leave adequate resources with banks to expand credit.

70. Fourth, another challenge facing the Indian economy is to restore the fiscal consolidation process. The fiscal stimulus packages by the Government and some other measures have led to sharp increase in the revenue and fiscal deficits which, in the face of slowing private investment, have cushioned the pace of economic activity. However, it would be a challenge to unwind fiscal stimulus in an orderly manner and return to a path of credible fiscal consolidation. In this context, close monitoring of the performance of the economy and the proper sequencing of the unwinding process would have to be ensured.

71. Fifth, a continued challenge is to preserve our financial stability. The Reserve Bank would continue to maintain conditions which are conducive for financial stability in the face of global crisis. A sound banking sector, well-functioning financial markets and robust payment and settlement infrastructure are the pre-requisites for financial stability. The banking sector in

India is sound, adequately capitalised and well-regulated. By all counts, Indian financial and economic conditions are much better than in many other countries of the world. The single factor stress tests carried out as part of the report of the Committee on Financial Sector Assessment (CFSA) (Chairman: Dr. Rakesh Mohan and Co-Chairman: Shri Ashok Chawla) have revealed that the banking system in India can withstand significant shocks arising from large potential changes in credit quality, interest rate and liquidity conditions. These stress tests for credit, market and liquidity risk show that Indian banks are generally resilient.

72. Sixth, the Reserve Bank has injected large liquidity in the system since mid-September 2008. It has reduced the CRR significantly and instituted some sector-specific facilities to improve the flow of credit to certain sectors. The tenure of some of these facilities has been extended to provide comfort to the market. While the Reserve Bank will continue to support all the productive requirements of the economy, it will have to ensure that as economic growth regains momentum, the large liquidity injected in the system is withdrawn in an orderly manner. It is worth noting that even as the monetary easing by the Reserve Bank has potentially made available a large amount of liquidity to the system, at the aggregate level this has not been out of line with our monetary aggregates unlike in many advanced countries. As such, the challenge of unwinding will be less daunting for India than for other countries.

73. Finally, we will have to address the key challenge of ensuring an interest rate environment that supports revival of investment demand. Since October 2008, as the inflation rate has decelerated and the policy rates have been reduced, market interest rates have also come down. However, the reduction in interest rates across the term structure and across markets has not been uniform. Given the cost plus pricing structure, banks have been slow in reducing their lending rates citing high cost of deposits. In this context, it may be noted that the current deposit and lending rates are higher than in 2004-07, although the policy rates are now lower. Reduction in deposit rates affects the cost only at the margin since existing term deposits continue at the originally contracted cost. So lending rates take longer to adjust. Judging from the experience of 2004-07, there is room for downward adjustment of deposit rates. With WPI inflation falling to near zero, possibly likely to get into a negative territory, *albeit* for a short period, and CPI inflation expected to moderate, inflationary risks have clearly abated. The Reserve Bank's current assessment is that WPI inflation could be around 4.0 per cent by end-March 2010. Banks have indicated that small savings rate acts as a floor to banks' deposit interest rate. It may, however, be noted that small savings and bank deposits are not perfect substitutes. Banks should not, therefore, be overly apprehensive about reducing deposit interest rates for fear of competition from small savings, especially as the overall systemic liquidity remains highly comfortable. There is scope for the overall interest rate structure to move down within the policy rate easing already effected by the Reserve Bank. Further action on policy rates is now being taken to reinforce this process.

By Dr. D. Subbarao
Governor

Policy Stance

74. On the basis of the above overall assessment, the stance of monetary policy in 2009-10 will broadly be as follows:

- Ensure a policy regime that will enable credit expansion at viable rates while preserving credit quality so as to support the return of the economy to a high growth path.
- Continuously monitor the global and domestic conditions and respond swiftly and effectively through policy adjustments as warranted so as to minimise the impact of adverse developments and reinforce the impact of positive developments.
- Maintain a monetary and interest rate regime supportive of price stability and financial stability taking into account the emerging lessons of the global financial crisis.

75. Over the last several months, the Reserve Bank has been actively engaged in policy action to minimise the impact of the global crisis on India. The policy response of the Reserve Bank has helped in keeping our financial markets functioning in a normal manner and in arresting the growth moderation. The Reserve Bank will continue to maintain vigil, monitor domestic and global developments, and take swift and effective action to minimise the impact of the crisis and restore the economy to a high growth path consistent with price and financial stability.

III. Monetary Measures

Bank Rate

76. The Bank Rate has been retained unchanged at 6.0 per cent.

Repo Rate

77. It is proposed:

- to reduce the repo rate under the Liquidity Adjustment Facility (LAF) by 25 basis points from 5.0 per cent to 4.75 per cent with immediate effect.

Reverse Repo Rate

78. It is proposed:

- to reduce the reverse repo rate under the LAF by 25 basis points from 3.5 per cent to 3.25 per cent with immediate effect.

79. The Reserve Bank has the flexibility to conduct repo/reverse repo auctions at a fixed rate or at variable rates as circumstances warrant.

80. The Reserve Bank retains the option to conduct overnight or longer term repo/ reverse repo under the LAF depending on market conditions and other relevant factors. The Reserve Bank will continue to use this flexibly including the right to accept or reject tender(s) under the LAF, wholly or partially, if deemed fit, so as to make efficient use of the LAF in daily liquidity management.

Cash Reserve Ratio

81. The cash reserve ratio (CRR) of scheduled banks has been retained unchanged at 5.0 per cent of net demand and time liabilities (NDTL).

First Quarter Review

82. The First Quarter Review of Monetary Policy for 2009-10 will be undertaken on July 28, 2009.

Part B. Developmental and Regulatory Policies 2009-10

83. The key objective of financial sector policies is to aid the process of economic growth consistent with price and financial stability. In this context, the Reserve Bank has been focusing on improving credit delivery, developing financial markets and promoting financial inclusion. Internationally, the financial intermediation process has got significantly affected by the ongoing financial crisis. Consequently, various international bodies and financial intermediaries have been contemplating changes in the financial regulatory architecture to restore normalcy in the functioning of global financial markets and strengthen financial stability. There is a great deal of thinking going on about the appropriate design of the regulatory framework that encourages credit flow while mitigating risks. Domestically, although there has been some slowdown in credit growth, particularly in the second half of 2008-09, the banking system remains inherently sound and the financial markets including inter-bank markets are functioning normally. Nevertheless, the unfolding of the global financial crisis underscores the need for further strengthening of regulation and supervision even as India remains outside the epicentre of the global crisis.

I. Financial Stability

84. The current crisis has triggered several initiatives in an unprecedented co-ordinated manner at the global level with a view to resolving the crisis and strengthening the international financial architecture (Box).

85. While India has been a part of the global initiative, recently a comprehensive assessment of the Indian financial sector has been conducted by the Committee on Financial Sector Assessment (CFSA) (Chairman: Dr. Rakesh Mohan and Co-Chairman: Shri Ashok Chawla) constituted by the Government of India, in consultation with the Reserve Bank. The Committee submitted its report to the Finance Minister on March 25, 2009 at New Delhi. The Report was also released to the public on March 30, 2009 and placed on the Reserve Bank's website. While the Committee found India's financial sector to be broadly sound and resilient, it also identified specific concerns. The Committee has made several recommendations towards furthering financial sector development over the medium term.

86. Keeping in view both international and domestic initiatives in the financial sector, it is proposed:

- to constitute a Task Force to look into all the issues that have arisen with regard to the G-20 Working Groups and the report of the CFSA and suggest follow-up actions relevant for the Reserve Bank in the domestic context on an on-going basis, for every quarter;
- in consultation with all regulators and the Government to consider the setting up of a Working Group to implement the recommendations of the CFSA;
- to set up a Financial Stability Unit in the Reserve Bank drawing upon inter-disciplinary expertise from supervisory, regulatory, statistics, economics and financial markets departments for carrying out periodic stress testing and for preparing financial stability reports.

Box: International Co-operation - Recent Initiatives

Several international initiatives have been taken in the recent period for formulating proposals for strengthening the financial system. The major initiatives in this regard include the following:

- Several reports have been released recently such as the Financial Stability Forum's (now Financial Stability Board) Report on 'Enhancing Market and Institutional Resilience', the Geneva Report on 'The Fundamental Principles of Financial Regulation', Larosiere Report on 'The High Level Group on Financial Supervision in the EU' and the Turner Review on 'Regulatory Response to the Global Banking Crisis'.
- The G-20 countries have also taken several initiatives. In the summit held in Washington in November 2008, the G-20 countries laid down an action plan and constituted four Working Groups, *viz.,* (i) Enhancing Sound Regulation and Strengthening Transparency; (ii) Reinforcing International Co-operation and Promoting Integrity in Financial Markets; (iii) Reform of the IMF; and (iv) The World Bank and other Multilateral Development Banks (MDBs). The first group on Enhancing Sound Regulation and Strengthening Transparency was co-chaired by Dr. Rakesh Mohan, Deputy Governor, Reserve Bank of India along with Mr. Tiff Macklem of Canada. The status for India with regard to the recommendations of this group in set out in Annex II.
- The leaders of the G-20 again met in London on April 2, 2009 and laid down the 'Global Plan for Recovery and Reform'.
- Drawing mainly from the recommendations of the group on Enhancing Sound Regulation and Strengthening Transparency, the G-20 also made a declaration for strengthening the financial system. The declaration agreed to make far reaching reforms in the areas of expanding the membership of international bodies, international co-operation, prudential regulations, scope of regulations, compensation, tax havens and non-co-operative jurisdictions, accounting standards and credit rating agencies.
- With a view to increasing international co-operation, the Financial Stability Forum (FSF), rechristened as Financial Stability Board (FSB), has been expanded to include more emerging market economies and its mandate has been broadened. India has been invited to join the FSB as a member. Alongside the current mandate of the FSF – to assess vulnerabilities affecting the financial system and identify and oversee action needed to address them – the FSB will advise on market developments and monitor best practices in meeting regulatory standards, among others.
- The Basel Committee on Banking Supervision (BCBS) has also been expanded and India has been invited to nominate a member to the Committee. Accordingly, Smt. Usha Thorat, Deputy Governor, Reserve Bank of India has been nominated as a member of the BCBS.
- A Group of 30 (G-30) released the report on 'Financial Reform – A Framework for Financial Stability' on January 15, 2009 to strengthen prudential regulations and supervision.

II. Interest Rate Policy

(a) BPLR System: Review

87. Consequent to the Mid-Term Review of October 2005, the Indian Banks' Association (IBA) issued guidelines for determination of benchmark prime lending rate (BPLR) by banks for appropriate pricing of credit. Over time, however, the system of BPLR has evolved in such a manner that it has lost its relevance as a meaningful reference rate as bulk of loans is advanced below BPLR. Furthermore, this impedes the smooth transmission of monetary signals and makes the loan pricing system non-transparent. It has, therefore, become necessary to review the current procedures and processes of pricing of credit. Accordingly, it is proposed:

- to constitute a Working Group to review the present BPLR system and suggest changes to make credit pricing more transparent. The Working Group would consult all the stakeholders and submit its report by end-August 2009.

(b) Payment of Interest on Savings Bank Account on a Daily Product Basis

88. At present, interest on savings bank accounts is calculated on the minimum balances held in the accounts during the period from the 10th day to the last day of each calendar month. Several banks have suggested that interest on savings bank accounts may be calculated either on the minimum balances in the deposit accounts during the period from the first to the last day of each calendar month or on a daily product basis. The matter was referred to the IBA, which was of the view that payment of interest on a daily product basis would be feasible only when computerisation in banks is completed. In view of the present satisfactory level of computerisation in commercial bank branches, it is proposed that:

- payment of interest on savings bank accounts by scheduled commercial banks (SCBs) would be calculated on a daily product basis with effect from April 1, 2010.

Modalities in this regard will be worked out in consultation with banks.

III. Financial Markets

Money Market

(a) Special Refinance Facility: Extension

89. A special refinance facility was introduced on November 1, 2008 under Section 17(3B) of the Reserve Bank of India Act, 1934 to provide funding to scheduled commercial banks (excluding regional rural banks) up to 1.0 per cent of their net demand and time liabilities (NDTL) as on October 24, 2008 at the repo rate. It is proposed:

- to extend this special refinance facility up to March 31, 2010.

(b) Special Term Repo Facility: Extension

90. The Reserve Bank introduced a special 14-day term repo facility for banks in September 2008 through relaxation in the maintenance of SLR up to 1.5 per cent of their NDTL, to enable them to meet the liquidity requirements of mutual funds (MFs), non-banking financial companies (NBFCs) and housing finance companies (HFCs). The auctions for the special 14-day term repo are conducted on a daily basis. On a review, it is proposed:

- to extend the time for availability of this special term repo facility to banks up to March 31, 2010;
- to conduct these 14-day term repo auctions on a weekly basis.

(c) Export Credit Refinance: Review

91. With a view to providing flexibility in the liquidity management of banks, the limit of the standing liquidity facility to banks in terms of export credit refinance (ECR) under Section 17(3A) of the RBI Act was raised from 15.0 per cent of the eligible outstanding rupee export credit as on the preceding fortnight to 50.0 per cent in November 2008. It is proposed:

- to review the ECR limit in March 2010.

(d) Money Market Mutual Funds

92. The liquidity stress recently faced by mutual funds, particularly the money market mutual funds (MMMFs), was caused primarily on account of mobilisation of significant resources from large corporates and banks with redemption facilities on par with current accounts of banks. In this regard, the Securities and Exchange Board of India (SEBI) has taken several measures to mitigate the liquidity risks. In view of the systemic implications of the activities of such funds, it is proposed:

- to identify and address the macro-prudential concerns arising from the current framework in consultation with SEBI.

(e) Interest Rate Futures

93. The Technical Advisory Committee (TAC) for Money, Foreign Exchange and Government Securities Markets had released the report of the Working Group on Interest Rate Futures (Chairman: Shri V. K. Sharma) in August 2008. The Working Group had recommended, *inter alia,* the introduction of a physically settled contract based on a 10-year notional coupon bearing government bond. The Reserve Bank has already permitted banks to take trading positions in interest rate futures (IRFs). The RBI-SEBI Standing Technical Committee has completed the preparatory work and an exchange traded IRFs contract on the 10-year notional coupon bearing government bond is expected to be launched shortly.

Government Securities Market

(a) Central Government Securities

(i) Floating Rate Bonds

94. The floating rate bonds (FRBs) issued by the Government of India till September 2004 were linked to the cut-off yields of the 364-day Treasury Bills (TBs), which led to certain issues relating to the pricing of FRBs in the secondary market. Reflecting this experience and in consultation with market participants and the Technical Advisory Committee on Money, Foreign Exchange and Government Securities Markets, the structure has been revised. The revised structure contemplates that: (i) the auction will be conducted through the 'price based' process as against the 'spread based' process earlier; and (ii) the base yield for FRBs will be linked to the primary market cut-off yield of the 182-day TBs. The revised structure is expected to simplify the methodology for pricing of FRBs in the secondary market. The revised issuance structure for FRBs has been built into the negotiated dealing system (NDS) auction format being developed by the Clearing Corporation of India Limited (CCIL).

95. The indicative calendar for the issuance of Central Government securities provides for the issuance of FRBs. Accordingly:

- any new issuance of floating rate bonds would be in terms of the revised issuance structure.

(ii) Auction Process of Government of India Securities

96. As indicated in the Mid-Term Review of October 2008, the recommendations of the Internal Working Group (Chairman: H.R. Khan) involving the Reserve Bank such as reduction of the time gap between bid submission and declaration of auction results have already been implemented. The other recommendations of the Working Group such as: (i) withdrawal of the facility of bidding in physical form and submission of competitive bids only through the NDS;

and (ii) submission of a single consolidated bid on behalf of all its constituents by the bank/primary dealer (PD) in respect of non-competitive bids will be implemented after the amendments in the specific notification and in the scheme for non-competitive bidding facility by the Government of India.

(iii) Ways and Means Advances to the Government of India: Status

97. The Reserve Bank, in consultation with the Government of India, has revised the extant limits for the Ways and Means Advances (WMA) for the financial year 2009-10. As per the revised arrangements, the WMA limits will continue to be fixed on a half-yearly basis, and are placed at Rs.20,000 crore for the first half and Rs.10,000 crore for the second half of 2009-10. The applicable interest rate on WMAs and overdrafts will, as it is the practice now, continue to be linked to the repo rate. The Reserve Bank of India, however, retains the flexibility to revise the limits in consultation with the Government of India, taking into consideration the prevailing circumstances.

(b) Debt Management for State Governments

(i) Non-Competitive Bidding in the Auction of State Development Loans (SDLs): Status

98. In order to widen the investor base and enhance the liquidity for SDLs, a scheme for non-competitive bidding in the auction of SDLs was notified by all the State Governments on July 20, 2007. Subsequent to the announcement in the Mid-Term Review of October 2008, the necessary system changes required to handle non-competitive bidding in the auction of SDLs have been carried out in the NDS auction platform developed by the CCIL.

99. The scheme for non-competitive bidding in SDLs will be operationalised during the current financial year.

(ii) Ways and Means Advances Limits for the State Governments: Status

100. The State-wise limits of normal WMA for the year 2009-10 have been kept unchanged at the limits set for the year 2008-09. Accordingly, the aggregate normal WMA limit for State Governments is placed at Rs.9,925 crore, including the WMA limit of Rs.50 crore for the Government of the Union Territory of Puducherry. All other terms and conditions of the scheme remain unchanged.

(c) Development of Market Infrastructure

(i) Separate Trading for Registered Interest and Principal of Securities (STRIPS)

101. Stripping is the process of converting periodic coupon payments and the principal of an existing Government security into tradable zero-coupon securities, *i.e.*, separate trading for registered interest and principal of securities (STRIPS). The availability of STRIPS across the term structure will aid the development of a sovereign zero-coupon yield curve. As indicated in the Annual Policy Statement of April 2008, all operational arrangements for the introduction of STRIPS are ready. The required software development, critical for the introduction of STRIPS, has been carried out as part of the public debt office – NDS (PDO-NDS) platform maintained by the Reserve Bank. Furthermore, in order to ensure sufficient volume/liquidity in STRIPS and considering the fungibility of

coupon STRIPS, securities have been identified that will be eligible for stripping/ reconstitution by the market participants. Accordingly:

- draft guidelines prepared in consultation with the market participants are being placed on the Reserve Bank's website for comments and feedback by end-May 2009. With the finalisation of the guidelines, STRIPS will be launched during the current financial year.

(ii) Revision of Repo Accounting

102. The accounting norms on repo transactions prescribed by the Reserve Bank in 2003, treated repo as a set of two independent outright transactions. Consequent upon the amendment in 2006 to the Reserve Bank of India Act, 1934, repo has been defined as an instrument for borrowing funds by selling securities. Accordingly, it was proposed to revise the accounting guidelines to capture the economic essence of repo as a collateralised lending and borrowing instrument and not as outright sale and purchase. Accordingly, it is proposed:

- to issue revised guidelines on repo accounting, taking into account comments on the draft guidelines earlier placed on the Reserve Bank's website, by end-June 2009 for implementation from April 1, 2010.

(iii) Multi-modal Settlements in Government Securities: Status

103. As indicated in the Annual Policy Statement of April 2008, a new settlement mechanism (Multi-modal Settlement) through commercial banks has been put in place to facilitate entities such as mutual funds (MFs), which do not hold a current account with the Reserve Bank, to directly participate in the government securities market. Under the new mechanism, while settlement of the securities leg continues to take place in the SGL account maintained with the Reserve Bank, the funds leg will settle through the 'designated settlement banks' (DSBs) appointed by the CCIL. The guidelines in the matter were issued on June 2, 2008. From June 30, 2008 onwards, secondary market transactions in government securities undertaken by MFs are being settled only through this mechanism.

104. The facility of multi-modal settlements can also be availed of by other non-bank entities such as insurance companies, pension funds and co-operative banks which do not maintain a current account with the Reserve Bank.

(iv) Clearing and Settlement of OTC Rupee Interest Rate Derivatives: Status

105. As indicated in the Mid-Term Review of October 2008, the CCIL has operationalised a clearing and settlement arrangement for over-the-counter (OTC) rupee interest rate derivatives on a non-guaranteed basis since November 27, 2008. As at end-March 2009, 13 members have decided to participate in the non-guaranteed settlement of OTC rupee interest rate derivatives. The trade reporting platform for OTC rupee interest rate derivatives is already functional.

(v) Settlement of OTC Trades in Corporate Bonds

106. For facilitating settlement of OTC corporate bond transactions in real-time

gross settlement (RTGS) system on a DvP-I basis (*i.e.*, on a trade-by-trade basis), it has been decided, in consultation with the SEBI, to allow the clearing houses of the exchanges to have a transitory pooling account facility with the Reserve Bank. Under the proposed settlement mechanism, the buyer of securities will transfer the funds through his bank to this transitory account through RTGS. The clearing house will thereafter transfer the securities from the seller's account to the buyer's account and effect the release of funds from the transitory account to the seller's account.

Foreign Exchange Market

(a) ECBs: Extension of Relaxation of all-in-cost Ceilings

107. As per extant ECB policy, the all-in-cost ceilings for ECBs are: LIBOR plus 300 bps for ECBs with average maturity period of three years and up to five years; and LIBOR plus 500 bps for ECBs with average maturity of more than five years. However, these all-in-cost ceilings have been dispensed with up to June 30, 2009 subject to the condition that ECB proposals above the prescribed all-in-cost ceilings, irrespective of the amount of the borrowing, will come under the approval route. Considering the continuing tightness of credit spreads in the international markets, it is proposed:

- to extend the relaxation in all-in-cost ceilings until December 31, 2009.

(b) Liberalisation of the Policy on Buyback of FCCBs

108. Recognising the benefits accruing to the Indian companies as well as to the economy, the policy on the premature buyback of FCCBs was liberalised in December 2008. The proposals for buyback of FCCBs by Indian companies are being considered both under the approval and automatic routes, provided buyback is financed out of their foreign currency resources held in India or abroad and/or out of fresh ECBs raised in conformity with the current ECB norms and out of internal accruals up to US $ 50 million of the redemption value per company. The entire procedure for buyback of FCCBs is required to be completed by December 31, 2009 and details of the buyback are also required to be reported to the Reserve Bank.

109. In terms of the extant norms, the Reserve Bank has been considering, under the approval route, proposals from Indian companies for buyback of FCCBs, out of internal accruals, up to US $ 50 million redemption value per company, at a minimum discount of 25 per cent on the book value. Up to April 15, 2009, the Reserve Bank has approved 18 proposals for buyback of FCCBs involving US $ 765 million with the discount ranging from 25 per cent to 50 per cent.

110. The current policy has been reviewed. Keeping in view the benefits accruing to Indian companies, it is proposed to increase the total amount of permissible buyback, out of internal accruals, from US$ 50 million of the redemption value per company to US $ 100 million, by linking the higher amount of buyback to larger discounts. Accordingly:

- Indian companies may, henceforth, be permitted, under the approval route, to buy back FCCBs out of internal accruals with a minimum discount of 25 per cent of book value for redemption amount of up to US $ 50 million, 35 per cent of book value for redemption amount more than US $ 50 million and up to 75 million; and 50 per cent of book value for redemption amount more than US $ 75 million and up to US $ 100 million.

(c) Loans against Non-resident Deposits

111. As per the extant norms, Authorised Dealer Category–I and authorised banks are permitted to grant loans up to Rs.20 lakh against the security of funds held in NR(E)RA and FCNR(B) deposits. On a review, it is proposed:

- to enhance the cap of Rs.20 lakh to Rs.1 crore with immediate effect.

(d) Currency Futures

112. Since the launch of the first currency futures exchange in September 2008, currency futures contracts are being traded in three recognised exchanges. The average daily volume of currency futures contracts traded on all the exchanges increased from Rs.260 crore in September 2008 to Rs.2,181 crore in December 2008 and further to Rs.5,235 crore in March 2009. The functioning of the exchanges continues to be reviewed by the RBI-SEBI Standing Technical Committee. On the recommendation of the Committee, the position limits on the clients and trading members have been doubled from US $ 5 million and US $ 25 million respectively to US $ 10 million and US $ 50 million. However, the upper limits of 6 per cent and 15 per cent of the total open interest on the clients and trading members remain unchanged. The position limit for banks continues at 15 per cent of total open interest or US $ 100 million, whichever is higher.

IV. Credit Delivery Mechanism and Other Banking Services

(a) Credit Flow to the MSE Sector

113. As indicated in the Mid-Term Review of October 2008, the Reserve Bank appointed a Working Group on Rehabilitation of Sick SMEs (Chairman: Dr. K.C. Chakrabarty). The Working Group made several significant recommendations pertaining not only to the issue of rehabilitation of sick SMEs but also to the larger issues of credit flow to the SME sector and other developmental issues. While the recommendations on which action is to be initiated by the Government of India, State Governments and SIDBI are being forwarded to them, it is proposed:

- to issue guidelines to banks based on the recommendations of the Group, by April 30, 2009.

114. Having regard to the need to accelerate the credit flow to the micro and small enterprises (MSEs) sector so critical for employment, output and exports, it is proposed:

- to ask the Standing Advisory Committee on MSEs to review the Credit Guarantee Scheme so as to make it more effective.

(b) Rural Co-operative Banks

(i) Licensing of Co-operatives

115. The Committee on Financial Sector Assessment (Chairman: Dr. Rakesh Mohan and Co-Chairman: Shri Ashok Chawla) has observed that there is a need to draw up a roadmap for ensuring that only licensed banks operate in the co-operative space.

The Committee further suggested the need for a roadmap to ensure that banks which fail to obtain a licence by 2012 should not be allowed to operate. This will expedite the process of consolidation and weeding out of non-viable entities from the co-operative space. Accordingly, it is proposed:

- to work out a roadmap for achieving this objective in a non-disruptive manner in consultation with NABARD.

(ii) Revival of Rural Co-operative Credit Structure: Status

116. As indicated in the Annual Policy Statement of April 2008, the Government of India approved a package for revival of the short-term rural co-operative credit structure based on the recommendations of the Task Force on Revival of Rural Co-operative Credit Institutions (Chairman: Prof. A. Vaidyanathan). So far, 25 States have executed Memoranda of Understanding (MoUs) with the Government of India and the NABARD, as envisaged in the package. Eight States have made necessary amendments in their Co-operative Societies Acts. An aggregate amount of Rs. 4,740 crore has been released by the NABARD as the Government of India's share for recapitalisation of primary agricultural credit societies (PACS) in eight States as on February 28, 2009. Eight State Governments have released their shares of Rs.459 crore for recapitalisation of PACS. The National Implementing and Monitoring Committee (NIMC), set up by the Government of India, is guiding and monitoring the implementation of the revival package on an all-India basis.

(c) Regional Rural Banks

(i) Capital to Risk-weighted Assets Ratio for RRBs

117. The Committee on Financial Sector Assessment (Chairman: Dr. Rakesh Mohan and Co-Chairman: Shri Ashok Chawla) has suggested a phased introduction of capital to risk-weighted assets ratio (CRAR) in the case of RRBs, along with the recapitalisation of RRBs after consolidation of these entities. It is, therefore, proposed:

- to introduce CRAR for RRBs in a phased manner, taking into account the status of recapitalisation and amalgamation. A time-table for this purpose would be announced in consultation with NABARD.

(ii) Assistance to RRBs for Adoption of ICT Solutions for Financial Inclusion: Status

118. The Report of the Working Group on Defraying Costs of ICT Solutions for Regional Rural Banks (Chairman: Shri G. Padmanabhan) was placed on the Reserve Bank's website in August 2008 for comments from public. The Group has, *inter alia,* noted that apart from the North-Eastern region and Jammu and Kashmir, there are 204 districts in several States which have been identified by the Committee on Financial Inclusion (Chairman: Dr. C. Rangarajan) as areas where there is a high level of financial exclusion. It is, therefore, suggested that these areas could also be considered for special treatment. With a view to enabling RRBs to adopt IT based solutions for financial inclusion, it is proposed:

- to work out, in consultation with NABARD, the manner of providing assistance to RRBs adopting ICT solutions for financial inclusion in districts identified as having high level of exclusion by the Committee on Financial Inclusion.

(iii) Amalgamation of RRBs

119. Consequent upon the amalgamation of 156 RRBs into 45 new RRBs sponsored by 20 banks in 17 States, the total number of RRBs declined from 196 to 86 as at end-March 2009 (which includes a new RRB set up in the Union Territory of Puducherry). The amalgamation process is almost complete.

(iv) Recapitalisation of RRBs

120. The Union Budget 2007-08 announced that RRBs, which have a negative net worth, would be recapitalised in a phased manner. As on March 31, 2009, 26 RRBs have been fully recapitalised with an amount of Rs. 1,783 crore and one RRB has been partially recapitalised with an amount of Rs.13 crore. The process of recapitalisation has been completed except in respect of one RRB in the State of Uttar Pradesh.

(v) Scheduling of Amalgamated RRBs

121. Out of 45 amalgamated RRBs, 25 RRBs have been included in the Second Schedule to the RBI Act, 1934 while 76 erstwhile RRBs have been excluded from the Second Schedule in terms of the notification dated September 22, 2008 published in the Gazette of India dated November 15, 2008.

(vi) Branch Licensing: Further Liberalisation

122. The Mid-Term Review of October 2008 proposed to allow RRBs greater flexibility in opening new branches as long as they made profits and their financials improved. The RRBs have obtained 345 licenses for opening branches in the financial year 2008-09 and have opened 316 branches in the same period.

(vii) Technology Upgradation of RRBs

123. As indicated in the Mid-Term Review of October 2008, the recommendation of the Working Group (Chairman: Shri G. Srinivasan) to prepare a roadmap for migration to core banking solutions (CBS) by RRBs, was forwarded to all sponsor banks in October 2008 for implementation. The Report has, among others, set September 2011 as the target date for all RRBs to move towards CBS. Also, all RRB branches opened after September 2009 are required to be CBS compliant from day one. In March 2009, sponsor banks were advised to give their feedback/status on implementation of the recommendations of the report in respect of RRBs sponsored by them.

(d) Delivery of Credit to Agriculture and other Segments of the Priority Sector

(i) Kisan Credit Card Scheme

124. The Kisan Credit Card (KCC) scheme, introduced in 1998-99 to enable farmers to purchase agricultural inputs and draw cash for their production needs, was revised to provide adequate and timely finance for meeting the comprehensive credit requirements of farmers under a single window, with flexible and simplified procedure, adopting a whole farm approach. During 2008-09 (up to December 2008), public sector banks (PSBs) issued 3.9 million KCCs with sanctioned limits aggregating Rs.23,366 crore. Since the inception of the scheme, PSBs have issued 35.08 million KCCs with sanctioned limits aggregating Rs.1,77,607 crore.

(ii) Rural Infrastructure Development Fund

125. The Interim Budget 2009-10 announced the continuation of financing of rural infrastructure projects for 2009-10 by way of RIDF XV which would be set up with NABARD with a corpus of Rs.14,000 crore, and a separate window under RIDF XV for rural roads component of Bharat Nirman Programme with a corpus of Rs.4,000 crore.

126. Consequent upon the announcement made in the Union Budget 2008-09, several funds were set up such as: (i) Short-Term Co-operative Rural Credit (STCRC) (Refinance) Fund with the NABARD with a corpus of Rs.5,000 crore; (ii) MSME (Refinance) Fund and MSME (Risk Capital) Fund with the Small Industries Development Bank of India (SIDBI) with corpus of Rs.1,600 crore and Rs.1,000 crore; and (iii) Rural Housing Fund with the National Housing Bank (NHB) with corpus of Rs.1,000 crore. The Annual Policy Statement of April 2008 announced that the shortfall in achievement of 10 per cent sub-target for lending to weaker sections by domestic scheduled commercial banks will also be taken into account for the purpose of allocating amounts for contribution to the Rural Infrastructure Development Fund (RIDF) maintained with the NABARD or funds with other financial institutions, as specified by the Reserve Bank, with effect from April 2009.

127. Consequent upon the announcement of measures by the Reserve Bank on November 15, 2008 to sustain the growth momentum in the employment-intensive sectors of micro and small enterprises and housing, the corpus of MSME (Refinance) Fund and Rural Housing Fund was enhanced by Rs.2,000 crore (to Rs.3,600 crore) and by Rs.1,000 crore (to Rs.2,000 crore), respectively. As on March 31, 2009 various scheduled commercial banks have placed deposits of Rs.4,622 crore in STCRC (Refinance) Fund, Rs.3,326 crore in MSME (Refinance) Fund, Rs.250 crore in MSME (Risk Capital) Fund and Rs.1,760 crore in Rural Housing Fund.

(e) Interest Subvention Relief to Farmers

128. The Union Budget 2008-09 announced continuation of the interest subvention scheme for short-term crop loans, introduced in 2006-07. The rate of subvention was increased from 2 per cent to 3 per cent for 2008-09. The Interim Budget 2009-10 announced that the Government of India would also continue to provide interest subvention in 2009-10 to ensure that farmers get short-term crop loans up to Rs.3 lakh at 7.0 per cent per annum.

(f) Micro-finance

129. The self-help group (SHG)-bank linkage programme has emerged as the major micro-finance programme in the country and is being implemented by commercial banks, RRBs and co-operative banks. As on March 31, 2008 3.6 million SHGs had outstanding bank loans of Rs.17,000 crore, an increase of 25 per cent over March 31, 2007 in respect of number of SHGs credit linked. During 2007-08, banks financed 1.2 million SHGs for Rs.8,849 crore. As at end-March 2008, SHGs had 5 million savings accounts with banks for Rs.3,785 crore.

(g) Financial Inclusion

(i) Pilot Project of State Level Bankers' Committee (SLBCs) for 100 per cent Financial Inclusion

130. So far, 344 districts have been identified by SLBCs for 100 per cent financial inclusion. Of these, 175 districts in 21 States and 7

Union Territories have reported having achieved the target. All districts of Haryana, Himachal Pradesh, Karnataka, Kerala, Uttarakhand, Goa, Chandigarh, Puducherry, Daman & Diu, Dadra & Nagar Haveli and Lakshadweep have reported having achieved the target of 100 per cent financial inclusion.

131. As indicated in the Mid-Term Review of October 2008, the findings of the external agencies entrusted with conducting evaluation studies in achieving the target of 100 per cent financial inclusion in 26 districts were placed on the Reserve Bank's website for wider dissemination. Based on the findings, banks were advised in January 2009, among other things, to (i) ensure provision of banking services nearer to the location of the no-frills account holders through a variety of channels; (ii) provide General Credit Card (GCC)/small overdrafts along with no-frills accounts to encourage the account holders to actively operate the accounts; (iii) conduct awareness drives so that the no-frills account holders were made aware of the facilities offered; (iv) review the extent of coverage in districts declared as 100 per cent financially included; and (v) efficiently leverage on the technology enabled financial inclusion solutions currently available.

(ii) Special Task Force in North-Eastern Region

132. As indicated in the Mid-Term Review of October 2008, a scheme of providing financial support to banks by the Reserve Bank for setting up banking facilities (currency chests, extension of foreign exchange and Government business facilities) at centres, in the North-Eastern region (NER), which are not found to be commercially viable by banks, was formulated, provided the State Governments made available necessary premises and other infrastructural support. The Government of Meghalaya has agreed to the proposal of providing premises and security, and bids have been received by PSBs and RRBs for setting up branches at centres identified by the State Government and are being processed. Action is being intitiated in respect of other States in NER where requests have been received.

(iii) Setting up of Credit Counselling Centres on a Pilot Basis

133. So far, banks have reported setting up or proposing to set up 123 credit counselling centres in various States of the country. The feedback received in this regard indicated that most of these centres were in effect set up as extensions of the bank branches and engaged in promotion of bank specific products. Accordingly, a model scheme on financial literacy and credit counselling centres (FLCCs) was formulated and communicated to all scheduled commercial banks and RRBs with the advice to set up the centres as distinct entities maintaining an arm's length from the bank so that the FLCC's services are available to even other banks' customers in the district.

(iv) Setting up of Rural Self Employment Training Institutes

134. The Reserve Bank has issued guidelines, framed by the Government of India, to the SLBC convenor banks to set up at least one Rural Self Employment Training Institute (RSETI) in each district by 2010. These institutions will train at least one youth in a family below poverty line (BPL) in various fields and enhance capacity building. In all,

134 RSETIs have been set up as on December 31, 2008. A target for opening of 100 RSETIs by banks was set for the year 2008-09 and a grant of Rs. one crore per RSETI has been earmarked by the Planning Commission for setting up the institutes. The Regional Offices of the Reserve Bank have been advised to monitor the progress of setting up of RSETIs under their jurisdiction on a quarterly basis.

(h) High Level Committee on Lead Bank Scheme

135. As announced in the Mid-Term Review of the Annual Policy Statement for the year 2007-08, a High Level Committee (Chairperson: Smt. Usha Thorat) with members drawn from various financial institutions, banks and Chief Secretaries of select States was constituted to review the Lead Bank Scheme. The Committee had several rounds of discussions with different State Governments, banks and other stakeholders, including academicians, micro-finance institutions (MFIs) and non-governmental organisations (NGOs). The Committee's draft report will be placed on the Reserve Bank's website by May 15, 2009.

(i) Amendment to Banking Ombudsman Scheme 2006

136. The scope of the Banking Ombudsman Scheme, 2006 was widened to include, *inter alia*, deficiencies arising out of internet banking. Under the amended Scheme, customers can lodge complaints against banks for non-adherence to the provisions of the fair practices code for lenders or the code of bank's commitment to customers issued by the Banking Codes and Standards Board of India (BCSBI).

V. Prudential Measures

(a) Further Relaxations in the Branch Authorisation Policy

137. The current branch authorisation policy requires banks to have a medium-term plan in respect of branch expansion. The request for opening of off-site ATMs was also required to be a part of such plans. On a review, it is proposed:

- to allow scheduled commercial banks (SCBs) to set up off-site ATMs without prior approval subject to reporting.

138. With respect to branch authorisation policy, it is proposed:

- to constitute a Group to review the extant framework of branch authorisation policy with a view to providing greater flexibility, enhanced penetration and competitive efficiency consistent with financial stability.

(b) Presence of Foreign Banks in India: Review

139. In February 2005, the Government of India and the Reserve Bank released the 'Roadmap for Presence of Foreign Banks in India' laying out a two-track and gradualist approach aimed at increasing the efficiency and stability of the banking sector in India. One track was the consolidation of the domestic banking system, both in private and public sectors, and the second track was the gradual enhancement of the presence of foreign banks in a synchronised manner. The roadmap was divided into two phases, the first phase spanning the period March 2005 - March 2009, and the second phase beginning April 2009 after a review of the experience gained in the first phase.

140. In view of the current global financial market turmoil, there are uncertainties surrounding the financial strength of banks around the world. Further, the regulatory and supervisory policies at national and international levels are under review. In view of this, it is considered advisable, for the time being, to continue with the current policy and procedures governing the presence of foreign banks in India. The proposed review will be taken up after due consultation with the stakeholders once there is greater clarity regarding stability, recovery of the global financial system, and a shared understanding on the regulatory and supervisory architecture around the world.

(c) Mitigating Procyclicality: Use of Floating Provisions

141. The G-20 Working Group on Enhancing Sound Regulation and Strengthening Transparency has recommended, as a part of measures to mitigate procyclicality, that capital buffers above minimum requirements and loan loss provisions should be built up in good times in order to enhance the ability of the regulated financial institutions to withstand large shocks. This would require modification in the Reserve Bank's circular of June 22, 2006. The Reserve Bank has been encouraging banks to build floating provisions as a buffer for the possible stress on asset quality later. It is proposed:

- to issue further detailed guidelines on mitigating procyclicality later this year after FSB, BCBS and Committee on Global Financial System (CGFS) finalise their recommendations in this regard.

(d) Credit Rating Agencies

142. In India, all credit rating agencies are registered with the SEBI. The Reserve Bank has accorded accreditation to four SEBI registered credit rating agencies for the limited purpose of using their ratings for assigning risk weights within the framework of the Basel II Accord. Since the Indian banking system has migrated to the Basel II framework, there is a need to review the performance of the credit rating agencies for continuation of the accreditation, especially by looking at the latest data relating to cumulative default rate and transition matrix of the rating agencies. Accordingly:

- the Reserve Bank will liaise with SEBI on the issue of rating agencies' adherence to Code of Conduct Fundamentals of the International Organisation of Securities Commissions (IOSCO).

(e) Liquidity Risk

143. In terms of the asset liability management, liquidity of banks in India is tracked through traditional maturity or cash flow mismatches. The Reserve Bank has examined the issue of banks establishing a more robust liquidity risk management framework that is well integrated into the bank-wide risk management process by adopting global liquidity planning. In this context, banks will be required to integrate their various foreign currency assets and liabilities positions from their branch operations in India with the rupee asset liability position. Accordingly, it is proposed:

- to prepare a draft circular detailing the modalities for adopting the integrated liquidity risk management system as also the guidance note on 'Liquidity Risk Management' based on Basel Committee's 'Principles for Sound Liquidity Risk Management and Supervision' brought out in September 2008 as well as other international best practices which would be placed on the Reserve Bank's website by June 15, 2009.

(f) Financial Inclusion: Relaxing Eligibility Criteria for Banking Correspondents

144. With the objective of achieving greater financial inclusion and increasing the outreach of the banking sector, banks were permitted, to use the services of NGOs/MFIs set up as societies, trusts, Section 25 companies, post offices, co-operative societies and more recently retired bank employees, ex-servicemen and retired government employees as banking correspondents (BCs). Scaling up the BC model is a challenge. It is, therefore, proposed:

- to constitute a Working Group to examine the experience to date of the business correspondent (BC) model and suggest measures, to enlarge the category of persons that can act as BCs, keeping in view the regulatory and supervisory framework and consumer protection issues.
- to increase the maximum distance criterion for the operation of the BC for rural, semi-urban and urban areas from the existing 15 kms. to 30 kms.

(g) Risk Weights for Exposure to Central Counterparties

145. A central counterparty (CCP) is an entity that interposes itself between counterparties to contracts traded within one or more financial markets, becoming the legal counterparty such that it is the buyer to every seller and the seller to every buyer. The CCIL has been acting as a CCP for banks in various segments of the financial market. Similarly, contracts like interest rate futures and currency futures, which are traded on the stock exchanges, are also settled through the clearing houses attached to these exchanges.

146. Banks settling trades through CCIL/ stock exchanges have two types of exposures to these CCPs. First, on account of the on-balance sheet and off-balance sheet transactions undertaken through the CCP; and second, the exposure on account of deposits/collateral kept with the CCPs to meet the margin requirements. It has been decided to lay down the norms for capital adequacy treatment of such exposures. Accordingly:

- the exposures on account of derivatives/ securities financing transactions trades outstanding against all the CCPs, will be assigned zero exposure value, as it is presumed that the CCPs' exposures to their counterparties are fully collateralised on a daily basis, thereby providing protection for the central counterparty's credit risk exposures;
- the margin amounts/collaterals maintained with the CCPs will attract risk weights appropriate to the nature of the CCP. For CCIL, the risk weight will be 20 per cent and for other CCPs, it will be according to the ratings assigned to these entities as per the New Capital Adequacy Framework.
- the above prescription will be subject to review on an on-going basis by the

Reserve Bank about the adequacy of margin, quality of collateral and risk management systems of the clearing house/CCP.

(h) Private Pool of Capital

147. It has been observed that Indian banks have recently been engaged in sponsoring and managing private pools of capital such as venture capital funds and infrastructure funds. The G-30 Report on 'Financial Reform – A Framework for Financial Stability' released on January 15, 2009, observed that large, systemically important banking institutions should be restricted in undertaking proprietary activities that present particularly high risks and serious conflicts of interest. Sponsorship and management of commingled private pools of capital (that is, hedge and private equity funds in which the banking institutions own capital is commingled with client funds) should ordinarily be prohibited and large proprietary trading should be limited by strict capital and liquidity requirements. Therefore, there is need for banks to have greater awareness of the risks inherent in such activities and limit such exposures commensurate with their risk management and available capital. Keeping in view the reputational risk involved in such activities, the Reserve Bank had mandated maintenance of certain level of economic capital in some of the cases approved in the recent past. It is now proposed:

- to issue a paper on prudential issues in banks' floating and managing private pools of capital for eliciting public comments which will form the basis for finalising regulatory guidelines by September 30, 2009.

(i) Stress Testing

148. In the Mid-Term Review of October 2008, it was indicated that the Reserve Bank would be upgrading the stress testing guidelines. Subsequently, the BCBS has issued a paper on 'Principles for Sound Stress Testing Practices and Supervision' in January 2009 for comments. The paper draws lessons for banks and supervisors emerging from the financial crisis and addresses weaknesses in stress testing, including the specific areas of risk mitigation and risk transfer. In this context, the CFSA has recommended that there is a need for the banks themselves to carry out such periodic stress testing. It is proposed to upgrade the stress testing guidelines once BCBS finalises the paper based on comments received.

(j) Securitisation of Bank Loans

149. The securitisation framework in India is considered to be reasonably prudent and has been able to minimise the incentives that have led to the problems which surfaced in the current crisis. It has come to the Reserve Bank's notice that some banks have securitised loans immediately after originating or purchasing these from other banks. Banks are also dividing the total loan for one project into different tranches and securitising a few tranches even before the total disbursement is complete, thus passing on the project implementation risk also to the investors. It is, therefore, proposed:

- to prescribe a minimum lock-in-period and minimum retention criteria for securitising the loans originated and purchased by banks.

(k) Certificate of Registration to Credit Information Companies

150. In response to the Reserve Bank's press release of April 18, 2007 inviting applications for grant of Certificate of Registration from companies desirous of entering into the business of credit information under the Credit Information Companies (Regulation) Act, 2005, 13 applications were received. A High Level Advisory Committee (Chairman: Dr. R.H. Patil) set up by the Reserve Bank screened the applications and recommended the names of four applicants for issue of Certificate of Registration. Accordingly, 'in principle' approvals have been issued to these four applicants.

VI. Institutional Developments

Payment and Settlement Systems

(a) Final Guidelines for Prepaid Payment Instruments in India

151. The enactment of the Payment and Settlement Systems Act, 2007 has brought the payment systems involved in the issuance of prepaid payment instruments under the regulatory jurisdiction of the Reserve Bank. The Reserve Bank had earlier placed the draft guidelines for issuance/operation of such instruments in public domain for wider dissemination and feedback. Taking into account the comments received from various entities within and outside the country, it is now proposed:

- to permit SCBs which comply with the eligibility criteria to issue all categories of prepaid payment instruments;
- eligible non-bank entities, including NBFCs, will be permitted to issue semi-closed instruments, which can be used to purchase all types of goods and services at an identified network of establishments.

The operating guidelines in this regard are being issued separately.

(b) Consolidation of Information Technology Systems: Data Centres

152. The Reserve Bank has set up data centres which were made operational in the second half of 2008. The state-of-the-art data centres provide for a high level of availability of information technology (IT) systems and ensure optimum business continuity management. The critical payment and settlement systems of the Reserve Bank are now operated using the systems at the data centres. Adequate disaster recovery drills are conducted at periodic intervals. While all participating member banks have been able to ensure full participation in these drills by operating from their disaster recovery (DR) sites, there are a few banks which have not been able to meet this objective. In view of the critical importance of such drills and in order to achieve overall systemic efficiency:

- banks are urged to ensure full compliance of these requirements.

(c) Adequacy of the Fallback Arrangements for Managed IT Systems

153. Currently, a number of banks have resorted to the retention of service providers to manage their IT-based operational requirements. It has, therefore, become imperative that banks have adequate plans/systems in place so as to manage risks arising out of such outsourcing arrangements. These risks arise on account

of excessive dependence of the system on a single entity (concentration risk), inadequate systems (operational risks) as also on account of failure of these service providers. The Reserve Bank has already issued comprehensive outsourcing guidelines in November 2006. The risk management aspects detailed therein are of particular relevance to a technology service provider. Hence, it is proposed that:

- banks should undertake a comprehensive review of all such outsourced arrangements including on-site inspections of critical service providers and ensure that adequate fallback arrangements are put in place.

(d) Network Based Operations: RBI Supported Systems

154. The Reserve Bank has taken steps to make the application systems [NDS, real time gross settlement (RTGS), centralised funds management system (CFMS) and structured financial messaging solution (SFMS)] provided by it to operate in an network based environment using the Multi Protocol Label Switching (MPLS). The MPLS approach by using a meshed network topology provides increased redundancies *vis-a-vis* a point to point connectivity at cheaper costs without impacting the security aspects. Accordingly:

- banks are advised to migrate to the MPLS system on a time bound basis.

(e) Recent Developments

(i) Electronic Payment Systems

155. The coverage of bank branches under the electronic payment network, *viz.*, the RTGS and the National Electronic Funds Transfer (NEFT) has increased significantly. While the NEFT network has increased to 54,200 branches at end-March 2009, the RTGS network has increased to 55,000 branches. The RTGS handles, on an average, 80,000 transactions per day, with a peak of 1,28,295 transactions processed as on March 30, 2009.

(ii) National Electronic Clearing Service

156. The volume of transactions through national electronic clearing service (NECS), introduced in September 2008, is also increasing. With a view to moving towards the centralised NECS system, the electronic clearing service (ECS) (credit) in Mumbai has been merged with the NECS. As such no separate local ECS clearing is operative in Mumbai.

(iii) National Financial Switch

157. The national financial switch (NFS) membership/volume is steadily on the increase. As on March 31, 2009 the NFS network covered a total of 38,714 automated teller machines (ATMs) of 34 banks. On an average, a daily volume of 8,90,180 transactions (of which 2,56,156 transactions pertained to balance enquiry and 6,34,024 pertained to cash withdrawal) were routed through the NFS in March 2009 as against a daily volume of 2,67,598 transactions in March 2008. Furthermore, on an average, the daily value settled through the NFS was around Rs.45 crore in March 2009 as against Rs.26 crore in March 2008. Since April 1, 2009 customers have the facility of using ATM of any bank for cash withdrawal, free of cost, thereby making ATMs national payment outlets rather than bank-specific outlets. This measure has seen a surge in transactions in the NFS network with a peak of 1.1 million transactions on a single day on April 11, 2009.

(iv) Mobile Payments

158. As indicated in the Mid-Term Review of October 2008, the operative guidelines for mobile payments were issued on October 8, 2008. So far, 19 banks have obtained permission from the Reserve Bank to provide mobile payment facilities to their customers.

(v) Rationalisation of Charges for Payment Systems

159. The Reserve Bank has rationalised various charges for payment systems. Accordingly, service charges levied for transfer of funds under outward RTGS transactions shall not exceed Rs.25 for transactions of Rs.1 lakh and up to Rs.5 lakh, and Rs.50 for transactions of Rs.5 lakh and above. Similarly, for outward NEFT transactions, service charges levied shall not exceed Rs.5 for transfer of funds up to Rs.1 lakh and Rs.25 for transactions of Rs.1 lakh and above.

160. The Reserve Bank has also prescribed maximum charges which could be levied for collection of outstation cheques under which the service charges would not exceed Rs.50 for cheque value up to Rs.10,000. A maximum charge of Rs.100 would be levied for cheque value of Rs.10,000 – Rs.100,000. The service charge would not exceed Rs.150 of cheque value Rs.100,001 and above.

(vi) Cheque Truncation System

161. The cheque truncation system (CTS) pilot project was operationalised in Delhi in February 2008 and more than 90 per cent of the cheque volume of Delhi clearing house is now processed through the CTS. The Reserve Bank continues to take steps towards extending the CTS across the country and accordingly, it has been decided to set up the CTS in Chennai.

(f) The Payment and Settlement Systems Act, 2007

162. As indicated in the Mid-Term Review of October 2008, the process of issuing authorisation to persons to operate various payment systems has commenced following the notification of the Payment and Settlement Systems Act, 2007 in August 2008. In terms of the Act, all payment system providers/operators including credit card issuing companies and entities engaged in money transfer activity would require authorisation.

Urban Co-operative Banks

(a) Area of Operations of UCBs

163. In order to facilitate the growth of well-functioning urban co-operative banks (UCBs) in States, which enter into Memorandum of Understanding (MoU), it is proposed:

- to permit extension of area of operation of Tier II UCBs in Grade I to the entire State of registration with the prior approval of the Reserve Bank.

(b) Review of Regulatory and Supervisory Framework: UCBs

164. UCBs are presently on Basel I capital framework with surrogate (additional risk-weight) capital charge on market risks. The Advisory Panel on Financial Regulation and Supervision to the Committee on Financial Sector Assessment (Chairman: Dr. Rakesh Mohan and Co-Chairman: Shri Ashok Chawla), which looked into the present regulatory and supervisory framework for UCBs, has observed that it would be premature for full migration of UCBs to Basel II at this juncture. However, it recommended assigning duration based

capital charge for market risk for scheduled UCBs that are systemically important and comparable in size to medium-sized commercial banks. Furthermore, the Panel recommended: (i) a review of the existing internal control systems, risk management systems, asset liability management (ALM) and disclosure norms for UCBs; and (ii) the issue of appropriate guidelines. Accordingly, it is proposed:

- to review the existing instructions and issue appropriate guidelines to UCBs on internal controls, risk management systems, ALM and disclosure norms;
- to apply capital charge for market risks in respect of large-sized and systemically important UCBs with effect from April 1, 2010.

(c) Vision Document for UCBs

165. The Vision Document for UCBs envisaged signing of MoU with the State and Central Governments for harmonisation of dual regulation and supervision of UCBs and setting up of Task Force on Urban Co-operative Banks (TAFCUB) for identification of viable UCBs for their rehabilitation and non-viable UCBs for their non-disruptive exit. Subsequent to the release of the Vision Document in public domain in March 2005, the Reserve Bank has entered into MoUs with 25 State Governments (nine entered during April 2008 to March 2009). As of date, 99 per cent of UCBs and 99 per cent of deposits of the UCB sector are covered under MoU arrangements. The number of UCBs in Grade III and IV, signifying various degrees of sickness, has since declined to 496 as on March 31, 2008 from 725 as on March 31, 2005. Till March 31, 2009 licences had been cancelled or rejected in respect of 85 banks and 31 unlicensed banks in MoU States have been issued banking licences. Since the recommencement of new branch authorisation, 232 licences have been issued for opening of branches by UCBs in MoU States. The initiatives for voluntary mergers and amalgamations of weak UCBs for bringing consolidation in the sector were also carried forward and new policy guidelines on mergers were announced. Sixty-eight mergers between healthy and weak banks have been effected so far. In view of the improved financial condition and enhanced regulatory and supervisory jurisdiction of the Reserve Bank, additional business opportunities were opened up for well-functioning multi-state UCBs and UCBs in MoU States.

(d) Information Technology Support to UCBs

166. Based on the recommendations of the Working Group which looked into ways of supporting IT initiatives of the UCBs, IDRBT is being asked to facilitate UCBs availing of Core Banking Platform on an Application Service Provider (ASP) model. With this, the UCBs will be able to put in place cost-effective, modern technology so as to render better customer service and sound regulatory compliance.

Non-Banking Financial Companies

(a) CRAR for NBFCs-ND-SI

167. The Mid-Term Review of October 2008 had indicated that the CRAR for NBFCs-ND-SI would be raised from 10 per cent to 12 per cent by March 31, 2009 and further to 15 per cent by March 31, 2010. Taking into account the difficulty in raising equity

capital in the current economic environment, it has been decided:

- to defer the implementation of CRAR of 12 per cent to March 31, 2010 and of 15 per cent to March 31, 2011.

(b) *Time-frame for Realisation of Assets by Securitisation Companies/ Reconstruction Companies*

168. In terms of the extant guidelines, securitisation companies (SCs)/ reconstruction companies (RCs) are required to realise the financial assets within a specified time-frame, which shall not in any case exceed five years from the date of acquisition of financial assets. Requests for extending the time frame in this regard are being examined. As an *interim* measure, it is proposed:

- to give an extension of two more years for realisation of the assets in respect of the security receipts (SRs) issued by SCs/ RCs which have completed five years.

(c) *Repossession of Vehicles by NBFCs*

169. The issue of repossession of vehicles in the event of non-payment of interest and/or principal of loans given by NBFCs has recently come into focus, and some courts have also ruled in this regard. The Reserve Bank has already advised NBFCs to put in place a Fair Practices Code with the approval of their boards which, *inter alia*, covers recovery of loans. The issue has been discussed with the industry participants and in view of certain queries raised, it is further clarified that:

- NBFCs must have a built-in repossession clause in the contract/loan agreement with the borrower which must be legally enforceable. To ensure transparency, the terms and conditions of the contract/loan agreement should contain detailed provisions in this regard.

A circular to NBFCs to this effect is being issued separately.

(d) *Special Liquidity Facility for Eligible NBFCs-ND-SI*

170. The Central Government had announced an arrangement for providing liquidity support to eligible NBFCs-ND-SI for meeting the temporary liquidity mismatches through the Industrial Development Bank of India Stressed Asset Stabilisation Fund (IDBI SASF) Trust, which has been notified as special purpose vehicle for undertaking this operation. The facility is meant exclusively for meeting the temporary liquidity mismatches of the NBFCs and not for asset growth.

171. The facility was available for eligible paper issued by NBFCs up to March 31, 2009 with an overall ceiling of Rs.20,000 crore, which was subsequently extended for eligible paper for a further period of three months till June 30, 2009. The facility has been availed to the extent of Rs.750 crore till date.

Second Quarter Review

172. The next review of the Annual Statement on Developmental and Regulatory Policies will be undertaken as part of the second quarter review of monetary policy on October 27, 2009.

Mumbai

April 21, 2009

Annex I
Policy Measures by the Reserve Bank of India: September 2008 Onwards

September 2008

- A firm assurance to meet any demand-supply gaps of foreign exchange in the domestic foreign exchange market.
- A second LAF was re-introduced on a daily basis.
- Interest rate ceilings on FCNR(B) and NR(E)RA deposits were increased by 50 basis points each to LIBOR/swap rates minus 25 basis points and LIBOR/swap rates plus 50 basis points respectively.
- As a temporary measure, scheduled banks were allowed to avail of additional liquidity support under the LAF to the extent of up to one per cent of their net demand and time liabilities from their SLR portfolio and seek waiver of penal interest.

October 2008

- The CRR was reduced by 250 basis points from 9.0 per cent to 6.5 per cent effective from the fortnight beginning October 11, 2008.
- A 14-day special repo facility for a notified amount of Rs.20,000 crore was instituted to alleviate liquidity stress faced by mutual funds, and banks were allowed temporary use of SLR securities for collateral purposes by an additional 0.5 per cent of NDTL exclusively for this purpose.
- Commercial banks and all-India term lending and refinancing institutions were allowed to lend against and buy back certificates of deposit (CDs) held by mutual funds.
- The Reserve Bank temporarily provided a sum of Rs.25,000 crore as the first instalment under the Agricultural Debt Waiver and Debt Relief Scheme to scheduled banks and NABARD immediately, pending Parliamentary sanction and consequent release of funds by the Central Government.
- Interest rate ceilings on FCNR(B) and NR(E)RA deposits were increased further by 50 basis points each to LIBOR/swap rates plus 25 basis points and LIBOR/swap rates plus 100 basis points respectively.
- Banks were permitted to borrow funds from their overseas branches and correspondent banks to the extent of 50 per cent of their unimpaired Tier-I capital or US $ 10 million, whichever is higher.
- The Reserve Bank announced that it would institute special market operations to meet the foreign exchange requirements of public sector oil marketing companies against oil bonds when they become available.
- On October 20, 2008 the repo rate under the LAF was reduced by 100 basis points to 8.0 per cent.
- The systemically important non-deposit taking non-banking financial companies (NBFCs-ND-SI) were permitted to raise short-term foreign currency borrowings.
- External commercial borrowings (ECBs) up to US $ 500 million per borrower per financial year were permitted for rupee expenditure and/or foreign currency expenditure for permissible end-uses

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Policy Measures by the Reserve Bank of India: September 2008 Onwards *(Contd.)*

under the automatic route. Further, the all-in-cost ceiling for ECBs of average maturity period of three years and up to five years was raised to 300 basis points, and over five years, to 500 basis points above 6-month LIBOR.

November 2008

- The repo rate under the LAF was reduced by 50 basis points to 7.5 per cent with effect from November 3, 2008.
- The CRR was reduced by 100 basis points from 6.5 per cent to 5.5 per cent of NDTL.
- The statutory liquidity ratio (SLR), which was relaxed on a temporary basis earlier, was made permanent and reduced to 24 per cent of NDTL effective November 8, 2008.
- In order to provide further liquidity comfort, a special refinance facility for scheduled commercial banks (excluding RRBs) up to 1.0 per cent of each bank's NDTL as on October 24, 2008 was introduced under Section 17(3B) of the Reserve Bank of India Act, 1934 up to a maximum period of 90 days.
- On October 15, 2008 the Reserve Bank introduced a 14-day special repo facility allowing banks to avail additional liquidity support exclusively for the purpose of meeting the liquidity requirements of mutual funds to the extent of 0.5 per cent of their NDTL. Subsequently, this facility was extended for NBFCs and the relaxation in the maintenance of the SLR was enhanced to the extent of up to 1.5 per cent of their NDTL.
- Buy-back of MSS dated securities was announced to provide another avenue for injecting liquidity to be calibrated with the market borrowing programme of the Government of India.
- The special term repo facility introduced for the purpose of meeting the liquidity requirements of MFs and NBFCs, was extended till end-March 2009. Banks can avail of this facility either on an incremental basis or on a rollover basis within the entitlement of up to 1.5 per cent of their NDTL.
- Interest rate ceilings on FCNR(B) and NR(E)RA deposits were further raised by 75 basis points each to LIBOR/swap rates plus 100 basis points and LIBOR/swap rates plus 175 basis points respectively.
- Housing finance companies (HFCs) registered with the National Housing Bank (NHB) were permitted to raise short-term foreign currency borrowings under the approval route.
- The Reserve Bank permitted Indian corporates to prematurely buy back their FCCBs at prevailing discounted rates.
- The period of entitlement of the first slab of pre-shipment rupee export credit was extended from 180 days to 270 days.
- The aggregate limit of export credit refinance (ECR) facility for scheduled banks (excluding RRBs) was enhanced from 15 per cent to 50 per cent of the outstanding export credit eligible for refinance.
- SIDBI and the NHB were allocated Rs. 2000 crore and Rs.1000 crore respectively against banks' estimated shortfall in priority sector lending in March 2009.

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Policy Measures by the Reserve Bank of India: September 2008 Onwards *(Contd.)*

- Banks were encouraged to use the special refinance facility under Section 17(3B) of the Reserve Bank of India Act, 1934 for the purpose of lending to micro and small enterprises.
- The provisioning requirements for all types of standard assets were reduced to a uniform level of 0.40 per cent, except in the case of direct advances to the agricultural and SME sectors which continue to attract provisioning of 0.25 per cent, as hitherto.
- Risk weights on banks' exposures to all unrated claims on corporates, claims secured by commercial real estate and claims on NBFCs-ND-SI were reduced to 100 per cent from 150 per cent.
- The special refinance facility under Section 17(3B) of the Reserve Bank of India Act, 1934 introduced on November 1, 2008 was extended up to June 30, 2009.
- The special term repo facility was expanded to enable banks to accommodate the funding needs of HFCs. The facility was extended up to June 30, 2009.
- On November 7, 2008 Indian public and private sector banks that have foreign branches or subsidiaries were provided a forex swap facility of tenor up to three months with the Reserve Bank. Further, for funding the swap, banks were allowed to borrow under the LAF for the corresponding tenor at the prevailing repo rate. This facility was subsequently extended up to June 30, 2009.
- The period of entitlement of the first slab of post-shipment rupee export credit was extended from 90 days to 180 days.

December 2008

- The repo rate under the LAF was reduced by 100 basis points from 7.5 per cent to 6.5 per cent and the reverse repo rate by 100 basis points from 6.0 per cent to 5.0 per cent, effective December 8, 2008.
- A refinance facility was introduced for SIDBI, NHB and EXIM Bank for Rs. 7,000 crore, Rs.4,000 crore and Rs.5,000 crore respectively. This facility will be available up to March 31, 2010.
- Authorised Dealers Category-I banks were permitted to consider applications for premature buy-back of FCCBs from their customers.
- Loans granted by banks to HFCs for on-lending for housing up to Rs.20 lakh per dwelling unit were classified under priority sector.
- Commercial real estate exposures restructured up to June 30, 2009 were allowed to be treated as standard assets. As a one-time measure, the second restructuring done by banks of exposures (other than exposures to commercial real estate, capital market exposures and personal/consumer loans) up to June 30, 2009 was also made eligible for concessional regulatory treatment.
- The prescribed interest rate as applicable to post-shipment rupee export credit (not exceeding BPLR minus 2.5 percentage points) was extended to overdue bills up to 180 days.

January 2009

- The repo rate under the LAF was reduced by 100 basis points from 6.5 per cent to 5.5 per cent with effect from January 5, 2009.

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Policy Measures by the Reserve Bank of India: September 2008 Onwards *(Contd.)*

- The reverse repo rate under the LAF was reduced by 100 basis points from 5.0 per cent to 4.0 per cent with effect from January 5, 2009.
- The CRR was reduced from 5.5 per cent to 5.0 per cent of NDTL effective from the fortnight beginning January 17, 2009.
- In order to address the temporary liquidity constraints of systemically important non-deposit taking non-banking financial companies (NBFCs-ND-SI), the Government announced the setting up of a special purpose vehicle (SPV). According to the scheme announced, the SPV was allowed to mobilise resources through issuance of government guaranteed securities for investment in CPs and NCDs of NBFCs-ND-SI. Government guaranteed securities were required to be purchased by the Reserve Bank. The SPV was to ensure that the NBFCs used the money only for addressing liquidity constraints and not for business expansion. The total support from the Reserve Bank was limited to Rs.20,000 crore with an option to raise it by a further Rs.5,000 crore.
- The special term repo facility under LAF for the purpose of meeting the funding requirements of MFs, NBFCs and HFCs was extended up to September 30, 2009.
- The special refinance facility for scheduled commercial banks under Section 17 (3B) of the RBI Act, 1934 was extended up to September 30, 2009.
- The all-in-cost ceiling for ECBs through the approval route has been dispensed with up to June 30, 2009.

February 2009

- The Forex Swap facility was extended till March 31, 2010.
- Banks were allowed to apply special regulatory treatment for accounts which were standard on September 1, 2008 and taken up for restructuring up to January 31, 2009 even if these had turned non-performing along this period. Subsequently, the time schedule for taking up restructuring was extended up to March 31, 2009.
- The ceiling rate on export credit in foreign currency was raised from LIBOR + 100 basis points to LIBOR + 350 basis points on February 5, 2009 subject to the condition that the banks would not levy any other charges.
- Correspondingly, the ceiling interest rate on the lines of credit with overseas banks was also increased from 6 months LIBOR/ EURO LIBOR/ EURIBOR + 75 basis points to six months LIBOR/ EURO LIBOR/ EURIBOR + 150 basis points.

March 2009

- The repo rate under the LAF was reduced by 50 basis points from 5.5 per cent to 5.0 per cent with effect from March 5, 2009.
- The reverse repo rate under the LAF was reduced by 50 basis points from 4.0 per cent to 3.5 per cent with effect from March 5, 2009.
- The MoU signed by the RBI with the Government on March 25, 2004 on the MSS was amended on February 26, 2009 to enable the transfer of a part of the

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amount in the MSS cash account to the normal cash account as part of the Government's market borrowing programme for meeting Government's approved expenditure. An amount of Rs.12,000 crore was transferred from the MSS account to the normal cash account of the Government of India on March 4, 2009 and an equivalent amount of Government securities issued under the MSS formed a part of the normal market borrowing of the Government of India. Based on the emerging fund requirements of the Government, Rs.33,000 crore of MSS would be de-sequestered against the approved market borrowing programme or bought back in the fiscal year 2009-10.

- The Reserve Bank announced OMO purchase of government securities of the order of Rs.80,000 crore in the first half of 2009-10, of which Rs.40,000 crore is envisaged for the first quarter of 2009-10.
- The facility of providing liquidity support to meet the temporary liquidity mismatches for eligible non-banking non-deposit taking systematically important financial companies (NBFCs-ND-SI), which was initially available for any paper issued up to March 31, 2009 was extended for any paper issued up to June 30, 2009. Accordingly, the SPV would cease to make fresh purchases after September 30, 2009 and would recover all dues by December 31, 2009.

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G-20 Working Group on Enhancing Sound Regulation and Strengthening Transparency: Current Status of the Reserve Bank on the Recommendations

Measures for strengthening the regulation of the financial system were considered by the G-20 Working Group on Enhancing Sound Regulation and Strengthening Transparency. The recommendations of the Group and the status with regard to the relevant items for India are set out below.

System-wide Approach to Financial Regulation

Recommendation 1

As a supplement to their core mandate, the mandates of all national financial regulators, central banks, and oversight authorities, and of all international financial bodies and standard setters (IASB, BCBS, IAIS and IOSCO) should take account of financial system stability.

- Over the last few years, financial stability has emerged as a key objective of the Reserve Bank's policy. Accordingly, several measures have been taken in recent years to promote financial stability. As recommended by the Committee on Financial Sector Assessment (CFSA), a Financial Stability Unit is being set up.

Recommendation 2

Within each country, there should be an effective mechanism for appropriate domestic financial sector authorities to jointly assess the systemic risks across the financial system and to co-ordinate the domestic policy response to limit the build-up in systemic risk. The structure of this coordinating mechanism should be transparent, with clear assignments of roles, responsibilities and accountability for each authority.

- In India, the High Level Co-ordination Committee on Financial Markets (HLCCFM) provides a co-ordination mechanism among financial sector regulators, *viz.*, Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), Insurance Regulatory and Development Authority (IRDA) and Provident Fund Regulatory and Development Authority (PFRDA). It is supported by other technical committees/ sub-committees, which examine issues relating to entities under various regulators that have cross-sector implications.
- There are separate technical committees for RBI regulated entities, SEBI regulated entities and IRDA regulated entities. These committees review capital market related developments and based on an early warning system attempt to identify any unusual developments that may require co-ordinated action. Exchange-traded currency futures and interest rate futures, financial conglomerate monitoring framework, crisis management group and a corporate bond and securitisation advisory committee have been introduced through co-ordination of inter-regulatory agencies.

Recommendation 3

Financial sector authorities should have suitable macroprudential tools to address systemic vulnerabilities.

- The Reserve Bank has been using various macro-prudential tools to address banking system risks. For instance, during the expansionary phase of 2004-07, the Reserve Bank took various measures to restrict unbridled growth of credit. These

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included increased provisioning for standard advances and increased risk weights in respect of certain asset classes. However, subsequently, during slow credit growth phase beginning November 2008, those counter-cyclical measures were reversed. The Reserve Bank will continue to make efforts to develop and use further macro-prudential tools and would also consider using any tools that may be developed or recommended by international standard setting bodies.

Recommendation 4

The expanded FSF, together with the IMF, should create an effective mechanism for key financial authorities in each country to regularly come together around an international table to jointly assess the systemic risks across the global financial system and to coordinate policy responses.

- The G-20 has redesignated the Financial Stability Forum (FSF) to Financial Stability Board (FSB) and its membership has, *inter alia,* been enlarged to include, all G-20 member countries, including India. The Reserve Bank, the Government of India and the SEBI look forward to contributing actively and effectively to the work and initiatives of the FSB and the BCBS.

Scope of Regulation

Recommendation 5

All systemically important financial institutions, markets and instruments should be subject to an appropriate degree of regulation and oversight, consistently applied and proportionate to their local and global systemic importance. Non-systemically important financial institutions, markets and instruments could also be subject to some form of registration requirement or oversight, depending on the type and degree of risk posed, for example for the integrity or efficiency of markets.

National authorities should have the authority to expand the perimeter of regulation in a timely way, recognizing that it may vary across countries and through time.

- Banks, which form the largest segment of the Indian financial system, are closely regulated by the Reserve Bank. In recent years, the Reserve Bank has extended its detailed prudential regulation to systemically important non-deposit taking NBFCs (NBFCs-ND-SI) also. The Reserve Bank oversees the payment and settlement systems, regulates money markets, foreign exchange market and government securities market.
- Issues relating to expansion of the perimeter of regulation to those institutions which are not prudentially regulated and are systemically important could be deliberated in the HLCCFM.

Recommendation 6

The systemic importance of financial institutions, markets and instruments depends on a wide range of factors, including their size, leverage, interconnectedness, as well as funding mismatches. The IMF, in consultation with the BIS and the expanded FSF and other bodies, should jointly develop a common

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international framework and guidelines to help national authorities assess whether a financial institution, market or an instrument is systemically important as consistently as possible across jurisdictions.

- The Reserve Bank is committed to follow sound international practices and standards. When a common international framework is available to help national authorities to assess whether a financial institution, market or an instrument is systemically important, the Reserve Bank will use the framework to further sharpen its focus with regard to the supervision of those institutions considered systemically important in consultation with the Government and other regulatory authorities, as necessary, consistent with the legal framework.

Recommendation 7

Large complex financial institutions require particularly robust oversight given their systemic importance, which arises in part from their size and interconnectedness (or correlation) with other institutions, and from their influence on markets.

- Following the report on financial conglomerates (FCs), a monitoring mechanism for the identified FCs has been in place since 2004 in co-operation with other regulators. Since April 2005, the FC monitoring mechanism has been further strengthened with the introduction of half-yearly discussion with the CEOs of the major group entities within the FC.
- As indicated in the Mid-term Review of October 2008, an 'approach paper' on the supervision of financial conglomerates has since been prepared by an Internal Group. The recommendations of the Group are being examined from the regulatory and supervisory perspectives for initiating appropriate action.
- As part of its endeavour to strengthen the supervision of banking groups, the Reserve Bank extended the major elements of prudential regulations, *viz.*, capital adequacy and exposure norms to all the subsidiaries of commercial banks in 2003.

Recommendation 8

The boundaries of the regulatory framework should be reviewed periodically within national jurisdictions, in light of financial innovation and broader trends in the financial system. International bodies will promote good practice and consistent approaches in this area.

- The Reserve Bank regularly interacts with other regulators of the financial system within the national jurisdiction, *viz.*, SEBI, the securities regulator, IRDA, the insurance regulator and PFRDA, the regulator of pension funds. The Reserve Bank has also been associated with various international bodies such as G-20 and the BIS, and now also with the FSB and the BCBS.
- The issue of review of the boundaries of the regulatory framework will be kept in focus, both in the interaction with sectoral regulators within the national jurisdiction and with international bodies.

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Oversight of Credit Rating Agencies

Recommendation 9

All credit rating agencies whose ratings are used for regulatory purposes should be subject to a regulatory oversight regime that includes registration and that requires compliance with the substance of the IOSCO Code of Conduct Fundamentals. National authorities should obtain the authority to enforce compliance and require changes to a rating agency's practices and procedures for managing conflicts of interest and for assuring the transparency and quality of the rating process.

- In India, all credit rating agencies are registered with the SEBI. The Reserve Bank has accorded accreditation to four credit rating agencies registered with the SEBI for the limited purpose of using their ratings for assigning risk weights within the framework of the Basel II Accord which has been implemented by all banks as at the end of March 2009. Prior to the accreditation, the Reserve Bank had undertaken a review of the rating agencies' practices and procedures to ensure that they comply with the criteria prescribed for accreditation in the Basel II framework.
- Since the Indian banking system has migrated to the Basel II framework, there is a need to review the performance of the credit rating agencies for continuation of the accreditation, especially by looking at the latest data relating to cumulative default rate and transition matrix of the rating agencies. The Reserve Bank will liaise with the SEBI on the issue of rating agencies' adherence to the IOSCO Code of Conduct Fundamentals.

Private Pools of Capital

Recommendation 10

Private pools of capital, including hedge funds, can be a source of risk owing to their combined size in the market, their use of leverage and maturity mismatches, and their connectedness with other parts of the financial system. They or their managers should therefore be required to register with financial authorities and disclose appropriate information to assess the risks they pose.

- In India, venture capital funds and mutual funds are registered and regulated by the SEBI. Hedge funds do not operate in India at present. The Reserve Bank proposes to issue a paper on prudential issues in banks' floating and managing private pools of capital to finalise the regulatory guidelines.

Transparent Assessment of Regulatory Regimes

Recommendation 11

All G-20 members should commit to undertake a Financial Sector Assessment Program (FSAP) report and to publish its conclusions. National authorities may also periodically undertake a self-assessment of their regulatory frameworks based on internationally agreed methodologies and tools.

- India first participated in an FSAP in 2001 conducted by the IMF and the World Bank and also associated with the independent

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assessment of standards and codes by the Fund/Bank. It also conducted a self-assessment of compliance with international standards and codes in 2002 and its review in 2004 and put these reports in public domain. Since the last FSAP in 2001, India has undertaken a series of ongoing reforms in the financial sector aimed at improving its soundness, resilience and depth. India has completed a comprehensive self-assessment of the financial sector in 2009 under a Committee on Financial Sector Assessment (Chairman: Dr. Rakesh Mohan and Co-Chairman: Shri Ashok Chawla) based on the IMF-WB methodology. The assessment, comprising six volumes, has been published and put in the public domain along with the comments of the internationally acclaimed Peer Reviewers on March 30, 2009. The Reserve Bank will set up a Task Force to take steps for implementation of the recommendations of the two G-20 Working Groups *viz.,* Enhancing Sound Regulations and Strengthening Transparency, and Reinforcing International Co-operation and Promoting Integrity in Financial Markets and will also continuously monitor the implementation. The Task Force will also look into all the issues that have arisen and what follow-up actions relevant to the Reserve Bank need to be taken regarding the recently released report of the Committee on Financial Sector Assessment (Chairman: Dr. Rakesh Mohan and Co-Chairman: Shri Ashok Chawla). The Task Force would suggest an implementation schedule for every quarter on a rolling basis.

Procyclicality

Recommendation 12

The FSF and other bodies, particularly the BCBS, should develop and implement supervisory and regulatory approaches to mitigate procyclicality in the financial system by promoting the build-up of capital buffers during the economic expansion and by dampening the adverse interaction between fair valuation, leverage and maturity mismatches in times of stress.

- As against the Basel norm for minimum CRAR of 8 per cent, in India, banks are required to maintain a minimum CRAR of 9 per cent. The overall CRAR of all scheduled commercial banks continued to be strong and it was at 13 per cent at the end-March 2008 and 13.1 per cent at end-December 2008. The Reserve Bank recognises the need for mitigating the element of procyclicality embedded in the regulatory norms as it may exacerbate cyclical trends. With this objective in view, the Reserve Bank has been employing a menu of macroprudential tools to mitigate the impact of procyclicality.
- FSB and member bodies, BCBS and CGFS have been entrusted with the work of developing regulatory and supervisory approaches to mitigate procyclicality. They are expected to develop a strategic plan by Fall 2009. India will take further action in this regard as per global consensus emerging from the work of international bodies.

Recommendation 13

Accounting standard setters should strengthen accounting recognition of loan loss provisions by considering alternative approaches

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for recognizing and measuring loan losses that incorporate a broader range of available credit information. They should also examine changes to relevant standards to dampen adverse dynamics associated with fair value accounting, including improvements to valuations when data or modelling is weak. Accounting standards setters and prudential supervisors should work together to identify solutions that are consistent with the complementary objectives of promoting the stability of the financial sector and of providing transparency of economic results in financial reports.

- The Reserve Bank introduced the asset classification and loan provisioning norms in the year 1991-92 which prescribe the minimum provisioning based on classification of assets. Certain areas of difference exist between the requirements of accounting standards in respect of loan loss provisioning (accounting perspective) and the Reserve Bank's present regulatory approach and the Basel II approach of calculating expected loan losses (regulatory perspective). Internationally, there are attempts for a convergence in this regard between the Accounting Task Force (ATF) of the BCBS and the IASB. The Reserve Bank will fine tune its policies in tandem with developments at international level in this regard.
- The Reserve Bank has, over the years, issued guidelines on valuation of various instruments/assets in conformity with the international best practices while keeping India-specific conditions in view. In order to encourage market discipline, the Reserve Bank has developed a set of disclosure requirements which allow the market participants to assess key pieces of information on capital adequacy, risk exposure, risk assessment processes and key business parameters which provide a consistent and understandable disclosure framework that enhances comparability. Banks are also required to comply with the Accounting Standard (AS) on disclosure of accounting policies issued by the Institute of Chartered Accountants of India (ICAI).

Capital

Recommendation 14

Capital should serve as an effective buffer to absorb losses over the cycle, so as to protect both the solvency of financial institutions in the event of losses, and their ability to lend.

In the near term, capital buffers above required minimums should be allowed to decline in response to deteriorating economic conditions and credit quality, and urgent consideration should be given to measures that would facilitate access to additional private sector capital in the downturn.

Once conditions in the financial system have recovered, the adequacy of the international standard for the minimum level of capital for banks should be reviewed and the quality and global consistency of capital should be enhanced. In addition, capital buffers above minimum requirements and loan-loss provisions should be built up in good times in order to enhance the ability of regulated financial institutions to withstand large shocks.

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- Once conditions in the global financial system recover, the Reserve Bank would consider enhancing the minimum capital standards in tandem with the proposals at the international level. The build-up of capital and provisioning buffers in good times will be encouraged by the Reserve Bank so that capital can absorb unexpected losses and be drawn down during difficult times.

Recommendation 15

G-20 leaders should support the progressive adoption of the Basel II capital framework, which will continue to be improved on an ongoing basis, across the G-20.

- All commercial banks in India were Basel II compliant as on March 31, 2009. Initially the base approach of the Basel II framework have been adopted. The Reserve Bank has placed on its website a draft circular giving an indicative timeframe for implementation of the advanced approach of the Basel II framework. The enhancement to current Basel II framework by the international standard setting bodies will be considered for implementation as appropriate.

Liquidity

Recommendation 16

Prudential supervisors and central banks should deliver a global framework for promoting stronger liquidity buffers at banks, including cross-border institutions, to ensure that they can withstand prolonged periods of market and funding liquidity stress.

- Indian banks have a significant holding of liquid instruments as they are required to maintain cash reserve ratio and statutory liquidity ratio (5 per cent and 24 per cent of their net demand and time liabilities, as at present). The substantial CRR/SLR holding offers, in effect, a good liquidity buffer. There are prudential norms governing unsecured overnight borrowings by banks and inter-bank liabilities.
- The Reserve Bank has examined the issue of banks establishing a more robust liquidity risk management framework that is well integrated into the bank-wide risk management process by adopting global liquidity planning. In this context, banks will be required to integrate their various foreign currency assets and liabilities positions from their branch operations in India with the rupee asset liability position.

Infrastructure for OTC Derivatives

Recommendation 17

Financial institutions should continue to strengthen the infrastructure supporting OTC derivatives markets. In the case of credit derivatives, this includes standardizing contracts to facilitate their clearing through a central counterparty. National authorities should enhance incentives as needed for the use of central counterparties to clear OTC credit derivatives.

Recommendation 18

Central counterparties should be subject to transparent and effective oversight by prudential supervisors and other relevant

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authorities, including central banks, and meet high standards in terms of risk management, operational arrangements, default procedures, fair access and transparency. The CPSS and IOSCO should review their experiences in applying their recommendations for central counterparties to derivatives.

- The CCIL provides an institutional structure for the clearing and settlement of transactions undertaken in government securities, money market instruments and foreign exchange products and has adopted the core principles set by the CPSS and IOSCO. In October 2007, CCIL has joined as a member of the CCP 12, an international organisation of central counterparty (CCP) clearing organisations.
- CCIL's role is being gradually extended to the OTC derivatives segment, initially as a reporting platform and thereafter, covering the settlement aspect.
- The Payment and Settlement Systems Act, 2007 has designated the Reserve Bank as the authority to regulate and supervise the payment and settlement systems in the country.
- The netting procedure and settlement finality, earlier governed by contractual agreement/s, have been accorded legal recognition under the Act. The Reserve Bank is empowered to issue directions and guidelines to the system providers, prescribe the duties to be performed by them and audit and inspect their systems/premises.
- The recommendations of the CPSS and the IOSCO when available will be applied as appropriate to CCIL.

Compensation Schemes and Risk Management

Recommendation 19

Large financial institutions should ensure that their compensation frameworks are consistent with their long-term goals and with prudent risk-taking. As such, the Boards of Directors of financial institutions should set clear lines of responsibility and accountability throughout their organizations to ensure that the design and operation of its remuneration system supports the firm's goals, including its overall risk tolerance. Shareholders may have a role in this process. Boards should also ensure there are appropriate mechanisms for monitoring remuneration schemes.

Recommendation 20

In order to promote incentives for prudent risk taking, each financial institution must review its compensation framework to ensure it follows sound practice principles developed by the FSF. These include the need for remuneration systems to provide incentives consistent with the firm's long-term goals, to be adjusted for the risk taken by employees, and for the variable components of compensation to vary symmetrically according to performance.

Recommendation 21

Prudential supervisors should enhance their oversight of compensation schemes by taking the design of remuneration systems into account when assessing risk management practices. The BCBS should more explicitly integrate this dimension in its guidance for the

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assessment of risk management practices by national prudential supervisors.

- In terms of Section 35 B of the Banking Regulation Act, 1949 banks in the private sector and foreign banks in India are required to obtain the approval of the Reserve Bank for remuneration payable to their CEOs (the remuneration of public sector bank CEOs is fixed by the Government of India).
- While devising the total remuneration package (including all perquisites and bonus) of CEOs and whole-time directors, Boards of private banks are required to ensure that the total package is reasonable in the light of industry norms including size of the business in India. The Compensation Committee which looks into the remuneration issue is required to have adequate representation of independent directors and directors, if any, representing major institutional shareholders in India. Remuneration of foreign banks' CEOs is mainly driven by the policies of their head offices.
- The Reserve Bank would recommend the implementation of the sound procedures/ principles developed by the FSB for financial institutions regarding the compensation packages.

Transparency

Recommendation 22

Accounting standard setters should accelerate efforts to reduce the complexity of accounting standards for financial instruments and enhance presentation standards to allow the users of financial statements to better assess the uncertainty surrounding the valuation of financial instruments.

- International Accounting Standards/ International Financial Reporting Standards (IAS/IFRS) are adopted as a basis for formulation of Indian standards and due consideration is given to local customs, usage, practices, legal and regulatory environment. The Reserve Bank has taken a proactive role in the area of adherence by banks to the Accounting Standards. The Reserve Bank also actually participates in the standard setting process through its nominees in the Accounting Standards Board and the National Advisory Committee on Accounting Standards.
- IASB is in the process of issuing a new globally accepted standard in place of the existing financial instruments standard (IAS 39 *Financial Instruments: Recognition and Measurement)* that would address issues arising from the financial crisis in a comprehensive manner. Implementation of the standard in the Indian context will arise after it is finalised by IASB and adopted by ICAI as a part of its convergence programme.
- The Reserve Bank has, over the years, issued guidelines on valuation of various instruments/assets in conformity with the international best practices while keeping India-specific conditions in view.
- The securitisation framework in India is considered to be reasonably prudent and has been able to minimise the incentives that have led to the problems which surfaced in the current crisis.

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Recommendation 23

The IASB should enhance its efforts to facilitate the global convergence towards a single set of high-quality accounting standards by sharing the experience of countries that have completed this process and by providing technical assistance.

- The recently published report of the CFSA on India's financial sector assessment has stated that the Indian accounting standards are generally in alignment with international accounting standards, except for some modifications to suit local customs, usages and level of development in the country. There has been significant progress in the area of convergence of accounting standards. The Indian accounting standards are expected to be fully convergent with IFRSs with effect from April 1, 2011 when IFRSs are likely to be adopted in India for listed and other public interest entities.

Enforcement

Recommendation 24

The effective enforcement of regulation should be a priority of all financial regulators. As such, national financial regulators and oversight authorities should ensure the effectiveness of their enforcement activities and that appropriate resources are available for monitoring the application of regulation and for prosecuting offenders. The enforcement function should be independent from other activities or from external influences.

- Regulations issued by the Reserve Bank are monitored by its supervisory department. The Banking Regulation Act, 1949 has prescribed extensive penalties for non submission or willful omission of information, for making false statements, and for not following directions issued by the Reserve Bank. Apart from this, the Reserve Bank can impose penalties under specific powers granted to it under the Act. Similar provisions exist in the Credit Information Companies (Regulation) Act, 2005 and the Payment and Settlement Systems Act, 2007. The penalties imposed by the Reserve Bank under the BR Act are placed in public domain.

Technical Assistance and Capacity Building in Emerging Market Economies

Recommendation 25

Recognizing that the degree of development of financial systems varies considerably across the G20, national authorities should commit to assist each other in enhancing their capacity to strengthen regulatory frameworks. In addition, IOSCO, the IAIS and the BCBS should have the appropriate capacity to provide technical assistance. The needs of emerging market economies deserve particular consideration.

- India has been striving for adopting the international best practices, tailored to country-specific conditions. Accordingly, the capacity building of all stakeholders has been progressively upgraded. The Reserve Bank has also conducted several international seminars often in collaboration with international bodies, to upgrade the skill levels in various

Annex II

G-20 Working Group on Enhancing Sound Regulation and Strengthening Transparency: Current Status of the Reserve Bank on the Recommendations *(Concld.)*

developing economies. The Reserve Bank will continue such efforts.

G-20 Leaders' Declaration

The other important elements for strengthening the financial system as contained in the G-20 Leaders' declaration are:

International Cooperation

To establish the remaining supervisory colleges for significant cross border firms by June 2009 building on 28 already in place.

- India has been actively participating in supervisory colleges conducted by overseas home regulators of foreign banks operating in India. No Indian bank has significant presence in foreign jurisdictions so as to render them systemically important there. As and when Indian banks attain critical level of operations, the Reserve Bank will consider convening supervisory colleges.

To implement the FSF principles for cross-border crisis management immediately, and that home authorities of each major international financial institutions should ensure that the group of authorities with a common interest in that financial institution meet at least annually;

To support continued efforts by the IMF, FSB, World Bank, and BCBS to develop an international framework for cross-border bank resolution arrangements;

- An Internal Working Group constituted to lay down the road map for adoption of a suitable framework for cross-border supervision and supervisory co-operation with overseas regulators has submitted its report in January 2009. The recommendations of the Group are being examined for initiating further action.
- Further, an Inter-departmental Group is examining additional areas/issues which need to be brought under supervisory focus, including modalities for on-site supervision of overseas branches and subsidiaries of Indian banks. The group is expected to submit its report by end May, 2009.
- As and when international framework is developed by international agencies/ standard setters, India will adopt the same in line with country specific needs.

Tax havens and non-cooperative jurisdictions

Increased disclosure requirements on the part of taxpayers and financial institutions to report transactions involving non-cooperative jurisdictions.

- In India, banks have been advised to be extremely cautious while continuing relationships with respondent banks located in countries with poor know-your-customer (KYC) standards and countries identified as 'non-co-operative' in the fight against money laundering and terrorist financing.
- The AML/CFT guidelines issued by the Reserve Bank are in consonance with the FATF recommendations and the Reserve Bank would continue to incorporate in its regulations latest international best practices.

*Macroeconomic and Monetary Developments in 2008-09**

Overview

The global economic conditions deteriorated sharply during the year 2008 with several advanced economies experiencing their sharpest declines in the post-World War II period. The associated adverse shocks spreading across emerging market economies (EMEs) particularly by the fourth quarter of the year, accentuated the synchronised global slowdown. The global inflation conditions witnessed sharp volatility during the year as headline inflation in major advanced economies firmed up considerably up to July 2008 but fell sharply thereafter. The global financial environment entered a crisis phase in mid-September 2008, following the growing distress among large international financial institutions and the declaration of bankruptcy of Lehman Brothers. As credit markets froze, central banks across the world, along with the respective governments, responded with both conventional and unconventional measures. The knock-on effect of these unprecedented adverse global developments became evident in the macroeconomic performance of the Indian economy, particularly in the second half of 2008-09.

The Indian economy, which was on a robust growth path up to 2007-08, averaging at 8.9 per cent during the period 2003-04 to 2007-08, witnessed moderation in 2008-09, with the deceleration turning out to be somewhat sharper in the third quarter. While the growth deceleration was primarily driven by the knock-on effects of the global economic crisis, it also reflected to some extent the slowdown associated with cyclical factors. Industrial growth experienced a significant downturn and the

* Issued with the Annual Policy Statement 2009-10.

loss of growth momentum was evident in all categories, viz., the basic, capital, intermediate and consumer goods. A hitherto key growth driver, services sector, witnessed some moderation, notwithstanding a counter-cyclical rise in the growth of community, social and personal services on the back of implementation of the Sixth Pay Commission recommendations. Although agriculture also recorded a deceleration in growth, the agricultural outlook remains satisfactory, with the sowing in the rabi season being higher than that in the previous year.

The slowdown in the Indian economy during 2008-09 has been associated with a deceleration in investment demand, which had been an important driver of growth in recent years. The adverse conditions for access to external capital, and the depressing effects of the global crisis on domestic business confidence contributed to the moderation in investment demand. The deceleration in private consumption expenditure was partly offset by a sharp increase in Government consumption expenditure during the third quarter emanating from the discretionary fiscal stimulus measures and committed expenditures. The key deficit indicators of the Central Government, viz., the revenue deficit and the gross fiscal deficit as per the revised estimates for 2008-09 were, therefore, significantly higher than the budgeted level as well as those of the preceding year. Implementing the fiscal stimulus packages required the Government to defer the attainment of the stipulated deficit targets under the Fiscal Responsibility and Budget Management (FRBM) Act, 2003. Corporate performance remained subdued during the year, with the impact on profitability being particularly adverse during the third quarter, when growth in sales, which had been strong in earlier quarters, also decelerated. External demand conditions weakened, particularly since October 2008, with the decline in exports resulting in a sharp widening of the merchandise trade deficit during April 2008-February 2009. Saving and investment rates, which had peaked in 2007-08, are likely to be affected adversely by the slowdown in economic growth during 2008-09.

The balance of payments (BoP) developments during April-December 2008 reflected the impact of shocks emanating from the global economy through both trade and financial channels. There was a large expansion in trade deficit led by relatively higher growth in imports on account of high oil prices in the earlier part of the year, and slowdown in exports. During the third quarter of 2008-09 both imports and exports recorded sharp deceleration under the impact of contraction in the external demand, slowing domestic demand and falling commodity prices. Despite relative resilience of software services exports and remittances from overseas Indians, the large trade deficit led to an expansion in current account deficit to US$ 36.5 billion in April-December 2008 as compared with US$ 15.5 billion in April-December 2007. Large net outflows under portfolio investment and large repayments under short-term trade credit, along with a wider current account deficit led to a decline in reserves. It is indeed remarkable that the contagion spreading from a severe global crisis could be managed with a reserve loss (excluding valuation) of only US$ 20.4 billion over the period April-December 2008, out of which US$ 17.9 billion was incurred in the last quarter of 2008 alone. As on April 10, 2009 the foreign exchange reserves stood at US $ 253.0 billion, showing a decline of US$ 56.7 billion (including valuation) over the level at end-March 2008. India's external debt, debt sustainability indicators and the level of foreign exchange reserves continue to remain at comfortable levels and would ensure external stability.

Monetary growth witnessed moderation during 2008-09, reflecting deceleration in bank credit on the back of the slowdown in economic activity emanating from the deepening of the international financial turmoil. The consequent capital outflows contributed to the contraction of reserve money. The Reserve Bank, therefore, undertook a number of measures such as cuts in the cash reserve ratio (CRR), unwinding/de-sequestering of balances held by the Government with the Reserve Bank under Market Stabilisation Scheme (MSS), open market operations (OMOs) and other measures to ensure ample rupee liquidity in the system. Consequently, the expansion of reserve money, adjusted for the CRR cuts, was substantial at 19.0 per cent in 2008-09, albeit, lower than that of 25.3 per cent in 2007-08. The expansion in non-food credit, after reaching a peak in October 2008, decelerated thereafter, reflecting the downturn in demand conditions in both the international economy and the domestic economy. The flow of resources to the commercial sector from non-banking and external sources declined sharply during the year. As a result of net capital outflows and consequent foreign exchange operations of the Reserve Bank, net foreign exchange assets of the Reserve Bank declined. On the other hand, net Reserve Bank credit to Centre increased reflecting its increased investments in government securities through OMOs as also the decline in MSS.

India also experienced the knock-on effects of adverse international developments in conjunction with domestic factors affecting liquidity conditions. Simultaneously capital flow reversals took place, which impacted the equity markets as well as the foreign exchange market. The Reserve Bank has taken a number of measures since mid-September 2008 to augment the domestic currency and foreign exchange liquidity through the banking system. Consequently, the liquidity conditions in India have been normal since mid-November 2008. The level of Government borrowings in 2008-09 was much higher than what was initially budgeted, which impacted market sentiment during the last quarter of 2008-09. The equity markets, which had remained subdued throughout 2008-09, began to pick-up in the last week of March, in line with the international developments.

During the first half of 2008-09, headline inflation increased in major economies but recorded sharp decline subsequently in consonance with movements in international energy and commodity prices. The recent declining trend in these prices was also contributed by moderation in demand pressures following the impact of the financial crisis. In India also, inflation as measured by year-on-year variation in the wholesale price index (WPI), declined from its intra-year *peak of 12.9 per cent recorded on August 2, 2008 to 0.3 per cent as on March 28, 2009 led by the reductions in the administered prices of petroleum products and electricity as well as decline in the prices of freely priced petroleum products, oilseeds/edible oils/oil cakes, raw cotton, cotton textiles and iron and steel. It may be noted that the effective supply management measures and other policy actions have contributed to relatively lower volatility in key commodity prices in India as compared to the international trends. On the other hand, high food prices have kept consumer inflation at elevated levels in the range of 9.6-10.8 per cent during January/February 2009 as compared with 7.3-8.8 per cent in June 2008 and 5.2-6.4 per cent in February 2008.*

In sum, the Indian economy has experienced some loss of growth momentum with major drivers of growth witnessing moderation. In particular, the broad-based industrial slowdown, dampened services sector growth, deceleration in private consumption and investment demand along with declining export demand are some of the major concerns facing the Indian economy in the wake of the global recession at the present juncture. The fiscal stimulus packages of the Government and the monetary easing of the Reserve Bank will, however, arrest the moderation in growth and revive consumption and investment demand, though with some lag, in the months ahead. Furthermore, prospects of the agricultural sector also remain bright, and this will continue to support the rural demand. Notwithstanding widened current account deficit in 2008-09, the balance of payments position remains sustainable in the context of the present level of foreign exchange reserves and external debt. Finally, in the wake of expected improvement in agricultural production as well as low international commodity prices, inflationary pressures are also anticipated to remain at a low level through the greater part of the 2009-10.

An important challenge in the macroeconomic and monetary policy making during 2008-09 has been to manage the volatility emerging in respect of several key economic indicators of the Indian economy. During the course of the year, while overall growth moderated from its high growth momentum, headline WPI inflation declined sharply from a double digit level to near zero per cent by the end of the year. India's financial sector activity confronted a sudden shift from a phase of high to that of sharply receding capital inflows. This was manifested in reversal of the appreciating trend in the exchange rate during the year. The consequent policy response to contain excessive volatility in the foreign exchange market by increasing the supply of foreign exchange posed a challenge in managing liquidity in the money markets. The knock-on impact from the global financial markets since September 2008 further tested the Reserve Bank's monetary management operations through both quantity as well as price instruments as the stance shifted from a contractionary to an accommodative mode. However, concious monetary policy measures pursued by the Reserve Bank restored orderly conditions in the money and foreign exchange markets by November 2008. Furthermore, in the wake of receding non-banking and external sources of *funding of the commercial sector, bank credit availability provided some substitution. However, the moderating economic activity eventually resulted in decelerating growth of bank credit by the end of the year. Notwithstanding several challenges, particularly from the global economy, the Indian economy remained resilient, its financial institutions and private corporate sector remained sound and solvent. Furthermore, the macroeconomic management helped in maintaining lower volatility in both the financial and the real sectors in India relative to several other advanced and emerging market economies.*

I. Output

The global financial crisis interrupted the growth momentum of India, despite the strong dominance of domestic sources of growth. There was clear moderation in growth by the third quarter of 2008-09. In relation to the agricultural sector, industry and services sectors have been affected more by the adverse external shocks, with some contribution to their growth deceleration arising from cyclical slowdown in certain sectors after a prolonged phase of high growth. In the context of the severity of the impact of the crisis on the real economy of countries around the world, the growth outcome reflects the resilience of the Indian economy.

I.1 The Indian economy, which witnessed robust growth up to the second quarter of 2008-09, recorded sharp deceleration thereafter in the wake of persistent global economic slowdown, particularly in the advanced economies. According to the estimates released by the Central Statistical Organisation (CSO) in February 2009, real GDP growth during the third quarter of 2008-09 was lower at 5.3 per cent as compared with 8.9 per cent in the corresponding period of 2007-08, reflecting deceleration of growth in all its constituent sectors (Table 1). While the slowdown in industrial growth was largely an outcome of some cyclical downturn and adverse global factors, the services sector also recorded moderation from its double-digit growth, notwithstanding a counter-cyclical rise in the growth of community, social and personal services following the implementation of the Sixth Pay Commission recommendations. The cumulative position reveals that the real GDP growth was 6.9 per cent during 2008-09

Table 1: Growth Rates of Real GDP@

(Per cent)

Sector	2007-08*	2008-09#	2007-08			2008-09			2007-08	2008-09
			Q1	Q2	Q3	Q1	Q2	Q3	April-December	
1	2	3	4	5	6	7	8	9	10	11
1. Agriculture and Allied Activities	**4.9 (17.8)**	**2.6 (17.1)**	**4.4**	**4.4**	**6.9**	**3.0**	**2.7**	**-2.2**	**5.5**	**0.6**
2. Industry	**7.4 (19.2)**	**4.2 (18.7)**	**8.5**	**7.5**	**7.6**	**5.2**	**4.7**	**0.8**	**7.9**	**3.5**
2.1 Mining and Quarrying	3.3	4.7	0.2	3.9	4.3	4.8	3.9	5.3	2.8	4.7
2.2 Manufacturing	8.2	4.1	10.0	8.2	8.6	5.6	5.0	-0.2	8.9	3.4
2.3 Electricity, Gas & Water Supply	5.3	4.3	6.9	5.9	3.8	2.6	3.6	3.3	5.5	3.2
3. Services	**10.8 (63.0)**	**9.2 (64.2)**	**10.7**	**10.7**	**10.1**	**10.2**	**9.6**	**9.5**	**10.5**	**9.7**
3.1 Trade, Hotels, Restaurants, Transport, Storage and Communication	12.4	10.3	13.2	11.0	11.6	11.2	10.7	6.8	11.9	9.4
3.2 Financing, Insurance, Real Estate and Business Services	11.7	8.6	12.4	12.2	11.9	9.3	9.2	9.5	12.2	9.3
3.3 Community, Social and Personal Services	6.8	9.3	4.5	7.1	5.5	8.5	7.7	17.3	5.7	11.2
3.4 Construction	10.1	6.5	9.7	13.7	9.0	11.4	9.7	6.7	10.8	9.2
4. Real GDP at Factor Cost	**9.0 (100)**	**7.1 (100)**	9.1	9.1	8.9	7.9	7.6	5.3	9.0	6.9
Memo:										(Amount in Rupees crore)
a) Real GDP at Factor Cost at 1999-2000 prices	31,29,717	33,51,653								
b) GDP at current market prices	47,23,400	54,26,277								

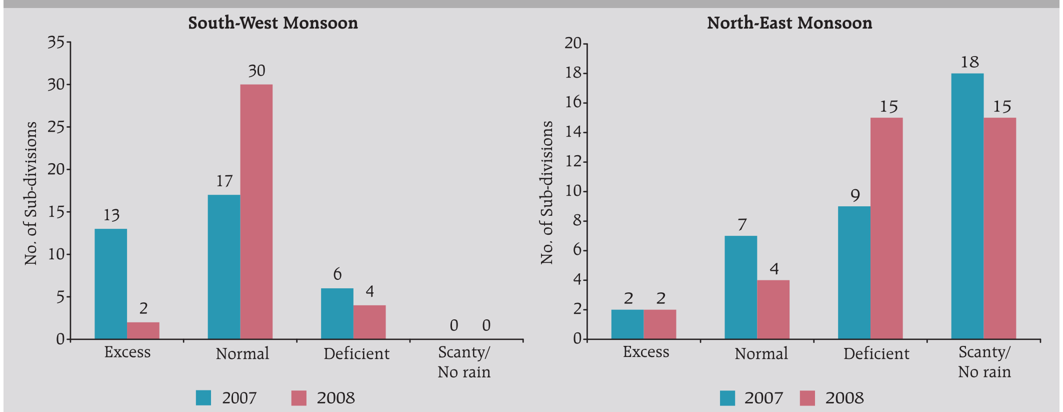
@ : At 1999-2000 Prices. * : Quick Estimates. # : Advance Estimates.
Note : Figures in parentheses indicate shares in real GDP.
Source : Central Statistical Organisation.

(April-December) as compared with 9.0 per cent during the corresponding period of 2007-08. Although India's growth trajectory has been impacted both by the financial crisis and the global economic downturn, the structural drivers of the Indian economy continue to remain intact, sustaining the overall growth at a level much higher than most of the economies in rest of the world. It is expected that domestic demand in the Indian economy would be well supported by strong rural consumption demand as well as the co-ordinated monetary-fiscal stimulus measures undertaken recently.

Agricultural Situation

I.2 The performance of the South West monsoon during 2008 (June 1 to September 30) was satisfactory. Cumulative rainfall was two per cent below normal with 32 of 36 meteorological sub-divisions registering excess/normal rains. The performance of North-East monsoon (October 1 to December 31, 2008) was, however, subdued with cumulative rainfall being 31.0 per cent below the normal level. Moreover, the spatial distribution of rainfall was highly uneven (Chart 1). As on March 26, 2009, the total live water storage was 26.0 per cent (33.0 per cent last year) of the Full Reservoir Level (FRL). The long range monsoon forecast released by the India Meteorological Department on April 17, 2009 reveals that rainfall during the South-West monsoon season 2009, for the country as a whole is likely to be near normal, *viz.*, 96 per cent of

Chart 1: Rainfall during 2008-09



the Long Period Average with a model error of ± 5 per cent.

I.3 The progress of acreage sown mirrors the prospects for agricultural production. The area covered under sowing of various crops declined marginally during the *kharif* season 2008-09 on account of moderate shortfall in rainfall. Nonetheless, the prospects for *rabi* production improved with area sown under *rabi* crops being higher than a year ago (Table 2).

Table 2: Progress of Area Sown under Crops - 2008-09

(Million hectares)

Crop	Normal Area	Area Coverage (as on October 17, 2008)			Crop	Normal Area	Area Coverage (as on March 27, 2009)		
		2007	2008	Absolute Variation			2008	2009	Absolute Variation
1	2	3	4	5	1	2	3	4	5
		Kharif Crops					*Rabi Crops*		
Rice	39.1	37.3	38.5	1.1	Rice	3.7	4.4	4.6	0.3
Coarse cereals	22.7	21.1	20.0	-1.2	Wheat	26.5	28.1	27.8	-0.3
of which:					Coarse cereals	6.4	6.2	6.9	0.7
Bajra	9.2	8.3	7.7	-0.6	*of which:*				
Jowar	4.2	3.5	3.0	-0.5	Jowar	4.9	4.5	4.9	0.4
Maize	6.4	7.4	7.1	-0.3	Maize	0.8	1.1	1.2	0.2
Total Pulses	10.9	12.3	10.4	-1.9	Total Pulses	11.6	13.6	14.5	0.9
Total Oilseeds	15.9	17.5	18.3	0.8	Total Oilseeds	9.2	9.7	10.0	0.3
of which:					*of which*:				
Groundnut	5.4	5.4	5.3	-0.1	Groundnut	0.8	1.2	1.1	-0.2
Soyabean	7.3	8.7	9.6	0.9	Rapeseed/				
Sugarcane	4.1	5.3	4.4	-0.9	Mustard	6.3	6.0	6.6	0.7
Cotton	8.4	9.2	9.1	-0.1	Sunflower	1.3	1.1	1.2	0.1
All Crops	**101.9**	**103.9**	**101.5**	**-2.4**	**All Crops**	**57.4**	**62.0**	**63.8**	**1.9**

Source : Ministry of Agriculture, Government of India.

I.4 The Ministry of Agriculture has set the target for foodgrains production for 2008-09 at 233.0 million tonnes. According to the Second Advance Estimates, the total foodgrains production during 2008-09 is placed at 227.9 million tonnes as compared with 230.8 million tonnes in 2007-08 (Table 3). The reduction in foodgrains production during 2008-09 is on account of decline in *kharif* foodgrains production attributable to the crop losses due to floods in States like Bihar, Eastern UP, Orissa and Assam during the *kharif* season 2008-09. There has been a decline in the production of coarse cereals, pulses, oilseeds, cotton and sugarcane. The marginally lower estimates of wheat production for 2008-09 mainly reflected the unusually warm weather in January and early February 2009. However, growth in allied sectors like horticulture, livestock and fisheries is expected to remain favourable.

Table 3: Agricultural Production

(Million tonnes)

Crop	2007-08	2008-09	
		Target	Achievement@
1	2	3	4
Rice	96.7	97.0	98.9
Kharif	82.7	83.0	85.5
Rabi	14.0	14.0	13.4
Wheat	78.6	78.5	77.8
Coarse Cereals	40.8	42.0	37.0
Kharif	31.9	32.6	27.7
Rabi	8.9	9.4	9.3
Pulses	14.8	15.5	14.3
Kharif	6.4	5.9	4.8
Rabi	8.4	9.6	9.4
Total Foodgrains	**230.8**	**233.0**	**227.9**
Kharif	121.0	121.5	118.0
Rabi	109.8	111.5	109.9
Total Oilseeds	29.8	31.8	26.0
Kharif	20.7	20.0	16.3
Rabi	9.0	11.8	9.6
Sugarcane	348.2	340.0	290.4
Cotton #	25.9	26.0	22.2
Jute and Mesta ##	11.2	11.0	11.0

@ : Second Advance Estimates.
# : Million bales of 170 kgs. each.
: Million bales of 180 kgs. each.
Source : Ministry of Agriculture, Government of India.

Food Management

I.5 The foodgrains procurement (rice and wheat) during 2008-09 was higher led by more than two-fold increase in wheat procurement (Table 4). The offtake of foodgrains (rice and wheat) during 2008-09 so far (up to January 31, 2009) was also higher than the level during corresponding period last year. The stocks of foodgrains with the Food Corporation of India (FCI) and other Government agencies nearly doubled to about 37.4 million tonnes as on February 1, 2009. The stocks of both rice and wheat are now higher than their norms.

Industrial Performance

I.6 The loss of growth momentum in the industrial sector was evident during 2008-09 (April-February) with the year-on-year expansion being 2.8 per cent as against 8.8 per cent in the corresponding period of the previous year (Table 5). The intra-year movement of growth in industrial production reveals that the Index of Industrial Production (IIP), which witnessed an average growth of around 5.6 per cent during the first four months of 2008-09 (April to July), slipped to a low of 1.7 per cent during August, before recovering to 6.0 per cent in September. The IIP growth, however, decelerated in October-November 2008 and January 2009 and recorded a negative growth during December 2008 and

Table 4: Management of Food Stocks

(Million tonnes)

Year/Month	Opening Stock of Foodgrains			Procurement of Foodgrains			Foodgrains Offtake					Closing Stock	Norms
	Rice	Wheat	Total	Rice	Wheat	Total	PDS	OWS	OMS - Domestic	Exports	Total		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2007-08	13.2	4.7	17.9	26.4	11.1	37.5	33.5	3.9	0.0	0.0	37.4	19.8	
2008-09@	13.8	5.8	19.8	32.8	22.7	55.4	28.9	2.6	0.5	0.0	32.0		
							(27.6)	(3.0)	(0.0)	(0.0)	(30.5)		
2007													
April	13.2	4.7	17.9	0.9	7.9	8.7	2.6	0.2	0.0	0.0	2.8	25.1	16.2
July	11.0	12.9	23.9	0.8	0.0	0.8	2.9	0.4	0.0	0.0	3.2	21.2	26.9
October	5.5	10.1	15.6	7.4	0.0	7.4	2.7	0.3	0.0	0.0	2.9	19.7	16.2
December	10.1	8.4	18.5	3.5	0.0	3.5	2.7	0.3	0.0	0.0	3.0	19.2	
2008													
January	11.5	7.7	19.2	4.5	0.0	4.5	2.9	0.3	0.0	0.0	3.2	21.4	20.0
April	13.8	5.8	19.8	1.1	12.6	13.7	2.7	0.0	0.0	0.0	2.8	30.7	16.2
July	11.3	24.9	36.3	0.1	0.2	0.3	2.8	0.3	0.0	0.0	3.1	34.3	26.9
September	8.5	23.3	31.8	1.4	0.0	1.4	2.8	0.4	0.0	0.0	3.2	30.0	
October	7.9	22.0	30.0	8.1	0.0	8.1	2.6	0.1	0.0	0.0	2.8	35.3	16.2
November	14.1	21.0	35.3	3.1	0.0	3.1	2.6	0.1	0.0	0.0	2.8	35.5	
December	15.6	19.6	35.5	4.2	0.0	4.2	3.0	0.5	0.2	0.0	3.6	36.2	
2009													
January	17.6	18.2	36.2	4.8	0.0	4.8	2.9	0.2	0.3	0.0	3.4	37.4	20.0
February	20.2	16.8	37.4	3.7	0.1	3.8	..	..	..	..	..	..	
March	..	..	..	2.4	0.0	2.4	..	..	..	..	..	..	

PDS : Public Distribution System. OWS : Other Welfare Schemes. OMS : Open Market Sales.

.. : Not Available.

@ : Offtake up to January 31, 2009.

Note : 1. Closing stock figures may differ from those arrived at by adding the opening stocks and procurement and deducting offtake, as stocks include coarse grains also.

2. Figures in parentheses indicate offtake of foodgrains during the corresponding period of 2007-08.

3. Total minimum stocks are to be maintained, as on April 1, July 1, October 1, and January 1, by public agencies under the 'new buffer stocking policy' with effect from March 29, 2005.

Source : Ministry of Consumer Affairs, Food and Public Distribution, Government of India.

February 2009 (Chart 2). Before this, IIP had registered negative growth in April 1994.

I.7 The manufacturing sector witnessed a slowdown as 15 industry groups accounting for 74.4 per cent of the total weight in the IIP recorded decelerated/negative growth during April-February 2008-09 (Table 6). Jute, most of the textiles, rubber, plastic, petroleum and coal products, food products, leather and fur products, wood and wood products, furnitures, fixtures, metal products and parts recorded a decline in production, while chemical and chemical products, machinery and equipment, basic metal and alloy industries, paper and paper products, transport equipment and parts, non-metallic mineral products, wool, silk and man-made fibre textiles and other

Table 5: Index of Industrial Production - Sectoral and Use-Based Classification

(Per cent)

Industry Group	Weight in the IIP	Growth Rate			Weighted Contribution #		
		April-March 2007-08	April-February		April-March 2007-08	April-February	
			2007-08	2008-09 P		2007-08	2008-09 P
1	2	3	4	5	6	7	8
Sectoral							
Mining	10.5	5.1	5.2	2.4	4.2	4.0	5.9
Manufacturing	79.4	9.0	9.3	2.8	89.5	89.6	86.7
Electricity	10.2	6.3	6.6	2.4	6.3	6.4	7.3
Use-Based							
Basic Goods	35.6	7.0	7.3	2.7	24.7	25.2	28.6
Capital Goods	9.3	18.0	17.7	8.8	25.0	23.1	39.9
Intermediate Goods	26.5	8.9	9.3	-2.7	27.4	27.7	-25.9
Consumer Goods (a+b)	28.7	6.1	6.6	4.9	22.9	24.1	55.6
a) Consumer Durables	5.4	-1.0	-1.0	4.1	-1.0	-0.9	11.2
b) Consumer Non-durables	23.3	8.5	9.3	5.1	24.0	25.0	44.4
General	**100.0**	**8.5**	**8.8**	**2.8**	**100.0**	100.0	100.0

P : Provisional.
: Figures may not add up to 100 due to rounding off.
Source : Central Statistical Organisation.

manufacturing industries recorded decelerated growth. On the contrary, only two industry groups, *viz.*, beverages, tobacco and related products and textile products recorded accelerated growth during the period.

I.8 Electricity sector witnessed its lowest growth since the introduction of current IIP series (1993-94=100), on account of deceleration in power generation in all spheres, *viz.*, thermal, nuclear and hydro-power plants. The mining sector growth also decelerated.

Chart 2: Industrial Production

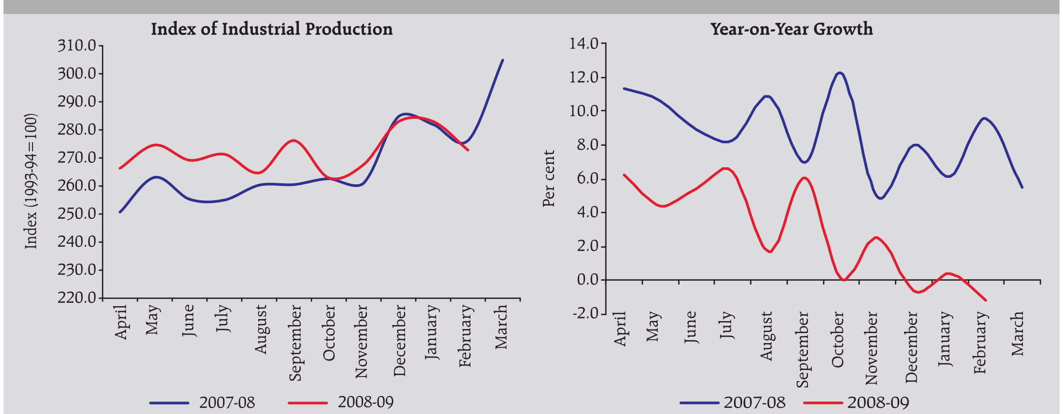


Table 6: Growth of Manufacturing Groups

(Per cent)

Industry Group	Weight in the IIP	Growth Rate			Weighted Contribution #		
		April-March 2007-08	April-February		April-March	April-February	
			2007-08	2008-09 P	2007-08	2007-08	2008-09 P
1	2	3	4	5	6	7	8
1. Food products	9.08	7.0	7.9	-6.2	6.3	6.6	-17.0
2. Beverages, tobacco and related products	2.38	12.0	11.9	14.7	6.8	6.6	27.5
3. Cotton textiles	5.52	4.3	4.7	-2.6	2.0	2.1	-3.7
4. Wool, silk and man-made fibre textiles	2.26	4.8	3.9	1.1	1.5	1.2	1.1
5. Jute and other vegetable fibre textiles (except cotton)	0.59	33.0	30.8	-10.9	0.9	0.9	-1.2
6. Textile products (including wearing apparel)	2.54	3.7	4.2	4.5	1.4	1.6	5.4
7. Wood and wood products, furniture & fixtures	2.70	40.5	46.5	-8.9	5.3	5.6	-4.8
8. Paper and paper products and printing, publishing and allied industries	2.65	2.7	2.7	1.8	0.9	0.9	1.9
9. Leather and leather & fur products	1.14	11.7	11.6	-6.1	1.1	1.0	-1.8
10. Chemicals and chemical products (except products of petroleum & coal)	14.00	10.6	11.4	2.4	22.4	23.4	16.8
11. Rubber, plastic, petroleum and coal products	5.73	8.9	9.3	-2.3	6.1	6.2	-5.2
12. Non-metallic mineral products	4.40	5.7	6.3	0.8	4.1	4.4	1.9
13. Basic metal and alloy industries	7.45	12.1	12.8	4.9	13.4	13.6	17.8
14. Metal products and parts (except machinery and equipment)	2.81	-5.6	-2.8	-2.8	-1.5	-0.7	-2.2
15. Machinery and equipment other than transport equipment	9.57	10.5	9.8	9.7	19.0	16.9	56.0
16. Transport equipment and parts	3.98	2.9	3.1	1.4	2.3	2.3	3.4
17. Other manufacturing industries	2.56	19.8	18.6	2.9	8.0	7.3	4.1
Manufacturing – Total	**79.36**	**9.0**	**9.3**	**2.8**	**100.0**	**100.0**	**100.0**

P : Provisional. # : Figures may not add up to 100 due to rounding off.
Source : Central Statistical Organisation.

I.9 In terms of use-based classification, the growth in basic, capital and consumer goods sectors recorded a deceleration, while intermediate goods production registered a decline during 2008-09 (April-February). The contraction in the intermediate goods sector is due to a decline in the production of a number of textile items, PVC pipes and tubes, railway/concrete sleeper, spun pipes, yarns, hessian, sacking, particle board and filament yarn. The basic goods sector decelerated sharply mainly on account of subdued growth in electricity sector, a fall in production of basic chemicals and rubber, petroleum and coal products and some steel and aluminium products. The capital goods sector moderated on account of decline in production of transport equipment and other machinery and equipments. Within the transport equipment, there was a decline in production of broad gauge covered wagons, passenger carriage, commercial vehicles, H.T. insulators among non-metallic mineral products and agricultural implements. The consumer goods sector witnessed a moderate deceleration, of which the growth of non-durables segment decelerated, while that of consumer durables accelerated. The subdued growth in consumer non-durables was on account of the decline in production of cotton textiles, textile products, leather goods, basic chemicals, metal products such as razor blades, machinery and equipment other than transport equipment and other manufacturing industries.

Infrastructure

I.10 The core sector recorded lower growth of 3.0 per cent during April-February 2008-09, down from 5.8 per cent during the corresponding period of the previous year (Chart 3). The sharp deceleration in the growth of electricity, finished steel and petroleum refinery products sector and decline in crude oil production impacted the growth of infrastructure. Both cement and steel sectors recorded decelerated growth reflecting slowdown in construction.

Services Sector

I.11 The services sector recorded some moderation in growth during 2008-09. The moderation was visible particularly from the second quarter of the year, reflecting subdued performance of all the segments, except community, social and personal services. Cumulatively, the sector recorded a lower growth of 9.7 per cent during April-December 2008-09, as compared with 10.5 per cent during the corresponding period of 2007-08. However, the share of the services sector in real GDP has gone up during 2008-09 (see Table 1).

I.12 In terms of relative contribution to real GDP growth, while the slowdown was particularly evident in construction, trade, hotel, transport and communication, the contribution of community, social and personal services increased, reflecting the Sixth Pay Commission payout (Table 7).

I.13 The indicators of services sector activity for 2008-09 suggest sharp negative growth in respect of foreign tourist arrivals, passengers handled at domestic terminals, commercial vehicles production, railway

Chart 3: Growth in Infrastructure Industries

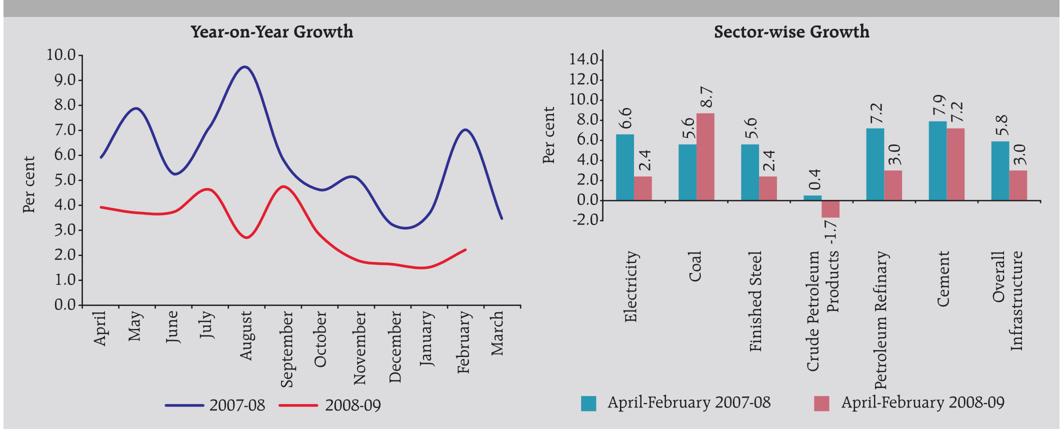


Table 7: Growth in Services Sector

(Contribution to real GDP growth; percentage points)

Year/Quarter	Construction	Trade, Hotels, Transport and Communication	Financing, Insurance, Real Estate and Business Services	Community, Social and Personal Services	Total Services
1	2	3	4	5	6
2005-06	1.1	3.0	1.5	1.0	6.7
2006-07	0.8	3.5	1.9	0.8	6.9
2007-08 QE	0.7	3.4	1.7	0.9	6.7
2008-09 AE	0.5	2.9	1.3	1.2	5.8
2007-08 : Q1	0.7	3.5	1.8	0.6	6.6
: Q2	1.0	3.1	1.8	1.0	6.9
: Q3	0.6	3.1	1.6	0.7	6.0
: Q4	0.9	3.4	1.5	1.3	7.1
2008-09 : Q1	0.8	3.0	1.4	1.1	6.4
: Q2	0.7	3.0	1.4	1.1	6.3
: Q3	0.5	1.8	1.3	2.1	5.7

QE : Quick Estimates. AE : Advance Estimates.
Source: Central Statistical Organisation.

revenue earning freight traffic and import cargo handled by civil aviation. Furthermore, growth in new cell-phone connections, export cargo handled by civil aviation, production of cement and steel decelerated (Table 8).

Table 8: Indicators of Services Sector Activity

(Growth rates in per cent)

Sub-sector	2006-07	2007-08	April-January	
			2007-08	2008-09
1	2	3	4	5
Tourist arrivals	13.0	12.2	12.7	-0.1
Commercial vehicles production#	33.0	4.8	4.5 @	-23.4 @
Railway revenue earning freight traffic	9.2	9.0	9.0 @	-0.9 @
New cell phone connections	85.4	38.3	42.7	31.1
Cargo handled at major ports	9.5	11.9	11.9	3.0
Civil aviation				
Export cargo handled	3.6	7.5	6.7 *	5.5 *
Import cargo handled	19.4	19.7	21.5 *	-0.8 *
Passengers handled at international terminals	12.1	11.9	12.7 *	6.2 *
Passengers handled at domestic terminals	34.0	20.6	24.1 *	-11.6 *
Cement **	9.1	8.1	7.9 @	7.2 @
Steel **	13.1	5.1	5.6 @	2.4 @

* : April-December. # : Leading Indicator for transportation.
@ : April-February. ** : Leading indicators for construction.
Source : Ministry of Tourism; Ministry of Commerce and Industry; Ministry of Statistics and Programme Implementation; Reserve Bank of India; and Centre for Monitoring Indian Economy.

II. Aggregate Demand

The role of aggregate demand in a phase of weakening growth impulses came to the forefront of public policy in 2008-09. The sharp contraction in external demand – as evident in falling global output, employment and global trade – clearly affected India's export performance. India's net exports (goods and services) showed a widening of deficit in 2008-09 (April-December) as compared with the previous year. Domestic demand, in the form of both private consumption and investment expenditure moderated, particularly in the third quarter of 2008-09. To offset the impact of the contraction in demand in other sectors of the economy, expanding the government demand became essential. Despite the pressures on the revenue side arising from the growth slowdown, the fiscal stimulus measures in the form of tax cuts and additional expenditure amounted to about 2.9 percent of GDP. Consequently, the targets set for deficits at the beginning of the year could not be attained, thereby necessitating deferment of the mandated deficit targets under the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 by two years. Corporate performance, after being robust for a number of consecutive years, showed signs of moderation in the third quarter of 2008-09.

II.1 The economic slowdown during 2008-09 has been associated with a considerable deceleration in investment demand, which had been a major driver of growth in recent years. There was also a marked deceleration in private consumption expenditure. Government final consumption, however, rose on account of the discretionary fiscal stimulus measures undertaken during the third quarter. As a result, key deficit indicators of the Central Government, *viz.*, the revenue deficit and the gross fiscal deficit (GFD) in the revised estimates for 2008-09 were significantly higher than the budgeted level as well as those of the preceding year. Corporate performance remained subdued, with the impact on profitability being particularly adverse during the third quarter. As regards external demand, merchandise trade deficit widened sharply during 2008-09 (April- February) as exports have contracted since October 2008. Imports also contracted since November 2008. However, during 2008-09 (April-February) the deceleration in export growth was much sharper than that of import growth. After peaking in 2007-08, saving and investment rates are likely to be lower in 2008-09 reflecting the slowdown in economic growth.

Domestic Demand

II.2 The moderation in overall growth during 2008-09 was driven by deceleration in both private consumption expenditure and investment, particularly during the third quarter of the year. The growth of real gross fixed investment decelerated to 5.3 per cent during the third quarter after registering double-digit growth in earlier quarters. On the other hand, the growth in Government final consumption expenditure (GFCE) picked up sharply during the third quarter of 2008-09 reflecting the Sixth Pay Commission payout, expenditure on agricultural debt waiver, oil and fertiliser subsidies, and counter-cyclical fiscal measures (Table 9).

II.3 The Indian economy continues to be driven by domestic consumption and domestic investment. A noteworthy feature in recent years has been the contribution of gross fixed investment, which has made the growth process more sustainable. During 2008-09 (April-December), the share of

Table 9: Disposition of GDP at Market Prices (Base: 1999-2000) - Growth Rates

(Per cent)

Item	2007-08*	2008-09#	2007-08			2008-09			2007-08	2008-09
			Q1	Q2	Q3	Q1	Q2	Q3	April-December	
1	2	3	4	5	6	7	8	9	10	11
1. Total Final Consumption Expenditure	8.3	8.2	6.6	7.8	8.0	7.6	7.0	7.8	7.5	7.5
(i) Private Final Consumption Expenditure	8.5	6.8	8.4	7.5	8.9	7.7	6.9	5.4	8.3	6.6
(ii) Government Final Consumption Expenditure	7.4	16.8	-2.4	10.0	2.0	7.1	7.9	24.6	2.7	13.3
2. Gross Fixed Capital Formation	12.9	8.9	12.9	16.2	13.7	10.1	15.1	5.3	14.3	10.1
3. Change in Stocks	51.7	36.9	54.1	51.7	52.2	-32.0	-32.0	31.2	52.7	-10.2
4. Valuables	2.7	-10.4	-8.0	1.4	16.5	29.2	22.9	-8.9	3.5	12.5
5. Exports	2.1	20.8	-4.0	-4.8	6.1	23.2	10.6	11.4	-0.9	15.5
6. *Less* Imports	6.9	27.9	-0.7	-3.6	6.7	30.3	26.0	20.6	0.9	25.3
GDP at 1999-2000 prices	9.1	7.1	9.1	8.9	9.1	8.1	7.7	4.5	9.0	6.6

* : Quick Estimates # : Advance Estimates.
Source: Central Statistical Organisation.

private final consumption expenditure (PFCE) in real GDP declined while that of the Government final consumption expenditure (GFCE) increased. The share of gross fixed investment in real GDP, which peaked during the second quarter of 2008-09, declined during the third quarter of the year (Table 10).

Combined Budgeted Government Finances: 2008-09

II.4 During 2008-09, the combined finances of the Central and State Governments were adversely impacted by the economic slowdown. This affected the revenue growth and necessitated additional expenditure on fiscal stimulus measures. In respect of the Central Government, the financial position as reflected in the revised estimates for 2008-09 shows sharp increases in major deficit indicators (Table 11). In respect of State Finances, the budgeted revenue surplus is expected to be wiped out due to lower revenue growth. The financing pattern of combined gross fiscal deficit indicates the continued dominance of market borrowing (Chart 4).

Central Government Finances: 2008-09

II.5 The Central Government finances came under pressure during the fiscal year 2008-09. During the first half of 2008-09, fiscal measures such as tax reductions and increased subsidies undertaken to reduce the impact of inflationary pressures caused by increase in global commodity prices (including petroleum products) expanded the revenue deficit and GFD. Fiscal stress continued during the second half of 2008-09 as spillover effect of the global financial crisis on the Indian economy necessitated the introduction of fiscal stimulus measures in the form of tax cuts and additional expenditure with a view to arrest the moderation in growth (Annex 1). The impact of these measures during 2008-09 is estimated to be around 2.9 per cent of GDP.

II.6 On account of the disproportionate growth in expenditure coupled with

Table 10: Disposition of GDP at Market Prices (Base: 1999-2000) - Shares

(Per cent)

Item	2007-08*	2008-09#	2007-08			2008-09			2007-08	2008-09
			Q1	Q2	Q3	Q1	Q2	Q3	April-December	
1	2	3	4	5	6	7	8	9	10	11
1. Total Final Consumption Expenditure	66.9	67.6	70.4	67.2	67.4	70.1	66.8	69.5	68.3	68.8
(i) Private Final Consumption Expenditure	57.2	57.0	60.1	58.5	59.0	59.8	58.0	59.5	59.2	59.1
(ii) Government Final Consumption Expenditure	9.8	10.6	10.4	8.7	8.4	10.3	8.7	10.0	9.1	9.7
2. Gross Fixed Capital Formation	31.6	32.1	31.7	33.0	30.8	32.3	35.3	31.0	31.8	32.8
3. Change in Stocks	3.1	4.0	3.3	3.2	3.0	2.1	2.1	3.7	3.1	2.7
4. Valuables	1.1	1.0	1.1	1.2	1.3	1.3	1.4	1.1	1.2	1.3
5. Exports	20.2	22.8	22.8	17.2	18.9	26.0	17.6	20.1	19.6	21.2
6. *Less* Imports	24.6	29.4	23.6	24.2	24.0	28.4	28.3	27.7	23.9	28.1
7. Discrepancies	1.5	1.8	-5.7	2.3	2.7	-3.3	5.1	2.1	-0.1	1.4
Memo:										(Rupees crore)
Real GDP at market prices	34,02,716	36,44,011	7,69,806	7,88,864	8,99,235	8,32,350	8,49,407	9,39,458	24,57,905	26,21,215

* : Quick Estimates. # : Advance Estimates.

Source : Central Statistical Organisation.

Table 11: Key Fiscal Indicators

(Per cent to GDP)

Year	Primary Deficit	Revenue Deficit	Gross Fiscal Deficit	Outstanding Liabilities*
1	2	3	4	5
Centre				
2007-08	-0.9	1.1	2.7	60.1
2008-09 BE	-1.1	1.0	2.5	56.4
2008-09 RE	2.5	4.4	6.0	57.8
2009-10 BE	1.8	4.0	5.5	56.6
States				
2007-08 RE	0.1	-0.5	2.3	28.3
2008-09 BE	0.1	-0.5	2.1	27.4
Combined				
2007-08 RE	-0.3	0.9	5.2	76.7
2008-09 BE	-0.8	0.5	4.5	71.7

RE : Revised Estimates. BE : Budget Estimates.
* : Includes external liabilities at historical exchange rates.
Note : 1. Negative sign indicates surplus.
2. Issuances of oil/fertiliser bonds in 2008-09 amounted to 1.8 per cent of GDP.

deceleration in revenue receipts, the revenue deficit and GFD in the revised estimates for the year 2008-09 were placed significantly higher than budget estimates, both in absolute terms as well as ratio of GDP (see Table 11). Revenue deficit at 4.4 per cent of GDP in 2008-09 (RE) was 3.4 percentage points higher than that of the budget estimates. Consequently, GFD relative to GDP rose to 6.0 per cent in 2008-09 (RE) from the budget estimates of 2.5 per cent.

II.7 During 2008-09, the economic slowdown and reduction in tax rates impacted the gross tax revenue, affecting both the net tax revenue of the Centre and the tax revenue transferred to the States. The gross tax revenue in the revised estimates for 2008-09 at Rs.6,27,949 crore

Chart 4: Financing Pattern of the Combined GFD

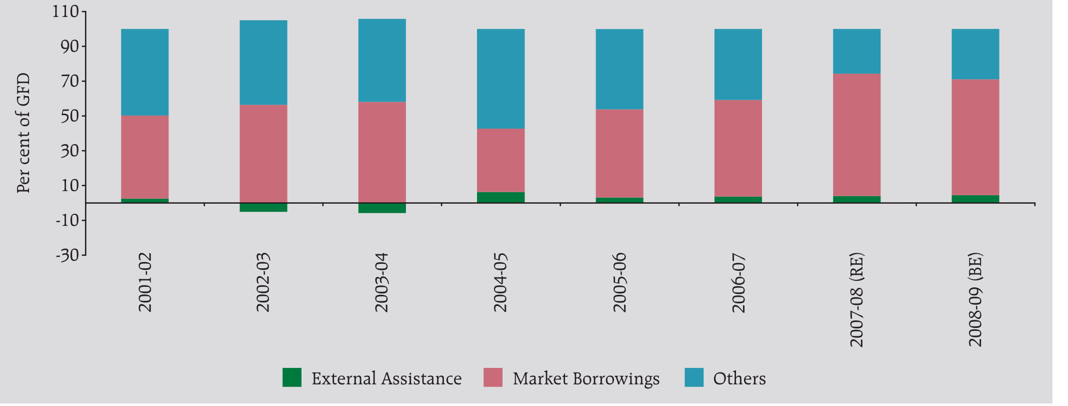


Chart 5: Revenue Collections - Major Taxes

was lower by 8.7 per cent than the budget estimates; collections under all major taxes were significantly lower than their budgeted levels (Chart 5). Non-tax revenue was marginally higher than the budget estimates due to a 10.0 per cent increase in 'other non-tax revenue' such as economic services, other general services and grants-in-aid and contribution. Major components of non-tax revenue, *viz.*, dividends and profits, and interest receipts, however, declined. Reflecting this, the revenue receipts of the Centre are estimated to be lower than the budget estimates (Table 12).

Table 12: Receipts of the Centre

(Amount in Rupees crore)

Item	2007-08 (Accounts)	2008-09 (BE)	2008-09 (RE)	Variation (4 over 3)	
				Amount	Per cent
1 2	3	4	5	6	
1. Total Receipts (2+3)	**7,12,732 ***	**7,50,884**	**9,00,953**	**1,50,069**	**20.0**
	(15.1)	**(13.8)**	**(16.6)**		
2. Revenue Receipts (i+ii)	5,41,925	6,02,935	5,62,173	-40,762	-6.8
	(11.5)	(11.1)	(10.4)		
i) Tax Revenue (Net)	4,39,547	5,07,150	4,65,970	-41,180	-8.1
	(9.3)	(9.3)	(8.6)		
ii) Non-Tax Revenue	1,02,378	95,785	96,203	418	0.4
	(2.2)	(1.8)	(1.8)		
3. Capital Receipts	1,70,807	1,47,949	3,38,780	1,90,831	129.0
	(3.6)	(2.7)	(6.2)		
of which:					
Market Borrowings	1,30,600	99,000	2,66,539	1,67,539	169.2
Recoveries of Loans	5,100	4,497	9,698	5,201	115.7
Disinvestment proceeds	38,795 *	10,165	2,567	-7,598	-74.7

RE : Revised Estimates. BE : Budget Estimates.

* : Includes an amount of Rs.34,309 crore on account of transfer of Reserve Bank's stake in State Bank of India (SBI) to the Central Government.

Note : Figures in parentheses are percentages to GDP.

Table 13: Aggregate Expenditure of the Centre

(Amount in Rupees crore)

Item	2007-08 (Accounts)	2008-09 (BE)	2008-09 (RE)	Variation (4 over 3)	
				Amount	Per cent
1	2	3	4	5	6
1. Total Expenditure (2+3=4+5)	7,12,732 *	7,50,884	9,00,953	1,50,069	20.0
	(15.1)	(13.8)	(16.6)		
2. Non-Plan Expenditure	5,07,650 *	5,07,498	6,17,996	1,10,498	21.8
	(10.7)	(9.4)	(11.4)		
of which:					
Interest Payments	1,71,030	1,90,807	1,92,694	1,887	1.0
	(3.6)	(3.5)	(3.6)		
Defence Expenditure	91,681	1,05,600	1,14,600	9,000	8.5
	(1.9)	(1.9)	(2.1)		
Subsidies	70,926	71,431	1,29,243	57,812	80.9
	(1.5)	(1.3)	(2.4)		
3. Plan Expenditure	2,05,082	2,43,386	2,82,957	39,571	16.3
	(4.3)	(4.5)	(5.2)		
4. Revenue Expenditure	5,94,494	6,58,119	8,03,446	1,45,327	22.1
	(12.6)	(12.1)	(14.8)		
5. Capital Expenditure	1,18,238 *	92,765	97,507	4,742	5.1
	(2.5)	(1.7)	(1.8)		

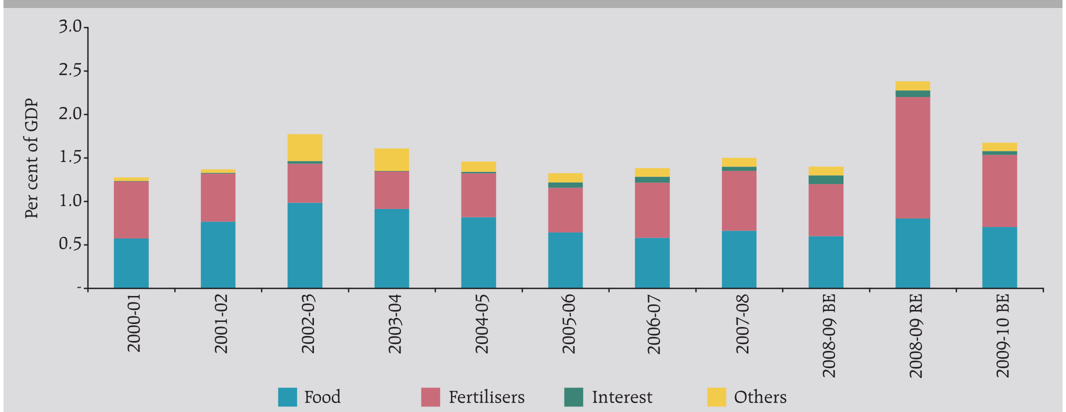
RE : Revised Estimates. BE : Budget Estimates.
* : Includes acquisition cost of Reserve Bank's stake in SBI at Rs.35,531 crore.

II.8 The aggregate expenditure in the revised estimates for 2008-09 was significantly higher than the budget estimates mainly on account of fiscal stimulus measures aimed at supporting aggregate demand in the economy (Table 13 and Annex 1). Revenue expenditure, which accounted for 96.8 per cent of the increase in aggregate expenditure, was primarily on account of subsidies and defence under the non-plan component and rural development under the plan component. Expenditure on subsidies at Rs.1,29,243 crore (2.4 per cent of GDP) in the revised estimates for 2008-09 was 80.9 per cent higher than the budgeted amount, mainly due to food and fertiliser subsidies exceeding the budget estimates by Rs.10,960 crore (33.6 per cent) and Rs.44,863 crore (144.8 per cent), respectively (Chart 6). Rise in defence revenue expenditure was on account of implementation of the Sixth Pay Commission award for defence personnel. With regard to capital expenditure, while the defence capital outlay declined by Rs.7,007 crore, non-defence capital outlay increased by Rs.5,790 crore.

Financing of the Central Government

II.9 Gross and net market borrowings (dated securities and 364-day Treasury Bills excluding allocations under the Market Stabilisation Scheme) of the Centre for 2008-09 were budgeted at Rs.1,78,575 crore and Rs.99,000 crore, respectively. In view of the increase in GFD by 2.4 times in the revised estimates over the budgeted level, the net market borrowings (dated securities and 364-day Treasury Bills) were hiked by 2.7 times of the budgeted level to Rs.2,66,539

Chart 6: Composition of Subsidies



crore, financing 81.6 per cent of GFD. Apart from market borrowings, short-term borrowings (14-day, 91-day and 182-day Treasury Bills) would finance 16.2 per cent of GFD in the revised estimates as compared with 10.5 per cent of GFD in the budget estimates. In the public account, deposits and advances and State provident funds would finance 3.9 per cent and 1.5 per cent, respectively, of GFD in the revised estimates. Reserve funds would negatively contribute 5.1 per cent mainly on account of outflow with respect to railway funds exceeding that of inflow.

Extra-Budgetary Items

II.10 The Central Government has been supporting Food Corporation of India (FCI), fertiliser companies and oil marketing companies through issuance of special bonds in addition to providing explicit subsidies on food, fertiliser and petroleum through the budget. These bonds are considered to be fiscal deficit neutral since they do not involve immediate cash flow and are, therefore, not treated as part of budgetary expenditure/receipts. However, these bonds have fiscal implications as they carry an obligation to repay at a later date and, hence, add to the fiscal liabilities of the Government. Furthermore, as interest payments on such bonds are treated as part of the revenue expenditure, they affect the revenue deficit and, thereby, the fiscal deficit.

II.11 During 2008-09, special bonds amounting to Rs.75,942 crore and Rs.20,000 crore were issued to oil marketing companies and fertiliser companies, respectively, together accounting for 1.8 per cent of the GDP. Repayment of special securities amounted to Rs.13,371 crore (including Rs.13,349 crore for oil bonds) during 2008-09. Taking into account this repayment, the outstanding special securities as at end-March 2009 amounted to Rs.1,99,011 crore (3.7 per cent of GDP).

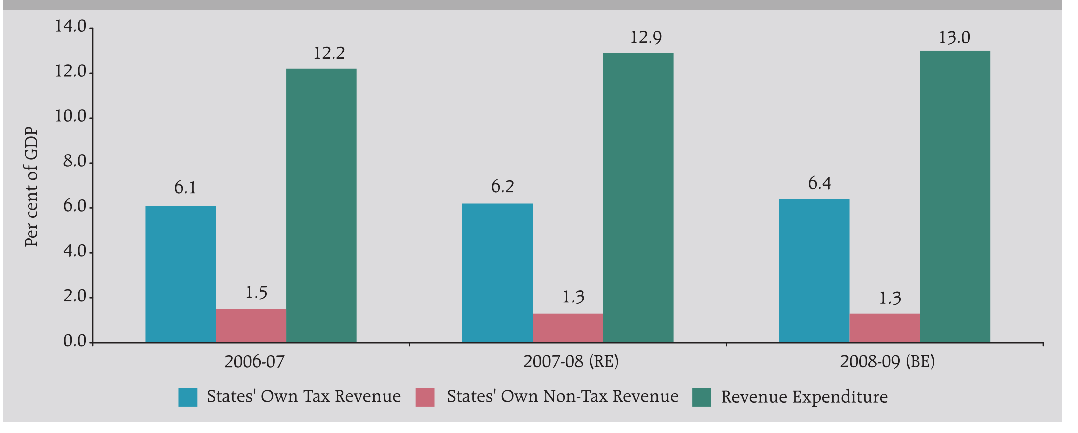
State Government Finances: 2008-09

II.12 The consolidated fiscal position of the State Governments during 2008-09 was budgeted to register a revenue surplus of 0.54 per cent of GDP. Reflecting the budgeted increase in revenue surplus as well as non-debt capital receipts, the GFD-GDP ratio at the consolidated level was budgeted to decline by 0.2 percentage points to 2.1 per cent (see Table 11). The States, while presenting their budgets for 2008-09, announced a number of policy initiatives aimed at augmenting revenues and directing expenditure towards priority areas. Allocations for agriculture and water conservation were proposed to be raised in 2008-09 by most of the States. All the States proposed higher expenditure on health and education sectors. State Governments also placed emphasis on development of infrastructure with higher allocations for development of roads and urban transport. A few States proposed higher allocations for urban development and housing sectors. They were also undertaking construction of houses for low and middle income group families, slum dwellers and below poverty line families under various schemes, including Indira Awas Yojana and Jawaharlal Nehru National Urban Renewal Mission (JNNURM). A number of State Governments extended their support for providing health as well as life insurance benefits to the poor. Several States also proposed computerisation of treasuries and tax departments.

II.13 During 2008-09, the consolidated revenue surplus of the State Government was budgeted to increase primarily through higher growth of the revenue receipts. The increase in revenue receipts in 2008-09 (BE) was indicated to be mainly contributed by States' own tax revenue and higher devolution and transfers from the Centre. As a ratio to GDP, the States' own non-tax revenue was to be maintained at previous year's level of 1.3 per cent (Chart 7). During 2008-09, the growth in revenue expenditure was budgeted to decelerate to 14.1 per cent from 19.9 per cent in the previous year.

II.14 The decomposition of consolidated GFD of all State Governments reveals that capital outlay was budgeted to exceed GFD for the third consecutive year in 2008-09 (BE), which was to be mainly financed by surpluses in the revenue account. The financing pattern of GFD of the State Governments underwent a compositional shift, with the market borrowings emerging as the major source of financing of GFD. In

Chart 7: States' Own Revenue Receipts and Revenue Expenditure



the past few years, special securities issued to the National Small Savings Fund (NSSF) used to be the major source of financing of GFD. Owing to the sharp decline in the collections under small savings, the special securities issued to NSSF financed less than one tenth of GFD in 2007-08 (RE) as compared with nearly three fourths in 2006-07. In 2008-09, the special securities issued to NSSF were budgeted to finance nearly one fifth of GFD, whereas market borrowings were budgeted to finance more than half of the GFD (Table 14). However, the progress during 2008-09 showed that due to a continued shortfall in collection under NSSF, State Governments were allowed to raise additional market borrowings as was done in 2007-08. Details of actual market borrowings of the Central and State Governments for the year 2008-09 are covered in Chapter V.

Central Government Finances: Budget Estimates for 2009-10

II.15 The Union Interim Budget for 2009-10 was presented against the backdrop of global economic slowdown adversely impacting the Indian economy and the consequent need to provide fiscal stimulus to contain the economic slowdown. The

Table 14: Decomposition and Financing Pattern of GFD of States

(Per cent)

Item	2006-07 (Accounts)	2007-08 (RE)	2008-09 (BE)
1	2	3	4
Decomposition (1+2+3-4)	**100.0**	**100.0**	**100.0**
1. Revenue Deficit	-32.1	-20.9	-25.2
2. Capital Outlay	126.5	118.9	128.9
3. Net Lending	8.0	9.8	9.7
4. Non-debt Capital Receipts	2.5	7.8	13.3
Financing (1 to 11)			
1. Market Borrowings	16.9	58.9	56.7
2. Loans from Centre	-11.5	3.2	6.2
3. Special Securities issued to NSSF/Small Savings	72.3	8.8	19.6
4. Loans from LIC, NABARD, NCDC, SBI & Other Banks	5.1	6.8	6.5
5. Small Savings, P.F., *etc.*	13.4	11.3	11.5
6. Reserve Funds	9.8	-8.9	1.1
7. Deposits & Advances	16.5	4.7	4.3
8. Suspense & Miscellaneous	6.0	-4.5	-1.6
9. Remittances	-0.4	-0.3	0.1
10. Others	-7.1	-2.2	-2.2
11. Overall Surplus (-) / Deficit (+)	-21.1	22.3	-2.1

RE : Revised Estimates. BE : Budget Estimates. NSSF : National Small Savings Fund.

Note : 1. 'Others' include Compensation and Other Bonds, Loans from other institutions, Appropriation to Contingency Fund, Inter-state Settlement and Contingency Fund.

2. Figures for 2006-07 (Accounts) in respect of Jammu and Kashmir and Jharkhand relate to revised estimates.

3. All financing items are on a net basis.

Source : Budget Documents of the State Governments.

buoyancy in revenue collection significantly declined not only due to the economic slowdown but also due to tax rate reduction measures undertaken by the Government to provide stimulus. At the same time, expenditure was stepped up substantially to boost the aggregate demand in the economy.

II.16 Although the adverse impact of economic slowdown on the revenue receipts observed during 2008-09 is expected to persist during 2009-10, there is likely to be some improvement. Accordingly, revenue receipts during 2009-10 are budgeted to increase by 8.4 per cent from 3.7 per cent in 2008-09 (RE). Growth of gross tax revenue at 6.9 per cent would be higher than that of 5.9 per cent in 2008-09. The gross tax revenue relative to GDP would, however, decline further during the year (Table 15). After the announcement of the Interim Budget, the Central Government announced further reductions in indirect tax rates as part of the fiscal stimulus package (see Annex 1), which could impact on the revenue collections.

II.17 Aggregate expenditure is budgeted to decelerate in 2009-10 after the substantial increase during the preceding year (Table 16). The lower growth in aggregate expenditure would mainly emanate from revenue expenditure, which is budgeted to decelerate to 5.6 per cent from 35.1 per cent growth in 2008-09. Containment of subsidies, in particular fertiliser subsidy, would be an important contributing factor to the slower growth in revenue expenditure during 2009-10. Growth in grants to States and Union Territories is budgeted to be lower at 10.4 per cent than 14.7 per cent a year ago. Capital expenditure, comprising capital outlay and loans and advances, is also budgeted to decelerate in 2009-10 over 2008-09 (adjusting for acquisition cost of Reserve Bank's stake in SBI in 2007-08). Capital outlay is budgeted to increase by 15.3 per cent as compared with an increase of 16.7 per cent (adjusting for acquisition cost of Reserve Bank's stake in SBI in 2007-08). While the defence capital outlay is estimated to increase by Rs.13,824 crore, the non-defence capital outlay would decline by Rs.1,100 crore.

Table 15: Gross Tax Revenues of the Centre

(Per cent to GDP)

Year	Direct	Indirect	Total
1	2	3	4
2004-05	4.2	5.5	9.7
2005-06	4.4	5.8	10.2
2006-07	5.3	6.1	11.5
2007-08	6.3	6.3	12.6
2008-09RE	6.4	5.2	11.6
2009-10BE	6.3	4.8	11.1

II.18 The Union Interim Budget for 2009-10 has indicated the relaxation of the FRBM targets for 2008-09 and 2009-10 in order to mobilise resources to boost aggregate demand. However, as a medium-term objective, it has recognised the need to revert to fiscal consolidation process at the earliest. The key deficit indicators, *viz.,* revenue deficit, GFD and primary deficit as per cent of GDP, are budgeted at 4.0 per cent, 5.5 per cent and 1.8 per cent in 2009-10, respectively, lower than 4.4 per cent, 6.0 per cent and 2.5 per cent, respectively, in the preceding year (see Table 11).

II.19 During 2009-10, net market borrowings (net of MSS) are budgeted to

Table 16: Union Interim Budget 2009-10 at a Glance

(Amount in Rupees crore)

Item	2008-09 (RE)	2009-10 (BE)	Growth rate (per cent) 2008-09	2009-10
1	2	3	4	5
1. Revenue Receipts (i+ii)	5,62,173 (10.4)	6,09,551 (10.1)	3.7	8.4
i) Tax Revenue (Net)	4,65,970 (8.6)	4,97,596 (8.3)	6.0	6.8
ii) Non-Tax Revenue	96,203 (1.8)	1,11,955 (1.9)	-6.0	16.4
2. Non-Plan Expenditure	6,17,996 (11.4)	6,68,082 (11.1)	30.9 *	8.1
of which:				
i) Interest Payments	1,92,694 (3.6)	2,25,511 (3.7)	12.7	17.0
ii) Defence Expenditure	1,14,600 (2.1)	1,41,703 (2.4)	25.0	23.7
iii) Subsidies	1,29,243 (2.4)	1,00,932 (1.7)	82.2	-21.9
3. Plan Expenditure	2,82,957 (5.2)	2,85,149 (4.7)	38.0	0.8
4. Revenue Expenditure	8,03,446 (14.8)	8,48,085 (14.1)	35.1	5.6
5. Capital Expenditure	97,507 (1.8)	1,05,146 (1.7)	17.9 *	7.8
6. Total Expenditure	9,00,953 (16.6)	9,53,231 (15.8)	33.0 *	5.8
7. Revenue Deficit	**2,41,273 (4.4)**	**2,38,534 (4.0)**	**359.0**	**-1.1**
8. Gross Fiscal Deficit	**3,26,515 (6.0)**	**3,32,835 (5.5)**	**157.3**	**1.9**
9. Gross Primary Deficit	**1,33,821 (2.5)**	**1,07,324 (1.8)**	**-403.3**	**-19.8**

* : Adjusting for acquisition cost of RBI's stake in SBI at Rs.35,531crore in 2007-08.
Note : Figures in parentheses are percentages to GDP.

increase from Rs.2,66,539 crore in 2008-09 to Rs.3,08,647 crore. Inclusive of repayment of Rs.93,087 crore, gross market borrowings (net of MSS) are placed at Rs.4,01,734 crore in 2009-10. In terms of financing GFD, the share of net market borrowings (excluding allocations under MSS), investments by the NSSF in the special Central Government securities and external assistance are budgeted to increase in 2009-10 over 2008-09 (RE). Outflow from reserve funds is budgeted to be lower in 2009-10 than in 2008-09 (RE). During 2009-10, the budget expects no drawdown of cash balances to finance GFD as against 9.2 per cent of GFD in 2008-09 (RE) (Table 17).

Corporate Performance

II.20 An analysis of the performance of select non-financial non-government companies during the first half of the year 2008-09 showed that sales recorded a strong growth in relation to the first half of 2007-08. This was mainly on account of high selling prices and continued consumer demand. However, expenditure growth remained higher than sales growth primarily

Table 17: Financing Pattern of Gross Fiscal Deficit

(Amount in Rupees crore)

Item	2008-09 (RE)	2009-10 (BE)
1	2	3
Gross Fiscal Deficit	3,26,515	3,32,835
Financed by:		
Market Borrowings	2,66,539	3,08,647
	(81.6)	(92.7)
Securities issued against Small Savings	1,324	13,255
	(0.4)	(4.0)
External Assistance	9,603	16,047
	(2.9)	(4.8)
State Provident Fund	4,800	5,000
	(1.5)	(1.5)
NSSF	11,206	1,022
	(3.4)	(0.3)
Reserve Funds	-16,808	-3,358
	(-5.1)	(-1.0)
Deposit and Advances	12,788	9,026
	(3.9)	(2.7)
Postal Insurance and Life Annuity Funds	2,594	2,672
	(0.8)	(0.8)
Drawdown of Cash Balances	29,984	0
	(9.2)	(0.0)
Others	4,486	-19,477
	(1.4)	(-5.9)

Note: Figures in parentheses are percentages to GFD.

on account of rising input costs, including power and fuel, rise in interest outgo and large provisioning towards marked-to-market (MTM) losses on foreign exchange related transactions. Burden of piled-up inventories and decline in other income also affected profit performance which remained subdued during the first half of 2008-09.

II.21 During the third quarter of 2008-09, however, sales growth slowed down considerably as demand weakened. As against accumulation of stocks in trade during the first half of 2008-09, sales were partly made through depletion of inventories in the third quarter. Although the expenditure growth also decelerated during this period, the deceleration in sales growth was sharper than that in expenditure growth. Consequently, profitability of these companies measured in terms of the ratios of gross profits to sales and profits after tax to sales deteriorated, indicating pressure on margins. The high growth in interest payments was one of the key factors in the decline in net profits in the third quarter of 2008-09 over the corresponding period of the previous year. More importantly, other income continued to decline over the third quarter as compared to substantial increases witnessed during the preceding year (Table 18).

II.22 The non-financial government (oil and non-oil) companies posted a growth of 11.1 per cent in revenue and a fall of 27.0 per cent in net profits during the third quarter of 2008-09 over the corresponding period of the previous year. While net profits of non-oil companies declined by 10.3 per cent, that of oil companies declined sharply by 45.4 per cent during the third quarter of 2008-09. The sharp reduction in crude and petroleum prices during the third quarter led to inventory valuation losses and lower realisation of exports which adversely affected the profits of oil companies. The profits of these companies were also affected by higher outgo on interest payments and increase in staff costs due to larger provisioning for anticipated wage revision. The three oil marketing companies, however, posted combined net profits of Rs.3,336 crore during the quarter. The issuance of oil bonds by Government to partially compensate the under-realisation suffered by them (as a result of non-revision of retail prices of petrol, diesel, LPG and kerosene in line with

Table 18: Corporate Sector - Financial Performance

(Growth rates/Ratios in per cent)

Item	2007-08	2007-08	2008-09	2007-08				2008-09		
		April-December		Q1	Q2	Q3	Q4	Q1	Q2	Q3
1	2	3	4	5	6	7	8	9	10	11
Sales	18.3	17.9	23.9	19.2	16.0	18.0	20.6	29.3	31.8	9.5
Other income	46.2	68.0	-2.4	106.7	45.2	70.2	28.5	-8.4	-0.6	-4.8
Expenditure	18.4	17.7	28.3	18.0	15.3	18.9	23.3	33.5	37.5	12.6
Depreciation provision	14.8	17.4	14.9	18.1	15.8	17.9	15.4	15.3	16.5	16.8
Gross profits	22.8	23.7	-1.7	31.9	22.5	20.4	16.8	11.9	8.7	-26.7
Interest payments	28.8	25.1	65.4	4.4	18.4	45.7	35.8	58.1	85.3	62.9
Profits after tax	26.2	28.6	-16.7	33.9	22.7	29.4	14.1	6.9	-2.6	-53.4
Select Ratios										
Gross profits to Sales	16.3	16.0	13.1	16.7	16.3	16.2	15.0	14.5	13.5	11.0
Profits after tax to Sales	11.8	11.6	8.1	11.6	11.5	12.2	10.3	9.7	8.6	5.3
Interest to Sales	2.2	2.2	3.0	2.0	2.1	2.5	2.2	2.4	2.9	3.8
Interest to Gross profits	13.8	13.5	22.6	11.8	12.8	15.3	14.6	16.8	21.5	34.6
Interest Coverage (Times)	7.3	7.4	4.4	8.5	7.8	6.5	6.8	6.0	4.6	2.9
Memo:										(Amount in Rupees crore)
No. of Companies	2,359	2,476	2,059	2,342	2,228	2,329	2,357	2,500	2,386	2,486
Sales	11,41,711	9,08,339	10,35,713	2,80,814	2,97,110	3,06,238	3,50,917	3,65,303	3,93,626	3,74,686
Other income*	30,958	23,916	22,077	9,151	8,057	9,221	10,082	7,666	7,943	8,471
Expenditure	9,56,930	7,63,735	8,97,759	2,37,698	2,49,194	2,57,472	3,02,105	3,17,605	3,43,921	3,22,077
Depreciation provision	40,664	32,075	34,191	10,173	10,576	10,961	11,805	11,590	12,075	14,563
Gross profits	1,86,665	1,45,492	1,35,541	46,780	48,296	49,717	52,583	52,930	52,968	41,299
Interest payments	25,677	19,659	30,674	5,504	6,194	7,609	7,703	8,891	11,403	14,277
Profits after tax	1,34,291	1,05,686	83,664	32,699	34,266	37,470	36,109	35,295	33,844	19,962

*: Other income excludes extraordinary income/expenditure if reported explicitly.

Notes: 1. Data are based on abridged financial results of the select non-government non-financial listed public limited companies.

2. Growth rates are percentage changes in the level for the period under reference over the corresponding period of the previous year for common set of companies.

3. The quarterly data may not add up to annual data due to differences in the number and composition of companies covered in each period.

the international prices) had averted net losses in these companies.

External Demand

II.23 Net external demand, as reflected by net exports (goods and services) as a percentage of GDP, deteriorated to (-) 7.8 per cent during the first three quarters of 2008-09 as compared with (-) 4.7 per cent in the corresponding period of the previous year. Exports and imports (goods and services) grew by 17.1 per cent and 27.3 per cent, respectively, in April-December 2008 as compared with 23.3 per cent and 25.1 per cent, respectively, in April-December 2007. Merchandise trade deficit recorded a sharp increase during 2008-09 (April-February) on account of higher crude oil prices in the early part of the year coupled with loss of momentum in exports since September 2008. Export growth decelerated in

September and thereafter turned negative in October 2008 and the negative trend continued till February 2009. Accordingly, merchandise trade deficit during 2008-09 (April-February) widened to US $ 113.8 billion from US $ 82.2 billion a year ago. A detailed discussion on the external demand conditions is set out in Chapter III.

Saving and Investment

II.24 The rate of Gross Domestic Saving (GDS) had steadily risen since 2002-03 to a peak of 37.7 per cent of GDP in 2007-08, mainly due to improved saving performance of the private corporate and public sectors. Improved profitability of joint stock companies contributed to the increase in private corporate savings. In respect of the public sector, a significant decline in the dissavings of government administration as enabled by the fiscal consolidation coupled with improved profitability of departmental enterprises and non-departmental undertakings contributed to higher savings. Household saving rate exhibited marginal improvement in 2007-08 over the previous year, owing to a rise in the physical saving rate (Table 19). The rate of Gross Domestic Capital Formation (GDCF) also peaked at

Table 19: Rates of Gross Domestic Saving and Investment

(Per cent of GDP at current market prices)

Item	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07 PE	2007-08 QE
1	2	3	4	5	6	7	8
1. Household Saving	22.1	22.9	24.1	22.8	24.1	24.1	24.3
of which :							
a) Financial assets	10.9	10.3	11.4	10.1	11.7	11.7	11.7
b) Physical assets	11.3	12.6	12.7	12.7	12.4	12.4	12.6
2. Private Corporate Saving	3.4	4.0	4.6	6.7	7.7	8.3	8.8
3. Public Sector Saving	-2.0	-0.6	1.1	2.2	2.4	3.3	4.5
4. Gross Domestic Saving	23.5	26.3	29.8	31.7	34.2	35.7	37.7
5. Net capital inflow	-0.6	-1.2	-2.2	0.4	1.2	1.1	1.4
6. Gross Domestic Capital Formation #	22.8	25.2	27.6	32.1	35.5	36.9	39.1
7. Gross Capital Formation	24.2	25.2	26.8	31.6	34.8	36.4	38.7
of which :							
a) Public sector	6.9	6.1	6.3	6.9	7.6	8.0	9.1
b) Private corporate sector	5.4	5.9	6.8	10.8	13.7	14.8	15.9
c) Household sector	11.3	12.6	12.7	12.7	12.4	12.4	12.6
d) Valuables	0.6	0.6	0.9	1.3	1.2	1.2	1.1
8. Total Consumption Expenditure (a+b)	76.9	75.2	73.1	69.4	68.1	66.4	65.3
a) Private Final Consumption Expenditure	64.5	63.3	61.8	58.7	57.6	56.2	55.2
b) Government Final Consumption Expenditure	12.4	11.9	11.3	10.7	10.5	10.2	10.1
Memo							
Saving-Investment Balance (4-6)	0.6	1.2	2.2	-0.4	-1.2	-1.1	-1.4
Public Sector Balance	-8.9	-6.7	-5.3	-4.7	-5.2	-4.6	-4.6
Private Sector Balance	8.8	8.4	9.2	6.1	5.7	5.2	4.7
a) Private Corporate Sector	-2.1	-1.9	-2.2	-4.0	-6.0	-6.5	-7.0
b) Household Sector	10.9	10.3	11.4	10.1	11.7	11.7	11.7

PE : Provisional Estimates. QE : Quick Estimates. # : Adjusted for errors and omissions.

Note : Figures may not add up to the totals due to rounding off.

Source : Central Statistical Organisation.

39.1 per cent of GDP in 2007-08. The saving-investment balance widened during 2007-08 reflecting continuous surge in investment activity ahead of the saving rate. It may, however, be noted that the steady trend of rise in saving and investment may not be sustained during 2008-09 on account of slowing down of economic activity.

Annex 1: Major Fiscal Stimulus Measures

October 20, 2008

- The supplementary demand for grants provided for a gross expenditure amounting to Rs.2,37,286 crore with net cash outgo of Rs.1,05,613 crore mainly to finance schemes/plans announced in the Union Budget for 2008-09 but for which no provisions were made.

December 7, 2008

- The three major *ad valorem* rates of Central Excise duty, *viz.*, 14 per cent, 12 per cent and 8 per cent applicable to non-petroleum products were reduced by 4 percentage points each.
- For promoting exports, pre-shipment and post-shipment export credit for labour intensive exports, *i.e.*, textiles (including handlooms, carpets and handicrafts), leather, gems & jewellery, marine products, the SME sector is being made more attractive by providing an interest subvention of 2 per cent up to March 31, 2009 subject to minimum rate of interest of 7 per cent per annum. An additional fund of Rs.1,100 crore to ensure full refund of Terminal Excise duty/CST was announced. Furthermore, an additional allocation for export incentive schemes of Rs.350 crore was announced.
- In order to provide a counter-cyclical stimulus *via* plan expenditure, an additional Plan expenditure of up to Rs 20,000 crore in the current fiscal year was allocated.
- In the textile sector, an additional allocation of Rs.1,400 crore will be made to clear the entire backlog of Technology Up-gradation Fund (TUF) Scheme.
- In order to support the infrastructure schemes under Public Private Partnership mode, India Infrastructure Finance Company Limited (IIFCL) was authorised to raise Rs.10,000 crore through tax-free bonds by March 31, 2009.

December 19, 2008

- The second supplementary demand for grants provided for a gross expenditure amounting to Rs.55,605 crore with a net cash outgo of Rs.42,480 crore.

January 29, 2009

- The Debt Consolidation and Relief Facility (DCRF) guidelines for the year 2008-09 were relaxed by modifying the fiscal deficit target as 3.5 per cent so as to enable the States to borrow up to 3.5 per cent of their respective Gross State Domestic Product (GSDP) during 2009-10 as one-time relaxation for undertaking capital expenditure. In addition, the DCRF requirement of elimination of revenue deficit was also relaxed for 2008-09. On February 26, 2009, this relaxation was extended for the year 2009-10 also. The States will not lose benefits of DCRF provided they achieve the fiscal deficit target of 3.5 per cent of GDP in 2009-10. The States will have to suitably amend their respective FRBM Acts.

February 24, 2009 (Post-Interim Budget)

- General reduction in excise duty rates by 4 percentage points, which was made with effect from December 7, 2008, was extended beyond March 31, 2009. In addition, central excise duty was reduced from 10 per cent to 8 per cent. Service tax on taxable services was also reduced from 12 per cent to 10 per cent.

III. The External Economy

In the face of deteriorating external environment, the adverse effects of the contagion transmitting through different components of India's balance of payments (BoP) could largely be contained through policy actions. Reflecting higher trade and current account deficits in the face of lower net capital inflows, the foreign exchange reserves of India (excluding valuation effects) fell by US$ 20.4 billion during April-December 2008, even though the foreign exchange reserves level (including valuation effects) fell more sharply by US$ 53.8 billion during the same period, reflecting the impact of large volatility in major international currencies. The effect of the external shocks transmitting to India through the BoP could thus be contained with loss of reserves mainly in the third quarter of 2008-09, when the global crisis deepened and spread significantly with more visible real effects. Even though significant moderation in international oil prices in the second half of 2008-09 relieved the pressures on BoP through deceleration in import growth, slowdown in exports on account of contracting global demand, large reversal in portfolio flows, and reduced inflows of debt capital on account of the adverse global credit market conditions exerted sustained pressures on the BoP. Notwithstanding these adverse developments, sustained interest in India as a long-term investment destination and a comfortable reserve position suggest that the external sector could continue to support stability and growth.

III.1 The slowdown in global demand and credit market shocks adversely impacted India's balance of payments (BoP) in 2008-09 (April-December). The BoP position was marked by a widened trade deficit, a record level of current account deficit (CAD) and lower net capital inflows. During the third quarter of 2008-09, export growth turned negative for the first time since 2001-02, while import growth touched a single digit. At the same time, large net outflows under portfolio investment and large repayments under short-term trade credit led to a lower capital account surplus during April-December 2008. Except FDI and NRI deposits, all other components of capital flows declined in net terms. Reflecting these developments, India's foreign exchange reserves on BoP basis declined by US $ 20.4 billion during April-December 2008 (US $ 53.8 billion including valuation losses). As on April 10, 2009, the foreign exchange reserves stood at US $ 253.0 billion.

International Developments

III.2 The world economy experienced a synchronised downturn extending to the emerging markets with steeper fall in output and trade than earlier anticipated. Global economic activity continued to contract with the advanced economies experiencing their sharpest declines in the post-World War II period, notwithstanding policy efforts. The financial sector deleveraging in conjuction with weak credit markets, falling production and rapidly shrinking global trade, have led to a situation of a more prolonged recession. The impact is visible not only in the financial markets but also in the real economy across the globe. Significant fall in various asset prices, the end of a housing construction boom in a number of countries and fall in consumer and business sentiments are weighing on economic activity. While all major advanced economies including the US, Euro Area, Japan and the UK witnessed recessionary conditions in the fourth quarter of 2008, the growth in EMEs also showed significant moderation (Table 20).

III.3 Uncertainty surrounding the global economic outlook remains high mainly stemming from a scenario of ongoing financial market turmoil affecting the real economy more adversely than previously anticipated. Since the official recognition of recession in the US, the UK, the Euro Area and Japan, the downside risks to the global economy have increased. According to the forecast released by the International Monetary Fund (IMF) on March 19, 2009, world output is projected to contract by 0.5-1.0 per cent in 2009 as compared with a growth of 3.2 per cent in 2008, before recovering gradually in 2010 (Table 21).

III.4 According to the IMF, the US economy is projected to contract by 2.6 per cent in 2009 (as against an increase of 1.1 per cent in 2008) as households respond to depreciating real and financial assets and tightening financial conditions. Similarly, real GDP in the Euro Area is also projected to decline by 3.2 per cent in 2009 (as against an increase of 0.9 per cent in 2008) due to sharp decline in external demand, the impact of housing market corrections in some member states, intensification of financing constraints and falling confidence. The Japanese GDP has already shown contraction by 4.6 per cent in the fourth quarter of 2008 reflecting sluggish domestic demand and sharp decline in exports and business investment. Real GDP

Table 20: Real GDP Growth Rates – Global Scenario

(Per cent)

Region/Country	2007	2008 P	2009 P	2008			
				Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8
Advanced Economies							
Euro area	2.6	0.9 *	-3.2 *	2.2	1.5	0.6	-1.3
Japan	2.4	-0.7 *	-5.8 *	1.5	0.7	-0.2	-4.6
Korea	5.0	4.1	3.5	5.5	4.3	3.1	-3.4
UK	3.0	0.7	-2.8	2.6	1.7	0.2	-2.0
US	2.0	1.1 *	-2.6 *	2.5	2.1	0.7	-0.8
OECD Countries	2.6	1.2	-0.4	2.6	1.8	0.8	-1.6
Emerging Economies							
Argentina	8.7	6.5	3.6	8.5	7.8	6.9	4.9
Brazil	5.7	5.8	1.8	6.1	6.2	6.8	1.3
China	13.0	9.0	6.7	10.6	10.1	9.0	6.8
India	9.0 #	7.1#	5.3 @	8.8	7.9	7.6	5.3
Indonesia	6.3	6.1	5.5	6.3	6.4	6.1	5.2
Malaysia	6.3	5.8	4.8	7.4	6.7	4.7	0.1
Thailand	4.8	4.7	4.5	6.0	5.3	3.9	-4.3

P : IMF Projections.
* : Based on the revised data released in the IMF's WEO Update of March 19, 2009.
# : Data relate to fiscal years based on the C.S.O. estimates.
@ : IMF Public Information Notice No.09/35 dated March 17, 2009; fiscal year projections.
Source : International Monetary Fund; The Economist; and the OECD.

in Japan is projected to record a decline of 5.8 per cent in 2009 as the support to growth from net exports is expected to decline further. Financial conditions continue to present significant downside risks. Considerable uncertainty still remains about the extent and duration of the economic downturn in affected economies stemming from the crisis.

III.5 The growth rates in the emerging and developing economies, which were earlier considered to be resilient to the global financial disruptions, are also projected to slow appreciably to 1.5-2.5 per cent in 2009. Growth fell sharply across a broad spectrum of emerging economies, reflecting the confluence of weakening external demand, tightening financing constraints and falling commodity prices. The IMF projects that Developing Asia will grow by 5.5 per cent in 2009 (7.8 per cent in 2008). While China's growth is projected to moderate from 9.0 per cent in 2008 to 6.7 per cent in 2009, growth for India is placed at 5.3 per cent for 2009-10 (6.3 per cent in 2008-09) by the IMF. Nevertheless, the economic outlook for the EMEs still remains relatively positive when compared to advanced economies, but uncertainties about their resilience to the global shocks have considerably increased. The impact of the financial crisis is already in evidence in the currency and equity markets and in the capital outflows from

Table 21: Select Economic Indicators – World

Item	2006	2007	2008P	2009P
1	2	3	4	5
I. World Output (per cent change) #	5.1 (3.9)	5.2 (3.8)	3.2+	-1.0 to -0.5+
i) Advanced Economies	3.0	2.7	0.8+	-3.5 to -3.0+
ii) Other Emerging Market and Developing Countries	7.9	8.3	6.1+	1.5 to 2.5+
of which: Developing Asia	9.8	10.6	7.8	5.5
II. Consumer Price Inflation (per cent)				
i) Advanced Economies	2.4	2.1	3.5	0.3
ii) Other Emerging Market and Developing Countries	5.4	6.4	9.2	5.8
of which: Developing Asia	4.2	5.4	7.8	6.2
III. Net Capital Flows* (US $ billion)				
i) Net Private Capital Flows (a+b+c)**	223.0	632.8	528.6	286.6
a) Net Private Direct Investment	246.0	379.0	443.6	414.6
b) Net Private Portfolio Investment	-107.3	54.5	-6.6	-89.1
c) Net Other Private Capital Flows	84.4	199.5	91.8	-38.7
ii) Net Official Flows	-158.0	-140.7	-158.6	-135.4
IV. World Trade @				
i) Trade Volume	9.4	7.2	4.1	-2.8
ii) Export Volume@@	8.5	6.0	2.0	-9.0
iii) Trade Price Deflator	5.0	8.1	15.3	0.2
V. Current Account Balance (per cent to GDP)				
i) US	-6.0	-5.3	-4.6	-3.3
ii) China	9.4	11.3	9.5	9.2
iii) Middle East	21.1	18.4	22.9	17.1

P : IMF Projections.
+ : Based on the revised data released in the IMF's WEO Update of March 19, 2009.
# : Growth rates are based on exchange rates at purchasing power parities. Figures in parentheses are growth rates at market exchange rates as given in World Economic Outlook October 2008 and WEO Update of January 28, 2009 and March 19, 2009.
* : Net capital flows to emerging market and developing countries.
** : On account of data limitations, flows listed under 'Net private capital flows' may include some official flows.
@ : Average of annual percentage change for world exports and imports of goods and services.
@@ : Average of annual percentage change for world exports of goods and services according to the WTO.
Source : World Economic Outlook (October 2008), WEO Update (January 28, 2009 and March 19, 2009), International Monetary Fund.

the EMEs. However, the macroeconomic impact on the EMEs, including India, has so far been contained somewhat by the strength of domestic demand.

III.6 According to the IMF projections, world trade volume is expected to decline by 2.8 per cent in 2009, however, export volume of emerging and developing economies is projected to decline marginally by 0.8 per cent (see Table 21). The World Trade Organisation (WTO) has also projected that the collapse in global demand will drive exports volume down by 9 per cent in 2009, the biggest contraction since the World War II.

III.7 According to the IMF's International Financial Statistics, world merchandise exports, in dollar terms, grew by 22.6 per cent during January-September 2008, but subsequently declined during October-December 2008 by 10.1 per cent. The contraction in exports could be attributed to declining demand, falling production and a sharp shrinkage in credit to finance trade (WTO, 2009). The overall world exports during 2008 remained marginally higher than a year ago, mainly because of the higher export growth recorded in the first half of 2008 (Table 22). Exports from advanced economies showed a sharp deceleration, reflecting the impact of well entrenched recession. Exports from emerging and developing economies during 2008 grew sharply up to September 2008. However, a sharp shrinkage occurred since October, which subsequently got worsened with a rapid fall in export growth emanating from deteriorating external demand, sharp fall in commodity prices and severe constraints in accessing trade credit in the international markets.

Table 22: Growth in Exports - Global Scenario

(Per cent)

Region/Country	2007	2008
1	2	3
World	13.9	14.3
Advanced Economies	13.5	11.3
Emerging and Developing Economies	14.7	21.1
China	25.6	17.3
France	12.3	9.8
Germany	18.0	10.8
India	21.5	20.6
Indonesia	14.7	24.4
Japan	7.8	12.3
Korea	14.1	13.6
Malaysia	9.6	19.1
Singapore	10.1	13.0
Thailand	17.0	12.9
US	12.0	11.9

Source : International Financial Statistics, International Monetary Fund; DGCI&S for India.

III.8 In response to the global economic slowdown, various national level as well as co-ordinated global monetary and fiscal policy measures have been put in place. The G-20 member countries on April 2, 2009 resolved to restore confidence, growth and jobs; repair the financial system to restore lending; strengthen financial regulation to rebuild trust; fund and reform the international financial institutions; promote global trade and investment and reject protectionism; and build an inclusive and sustainable recovery. This would be pursued through undertaking a concerted fiscal expansion (US $5 trillion), providing additional resources through international financial institutions and trade finance, trebling of resources to the IMF, supporting a new SDR allocation and additional lending by the Multilateral Development Banks, and using additional resources from the IMF gold sales for concessional finance for the poorest countries. At the same time, attention has also been drawn to the need for credible exit strategies to ensure long-term fiscal sustainability and price stability (Box 1).

Merchandise Trade

III.9 The impact of global slowdown was felt more severely on India's external demand, evident in the negative growth of merchandise exports that set in the third quarter of 2008-09. Imports growth also witnessed sharp slowdown in tandem as domestic activity slowed down rapidly. India's merchandise exports, which remained buoyant till August 2008 decelerated in September 2008 and thereafter recorded continuous negative growth till February 2009, under the impact

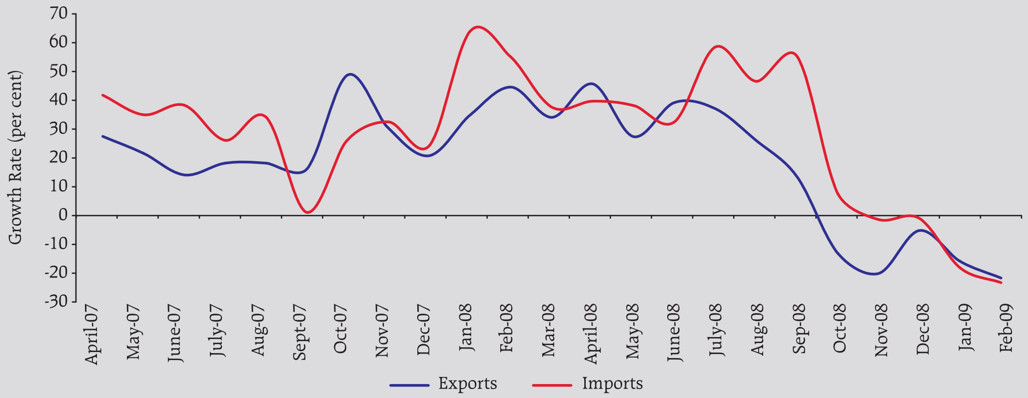
Box 1: The G-20 Communique

According to the Press Communique of the meeting of the G-20 member countries held on April 2, 2009 in London, the members have planned to undertake a concerted fiscal expansion amounting to US $5 trillion to resolve the global crises. They further agreed for over US $1 trillion of additional resources for the world economy through international financial institutions and trade finance. It was agreed to treble resources available to the IMF (US $750 billion), to support a new SDR allocation (US $250 billion), to support additional lending by the Multilateral Development Banks (at least US $100 billion), to ensure support for trade finance (US $250 billion), and to use the additional resources from agreed IMF gold sales for concessional finance for the poorest countries. The G-20 countries have additionally pledged to put in place credible exit strategies to ensure long-term fiscal sustainability and price stability. The following major initiatives were agreed:

- Even-handed and independent IMF surveillance of member economies and financial sectors, of the impact of policies on others, and of risks facing the global economy.
- Establish the much greater consistency and systematic co-operation between countries, and the framework of internationally agreed high standards.
- A new Financial Stability Board (FSB) will be established with a strengthened mandate, as a successor to the Financial Stability Forum (FSF), including all G-20 countries, FSF members, Spain, and the European Commission. The FSB should collaborate with the IMF to provide early warning of macroeconomic and financial risks and the actions needed.
- Regulation and oversight should be extended to all the systemically important financial institutions, instruments and markets including, for the first time, systemically important hedge funds.
- FSB and the IMF to monitor progress, working with the Financial Action Taskforce and other relevant bodies, and to provide a report to the next meeting of the G-20 Finance Ministers in Scotland in November.
- IMF should implement the package of quota and voice reforms agreed in April 2008 and complete the next review of quotas by January 2011. For World Bank also, similar reform should be completed on an accelerated timescale, to be agreed by the 2010 Spring Meetings.
- The G-20 members have committed to refrain from raising new barriers to investment or to trade in goods and services, imposing new export restrictions, or implementing World Trade Organisation (WTO) inconsistent measures to stimulate exports.
- The G-20 members should not retreat into financial protectionism, particularly measures that constrain worldwide capital flows, especially to developing countries.

of the global economic slowdown (Chart 8). With the result, exports during 2008-09 (April-February) recorded a lower growth of 6.4 per cent than 28.4 per cent a year ago. Imports during 2008-09 (April-February) also recorded a lower growth due to deceleration in growth of both petroleum, oil and lubricants (POL) and non-POL imports. During 2008-09 (April-February), POL imports showed a growth of 24.4 per cent

Chart 8: India's Merchandise Trade



lower than 35.3 per cent a year ago. Non-POL imports also exhibited moderation in growth during this period to 15.0 per cent from 42.6 per cent a year ago. Thus, merchandise trade deficit during 2008-09 (April-February) widened to US$ 113.8 billion from US $ 82.2 billion a year ago (Table 23).

Table 23: India's Merchandise Trade

(US $ billion)

Item	2007-08 R	2007-08 R	2008-09 P
		April-February	
1	2	3	4
Exports	162.9	145.6	154.9
Oil	28.4	24.3	21.6 *
Non-oil	134.5	121.3	96.7 *
Imports	251.4	227.9	268.7
Oil	79.6	70.6	87.8
Non-oil	171.8	157.3	181.0
Trade Balance	-88.5	-82.2	-113.8
Non-Oil Trade Balance	-37.3	-36.0	-36.4 *
Variation (Per cent)			
Exports	28.9	28.4	6.4
Oil	51.8	42.6	25.3 *
Non-oil	24.9	25.9	16.0 *
Imports	35.4	40.2	17.9
Oil	39.4	35.3	24.4
Non-oil	33.6	42.6	15.0

R : Revised. P : Provisional.
* : April-November
Source : DGCI&S.

III.10 The commodity-wise exports data available for the period April-November 2008 revealed that manufactured goods continued to maintain the largest share at 64.7 per cent, followed by petroleum products (18.3 per cent) and primary products (14.9 per cent). During April-November 2008, engineering goods and chemicals and related products showed higher growth in exports, while agriculture and allied products, ores and minerals, leather and manufactures, textiles and textile products, gems and jewellery and petroleum products showed deceleration. The handicrafts exports declined during the same period (Table 24).

III.11 Destination-wise, during April-November 2008, developing countries continued to remain the major markets for India's exports with a share of 39.9 per cent, followed by OECD countries and the OPEC (Chart 9). The US with a share of 11.9 per cent continued to be the single largest

Table 24: Exports of Principal Commodities

Commodity Group	US $ billion			Variation (Per cent)		
	2007-08	2007-08 R	2008-09 P	2007-08	2007-08	2008-09
		April-November			April-November	
1	2	3	4	5	6	7
1. Primary Products	**27.5**	**15.2**	**17.6**	**39.8**	**31.8**	**16.1**
of which:						
a) Agriculture and Allied Products	18.4	10.2	12.6	45.1	35.5	23.4
b) Ores and Minerals	9.1	5.0	5.1	30.2	24.8	1.2
2. Manufactured Goods	**102.9**	**65.4**	**76.5**	**21.2**	**20.5**	**16.9**
of which:						
a) Chemicals and Related Products	21.2	13.1	15.6	22.2	18.1	18.5
b) Engineering Goods	37.4	23.1	30.6	26.3	23.8	32.6
c) Textiles and Textile Products	19.4	12.5	12.9	11.8	11.4	3.6
d) Gems and Jewellery	19.7	13.3	13.7	23.2	28.0	3.0
3. Petroleum Products	**28.4**	**17.2**	**21.6**	**51.8**	**34.4**	**25.3**
4. Total Exports	**162.9**	**100.6**	**118.3**	**28.9**	**24.5**	**17.6**
Memo:						
Non-oil Exports	134.5	83.3	96.7	24.9	22.7	16.0

R : Revised. P : Provisional.
Source : DGCI&S.

export destination of India, though its share declined over the previous year. The US was followed by the UAE, Singapore, China and Hong Kong. Region-wise details available for April-November 2008 indicated that the growth rate of India's exports to major regions except the OPEC declined (Table 25).

III.12 The commodity-wise imports data for the period April-November 2008 indicated that POL imports showed sharp rise of 58.8 per cent as compared with 20.8 per cent a year ago on account of high international crude oil prices that prevailed during April-September 2008. Non-POL imports witnessed

Chart 9: Direction of India's Exports

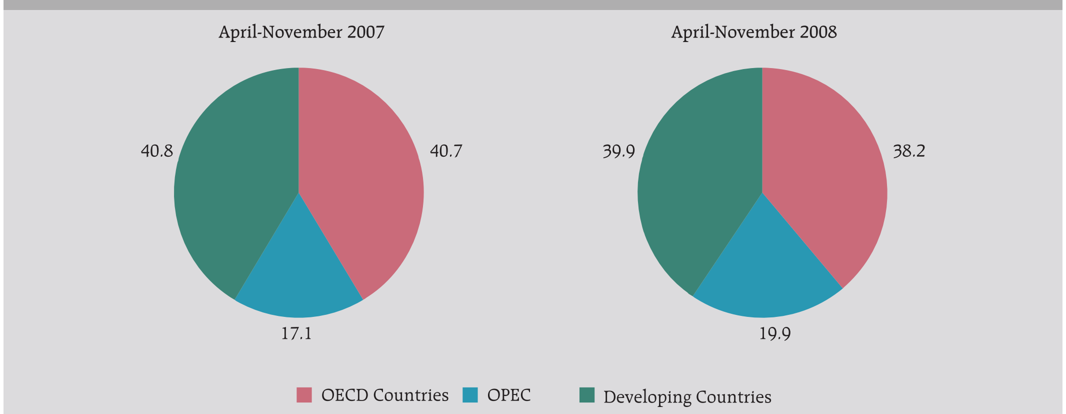


Table 25: Direction of India's Exports

Group/Country	US $ billion			Variation (Per cent)		
	2007-08	2007-08 R	2008-09 P	2007-08	2007-08	2008-09
		April-November			April-November	
1	2	3	4	5	6	7
1. OECD Countries	**62.6**	**40.9**	**45.2**	**20.4**	**20.7**	**10.5**
of which:						
EU	32.9	21.8	25.4	27.6	29.5	16.7
North America	22.0	14.5	14.9	10.0	10.2	3.1
US	20.7	13.7	14.0	9.8	10.2	2.6
2. OPEC	**26.7**	**17.2**	**23.6**	**28.8**	**25.0**	**37.2**
of which:						
UAE	15.6	10.1	13.3	29.9	25.9	31.7
3. Developing Countries	**69.6**	**41.0**	**47.2**	**37.1**	**28.4**	**15.2**
of which:						
Asia	51.5	30.0	34.3	36.9	26.2	14.3
People's Republic of China	10.8	5.9	5.2	30.6	24.4	-11.9
Singapore	7.4	4.5	6.0	21.4	7.1	33.9
4. Total Exports	**162.9**	**100.6**	**118.3**	**28.9**	**24.5**	**17.6**

R : Revised. P : Provisional.
Source : DGCI&S.

moderation in growth mainly due to decline in imports of gold and silver and electronic goods. The period (April-November 2008) also witnessed deceleration in imports of iron and steel and edible oil, while fertilisers recorded higher growth (Table 26).

Table 26: Imports of Principal Commodities

Group/Country	US $ billion			Variation (Per cent)		
	2007-08	2007-08 R	2008-09 P	2007-08	2007-08	2008-09
		April-November			April-November	
1	2	3	4	5	6	7
Petroleum, Petroleum Products and Related Material	79.6	47.6	75.6	39.4	20.8	58.8
Edible Oil	2.6	1.9	2.1	21.4	22.4	10.1
Iron and Steel	8.7	5.9	6.8	35.3	45.8	15.0
Capital Goods	70.8	36.6	40.6	50.5	34.4	11.0
Pearls, Precious and Semi-Precious Stones	8.0	6.1	10.6	6.5	22.5	73.4
Chemicals	9.9	6.6	9.5	26.5	25.5	44.1
Gold and Silver	17.9	13.6	13.0	22.0	41.1	-4.8
Total Imports	**251.4**	**153.5**	**208.6**	**35.4**	**28.5**	**35.9**
Memo:						
Non-oil Imports	171.8	105.9	133.0	33.6	32.2	25.6
Non-oil Imports excluding Gold and Silver	153.9	92.3	120.1	35.1	31.0	30.1
Mainly Industrial Inputs*	141.7	84.1	104.6	35.4	30.3	24.4

R : Revised. P : Provisional.
* : Non-oil imports net of gold and silver, bulk consumption goods, manufactured fertilisers and professional instruments.
Source : DGCI&S.

III.13 Source-wise, during April-November 2008, the OPEC had the highest share in India's imports, followed by developing countries and the OECD countries. China was the single largest source of imports, with a share of 10.0 per cent in total imports, followed by Saudi Arabia, the UAE, the US, Iran and Switzerland.

Balance of Payments

Current Account

III.14 The impact of the rapid shrinkage in global demand and trade was particularly felt on India's current account in Q3 of 2008-09 with widening trade deficit, some moderation in services exports and remittances and the consequent expansion in current account deficit. India's current account deficit increased to US$ 36.5 billion in April-December 2008 from US$ 15.5 billion in April-December 2007 mainly led by larger trade deficit on account of higher growth in imports coupled with a slowdown in export growth (Table 27 and Chart 10). On BoP basis, while merchandise exports increased by 17.5 per cent during April-December 2008 (21.9 per cent in April-December 2007), import payments recorded a growth of 30.6 per cent during the same period (28.3 per cent in April-December 2007). The lower growth of exports mainly reflected negative growth of 10.4 per cent during the third quarter, due to global economic slowdown. After remaining buoyant for almost six years, the growth in imports decelerated to single digit during the third quarter mainly led by lower crude oil prices. Overall, the trade deficit was higher at US$ 105.3 billion during April-December 2008 as compared with US$ 69.3 billion in April-December 2007.

III.15 The widening of trade deficit during April-December 2008 could be attributed to higher import payments reflecting high international commodity prices, particularly

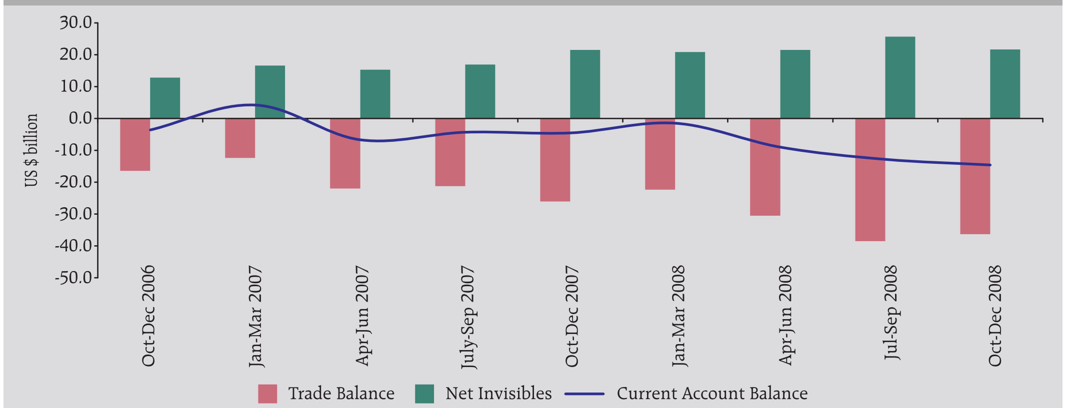
Table 27: India's Balance of Payments

(US$ billion)

Item	2007-08 PR	2007-08 PR				2008-09 P			
	Apr-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Apr-Dec	Apr-Jun	Jul-Sep	Oct-Dec	Apr-Dec
1	2	3	4	5	6	7	8	9	10
Exports	166.2	34.4	38.3	41.0	113.6	49.1	47.7	36.7	133.5
Imports	257.8	56.3	59.5	67.0	182.9	79.6	86.2	73.0	238.9
Trade Balance	-91.6	-22.0	-21.2	-26.1	-69.3	-30.5	-38.5	-36.3	-105.3
Net Invisibles	74.6	15.3	16.9	21.5	53.8	21.5	25.7	21.7	68.9
Current Account Balance	-17.0	-6.7	-4.3	-4.5	-15.5	-9.0	-12.8	-14.6	-36.5
Net Capital Account	108.0	17.8	33.2	31.0	82.0	11.1	7.9	-3.7	15.3
Overall Balance*	92.2	11.2	29.2	26.7	67.2	2.2	-4.7	-17.9	-20.4
Memo:									
Export growth (%)	28.9	15.8	17.0	33.0	21.9	43.0	24.6	-10.4	17.5
Import growth (%)	35.2	20.9	22.2	41.9	28.3	41.3	44.9	8.9	30.6
Invisibles receipts growth (%)	29.7	19.8	36.8	33.2	30.1	28.4	32.9	-0.6	18.8
Invisibles payments growth (%)	18.7	17.3	17.0	6.9	13.2	15.5	14.3	-2.1	8.7

*: Overall balance includes errors and omissions. PR : Partially Revised. P : Preliminary.

Chart 10: Movements in India's Current Account



crude oil prices during the first half of 2008-09 (Chart 11).

Invisibles

III.16 Gross invisibles receipts witnessed a lower growth of 18.8 per cent during April-December 2008 (30.1 per cent in the corresponding period of the previous year) mainly due to slow pace of growth in travel, business services and investment income receipts (Table 28). Similarly, invisibles payments also showed a lower growth of 8.7 per cent in April-December 2008 (13.2 per cent in April-December 2007) largely on account of slowdown in payments relating to travel, software services and a number of business and professional services. Net invisibles (invisibles receipts *minus* payments) increased by 28.1 per cent during April-December 2008, primarily led by receipts under private transfers and software services. At this level, the invisibles surplus financed about 65.4 per cent of trade deficit during April-December 2008 as against 77.6 per cent during April-December 2007.

Chart 11: India's POL Imports and International Crude Prices

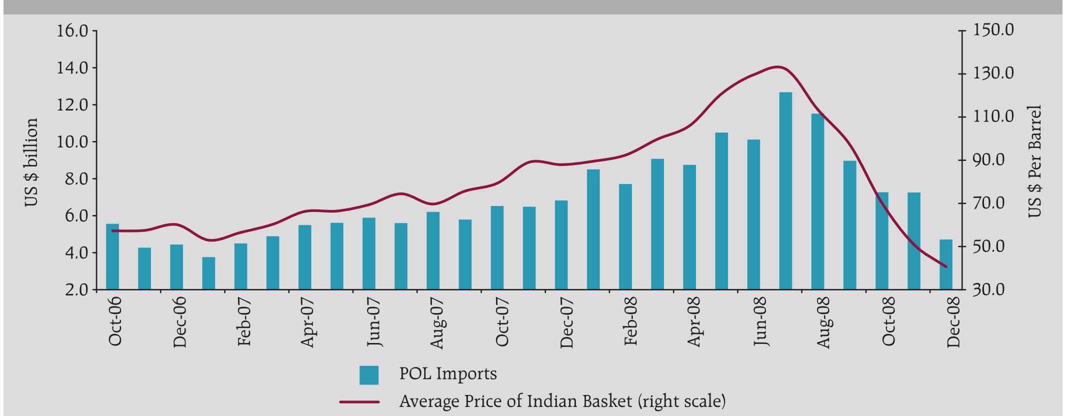


Table 28: Invisibles Gross Receipts and Payments

(US $ million)

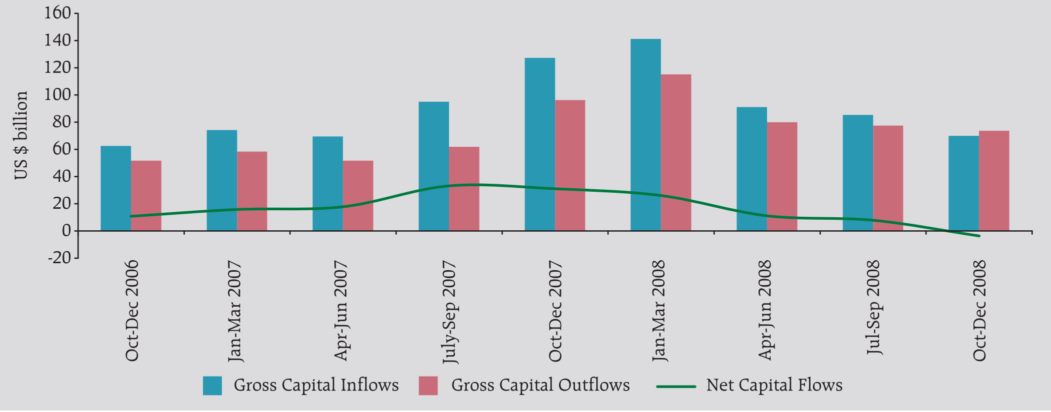
Item	Invisibles Receipts				Invisibles Payments			
	April-March		April-December		April-March		April-December	
	2006-07	2007-08 PR	2007-08 PR	2008-09 P	2006-07	2007-08 PR	2007-08 PR	2008-09 P
1	2	3	4	5	6	7	8	9
1. Travel	9,123	11,349	7,731	8,214	6,684	9,254	6,472	6,857
2. Transportation	7,974	10,014	6,843	7,961	8,068	11,514	8,128	10,282
3. Insurance	1,195	1,639	1,152	1,058	642	1,044	730	803
4. Govt. not included elsewhere	253	330	252	308	403	376	313	438
5. Transfers	31,470	44,259	29,764	37,413	1,391	2,315	1,333	2,337
6. Income	9,308	14,268	9,587	10,909	16,639	19,185	14,244	14,250
Investment Income	8,926	13,808	9,288	10,273	15,688	18,089	13,481	13,258
Compensation of employees	382	460	299	636	951	1,096	763	992
7. Miscellaneous	55,235	66,745	48,117	56,991	28,514	30,324	18,454	19,019
Of which:								
Software	31,300	40,300	27,494	34,620	2,267	3,058	2,332	2,361
Non-Software	23,935	26,445	20,623	22,371	26,247	27,266	16,122	16,658
Total (1 to 7)	114,558	148,604	103,446	122,854	62,341	74,012	49,674	53,986

P : Preliminary. PR : Partially Revised.

Capital Account

III.17 The adverse impact of the global financial market turmoil and liquidity problems on India's BoP was felt in terms of reversal of FIIs inflows and decline in long-term and short-term debt flows. A positive development was, however, turnaround in NRI flows and resilience of FDI inflows in the face of reversal of capital flows, reflecting the attractiveness of India as a long-term investment destination. The capital account balance moderated during April-December 2008 mainly due to higher gross capital outflows coupled with lower gross capital inflows (Chart 12). While the gross capital inflows declined to US $ 246.4

Chart 12: Movements in Capital Inflows and Outflows



billion during April-December 2008 from US $ 291.8 billion in April-December 2007, the gross capital outflows increased to US $ 231.1 billion from US $ 209.8 billion during the same period. The higher gross capital outflows were mainly an outcome of the developments during the third quarter of 2008-09, which was characterised by large portfolio outflows and higher repayments under short-term trade credits to India resulting in a negative quarterly capital account balance, a position last observed in the first quarter of 1998-1999.

III.18 Notwithstanding the deepening of the global financial and economic crisis, net inward FDI into India remained buoyant at US$ 27.4 billion during April-December 2008 (US$ 20.0 billion in April-December 2007), reflecting the relative attraction of India as an investment destination and the continuing liberalisation measures to attract FDI (Table 29). Gross inward FDI was US$ 31.7 billion during 2008-09 so far (April-February) as compared with US$ 27.6 billion in the corresponding period of the previous year (Table 30). During the same period, FDI was channeled mainly into manufacturing (21.1 per cent) followed by financial services (17.4 per cent) and construction sector (10.1 per cent). Net outward FDI from India also continued to remain high at US$ 12.0 billion in April-December 2008 (US$ 13.1 billion invested in April-December 2007) with net outward flows of US$ 5.9 billion in Q3 of 2008-09. Thus, despite the deterioration in global credit markets, Indian companies, particularly in the mineral sector, continued their overseas expansion raising resources from the domestic markets.

Table 29: Net Capital Flows

(US$ million)

Item	April-March		April-December	
	2006-07	2007-08 PR	2007-08 PR	2008-09 P
1	2	3	4	5
1. Foreign Direct Investment (FDI)	7,693	15,401	6,905	15,373
Inward FDI	22,739	34,236	20,039	27,357
Outward FDI	15,046	18,835	13,134	11,984
2. Portfolio Investment	7,060	29,556	33,292	-11,341
Of which:				
FIIs	3,226	20,327	24,471	-12,408
ADRs/GDRs	3,776	8,769	8,390	1,142
3. External Assistance	1,775	2,114	1,274	1,861
4. External Commercial Borrowings	16,103	22,633	17,410	7,114
5. NRI Deposits	4,321	179	-931	2,115
6. Banking Capital excluding NRI Deposits	-2,408	11,578	6,862	-2,244
7. Short-term Trade Credit	6,612	17,183	10,719	547
8. Rupee Debt Service	-162	-121	-45	-33
9. Other Capital	4,209	9,470	6,478	1,900
Total (1 to 9)	**45,203**	**1,07,993**	**81,964**	**15,292**

P : Preliminary. PR : Partially Revised.

Table 30: Capital Flows in 2008-09

(US $ billion)

Component	Period	2007-08	2008-09
1	2	3	4
FDI to India	April-February	27.6	31.7
FIIs (net)	April-March	20.3	(-)15.0
ADRs/GDRs	April-March	8.8	1.2
ECB Approvals	April-February	26.5	17.2
NRI Deposits (net)	April-February	(-) 0.3	2.8

FDI : Foreign Direct Investment.
FII : Foreign Institutional Investors.
ECB : External Commercial Borrowings.
NRI : Non Resident Indians.
ADR : American Depository Receipts.
GDR : Global Depository Receipts.

III.19 Portfolio investment, primarily comprising foreign institutional investors' (FIIs) investments and American Depository Receipts (ADRs)/Global Depository Receipts (GDRs), witnessed net outflows in April-December 2008 as against net inflows in the corresponding period of the previous year. Outflows under portfolio investment were led by large sales of equities by FIIs in the Indian stock market and slowdown in net inflows under ADRs/GDRs due to drying-up of liquidity in the overseas market. During 2008-09, FIIs recorded a net outflow of US $ 15.0 billion as against net inflows of US$ 20.3 billion a year ago. In the current financial year, up to April 10, 2009, there were net inflows under FIIs to the tune of US $ 0.9 billion as against net outflows of US $ 1.5 billion during the same period last year.

III.20 Banking capital mainly consists of foreign assets and liabilities of commercial banks. NRI deposits, which constitute major part of the foreign liabilities, recorded a net inflow of US$ 2.1 billion in April-December 2008, a turnaround from net outflow of US$ 0.9 billion in April-December 2007, responding to the hikes in the ceiling interest rates on non-resident deposit schemes. Including other components, total banking capital, in net terms, turned marginally negative to US$ 0.1 billion during April-December 2008 as against net inflows of US$ 5.9 billion during April-December 2007. According to the latest available information, net inflows under NRI deposits increased to US$ 2.8 billion during April-February of 2008-09.

III.21 Reflecting the tight liquidity conditions in the overseas credit markets and increased cost of borrowings, gross inflows under external commercial borrowings (ECBs) to India moderated sharply during April-December 2008. However, ECB repayments by Indian companies increased marginally during April-December 2008. As a result, the net inflows under ECBs slowed down to US$ 7.1 billion in April-December 2008 (US$ 17.4 billion in April-December 2007). During 2008-09 so far (April-February), approvals under ECBs remained low at US$ 17.2 billion as compared with US$ 26.5 billion a year ago.

III.22 Despite tightness in overseas credit markets, gross disbursements of short-term trade credit at US$ 31.4 billion during April-December 2008 were comparable with US$ 32.2 billion in April-December 2007. However, repayments of short-term trade credit increased to US$ 30.8 billion during April-December 2008 from US$ 21.5 billion during April-December 2007 mainly due to some problems in roll over observed during the third quarter of 2008-09. Net short-term trade credit stood at US$ 0.5 billion (inclusive of suppliers' credit up to 180 days) during April-December 2008 as compared with US$ 10.7 billion during the same period of the previous year.

Foreign Exchange Reserves

III.23 A sharp expansion in CAD in Q3 of 2008-09 alongwith net capital outflows resulted in the outgo of foreign exchange reserves to the extent of US $ 17.9 billion (excluding valuation). This magnitude of decline in reserves in a single quarter, although led to some stress on the exchange rate, was managed without creating disruptions in the financial markets. This level of decline in reserves was the highest during any one quarter in earlier years; a decline of US$ 4.7 billion in reserves was last observed in the third quarter of 2005-06. As a result of this, foreign exchange reserves on BoP basis (*i.e.*, excluding valuation) declined by US$ 20.4 billion in April-December 2008 as against accretion to reserves of US$ 67.2 billion in April-December 2007 (Chart 13). Taking into account the valuation effect, foreign exchange reserves recorded a decline of US$ 53.8 billion during April-December 2008 as against an accretion of US$ 76.1 billion in April-December 2007. Valuation losses, reflecting the depreciation of major currencies against the US dollar accounted for US$ 33.4 billion or 62.1 per cent of the total decline in foreign exchange reserves during April-December 2008.

III.24 India's foreign exchange reserves were US$ 252.0 billion as at end-March 2009, showing a decrease of US$ 57.7 billion over end-March 2008 (including valuation losses) (Table 31). The foreign exchange reserves, however, increased to US $ 253.0 billion as on April 10, 2009.

III.25 The overall approach to the management of India's foreign exchange reserves in recent years reflects the changing composition of the balance of payments and the 'liquidity risks' associated with different types of flows and other requirements. Taking these factors into account, India's foreign exchange reserves continued to be at a level consistent with the rate of growth, the size of the external sector in the economy and the size of risk-adjusted capital flows.

Chart 13: Quarterly Changes in India's Foreign Exchange Reserves

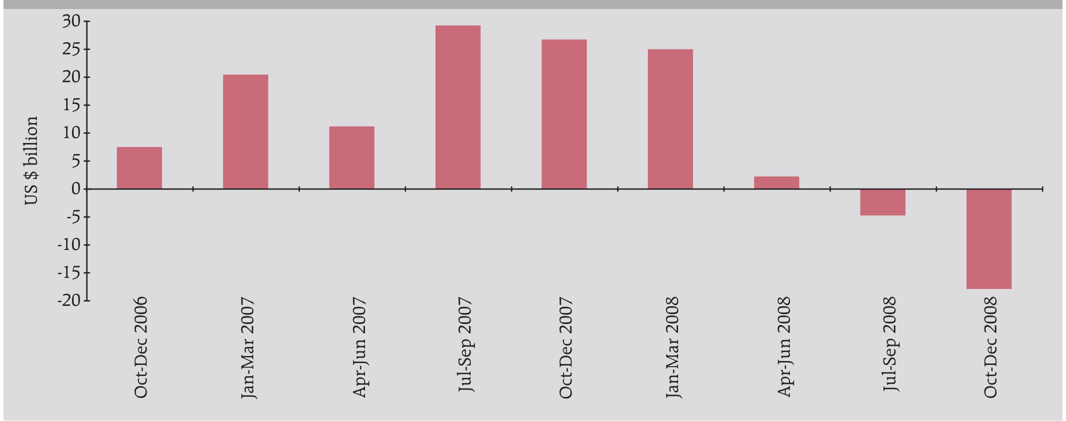


Table 31: Foreign Exchange Reserves

(US $ million)

Month	Gold	SDR	Foreign Currency Assets	Reserve Position in the IMF	Total (2+3+4+5)	*Memo*: Outstanding Net Forward Sales (-) / Purchases (+) of US dollar by the Reserve Bank at the end of the month
1	2	3	4	5	6	7
March 2007	6,784	2	191,924	469	199,179	–
March 2008	10,039	18	299,230	436	309,723	(+) 14,735
April 2008	9,427	18	304,225	485	314,155	(+) 17,095
May 2008	9,202	11	304,875	526	314,614	(+) 15,470
June 2008	9,208	11	302,340	528	312,087	(+) 13,700
July 2008	9,735	11	295,918	512	306,176	(+) 11,910
August 2008	8,692	4	286,117	496	295,309	(+) 9,925
September 2008	8,565	4	277,300	467	286,336	(+) 2,300
October 2008	8,382	9	244,045	447	252,883	(+) 90
November 2008	7,861	3	238,968	854	247,686	(-) 487
December 2008	8,485	3	246,603	877	255,968	(-) 1,752
January 2009	8,884	3	238,894	830	248,611	(-) 1,723
February 2009	9,746	1	238,715	816	249,278	(-) 1,953
March 2009	9,577	1	241,426	981	251,985	–
April 2009*	9,577	1	242,423	976	252,977	–

* : As on April 10, 2009. – : Not Available.

External Debt

III.26 India's external debt did not show a significant increase in Q3 of 2008-09 due to a decline in short-term debt. The ratio of short-term debt to total debt and the debt-service ratio remained at a reasonably low level. Recording an increase of around US$ 6.2 billion (2.8 per cent) over end-September 2008, India's total external debt stood at US $ 230.8 billion at end-December 2008 (Table 32). The increase in external debt stock was essentially due to increase in long-term debt outstanding by US$ 9.4 billion, especially commercial borrowings and bilateral debt, during the third quarter of 2008-09. Short-term debt, however, declined by US$ 3.2 billion on account of all the components, except FII investment in government Treasury Bills and corporate debt instruments, which increased by US$ 543 million. NRI deposits declined by US$ 0.33 billion over end-September 2008 and stood at US$ 40.3 billion at end-December 2008 mainly reflecting valuation changes. The US dollar continued to be the leading currency in which India's external debt was denominated, accounting for about 53.1 per cent of total debt at end-December 2008.

III.27 Debt sustainability indicators remained at a comfortable level at end-December 2008. The debt service ratio was placed at 5.3 per cent during the third quarter of 2008-09. The ratio of short-term to total debt decreased to 20.6 per cent while

Table 32: India's External Debt

(US $ million)

Item	End-March 2007	End-March 2008	End-June 2008	End-September 2008	End-December 2008
1	2	3	4	5	6
1. Multilateral	35,337	39,490	39,644	38,911	39,892
2. Bilateral	16,065	19,702	18,729	18,837	21,427
3. Trade Credit (above 1 year)	7,165	10,389	11,075	12,324	13,944
4. External Commercial Borrowings	41,443	62,504	61,231	61,568	66,158
5. NRI Deposit	41,240	43,672	42,612	40,622	40,296
6. Rupee Debt	1,951	2,016	1,866	1,707	1,652
7. Long-term (1 to 6)	143,201	177,773	175,157	173,969	183,369
8. Short-term	28,130	46,999	48,619	50,676	47,477
Total (7+8)	**171,331**	**224,772**	**223,776**	**224,645**	**230,846**
Memo:					(Per cent)
Total debt /GDP	18.1	19.0	..	..	..
Short-term/Total debt	16.4	20.9	21.7	22.6	20.6
Short-term debt/Reserves	14.1	15.2	15.6	17.7	18.5
Concessional debt/Total debt	23.1	19.7	19.1	18.5	18.7
Reserves/Total debt	116.2	137.8	139.5	127.5	110.9
Debt Service Ratio *	4.7	4.8	3.7	4.2	5.3

*: Relates to the corresponding fiscal year/quarter. .. : Not available.

the ratio of short-term debt to reserves increased to 18.5 per cent at end-December 2008 from 22.6 per cent and 17.7 per cent, respectively, at end-September 2008. India's foreign exchange reserves exceeded the external debt by US$ 25.1 billion, providing a cover of 110.9 per cent to the external debt stock at the end of December 2008.

III.28 Based on residual maturity (an important indicator for assessing the debt service liability in the short-run), the total short-term residual maturity obligations stood at US$ 90.0 billion, which accounted for 39.0 per cent of the total external debt outstanding at end-December 2008. The total short-term debt in terms of residual maturity (US$ 90.0 billion) at end-December 2008 consists of short-term debt based on original maturity at US$ 47.5 billion and long-term external debt due for payments within one year of US$ 42.5 billion. Out of these US$ 42.5 billion, the NRI deposits constitute the major portion (US$ 31.8 billion) and are expected to get rolled over.

International Investment Position

III.29 India's net international liabilities increased by US $ 10.2 billion between end-June 2008 and end-September 2008, as the decline in international assets (US $ 19.7 billion) exceeded that in international liabilities (US $ 9.5 billion) (Table 33). The decline in international assets was mainly on account of decrease in reserve assets amounting to US $ 25.8 billion. However, the direct investment and other investment position increased between end-June 2008

Table 33: International Investment Position of India

(US $ billion)

Item	March 2007 PR	March 2008 PR	June 2008 PR	September 2008 P
1	2	3	4	5
A. Assets	**247.6 (26.1)**	**384.1 (32.5)**	**377.9**	**358.2**
1. Direct Investment	30.9	49.8	52.7	55.9
2. Portfolio Investment	0.9	0.7	0.7	0.7
2.1 Equity Securities	0.5	0.6	0.6	0.6
2.2 Debt securities	0.4	0.1	0.1	0.0
3. Other Investment	16.6	23.9	12.4	15.3
3.1 Trade Credits	0.7	-0.1	-1.6	1.8
3.2 Loans	3.2	10.5	2.1	1.7
3.3 Currency and Deposits	8.5	8.2	6.4	5.5
3.4 Other Assets	4.2	5.2	5.6	6.4
4. Reserve Assets	199.2 (21.0)	309.7 (26.2)	312.1	286.3
B. Liabilities	**308.9 (32.6)**	**438.3 (37.1)**	**429.9**	**420.5**
1. Direct Investment	77.0 (8.1)	118.3 (10.0)	121.9	121.3
2. Portfolio Investment	79.4 (8.4)	120.1 (10.2)	108.2	101.8
2.1 Equity Securities	63.3	98.6	87.7	80.0
2.2 Debt securities	16.2	21.5	20.5	21.8
3. Other Investment	152.4 (16.1)	199.9 (16.9)	199.8	197.4
3.1 Trade Credits	27.7	45.2	47.5	48.2
3.2 Loans	80.9	106.9	106.4	105.6
3.3 Currency and Deposits	41.7	44.8	43.6	41.5
3.4 Other Liabilities	2.1	3.0	2.3	2.0
C. Net Position (A-B)	**-61.3 (-6.5)**	**-54.2 (-4.6)**	**-52.1**	**-62.2**

PR : Partially Revised. P : Provisional.

Note : Figures in parentheses are percentage to GDP.

and end-September 2008. On the other hand, the decline in international liabilities is mainly attributed to outflow by FIIs from portfolio equity investment during July-September 2008 and also due to the effect of valuation changes.

IV. Monetary Conditions

The global crisis, which created intense uncertainties for funding liquidity in the face of tight market liquidity for financial instruments trading in almost all financial markets, brought to the fore the strong interactions between funding liquidity and market liquidity. As the global liquidity crisis started to affect the domestic money and foreign exchange markets in the last quarter of 2008, the Reserve Bank ensured adequate provision of both domestic and foreign exchange liquidity to the market through banks, with the aim of restoring normal functioning of the market, and thereby facilitating adequate flow of credit to the productive sectors of the economy. As the Reserve Bank's net foreign exchange assets contracted on account of provision of dollar liquidity to the market, net domestic assets were expanded through policy actions to offset the impact so that overall rupee liquidity remains comfortable. The monetary policy stance of the Reserve Bank shifted from concerns related to inflation in the first half of 2008-09 to maintaining financial stability and arresting the moderation of growth in the second half. While money supply evolved consistent with indicative projections, credit to the private sector reflected the conditions evolving in the real sector of the economy.

IV.1 Growth in monetary and liquidity aggregates during 2008-09 witnessed some moderation reflecting net capital outflows and deceleration in expansion of bank credit to the commercial sector. Broad money growth during the last quarter of 2008-09 moderated and remained marginally below the Reserve Bank's projected trajectory of 19.0 per cent for the year 2008-09. Expansion in bank credit to the commercial sector remained strong up to October 2008 in the backdrop of drying up of other sources of funds to industry but has since decelerated and remained below the Reserve Bank's Third Quarter Review projection of 24.0 per cent for the year 2008-09. The contractionary impact of decline in net foreign exchange assets on reserve money and domestic liquidity was offset by OMO, unwinding under MSS and other measures to augment rupee liquidity. Net Reserve Bank credit to Central Government increased substantially reflecting large purchases under OMO and unwinding under MSS. In response to the international financial turmoil and its possible impact on the domestic economy in the backdrop of the downturn in headline inflation, the Reserve Bank had taken a number of conventional and unconventional measures towards monetary easing since mid-September 2008. The aim of these measures was to ensure provision of ample liquidity to the banking system to make credit available for productive purposes for reviving the growth momentum.

Monetary Survey

IV.2 Broad money (M_3) growth, on a year-on-year (y-o-y) basis, was placed at 18.4 per cent at end-March 2009, which was lower than 21.2 per cent a year ago. Expansion in the residency-based new monetary aggregate (NM_3) – which does not directly reckon non-resident foreign currency deposits such as FCNR(B) deposits – was lower at 18.2 per cent at end-March 2009 than 21.3 per cent a year ago. Similarly growth in liquidity aggregate, L_1, was lower at 17.6 per cent than 20.6 per cent a year ago (Table 34 and Chart 14).

IV.3 Growth in key monetary aggregates during 2008-09 reflected changing liquidity conditions arising from domestic and global financial conditions and the necessary responses of monetary policy. The deterioration in the global financial conditions since September 2008 and capital outflows tightened domestic liquidity conditions. This necessitated the Reserve Bank to augment rupee and dollar liquidity and strengthen the credit delivery mechanisms for arresting the growth moderation through a series of policy measures. On the inflation front, WPI inflation moderated since August 2008 on account of the marked decline in international energy and commodity prices as well as slowdown in aggregate global demand due to persistence of financial market turmoil. In view of the prevailing macroeconomic scenario, the cash reserve ratio (CRR) has been reduced by a cumulative 4.0 percentage points from 9.0 per cent to 5.0 per cent since October 2008. This reduction in CRR released primary liquidity of the order of Rs.1,60,000 crore into the system. The repo rate was also reduced by a cumulative 4.0 percentage points to 5.0 per cent. The reverse repo rate was also reduced by 2.5 percentage points to 3.5 per cent (see Chapter VI, Table 66). The monetary and liquidity aggregates though remained strong, witnessed some moderation in the last quarter reflecting slowing down of economic growth.

Table 34: Monetary Indicators

(Amount in Rupees crore)

Item	Outstanding as on March 31, 2009	Variation (year-on-year)			
		Mar. 31, 2008		Mar. 31, 2009	
		Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6
I. Reserve Money (M_0)	9,87,902	2,19,412	31.0	59,600	6.4
(Reserve Money adjusted for CRR changes)		(1,72,412)	(25.3)	(1,61,850)	(19.0)
II. Narrow Money (M_1)	12,45,557	1,86,443	19.3	93,125	8.1
III. Broad Money (M_3)	47,58,504	7,01,580	21.2	7,40,932	18.4
a) Currency with the Public	6,66,095	85,475	17.7	97,815	17.2
b) Aggregate Deposits	40,86,865	6,14,546	21.7	6,46,627	18.8
i) Demand Deposits	5,73,918	99,410	20.9	-1,179	-0.2
ii) Time Deposits	35,12,947	5,15,137	21.9	6,47,806	22.6
of which: Non-Resident Foreign Currency Deposits	67,303	-10,525	-15.6	10,368	18.2
IV. NM_3	47,65,882	7,08,086	21.3	7,33,298	18.2
of which: Call Term Funding from FIs	1,11,739	20,668	24.1	5,235	4.9
V. a) L_1	48,79,353	7,07,388	20.6	7,31,918	17.6
of which: Postal Deposits	1,13,471	-698	-0.6	-1,380	-1.2
b) L_2	48,82,285	7,07,388	20.5	7,31,918	17.6
c) L_3	49,06,932	7,08,221	20.4	7,31,713	17.5
VI. Major Sources of Broad Money					
a) Net Bank Credit to the Government (i+ii)	12,83,165	71,612	8.6	3,77,318	41.7
i) Net Reserve Bank Credit to Government	69,913	-1,15,632	–	1,83,122	–
of which: to the Centre	69,311	-1,16,772	–	1,83,947	–
ii) Other Banks' Credit to Government	12,13,252	1,87,244	22.5	1,94,196	19.1
b) Bank Credit to the Commercial Sector	30,12,673	4,47,059	21.0	4,35,536	16.9
c) Net Foreign Exchange Assets of the Banking Sector	13,22,847	3,81,952	41.8	27,716	2.1
d) Government Currency Liability to Public	9,984	1,063	13.0	760	8.2
e) Net Non-Monetary Liabilities of the Banking Sector	8,70,165	2,00,107	35.1	1,00,399	13.0
Memo:					
Aggregate Deposits of SCBs	38,30,322	5,85,006	22.4	6,33,382	19.8
Non-food Credit of SCBs	27,23,801	4,32,846	23.0	4,06,287	17.5

SCBs : Scheduled Commercial Banks. FIs : Financial Institutions. NBFCs : Non-Banking Financial Companies.

NM_3 is the residency-based broad money aggregate and L_1, L_2 and L_3 are liquidity aggregates compiled on the recommendations of the Working Group on Money Supply, 1998.

$L_1 = NM_3$ + Select deposits with the post office saving banks.

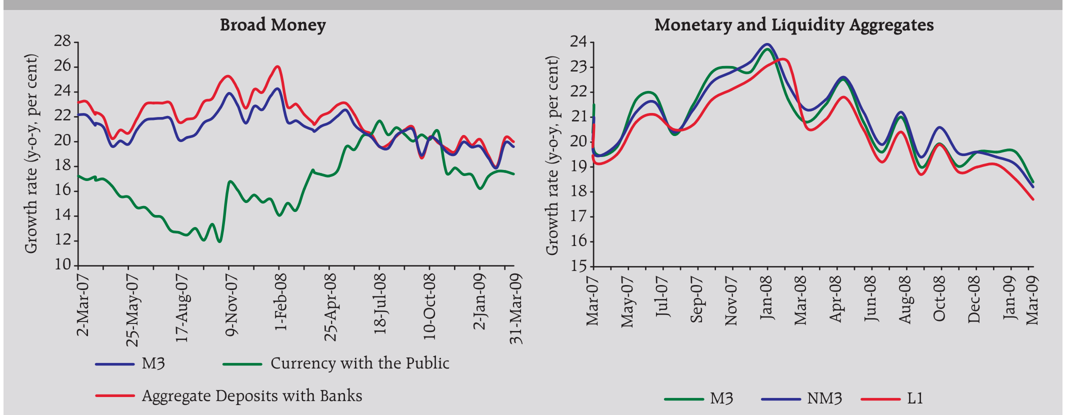
$L_2 = L_1$ +Term deposits with term lending institutions and refinancing institutions + Term borrowing by FIs + Certificates of deposit issued by FIs.

$L_3 = L_2$ + Public deposits of NBFCs.

Note : 1. Data are provisional. Wherever data are not available, the data for last available month are repeated as estimates.

2. Government Balances as on March 31, 2009 are before closure of accounts.

Chart 14: Money Supply



IV.4 The moderation in broad money (M_3) growth mainly reflected a deceleration in aggregate deposits expansion during 2008-09 emanating from the downturn in economic activity. Currency in circulation remained high during the first half of 2008-09 reflecting the effects of disbursement under Farmers' Debt Waiver Scheme and the Sixth Pay Commission payouts. Currency with the public grew by 17.2 per cent (y-o-y) at end-March 2009 as compared with 17.7 per cent a year ago (Table 35). Growth in time deposits decelerated during the first two quarters of 2008-09 but witnessed robust expansion thereafter reflecting some switching of demand deposits and other savings instruments to time deposits. Time deposits recorded a higher growth of 22.6 per cent (y-o-y) at end-March 2009 as compared with 21.9 per cent a year ago. The net outflows from small savings schemes that started from December 2007 continued up to February 2009, the latest period for which the data are available (Chart 15).

IV.5 On the sources side of broad money (M_3), growth of bank credit to commercial sector decelerated and expansion in net foreign exchange assets of the banking sector moderated to a large extent. On the other hand, net Reserve Bank credit to the Centre increased reflecting the decline in outstanding balances under MSS, increase in open market operations (including purchase of oil bonds under special market operations) and decline in the Centre's surplus with the Reserve Bank. However, growth in scheduled commercial banks' (SCBs) credit to Government witnessed some moderation during this period. Bank credit to the commercial sector increased by 16.9 per cent (y-o-y) at end-March 2009 as compared with 21.0 per cent a year ago. Non-food credit growth (y-o-y) of SCBs picked up during the first two quarters of 2008-09, in the backdrop of sizeable rise in credit to petroleum sector due to the funding requirements of oil companies and substitution of funds raised by corporates from non-banking and external sources. It peaked during October-November 2008 but witnessed sustained deceleration thereafter. Non-food credit-growth (y-o-y) was 17.5 per cent at end-March 2009 as

Table 35: Monetary Aggregates – Variations

(Rupees crore)

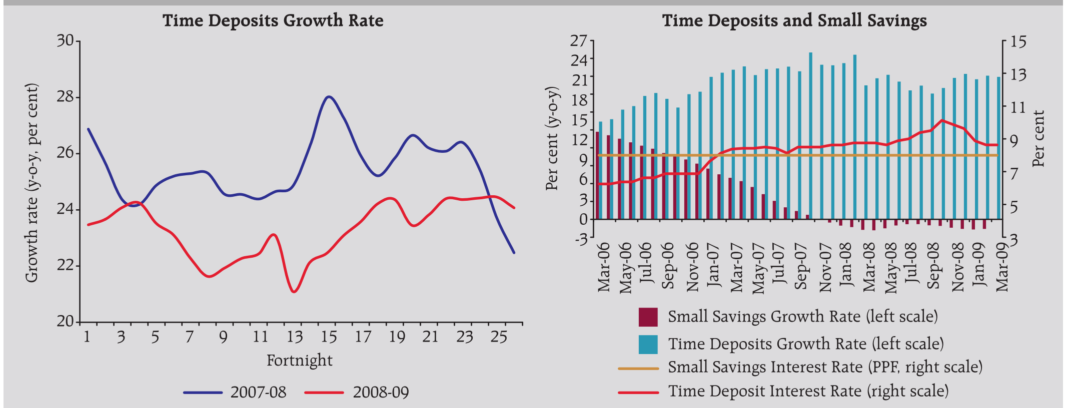
Item	2007-08	2008-09	2008-09			
			Q1	Q2	Q3	Q4
1	2	3	4	5	6	7
M_3 (1+2+3 = 4+5+6+7-8)	7,01,580 (21.2)	7,40,932 (18.4)	88,874	1,71,180	1,59,060	3,21,818
1. Currency with the Public	85,475 (17.7)	97,815 (17.2)	35,749	-17,971	40,431	39,606
2. Aggregate Deposits with Banks	6,14,546 (21.7)	6,46,627 (18.8)	57,235	1,88,636	1,11,585	2,89,171
2.1 Demand Deposits with Banks	99,410 (20.9)	-1,179 (-0.2)	-79,118	52,023	-61,730	87,646
2.2 Time Deposits with Banks	5,15,137 (21.9)	6,47,806 (22.6)	1,36,353	1,36,614	1,73,315	2,01,525
3. 'Other' Deposits with Banks	1,558 (20.8)	-3,510 (-38.8)	-4,110	514	7,045	-6,959
4. Net Bank Credit to Government	71,612 (8.6)	3,77,318 (41.7)	36,224	30,879	1,29,330	1,80,885
4.1 RBI's Net Credit to Government	-1,15,632	1,83,122	-13	51,360	30,230	1,01,545
4.1.1 RBI's Net Credit to the Centre	-1,16,772	1,83,947	1,430	51,379	29,932	1,01,206
4.2 Other Banks' Credit to Government	1,87,244	1,94,196	36,237	-20,482	99,101	79,339
5. Bank Credit to the Commercial Sector	4,47,059 (21.0)	4,35,536 (16.9)	31,107	1,59,864	88,766	1,55,799
6. NFEA of Banking Sector	3,81,952	27,716	66,858	7,271	-1,32,461	86,048
6.1 NFEA of the RBI	3,69,977	43,986	1,03,932	10,336	-1,56,330	86,048
7 Government's Currency Liabilities to the Public	1063	760	225	206	186	143
8 Net Non-Monetary Liabilities of the Banking Sector	2,00,107	1,00,399	45,541	27,040	-73,239	1,01,056
Memo:						
1. Non-resident Foreign Currency Deposits with SCBs	-10,525	10,368	2,048	3,898	-2,536	6,957
2. SCB' Call-term Borrowing from Financial Institutions	20,668	5,235	-1,116	7,015	-685	21
3. Overseas Borrowing by SCBs	12,546	-2,795	9,494	4,600	-5,185	-11,704

SCBs : Scheduled Commercial Banks. NFEA : Net Foreign Exchange Assets.
Note : 1. Data are provisional.

compared with 23.0 per cent a year ago (Table 36). The lower expansion in credit relative to the expansion in deposits resulted in a decline in the incremental credit-deposit ratio (y-o-y) of SCBs to 64.4 per cent at end-March 2009 from 73.6 per cent a year ago (Chart 16).

IV.6 Scheduled commercial bank's investment in SLR securities as a per cent of their net demand and time liabilities (NDTL) increased at end-March 2009 to 28.1 per cent from 27.8 per cent a year ago. However, adjusted for liquidity adjustment facility (LAF) collateral securities on an

Chart 15: Time Deposits and Small Savings



outstanding basis, SCB's holding of SLR securities amounted to Rs.11,10,156 crore or 26.7 per cent of NDTL at end-March, 2009 - implying an excess of Rs.1,13,817 crore or 2.7 per cent of NDTL over the prescribed SLR of 24.0 per cent of NDTL (Chart 17).

Table 36: Scheduled Commercial Bank Survey

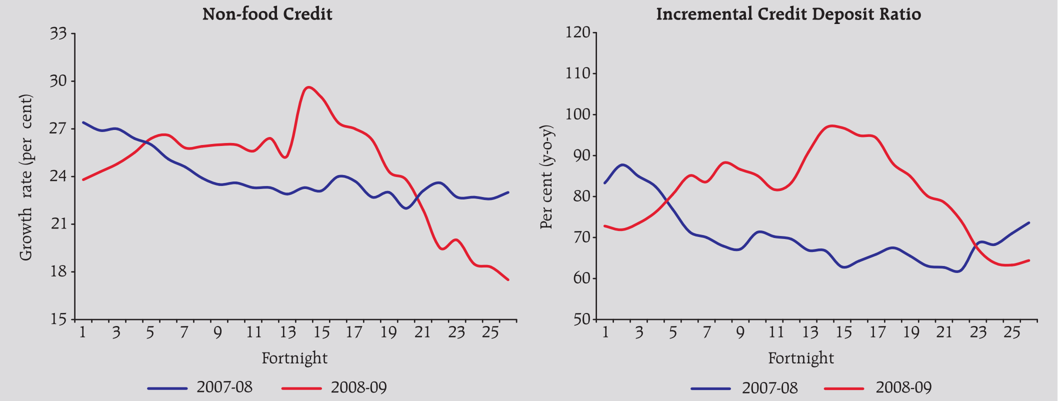
(Amount in Rupees crore)

Item	Outstanding as on Mar. 27, 2009	Variation (year-on-year)			
		As on Mar. 28, 2008		As on Mar. 27, 2009	
		Amount	Per cent	Amount	Per cent
1	2	3	4	5	6
Sources of Funds					
1. Aggregate Deposits	38,30,322	5,85,006	22.4	6,33,382	19.8
2. Call/Term Funding from Financial Institutions	1,11,739	20,668	24.1	5,235	4.9
3. Overseas Foreign Currency Borrowings	41,655	12,546	39.3	-2,795	-6.3
4. Capital	47,016	9,695	28.5	3,246	7.4
5. Reserves	2,81,673	60,126	35.6	52,821	23.1
Uses of Funds					
1. Bank Credit	27,70,012	4,30,724	22.3	4,08,099	17.3
of which: Non-food Credit	27,23,801	4,32,846	23.0	4,06,287	17.5
2. Investments in Government and Other Approved Securities	11,65,746	1,80,199	22.8	1,94,031	20.0
a) Investments in Government Securities	11,48,168	1,82,603	23.5	1,89,507	19.8
b) Investments in Other Approved Securities*	17,578	-2,405	-15.6	4,524	34.7
3. Investments in non-SLR Securities	2,11,953	30,155	21.5	41,344	24.2
4. Foreign Currency Assets	56,251	-27,564	-46.9	25,062	80.4
5. Balances with the RBI	2,38,195	76,900	42.7	-18,927	-7.4

* : Refer to investment in SLR securities as notified in the Reserve Bank notification DBOD No. Ref. BC. 61/12.02.001/2007-08 dated February 13, 2008.

Note : Data are provisional.

Chart 16: Scheduled Commercial Banks' Credit Growth



IV.7 Bank credit flow from scheduled commercial banks moderated to 17.3 per cent (y-o-y) at end-March 2009 as compared with 22.3 per cent a year ago. The deceleration in credit expansion was observed across the banking system, but it was sharper for the private and foreign banks (Table 37).

IV.8 Disaggregated data on sectoral deployment of gross bank credit available up to February 27, 2009 showed that 52.5 per cent of incremental non-food credit (y-o-y) was absorbed by industry as compared with 45.2 per cent in the corresponding period of the previous year. The expansion of incremental non-food credit to industry during this period was led by infrastructure, petroleum, coal products & nuclear fuels, iron & steel, engineering, construction and chemical & chemical products industries. Small enterprises (both small industrial and services enterprises) absorbed 15.4 per cent of the total incremental non-food credit as compared with 19.2 per cent in the same period of the previous year. The infrastructure sector alone accounted for

Chart 17: SLR Investments by Scheduled Commercial Banks

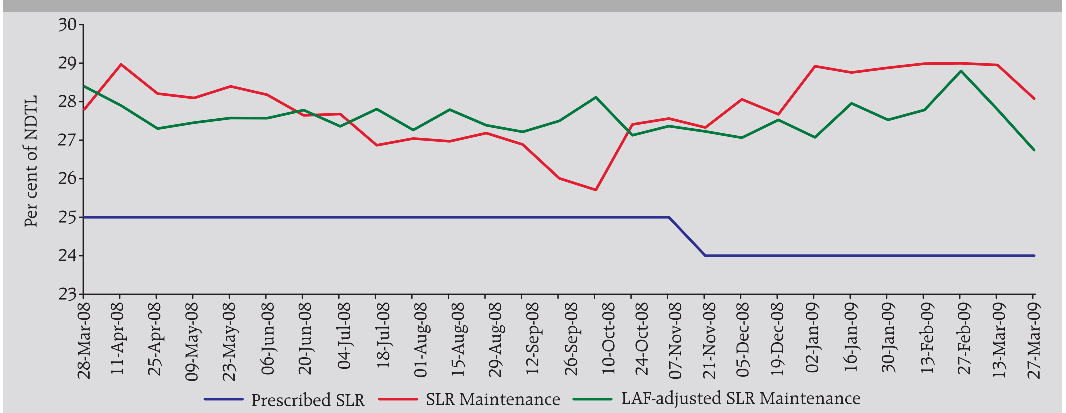


Table 37: Credit Flow from Scheduled Commercial Banks

(Amount in Rupees crore)

Item	Outstanding as on March 27, 2009	Variation (year-on-year)			
		As on March 28, 2008		As on March 27, 2009	
		Amount	Per cent	Amount	Per cent
1	2	3	4	5	6
1. Public Sector Banks	20,11,591	3,07,310	22.5	3,41,442	20.4
2. Foreign Banks	1,69,350	36,116	28.5	6,483	4.0
3. Private Banks	5,23,038	78,301	19.9	51,559	10.9
4. All Scheduled Commercial Banks*	27,70,012	4,30,724	22.3	4,08,099	17.3

*: Includes Regional Rural Banks
Note: Data are provisional.

31.3 per cent of the incremental credit to industry as compared with 33.2 per cent in the corresponding period of the previous year. The agricultural sector absorbed 13.0 per cent of the incremental non-food bank credit as compared with 9.2 per cent in the corresponding period of the previous year. Personal loans that accounted for 10.7 per cent of the incremental non-food credit witnessed some moderation; within personal loans, housing loans decelerated to a large extent. Growth in loans to commercial real estate and non-banking financial companies remained high (Table 38).

IV.9 Apart from banks, the commercial sector mobilised resources from a variety of other sources such as issuances in capital markets, commercial paper, non-banking financial companies (NBFCs), financial institutions, external commercial borrowings, issuances of American Depository Receipts (ADRs)/Global Depository Receipts (GDRs) and foreign direct investment. During 2008-09, so far, flow of resources to the commercial sector declined reflecting subdued conditions in the domestic capital markets as well as deceleration of funds flow from external sources. Among the domestic sources, barring private placement and credit by housing companies, flow of resources from other sources have declined. Among the foreign sources, barring foreign direct investment, flow of resources from all other sources has declined (Table 39).

Reserve Money Survey

IV.10 The intra-year movements in reserve money largely reflected the Reserve Bank's market operations and movements in bankers' deposits with the Reserve Bank in the wake of changes in the CRR and large expansion in demand and time liabilities. In view of the inflationary pressures in the beginning of 2008-09, the Reserve Bank initially raised CRR by 150 basis points during April-August 2008-09 to 9.0 per cent. Subsequently, in view of the international financial turmoil and its possible impact on the domestic monetary and liquidity conditions in the backdrop of easing inflationary pressure, the Reserve Bank reduced CRR by a total 400 basis points since October 11, 2008. In the context of sharp changes in the CRR during 2008-09, for analytical purposes reserve money growth adjusted for the first round impact of CRR changes has become more relevant. Adjusted

Table 38: Non-food Bank Credit - Sectoral Deployment

(Amount in Rupees crore)

Sector/Industry	Outstanding as on Feb. 27, 2009	Year-on-Year Variations			
		Feb. 15, 2008		Feb. 27, 2009	
		Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6
Non-food Gross Bank Credit (1 to 4)	**24,92,685**	**3,71,053**	**22.0**	**4,06,304**	**19.5**
1. Agriculture and Allied Activities	**2,97,753**	**34,013**	**16.4**	**52,742**	**21.5**
2. Industry (Small, Medium and Large)	**10,39,821**	**1,67,819**	**25.9**	**2,13,261**	**25.8**
3. Personal Loans	**5,55,392**	**58,669**	**13.2**	**43,559**	**8.5**
Housing	2,72,376	26,930	12.0	19,012	7.5
Advances against Fixed Deposits	45,779	5,773	15.6	2,872	6.7
Credit Cards	28,926	8,947	51.3	2,332	8.8
Education	27,832	5,938	40.9	7,030	33.8
Consumer Durables	8,211	525	5.9	-1,393	-14.5
4. Services	**5,99,719**	**1,10,553**	**28.4**	**96,742**	**19.2**
Transport Operators	38,638	9,669	43.3	5,783	17.6
Professional & Other Services	39,841	5,188	24.1	13,071	48.8
Trade	1,38,187	17,731	17.5	17,896	14.9
Real Estate Loans	90,765	11,361	26.7	34,533	61.4
Non-Banking Financial Companies	90,521	20,979	48.6	26,651	41.7
Memo:					
Priority Sector	**8,28,892**	**99,277**	**16.9**	**1,33,304**	**19.2**
Micro & Small Enterprises (Manufacturing & Services)	2,39,399	71,182	67.4	62,580	35.4
Industry (Small, Medium and Large)	**10,39,821**	**1,67,819**	**25.9**	**2,13,261**	**25.8**
Food Processing	53,855	11,720	32.0	5,190	10.7
Textiles	1,03,732	16,862	23.0	11,537	12.5
Paper & Paper Products	16,491	2,470	23.0	3,132	23.4
Petroleum, Coal Products & Nuclear Fuels	72,762	7,412	23.3	31,933	78.2
Chemicals and Chemical Products	73,269	7,437	13.9	11,899	19.4
Rubber, Plastic & their Products	13,269	1,355	16.1	3,368	34.0
Iron and Steel	1,00,383	11,661	19.2	27,117	37.0
Other Metal & Metal Products	30,111	3,634	18.5	6,302	26.5
Engineering	66,868	10,623	26.2	15,884	31.2
Vehicles, Vehicle Parts and Transport Equipments	35,505	7,337	38.4	7,157	25.2
Gems & Jewellery	27,242	2,073	9.3	2,454	9.9
Construction	38,207	5,856	33.3	14,141	58.8
Infrastructure	2,56,860	55,716	42.1	66,770	35.1

Note: 1. Data are provisional and relate to select scheduled commercial banks.
2. Data also include the figures of Bharat Overseas Bank, which was merged with Indian Overseas Bank, American Express Bank with Standard Chartered Bank and State Bank of Saurashtra with State Bank of India.
3. Credit growth for February 2008 has been calculated with outstanding as on February 15, 2008 to obtain variations over comparable 26 fortnights data.

for the first round effect of the changes in CRR, reserve money growth (y-o-y) as on March 31, 2009 was lower at 19.0 per cent as compared with 25.3 per cent a year ago (Chart 18). On the sources side, reserve money was driven by net domestic assets during 2008-09 in contrast to net foreign exchange assets (adjusted for revaluation) being the major driver for preceding three years. The contractionary impact of decline in net

Table 39: Flow of Financial Resources to Commercial Sector

(Rupees crore)

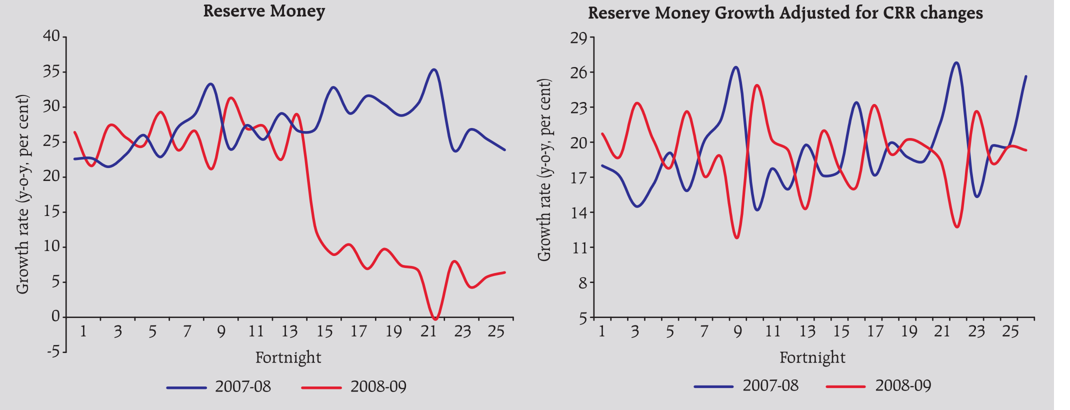
Item	2007-08	2008-09
1	2	3
A. Adjusted non-food Bank Credit (NFC)	**4,44,807**	**4,14,902**
i) Non-Food Credit	4,32,846	4,06,287
ii) Non-SLR Investment by SCBs	11,961	8,615
B. Flow from Non-banks (B1+B2)	**3,35,698**	**2,64,138**
B1. Domestic Sources	**1,72,338**	**1,50,604**
1. Public issues by non-financial entities	51,478	14,205
2. Gross private placements by non-financial entities #	47,419	51,254
3. Net issuance of CPs subscribed by non-banks	10,660	5,365
4. Net Credit by housing finance companies **	8,693	16,438
5. Total gross accommodation by 4 RBI regulated AIFIs - NABARD, NHB, SIDBI & EXIM Bank #	4,650	9,862
6. Systemically important non-deposit taking NBFCs net of bank credit #	25,163	-12,335
7. LIC's gross investment in Corporate Debt, Infrastructure and Social Sector	24,275	65,815
B2. Foreign Sources	**1,63,360**	**1,13,534**
1. External Commercial Borrowings / FCCB #	70,382	32,765
2. ADR/GDR Issues excluding banks and financial institutions	13,023	4,788
3. Short-term Credit from abroad @	53,080	4,584
4. Foreign Direct Investment *	26,875	71,397
C. Total Flow of Financial Resources (A+B)	**7,80,505**	**6,79,040**

#: Up to December 2008 . * : Up to January 2009. @ : Up to February 2009 ** : Up to September 2008.

Note: Data not comparable with those published in the *Macroeconomic Monetary Developments: Third Quarter Review 2008-09*, which were exclusive of item no. B1.7.

foreign exchange assets on reserve money and domestic liquidity was offset by expansion of net domestic assets through OMO, unwinding MSS and other measures to augment rupee liquidity (See Chapter V, Annex 2). Net Reserve Bank's credit to the Centre during 2008-09 increased by Rs.1,83,947 crore as against a decrease of

Chart 18: Reserve Money Growth



Rs.1,16,772 crore during the corresponding period of the previous year (Table 40). The Reserve Bank's foreign currency assets (adjusted for revaluation) decreased by Rs.1,00,308 crore as against an increase of Rs.3,70,550 crore during the corresponding

Table 40: Reserve Money - Variations

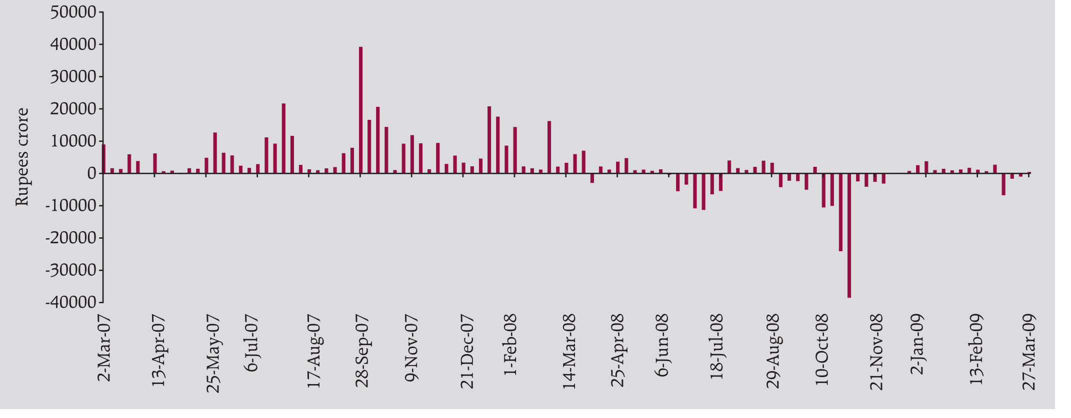
(Amount in Rupees crore)

Item	Outstanding as on Mar. 31,09	2007-08	2008-09	2008-09			
				Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8
Reserve Money	9,87,902	2,19,412 (31.0)	59,600 (6.4)	3,416	25,218	-70,452	1,01,417
Adjusted Reserve Money		*1,72,412 (25.3)*	*1,61,850 (19.0)*	*-24,584*	*-4,532*	*69,548*	*1,21,417*
Components (1+2+3)							
1. Currency in Circulation	6,91,083	86,702 (17.2)	1,00,282 (17.0)	36,859	-14,516	38,277	39,663
2. Bankers' Deposits with RBI	2,91,275	1,31,152 (66.5)	-37,172 (-11.3)	-29,333	39,219	-1,15,773	68,714
3. 'Other' Deposits with the RBI	5,544	1,558 (20.8)	-3,510 (-38.8)	-4,110	514	7,045	-6,959
Sources (1+2+3+4-5)							
1. RBI's net Credit to Government	69,913	-1,15,632	1,83,122	-13	51,360	30,230	1,01,545
of which: to Centre (i+ii+iii+iv-v)	69,311	-1,16,772	1,83,947	1,430	51,379	29,932	1,01,206
i. Loans and Advances	0	0	0	0	0	0	0
ii. Treasury Bills held by the RBI	0	0	0	0	0	0	0
iii. RBI's Holdings of Dated Securities	1,57,389	17,421	42,796	-39,239	56,975	-44,206	69,266
iv. RBI's Holdings of Rupee Coins	99	121	-34	-1	-26	27	-33
v. Central Government Deposits	88,177	1,34,314	-1,41,184	-40,670	5,570	-74,111	-31,974
2. RBI's Credit to Banks and Commercial Sector	24,177	-2,794	17,799	-3,358	4,963	5,032	11,163
3. NFEA of RBI	12,80,116	3,69,977 (42.7)	43,986 (3.6)	1,03,932	10,336	-1,56,330	86,048
of which : FCA, adjusted for revaluation	–	3,70,550	-1,00,308	15,535	-31,641	-92,102	7,900
4. Governments' Currency Liabilities to the Public	9,984	1,063	760	225	206	186	143
5. Net Non-Monetary Liabilities of RBI	3,96,289	33,202	1,86,068	97,369	41,648	-50,431	97,481
Memo:							
Net Domestic assets	-2,92,214	-1,50,565	15,614	-1,00,516	14,882	85,879	15,370
LAF- Repos (+) / Reverse Repos(-)	-1,485	21,165	-51,835	-45,350	51,480	-62,170	4,205
Net Open Market Sales # *	–	-5,923	-94,548	-8,696	-10,535	-7,669	-67,649
Centre's Surplus	16,319	26,594	-60,367	-42,427	6,199	-32,830	8,691
Mobilisation under the MSS	88,077	1,05,419	-80,315	6,040	-628	-53,754	-31,973
Net Purchases(+)/Sales(-) from Authorised Dealers	–	3,12,054	-1,60,765^	3,956	-52,761	-1,11,877	-83^
NFEA/Reserve Money @	129.6	133.2	129.6	143.8	141.1	134.7	129.6
NFEA/Currency @	185.2	209.2	185.2	213.5	220.2	183.3	185.2

NFEA : Net Foreign Exchange Assets. FCA : Foreign Currency Assets. LAF : Liquidity Adjustment Facility.
* : At face value. # : Excludes Treasury Bills @ : Per cent; end of period ^: Up to end-February 2009.

Note: 1. Data are based on March 31 for Q4 and last reporting Friday for all other quarters.
2. Figures in parentheses are percentage variations.
3. Government Balances as on March 31, 2009 are before closure of accounts.

Chart 19: Accretion to RBI's Net Foreign Assets

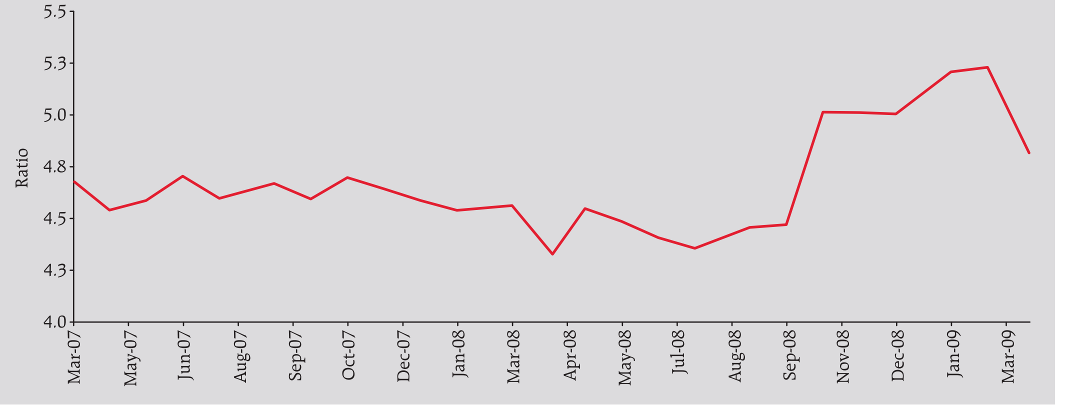


period of the previous year (Chart 19). Adjusted for the first round effect of the changes in CRR, reserve money growth (y-o-y) as on April 10, 2009 was at 17.3 per cent as compared with 20.4 per cent a year ago

IV.11 The changes in CRR have impacted the money multiplier, *i.e.*, the ratio between broad money and reserve money. The money multiplier, which had declined from 4.7 at end-March 2007 to 4.3 at end-March 2008 in the wake of CRR hikes, increased to 4.8 at end-March 2009, reflecting subsequent lowering of CRR (Chart 20).

IV.12 Movements in the net Reserve Bank's credit to the Central Government during 2008-09 largely reflected the liquidity management operations by the Reserve Bank and changes in Central Government deposits with the Reserve Bank. In particular, the net Reserve Bank's credit to the Central Government increased on account of the Reserve Bank's purchases under OMO, decline in Centre's cash balances with the Reserve Bank and unwinding of balances under MSS (details in Chapter V, see Table 47).

Chart 20: Money Multiplier



V. Financial Markets

The process of deleveraging and dysfunctional financial markets in the advanced economies accentuating a global financial crisis has highlighted the importance of orderly functioning of markets for achieving macroeconomic objectives. In the third quarter of 2008-09, when liquidity dried down in the global money markets and the credit markets almost froze, there were knock-on effects on the domestic money and foreign exchange markets, which prompted the Reserve Bank to initiate measures to ensure adequate provision of both rupee and foreign exchange liquidity in the market. While orderly conditions were restored in the money market by November 2008, the pressure on the exchange rate continued, alongside pressure on the country's balance of payments and draw down of foreign exchange reserves. The equity markets followed the general global sentiments and market trends and after a phase of sharp downward movement, the market has shown some recovery since March 2009. In the government securities market, reflecting the economy's need for large fiscal stimulus, the gross market borrowings of the Government in 2008-09 were substantially higher than that for 2007-08. The entire market borrowing programme was managed smoothly by the Reserve Bank. In the credit market, following significant reduction in policy rates by the Reserve Bank, the lending rates of banks have begun to exhibit some moderation. In the context of the high volatility that was witnessed in global financial markets in 2008-09, one notable aspect of the Indian financial markets was that all segments functioned normally, with occasional volatility for short periods.

V.1 The subprime crisis, that emerged in the US housing mortgage market in the second half of 2007, snowballed into a global financial crisis and a global economic crisis. The global financial landscape changed significantly during the course of 2008-09 wherein several large international financial institutions either failed or were restructured with the support of very large goverment interventions in many countries, to prevent the imminent collapse. The significant deterioration in global financial conditions since mid-September 2008 led to severe disruptions in the short-term funding markets, widening of risk spreads, sharp fall in equity prices and inactivity in the markets for asset-backed securities. Consequently, the strain on the balance sheets of financial institutions increased, threatening the viability of some of the most well known financial entities in the world. The freezing up of credit markets necessitated extraordinary actions on the part of central banks and governments in countries across the world to mitigate the systemic risks posed by the ongoing financial crisis.

V.2 To restore confidence and facilitate orderly functioning of markets, central banks have been responding through both conventional and unconventional measures and there have been instances of co-ordinated policy actions by the central banks. The conventional measure of monetary easing has been achieved through policy rate cuts which has taken the policy rate to nearly zero as in the case of the US and to an all-time low of 0.5 per cent as in the case of UK and 1.25 per cent in the Euro area. The other measures include lending by central banks to non-banks, large-scale provision of term-funding in local currency and dollar markets and expansion of the range of acceptable collateral for receiving funding from the central bank. Further, steps have been taken to deal with distressed assets and provide liquidity, including through bank recapitalisation.

V.3 The important initiatives taken by the US Federal Reserve, besides reduction of the federal funds rate, include conducting direct purchases of agency debt and agency mortgage-backed securities, broadening of liquidity programmes to financial intermediaries and other central banks and initiating programmes in support of systemically important market segments. The US government entities also undertook extraordinary initiatives to support the financial sector by injecting capital into the banking system and providing guarantees on select liabilities of depository institutions. Many foreign central banks and governments took similar steps. Despite the host of measures taken in most countries, normalcy continues to elude the international financial markets. This has contributed to the continued uncertainty and deterioration of the world economic outlook. The financial markets need to be stabilised in order to achieve a turnaround in global growth conditions.

V.4 Restoring investor confidence is key to achieving financial stability. In this context, there is a paramount need to deal with distressed assets and recapitalise vital institutions. This entails substantial contribution from governments for support of the financial sector. Simultaneously, governments have been addressing the recession through growth stimulus packages, while the tax receipts are likely to reduce in the face of the economic downturn. The longer it takes to effectively implement the support packages for the financial sector, the negative feedback transmitting from the financial sector to the real sector may lead to more protracted recession. The US government and the Federal Reserve have initiated programmes for systemically important segments/institutions of the financial market. The authorities are conducting severe stress tests on all the major banks, and if they are found short of capital required under more severe but plausible scenarios, they could fill the gap by recourse to private financing or through temporary capital buffers made available by the government. The US Treasury, in conjunction with the Federal Deposit Insurance Corporation and the Federal Reserve, has announced the details of a Public-Private Investment Programme which would use US$ 75-100 billion of Troubled Assets Relief Programme (TARP) capital and capital from private investors and seek to generate US$ 500 billion in purchasing power to buy legacy assets, with the potential to expand to US$ 1 trillion over time.

V.5 Due to the inter-linkages in the global financial markets, the ramifications of developments in the advanced economies are felt in the emerging economies. Hence, there needs to be greater co-ordination and co-operation amongst the policy-making bodies so as to restore trust in the markets. In this regard, the Basel Committee on Banking Supervision and the Financial Stability Forum, to be known as Financial Stability Board in its expanded version, have extended their membership to a number of emerging market economies including India.

V.6 The knock-on effects of the international developments spilled into the Indian financial markets in mid-September 2008. The Reserve Bank, like most central banks, has since taken a number of conventional and unconventional measures to augment the domestic and foreign exchange liquidity and address the supply constraints impacting the growth momentum in the domestic economy. An important distinction between the actions taken by the Reserve Bank and other central banks is that the interaction is still largely through the banking channel and even the measures aimed at addressing the liquidity and redemption needs of mutual funds, non-banking financial companies (NBFCs) and housing finance companies are directed through the banks[1]. Another notable distinction is that there has not been any dilution of the collateral taken by the Reserve Bank. The array of instruments available allow for flexibility in Reserve Bank's operations. Liquidity modulation through flexible use of a combination of instruments, to a significant extent, cushioned the impact of the international financial turbulence on domestic financial markets by absorbing excessive market pressures and ensuring orderly conditions. Thus, liquidity pressures were evident in India for a temporary period in September and October 2008. The Indian financial markets are robust and working normally

[1] The Government of India had announced an arrangement for providing liquidity support to meet the temporary liquidity mismatches for eligible Systemically Important Non-Deposit taking Non-Banking Financial Companies (NBFC-ND-SI) through the Industrial Development Bank of India Stressed Asset Stabilisation Fund Trust, which has been notified as a Special Purpose Vehicle for undertaking this operation.

with no dislocations in the foreign exchange, money and government securities markets.

International Financial Markets

V.7 Since mid-October 2008, the developments in the international financial markets have been largely conditioned by the policy responses to the crisis. The pricing behaviour has begun to mirror the strains of the ongoing economic recession and prices have been decidedly volatile given the environment of heightened uncertainty. Pressure on credit market persists in the wake of recession in many economies and subdued corporate performance, which has given rise to the expectation of possible increase in defaults. During the fourth quarter of 2008-09, the equity valuations generally remained low on account of concerns stemming from the weak financial and economic outlook.

Money Markets

V.8 The policies initiated by central banks and the guarantees offered by governments assuaged to an extent the funding pressures that were evident in the international financial markets during September and October 2008. The spreads between Libor and overnight index swaps (OIS) have been gradually narrowing. In the UK, however, bank funding markets came under renewed pressure. The Sterling Libor-OIS spreads slightly widened and the inter-bank term-lending remained subdued during late January and February 2009.

V.9 The benchmark credit default swap (CDS) indices have shown significant spread volatility since end-November 2008 up to the fourth quarter of 2008-09. Investment grade spreads, however, mostly performed better than the lower-rated borrowers. For instance, between end-November 2008 and end-February 2009, the US five-year CDX high-yield index spread had risen by 148 basis points, while the investment grade spreads registered a decline of 28 basis points. The same pattern was exhibited by the European CDS indices. As problems persist in the banking sector internationally and recessionary conditions have become widespread, it is expected that default rates will increase. Risk tolerance in the market is low and lower-rated spreads are expected to see increased volatility. In March 2009, the Federal Reserve approved the application of the ICE Trust to become a member of the Federal Reserve system. The ICE trust would provide central counterparty services for CDS contracts conducted by its participants. Under the arrangement, the ICE Trust would work towards reducing the risk associated with the trading and settlement of CDS transactions by assuming counterparty credit risk and enforcing participation standards and margin requirements.

V.10 As spreads continued to be affected by financial market concerns, in January 2009, the authorities in the UK announced a further broad-based package for rescue of the financial institutions in the country. Additional support measures were announced by other European countries as well. However, as concerns mounted over the fiscal implications of the support packages and the depressed risk appetite, spreads on sovereign CDS rose during the first three months of 2009.

V.11 Recent measures taken by the governments and central banks do seem to be having a favourable impact on certain segments of the money and credit markets, which had faced severe disruptions during the acute phase of the crisis in the third quarter of 2008-09. For instance, the US government's announcement in November 2008 and the subsequent initiation of a programme for purchase of up to US$ 100 billion of direct obligations of housing-related government-sponsored enterprises and up to US$ 500 billion of mortgage-backed securities (MBS) backed by Fannie Mae, Freddie Mac, and Ginnie Mae has helped in reducing spreads on agency debt and the conditions for high-quality borrowers in the primary residential mortgage market recovered to an extent. In March 2009, the Federal Open Market Committee also announced plans to purchase an additional US$ 750 billion of agency MBS and invest an additional US$ 100 billion in agency debt. The Committee also announced that it would buy up to US$ 300 billion of longer-term Treasury securities over the next six months to help improve conditions in private credit markets.

V.12 The Federal Reserve launched the Term-Asset Backed Securities Loan Facility (TALF) on March 3, 2009 in an attempt to unfreeze markets for securities backed by loans. Spreads in the areas where the programme is focussed – pooled credit card, auto, student and small business loans – narrowed during the first two months of 2009 in anticipation of TALF and narrowed considerably in March with the launch of the programme. The first tranche of funding under TALF was settled on March 25, 2009.

V.13 The banking sector in the US and Europe continued to show further signs of problems, despite the massive injection of capital by the government and from private sources since late 2007. Notable instances of governments picking up or hiking their stakes in financial entities during the fourth quarter of 2008-09 include the German government taking a 25 per cent stake in the merged entity of Commerzbank and Dresdner Bank, the US authorities' investment of US $ 20 billion in Bank of America through a preferred equity stake and the UK government restructuring its investment in the Royal Bank of Scotland. The UK authorities continued to announce a series of measures during the fourth quarter of 2008-09 for enabling sufficient credit flow to households and businesses. These measures include capping the losses on banks' holdings of risky assets, state guarantees to facilitate bank funding and purchase of commercial paper, corporate bonds and other securities to enhance credit availability in the economy. In March 2009, the Bank of England embarked upon a policy of credit/quantitative easing entailing the purchase of £ 75 billion worth of conventional gilts and notified private sector assets in the secondary market, in a bid to support the flow of corporate credit. The UK programme has resulted in significantly lower yields for the gilts, which the Bank has agreed to buy. Corporate bond yields have also fallen. By the first week of April 2009, £ 26 billion of asset purchases had been made and it is expected that the programme will be completed in another two months. In April 2009, the Bank of Japan announced that it would offer credit-worthy commercial banks subordinated loans worth up to ¥1 trillion to smoothen financial intermediation in the country. The programme is likely to commence in May 2009.

Short-term Interest Rates

V.14 The easing of short-term interest rates in advanced economies persisted in the fourth quarter of 2008-09, as policy rates continued to be cut with inflation concerns disappearing and the recession in most advanced economies turning out to be deeper and more protracted than was earlier estimated (Table 41). The US federal funds rate remains in the range of 0.0-0.25 per cent set in mid-December 2008. The Bank of England effected a 50 basis point cut in policy rates in each of the three months of the fourth quarter of 2008-09. As of March 5, 2009, the official bank rate was at an all-time low of 0.5 per cent. The ECB has reduced its policy rates by 300 basis points since October 2008, the rate for main refinancing operations thus stands reduced to 1.25 per cent. The softening of interest rates was broad-based and across the spectrum, as emerging economies also saw frequent cuts in policy rates and liquidity injections by the authorities. Countries that effected cuts in policy rates during the fourth quarter of 2008-09 include Turkey (cumulative reduction of 725 basis points since October 2008), South Africa (cumulative reduction of 250 basis points since October 2008) and South Korea (cumulative reduction of 300 basis points since October 2008). The policy rate cuts by the Czech Republic, Peru, Sri Lanka, Chile, Egypt, Canada, Poland, Malaysia, New Zealand, Iceland and Brazil, during the fourth quarter of 2008-09, ranged from 50 basis points to 600 basis points.

Table 41: Short-term Interest Rates

(Per cent)

Region/Country	End of					
	March 2007	March 2008	June 2008	Sept 2008	Dec 2008	March 2009
1	2	3	4	5	6	7
Advanced Economies						
Euro Area	3.91	4.72	4.96	5.07	2.97	1.50
Japan	0.57	0.75	0.75	0.75	0.62	0.54
UK	5.55	6.01	5.93	6.25	2.73	1.70
US	5.23	2.26	2.29	2.04	0.44	0.50
Emerging Market Economies						
Argentina	9.63	10.44	16.50	13.81	19.56	14.44
Brazil	12.68	11.18	12.17	13.66	13.66	11.16
China	2.86	4.50	4.48	4.31	1.86	1.22
Hong Kong	4.17	1.83	2.33	3.66	1.00	0.90
India	**7.98**	**7.23**	**8.73**	**8.56**	**5.04**	**4.95**
Malaysia	3.64	3.62	3.69	3.70	3.40	2.09
Philippines	5.31	6.44	6.00	4.00	5.25	4.50
Singapore	3.00	1.38	1.25	1.75	0.91	0.56
South Korea	4.94	5.32	5.36	5.78	3.98	2.41
Thailand	4.45	3.25	3.65	3.85	3.85	1.80

Note : Data for India refer to 91-day Treasury Bills rate and for other countries 3-month money market rates.
Source : The Economist.

Government Bond Yields

V.15 There has been much volatility in the government bond yields because even as most advanced economies are facing a recession, concerns have mounted over the increased borrowing requirements of the governments. This contributed to the increase in the 10-year government bond yields in some advanced countries during the fourth quarter of 2008-09. The 10-year government bond yield in the US increased by 72 basis points between December 29, 2008 and April 8, 2009. During the same period, yields on 10-year government papers increased by 34 basis points in the Euro area, 20 basis points in Japan and 15 basis points in the UK (Chart 21).

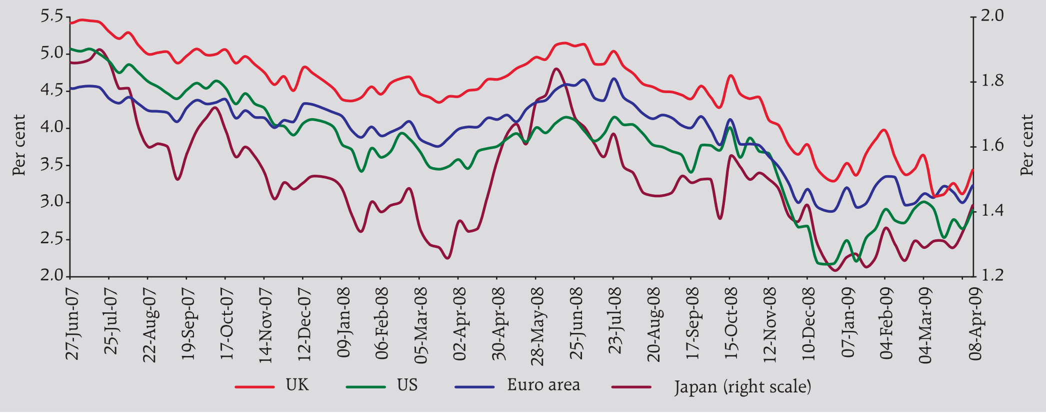
Foreign Exchange Markets

V.16 The international financial markets witnessed extreme dislocations in the period immediately following the collapse of the Lehman Brothers in mid-September 2008. The volatility in the markets, which peaked by end-2008, moderated somewhat in 2009. Due to the unwinding of carry trade positions and low risk appetite, the yen appreciated against most other currencies, including the US dollar during 2008-09. However, beginning mid-February 2009 up to mid-April 2009, the yen has generally depreciated against the US dollar.

V.17 Although, the foreign exchange swap spreads have begun to soften, the foreign exchange markets remained strained for most countries during the first quarter of 2009. The Bank of Mexico had to directly intervene in the foreign-exchange markets for the first time in more than a decade in February 2009 because of the severity of the impact of the crisis on its currency trading. Four eastern European central banks (of Romania, Hungary, Poland and the Czech Republic) announced that they would make co-ordinated effort to bolster their currencies as the sharp depreciations experienced by their respective currencies were not in line with the economic fundamentals.

V.18 The US dollar, generally, appreciated against most of the currencies as the US investors were liquidating their positions in overseas equity and bond markets and

Chart 21: 10-year Government Bond Yields



repatriating the money back to the US. Notwithstanding the deepening of the financial crisis and weakness in economic activity in the US, the flight to safety considerations helped strengthen the US dollar. During 2008-09, the US dollar appreciated against most major currencies including the euro and the pound sterling. The US dollar, however, depreciated against the Japanese yen, as a result of unwinding of carry trades. Amongst Asian currencies also, the US dollar appreciated against Korean won, Thai baht, Malaysian ringgit, Indonesian rupiah and Indian rupee but depreciated against Chinese yuan. As on April 14, 2009, however, the US dollar depreciated against most major currencies, except the euro and the Japanese yen, over end-March 2009 levels (Table 42).

Table 42: Appreciation (+)/Depreciation (-) of the US dollar *vis-à-vis* other Currencies

(Per cent)

Currency	End-March 2008 @	End-March 2009 @	April 14, 2009*
1	2	3	4
Euro	-15.77	18.82	0.24
Pound Sterling	-1.53	38.67	-3.78
Japanese Yen	-14.92	-2.00	1.78
Chinese Yuan	-9.34	-2.61	-0.09
Russian Ruble	-9.68	44.25	-1.52
Turkish Lira	-5.75	27.69	-6.03
Indian Rupee	-8.30	27.47	-2.15
Indonesian Rupiah	1.09	25.58	-5.13
Malaysian Ringgit	-7.77	14.42	-1.41
South Korean Won	5.47	38.86	-3.26
Thai Baht	-10.16	12.85	-0.24
Argentine Peso	2.08	17.32	-0.84
Brazilian Real	-16.99	31.20	-3.02
Mexican Peso	-3.48	32.90	-7.53
South African Rand	11.34	17.22	-4.95

@ : Year-on-year variation.
* : Variation over end-March 2009.

Equity Markets

V.19 The year 2008-09 continued to be a dismal year for the stock markets. As a reflection of the economic and financial market outlook, the year was characterised by depressed equity valuations. Equity price indices in most advanced economies were relatively flat during July and August 2008, but caught on the downward spiral subsequently, which continued into the first two months of 2009 (Table 43).

Table 43: International Stock Markets

Country/Index	Percentage Variation (year-on-year)		
	End-March 2007	End-March 2008	End-March 2009
1	2	3	4
Developed Markets			
US (Dow Jones)	11.2	-0.7	-38.0
US (NASDAQ)	3.5	-5.9	-32.9
FTSE UK 100	5.8	-9.6	-31.2
Euro area (FTSE 100)	7.5	-15.7	-40.1
Japan (Nikkei 225)	1.3	-27.6	-35.3
Hong Kong (Hang Seng)	25.3	15.4	-40.6
Emerging Markets			
Russia	34.9	6.1	-66.4
Brazil	20.7	33.1	-32.9
Colombia	-3.7	-16.0	-10.6
South Africa	34.3	11.5	-32.7
South Korea	6.8	17.3	-29.2
Hungary	1.6	-7.3	-49.0
Singapore	28.2	-4.9	-43.5
Malaysia	34.6	0.1	-30.1
Argentina	16.8	0.0	-46.5
Turkey	1.8	-10.6	-34.0
Indonesia	38.4	33.7	-41.4
India	**15.9**	**19.7**	**-37.9**
Thailand	-8.1	21.3	-47.2
China	145.2	9.1	-31.7
Memo:			
World (MSCI)	13.4	-5.1	-44.0
EMEs (MSCI)	17.9	18.9	-48.4

Source : Bloomberg.

V.20 Consequently, price/earnings ratios in most markets across the world followed a downward trend. They remained at or close to all-time low levels for most regions during the fourth quarter of 2008-09. Though the decline in equity valuations was broad-based across all sectors, financial institutions, particularly in Japan, were the worst sufferers. The volatility in the markets in the fourth quarter was compounded by the lack of detailed information about government rescue packages. The equity markets saw a slight recovery in most countries/regions since mid-March 2009, helped further by the US government announcing the details of the public-private investment programme aimed at repairing balance sheets of financial institutions.

Emerging Markets

V.21 The ongoing crisis has invalidated the 'decoupling hypothesis', as emerging economies too have been hit by the crisis. Even though institutions in most of the emerging economies did not have direct exposure to the toxic assets, these economies are suffering the consequences of the economic recession that has gripped the advanced economies. The emerging market economies witnessed capital flow reversals, sharp widening of spreads on sovereign and corporate debt and abrupt currency depreciations during 2008-09. Banks have curtailed their lending to emerging economies as reflected in the near halving of the total volume of international syndicated loan facilities given to borrowers in emerging markets in the last quarter of 2008 as against the corresponding period of the previous year.

V.22 The central and east European economies seem to have suffered the brunt of the global financial markets upheaval, given their large current account deficits. Banks in most of these countries are in need of government support in the form of recapitalisation. Several emerging eastern European countries, including Hungary, Romania and Ukraine, have sought IMF support to stabilise their financial markets. The emerging economies of Europe which saw plummeting valuations in equity markets include the Czech Republic, Hungary, Poland and Russia. During the fourth quarter of 2008-09, the foreign exchange markets of most emerging market economies continued to be under pressure. The Russian rouble continued the downward spiral against both the US dollar and the euro, with the plunge being particularly persistent during the fourth quarter of 2008-09. Some other currencies that suffered sharp losses during the period include the Czech koruna, the Hungarian forint, the Polish zloty, the Brazilian real, the Korean won, the Mexican peso and the Indonesian rupiah. Ten ASEAN members and China, Japan and Korea have together pledged US$ 120 billion to counter the risk of a currency collapse in the region by enhancing the total size of the multilateralised Chiang Mai Initiative. Sovereign credit spreads in select emerging market economies showed improvement over the levels that were seen in October 2008. However, for most low-rated Latin American and Eastern European issuers, the spreads continued to be at record highs.

V.23 Though emerging market economies, including India, do not have direct or significant exposure to stressed financial instruments or troubled financial institutions, they are not immune to the adverse effects of the financial crisis. During the fourth quarter of 2008-09, a number of countries announced further measures for monetary easing, provision of liquidity and restructuring/recapitalisation of the financial system (Table 44).

Table 44: Recent Global Response to Financial Market Turmoil

Country	Key Measures
1	2
United States	**Monetary Policy Easing** • The target range for federal funds rate was set between 0.00 and 0.25 per cent on December 16, 2008 and has remained unchanged since then. **Liquidity Provision** • Term funds continued to be auctioned through new channels such as the Term Auction Facility (TAF). • The set of eligible collateral for loans extended by the Term Asset-Backed Securities Loan Facility (TALF) was expanded to include four additional categories of asset-backed securities. • Five liquidity facilities – the Primary Dealer Credit Facility (PDCF), the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), the Commercial Paper Funding Facility (CPFF), the Money Market Investor Funding Facility (MMIFF) and the Term Securities Lending Facility (TSLF) – were extended up to October 30, 2009. • The Temporary Money Market Funds Guarantee Program extended up to September 18, 2009. • The set of institutions eligible to participate in the MMIFF was expanded. Several economic parameters of the MMIFF were adjusted so that it remained a viable source of back-up liquidity for money market investors even at very low levels of money market interest rates. • The Federal Reserve to purchase US$ 1.25 trillion of agency mortgage-backed securities and US$ 200 billion of agency debt in 2009. • The Federal Reserve to purchase US$ 300 billion of longer-term Treasury securities by September 2009. • A Public-Private Investment Programme to generate purchasing power of up to US$ 1 trillion to buy legacy assets. **Recapitalisation of the Financial System** • Restructuring of Government's financial support to the American International Group (AIG) was announced in March 2009. • The US government entered into an agreement with Bank of America to provide a package of guarantees, liquidity access and capital. • The US Treasury to participate in Citigroup's exchange offering by converting a portion of its preferred security to common equity alongside the other preferred holders. • Community Development Financial Institutions (CDFI) Fund announced to award nearly US$ 100 million in grants and US$ 3 billion in additional tax credit authority to support community-based financial institutions such as loan funds, credit unions, banks, venture capital firms and other financing entities. • Total Capital Purchase Program (CPP) investment of US$ 195.3 billion in 359 institutions since October 2008. • Capital Assistance Programme announced for the major US banking institutions. **Other Measures** • A policy announced to help avoid preventable foreclosures on certain residential mortgage assets held, owned or controlled by a Federal Reserve Bank. • Application of the ICE trust to provide central counterparty services for certain CDS contracts was approved.

(Contd...)

Table 44: Recent Global Response to Financial Market Turmoil *(Concld.)*

Country	Key Measures
1	2
United Kingdom	**Monetary Policy Easing** • Official bank rate was cut thrice by 50 basis points (bps) each during January-March, 2009 to 0.5 per cent. **Liquidity Provision** • Asset Purchase Facility to buy gilts, commercial paper and corporate bonds from the secondary market using central bank reserves amounting to £ 75 billion. • Extension of the drawdown window of the Credit Guarantee Scheme (CGS) up to December 31, 2009. • Extension of the term of the Bank of England's permanent discount window facility to 364 days for an additional fee of 25 bps. **Financial Restructuring** • The UK Treasury's preference share investment in RBS was converted to ordinary shares. **Recapitalisation of the Financial System** • Asset Protection Scheme, which aims to remove uncertainty about the value of banks' past investments, clean up banks' balance sheets and enable them to rebuild and restructure their operations and increase lending in the economy. The scheme is available for a fee on eligible assets of select participating institutions. Agreement signed with Lloyds Banking Group and Royal Bank of Scotland. **Other Measures** • The Banking Act 2009, which strengthens the UK's statutory framework for financial stability and depositor protection, was enacted.
Other Countries	**Monetary Policy Easing** • ECB cut its interest rates on the main refinancing operations by 50 bps each in January and March 2009 and by 25 bps in April 2009 to 1.25 per cent, on the marginal lending facility by 50 bps in March 2009 and by 25 bps in April 2009 to 2.25 per cent and on deposit facility by 100 bps in January, 50 bps in March 2009 and 25 bps in April 2009 to 0.25 per cent. • Central Bank of the Republic of Turkey cut its overnight borrowing rate by 450 bps during January-March 2009. • South Korea reduced its monetary policy base rate by 50 bps each in January and February 2009 to 2.0 per cent as on February 12, 2009. **Liquidity Provision** • Japan issued fresh guidelines on eligible collateral for credit extended by banks. • Bank of Japan announced terms and conditions for the outright purchase of corporate financing instruments such as CP and corporate bonds. • The frequency and duration of special funds supplying operations were increased. Most other provisions taken for achieving financial stability, that were set to expire in April 2009, were extended up to at least September 2009. **Recapitalisation of the Financial System** • Germany extended a bailout package to Commerzbank to backstop losses at newly acquired Dresdner Bank and took a 25 per cent holding in the combined entity. • Ireland took control of the Anglo Irish Bank. • The Dutch authorities granted ING Group a backup facility guaranteeing part of the bank's securitised mortgage portfolio worth US$ 35 billion. **Other Measures** • To address continued pressures in global US dollar funding markets, the temporary reciprocal currency arrangements (swap lines) between the Federal Reserve and other central banks were extended till October 30, 2009.

Source : Websites of respective central banks, finance ministries.

Domestic Financial Markets

V.24 Beginning mid-September 2008, the Indian financial markets came under pressure owing to the knock-on effects of the global crisis through the monetary, financial, real and confidence channels. The contagion was initially felt in the equity markets due to the reversal of foreign institutional portfolio flows. With sharp tightening of global liquidity, Indian banks and corporates saw their overseas financing drying up. As a means of substitute financing, corporates withdrew their investments from domestic money market mutual funds, thereby putting redemption pressure on them and on NBFCs where the mutual funds had invested a significant portion of their funds. This substitution of overseas financing by domestic financing brought both money market and credit market under pressure. Moreover, the foreign exchange market was impacted by the reversal of capital flows as part of the global deleveraging process. Simultaneously, corporates were converting the funds raised locally into foreign currency to meet their external obligations. Both these factors put downward pressure on the rupee. Furthermore, the Reserve Bank's intervention in the foreign exchange market to manage the volatility in the rupee temporarily tightened the money market.

V.25 In response, the Reserve Bank initiated several measures since September 16, 2008 to augment domestic and foreign exchange liquidity for proper functioning of the domestic markets and maintaining financial stability (Annex 2). Reflecting the impact of the measures, call rates in the money market have settled back into the informal LAF corridor since November 2008, having breached the upper bound in the preceding two months (Table 45). In the foreign exchange market, the Indian rupee generally depreciated against major currencies. In the credit market, the lending rates of scheduled commercial banks (SCBs) have begun to exhibit some moderation since November 2008. The government securities market was bearish for most of the fourth quarter of 2008-09 and yields hardened. Indian equity markets, picking up global cues, staged some recovery in March 2009.

Liquidity Conditions

V.26 The Reserve Bank's monetary policy response to the global crisis impinging on India was to keep the domestic money and credit markets functioning normally and ensure that the liquidity stress did not trigger solvency issues. The need to maintain a comfortable rupee liquidity position, to augment foreign exchange liquidity and to ensure credit delivery to all productive sectors of the economy marked a reversal of Reserve Bank's policy stance from monetary tightening in the first half of 2008-09 to monetary easing in the second half. The measures to meet the above objectives came in several policy packages starting mid-September 2008.

Cash Management of the Central Government

V.27 The surplus cash balance of Rs.76,686 crore as at end-March 2008 was used up by the Central Government to meet its expenditure needs and it resorted to ways and means advances (WMA) during August 4-6, 2008 and again during September 2-14, 2008. During the third quarter of 2008-09,

Table 45: Domestic Financial Markets at a Glance

Year/ Month	Call Money		Government Securities		Foreign Exchange			Liquidity Management		Equity			
	Average Daily Turnover (Rs. crore)	Average Call Rates* (Per cent)	Average Turnover in Govt. Securities+ (Rs. crore)	Average 10-Year Yield@ (Per cent)	Average Daily Inter-bank Turnover (US $ million)	Average Exchange Rate (Rs. per US $)	RBI's Net Foreign Currency Sales (-)/ Purchases (+) (US $ million)	Average MSS Out-standing# (Rs. crore)	Average Daily Reverse Repo (LAF) Out-standing (Rs. crore)	Average Daily BSE Turnover (Rs. crore)	Average Daily NSE Turnover (Rs. crore)	Average BSE Sensex**	Average S&P CNX Nifty**
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2006-07	**21,725**	**7.22**	**4,863**	**7.78**	**18,540**	**45.28**	**26,824##**	**37,698**	**21,973**	**3,866**	**7,812**	**12,277**	**3,572**
2007-08	**21,393**	**6.07**	**8,104**	**7.91**	**34,044**	**40.24**	**78,203##**	**1,28,684**	**4,677**	**6,275**	**14,148**	**16,569**	**4,897**
2008-09 P	**22,436**	**7.06**	**7,175**	**7.56**	**–**	**45.92**	**–**	**1,48,889**	**2,885**	**4,498**	**11,212**	**12,366**	**3,731**
Apr 2008	19,516	6.11	6,657	8.10	37,580	40.02	4,325	1,70,726	26,359	5,773	13,561	16,291	4,902
May 2008	19,481	6.62	6,780	8.04	32,287	42.13	148	1,75,565	11,841	6,084	13,896	16,946	5,029
Jun 2008	21,707	7.75	6,835	8.43	38,330	42.82	-5,229	1,74,433	-8,622	5,410	12,592	14,997	4,464
Jul 2008	24,736	8.76	5,474	9.18	37,173	42.84	-6,320	1,72,169	-27,961	5,388	12,862	13,716	4,125
Aug 2008	23,408	9.1	7,498	9.06	38,388	42.94	1,210	1,71,944	-22,560	4,996	11,713	14,722	4,417
Sep 2008	23,379	10.52	10,418	8.45	44,700	45.56	-3,784	1,75,666	-42,591	5,147	12,489	13,943	4,207
Oct 2008	28,995	9.9	4,321	7.85	36,999	48.66	-18,666	1,69,123	-45,612	3,911	10,810	10,550	3,210
Nov 2008	21,812	7.57	5,866	7.41	31,322	49.00	-3,101	1,47,648	-8,017	3,539	9,618	9,454	2,835
Dec.2008	21,641	5.92	11,451	5.88	34,874	48.63	-318	1,24,848	22,294	3,851	95,928	9,514	2,896
Jan 2009	18,496	4.18	9,568	5.84	27,171P	48.83	-29	1,13,535	45,474	3,526	9,559	9,350	2,854
Feb 2009	22,241	4.16	5,916	5.98	24,840P	49.26	230	1,02,934	50,649	2,856	7,887	9,188	2,819
March 2009P	23,818	4.17	5,322	6.56	–	51.23	–	88,077	33,360	3,488	10,140	8,995	2,802

* : Average of daily weighted call money borrowing rates.
@ : Average of daily closing rates.
** : Average of daily closing indices.
LAF : Liquidity Adjustment Facility.
MSS : Market Stabilisation Scheme.
P : Provisional
+ : Average of daily outright turnover in Central Government dated securities.
# : Average of weekly outstanding MSS.
: Cumulative for the financial year.
BSE : Bombay Stock Exchange Limited
NSE : National Stock Exchange of India Limited .
– : Not available.
Note : In column 10, (-) indicates injection of liquidity, while (+) indicates absorption of liquidity.

the Government announced fiscal stimulus packages even as revenue receipts decelerated. The Central Government was in WMA for 23 days and resorted to overdraft (OD) for 10 days during the third quarter. The Central Government was in WMA for 70 days and in OD for 55 days during the fourth quarter of 2008-09 (Table 46 and Chart 22).

Liquidity Management

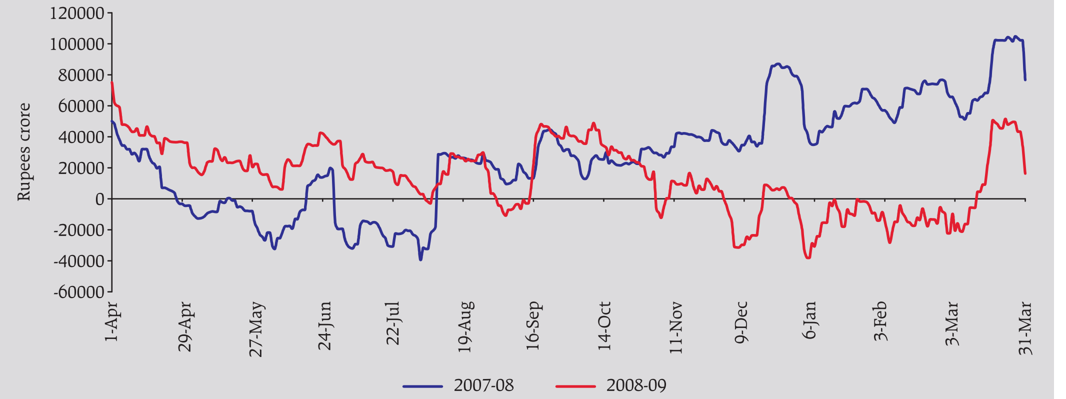
V.28 During the financial year 2008-09, liquidity management operations had to change course beginning mid-September 2008 as the knock-on effects of the severe disruptions in international financial markets began to be felt in the domestic financial markets. The use of liquidity management tools such as the CRR and the OMO, including the MSS and the LAF, was

Table 46: Cash Management of the Central Government

	2007-08	2008-09
1	2	3
Total Number of Days		
WMA	91	109
OD	37	65
Cash Deficit	91	109
Average Daily Utilisation*		
WMA	3,615	2,077
OD	647	1,823

* : in Rupees crore.

Chart 22: Cash Balances of the Central Government



thus modulated in accordance with the evolving conditions in financial markets. Variations in the cash balances of the Central Government and the capital flows and the concomitant foreign exchange operations of the Reserve Bank continued to be the key drivers of liquidity conditions during the year (Table 47).

Table 47: Reserve Bank's Liquidity Management Operations

(Rupees crore)

Item	2007-08 (April-March	2008-09 (April-February)	2008-09 Q1	Q2	Q3	Jan	Feb
1	2	3	4	5	6	7	8
A. Drivers of Liquidity (1+2+3+4+5)	**2,03,121**	**-1,24,579**	**6,061**	**-18,917**	**-1,01,304**	**-12**	**-10,408**
1. RBI's net purchases from Authorised Dealers	3,12,054	-1,60,765	-8,555	-40,249	-1,12,168	-129	336
2. Currency with the Public	-85,475	-82,369	-30,071	12,294	-40,096	-7,724	-16,771
3. Surplus cash balances of the Centre with the Reserve Bank	-26,594	76,586	40,073	-3,845	36,554	3,804	0
4. WMA and OD	0	9,603	0	0	0	9,166	437
5. Others (residual)	3,136	32,366	4,615	12,884	14,406	-5,129	5,590
B. Management of Liquidity (6+7+8+9)	**-1,17,743**	**1,06,952**	**-37,659**	**7,217**	**1,33,325**	**-3,516**	**7,586**
6. Liquidity impact of LAF Repos	21,165	-1,10,170	-18,260	24,390	-71,110	-39,975	-5,215
7. Liquidity impact of OMO (Net) *	13,510	48,472	14,642	11,949	10,681	5,173	6,028
8. Liquidity impact of MSS	-1,05,418	66,400	-6,041	628	53,754	11,286	6,773
9. First round liquidity impact due to CRR change	-47,000	1,02,250	-28,000	-29,750	1,40,000	20,000	0
C. Bank Reserves (A+B) #	**85,378**	**-17,627**	**-31,598**	**-11,700**	**32,021**	**-3,528**	**-2,822**

(+) : Indicates injection of liquidity into the banking system.
(-) : Indicates absorption of liquidity from the banking system.
: Includes vault cash with banks and adjusted for first round liquidity impact due to CRR change.
* : Includes oil bonds but excludes purchases of Government securities on behalf of State Governments.
Note : Data pertain to March 31 and last Friday for all other months.

V.29 There was a reduction in the generation of domestic liquidity during the period from April to mid-September 2008, as the drying up of capital inflows had brought a turnaround in the foreign exchange operations of the Reserve Bank from net spot purchases up to May 2008 to net spot sales thereafter, barring August 2008 (refer Table 47). Consequently, the MSS auctions of dated securities were kept in abeyance after end-April 2008 and MSS issuances, even through Treasury Bills, were stopped after September 2, 2008 (Chart 23). Reflecting the impact of these developments, the LAF turned from absorption mode to injection mode after the first week of June 2008.

V.30 Beginning mid-September 2008, the severe disruptions in international financial markets brought pressures on the domestic money and foreign exchange markets in conjunction with transient local factors such as advance tax payments. In order to alleviate these stresses and with the abatement of inflationary pressures, the Reserve Bank augmented rupee liquidity through a series of measures including reduction in CRR by a cumulative 400 basis points to 5.0 per cent and a slew of special facilities (refer Annex 2). Furthermore, the repo rate and the reverse repo rate under LAF were progressively reduced from 9.0 per cent to 5.0 per cent and 6.0 per cent to 3.5 per cent, respectively. These apart, MSS buyback auctions were started from November 6, 2008, largely dovetailed with the Government's normal market borrowing programme to provide another avenue for injecting liquidity (Table 48 and Chart 24). Reflecting the impact of these measures, the average daily net outstanding liquidity injection under LAF, which had increased to around Rs.43,000-46,000 crore during September and October 2008, declined sharply thereafter and turned into net absorption from early December 2008.

V.31 For more effective liquidity management and to ensure that the market borrowing programme of the Government was conducted in a non-disruptive manner, the scope of the OMO was widened with effect from February 19, 2009 by including purchases of government securities through an auction-based mechanism in addition to

Chart 23: Market Stabilisation Scheme

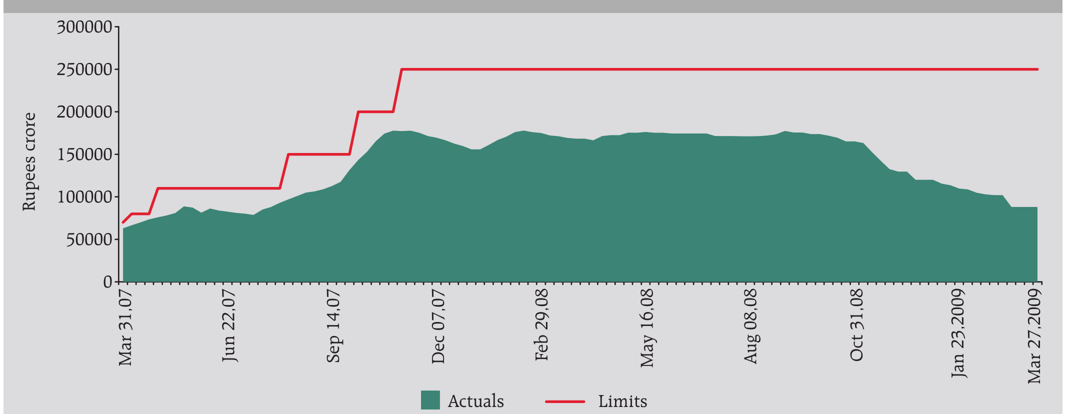


Table 48: Liquidity Management

(Rupees crore)

Outstanding as on Last Friday	LAF	MSS	Centre's Surplus with the RBI @	Total (2 to 4)
1	2	3	4	5
2008				
January	985	1,66,739	70,657	2,38,381
February	8,085	1,75,089	68,538	2,51,712
March*	-50,350	1,68,392	76,586	1,94,628
April	32,765	1,72,444	36,549	2,41,758
May	-9,600	1,75,362	17,102	1,82,864
June	-32,090	1,74,433	36,513	1,78,856
July	-43,260	1,71,327	15,043	1,43,110
August	-7,600	1,73,658	17,393	1,83,451
September	-56,480	1,73,804	40,358	1,57,682
October	-73,590	1,65,187	14,383	1,05,980
November	-9,880	1,32,531	7,981	1,30,632
December	14,630	1,20,050	3,804	1,38,484
2009				
January	54,605	1,08,764	-9,166	1,54,203
February	59,820	1,01,991	-9,603	1,52,208
March*	1,485	88,077	16,219	1,05,781
April 10	1,29,810	71,145	-13,779	1,87,176

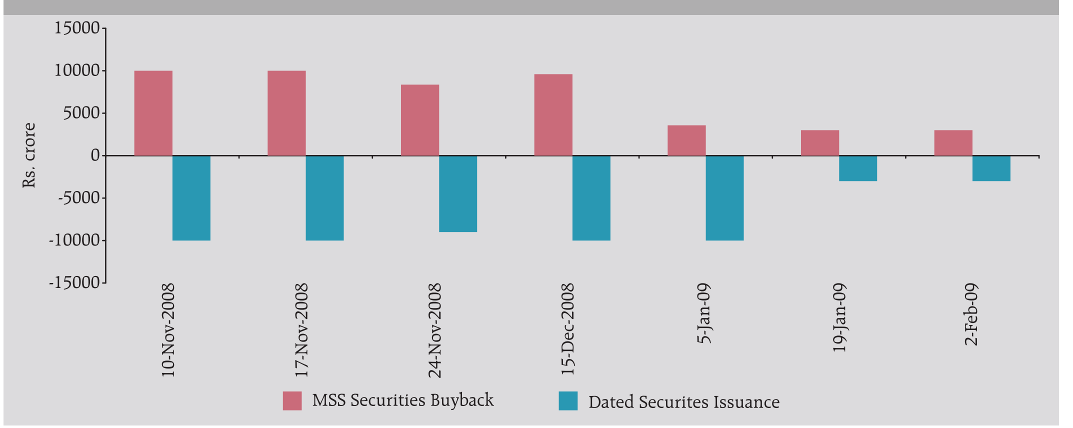
@ : Excludes minimum cash balances with the Reserve Bank in case of surplus.
* : Data pertain to March 31.
Note : 1. Negative sign in column 2 indicates injection of liquidity through LAF.
2. The Second LAF that was discontinued from August 6, 2007 was re-introduced from August 1, 2008 on reporting Fridays and from September 17, 2008 on a daily basis.
3. Negative sign in column 4 indicates injection of liquidity through WMA/OD.

purchases through the Negotiated Dealing System – Order Matching (NDS-OM) segment. The cut-off yields in the OMO purchase auctions were based on the attractiveness of offers for securities relative to their secondary market yields. Auction-based purchases aggregated Rs.5,000 crore whereas purchases through NDS-OM aggregated Rs.800 crore during February 2009.

V.32 With the change in the external accounts in the recent period resulting in attendant draining of primary liquidity reflecting the impact of the Reserve Bank's operations in the foreign exchange market, the Memorandum of Understanding (MoU) on the MSS was amended on February 26, 2009 to permit the transfer of the sterilised liquidity from the MSS cash account to the normal cash account of the Government (details covered in the Central Government securities section later in the Chapter).

V.33 In March 2009, the OMO purchases through auctions and NDS-OM were placed at Rs.41,640 crore and Rs.4,475 crore, respectively, whereas MSS redemptions amounted to Rs.2,000 crore (over and above

Chart 24: MSS Buyback and Issuance of Central Government Securities



the de-sequestering of Rs.12,000 crore of MSS balances); these helped to further ease liquidity conditions. The average daily net outstanding liquidity absorption through LAF, however, declined to around Rs.33,000 crore in March 2009 from over Rs.50,000 crore in the previous month, reflecting, *inter-alia*, advance tax outflows. It is, however, noteworthy that the net injection of liquidity through LAF did not occur even on a single day of March 2009, including the last day of the month, in sharp contrast to the experience in the previous few years.

Money Market

V.34 During the first half of 2008-09 (up to mid-September 2008), reflecting the orderly conditions in the money market, the call rates remained largely within the informal corridor of the reverse repo and repo rates. The failure of Lehman Brothers and a few other global financial institutions in September 2008 saw the abrupt freezing of money market activities in the major financial centres. In order to contain the excess volatility in the foreign exchange market, the Reserve Bank made available substantial dollar liquidity. This had a tightening impact on rupee liquidity. The impact was magnified on account of domestic factors such as advance tax outflows from the banking system. The call rate moved above the repo rate in mid-September 2008 (Chart 25). As the series of measures initiated by the Reserve Bank to augment liquidity began to take effect, the weighted average call money rate declined and mostly remained within the LAF corridor from November 3, 2008 onwards.

V.35 Interest rates in the collateralised segments of the money market – the market repo (outside the LAF) and the Collateralised Borrowing and Lending Obligation (CBLO) – moved in tandem with but remained below the call rate during 2008-09 in general, including in the last quarter of the year (Chart 26). Average daily volumes in the CBLO and market repo segments declined sharply during April-October 2008, mainly on account of tightening of liquidity conditions and increasing recourse to LAF repos. The CBLO

Chart 25: Liquidity Adjustment Facility and the Call Rate

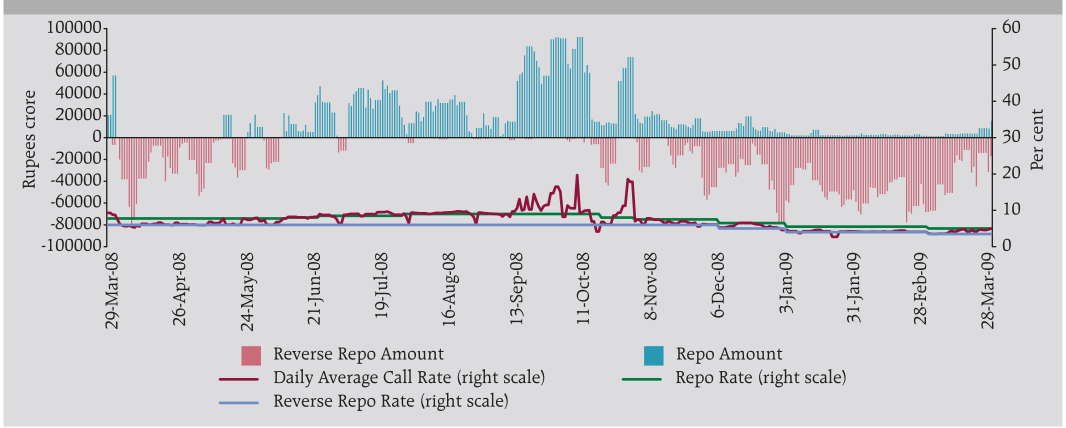
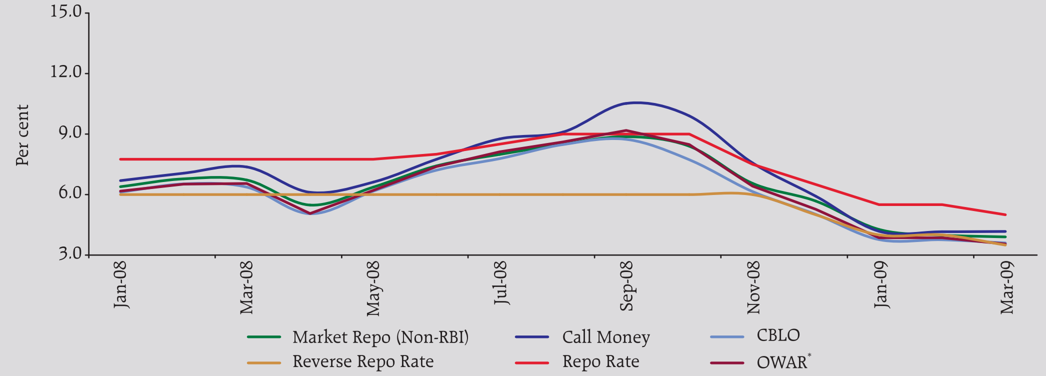


Chart 26: Money Market Interest Rates



* Overnight Weighted Average Rate (OWAR) is the daily volume-weighted interest rate of the overnight segments of call, CBLO and market repo.

and market repo volumes picked up substantially in the last quarter of 2008-09, largely reflecting the easing of liquidity conditions and the enhanced lending capacity of mutual funds. The total average daily volume of the three segments of the money market was placed at Rs.82,000 crore in March 2009 as compared with Rs.41,000 crore in October 2008 and Rs.64,000 crore in April 2008. The shares of the CBLO, market repo and call segments in total money market were placed at 59 per cent, 26 per cent and 15 per cent in March 2009, nearly the same as in April 2008.

Certificates of Deposit

V.36 The outstanding amount of certificates of deposit (CDs) issued by SCBs increased from end-March 2008 up to September 2008. This was followed by a decline up to December 2008, reflecting the indirect impact of the global financial turmoil. Subsequently, with the easing of liquidity conditions, the outstanding amount of CDs rose from January 2009. The outstanding amount constituted 5.23 per cent of aggregate deposits of CD-issuing banks with significant inter-bank variation as on March 13, 2009. The weighted average discount rate (WADR) of CDs generally increased up to November 2008 but declined thereafter in consonance with the movements in other money market rates (Table 49).

Commercial Paper

V.37 The outstanding amount of commercial paper (CP) issued by corporates, which had increased gradually during April-August 2008-09, declined thereafter till December 2008, mainly reflecting tight liquidity conditions and general risk-aversion. Subsequently, the outstanding amount of CPs picked up, as liquidity conditions eased. Leasing and finance companies continued to be the major issuers of CPs, accounting for 63.1 per cent of total outstanding as of March 15, 2009 (Table 50). The WADR of CPs increased steadily up to October 2008, and generally declined subsequently up to mid-March 2009, with the easing of liquidity conditions (refer Table 49). The differential in the WADR of CP *vis-a-vis* CD, however, continues to remain elevated since October 2008.

Table 49: Activity in Money Market Segments

(Rupees crore)

Year/ Month	Average Daily Volume (One Leg)						Commercial Paper		Certificates of Deposit	
	Call Money Market	Repo Market (Outside the LAF)	Collateralised Borrowing and Lending Obligation (CBLO)	Total (2+3+4)	Money Market Rate* (Per cent)	Term Money Market	Outstanding	WADR (Per cent)	Outstanding	WADR (Per cent)
1	2	3	4	5	6	7	8	9	10	11
2006-07	**10,863**	**8,419**	**16,195**	**35,477**	**6.57**	**506**	**21,329 +**	**8.08 +**	**64,821+**	**8.24+**
2007-08	**10,697**	**13,684**	**27,813**	**52,194**	**5.48**	**352**	**33,813 +**	**9.20 +**	**1,17,186 +**	**8.94 +**
2008-09 P	**11,218**	**14,330**	**30,776**	**56,323**	**6.43**	**397**	**47,312 +**	**10.57 +**	**1,61,257 +**	**9.39+**
Apr 2008	9,758	14,966	38,828	63,552	5.31	374	37,584	8.85	1,50,865	8.49
May 2008	9,740	14,729	36,326	60,795	6.29	420	42,032	9.02	1,56,780	8.95
Jun 2008	10,854	11,262	35,774	57,890	7.35	253	46,847	10.03	1,63,143	9.16
Jul 2008	12,368	8,591	23,669	44,628	8.09	226	51,569	10.95	1,64,892	10.23
Aug 2008	11,704	10,454	22,110	44,268	8.65	501	55,036	11.48	1,71,966	10.98
Sep 2008	11,690	10,654	20,547	42,891	9.26	335	52,038	12.28	1,75,522	11.56
Oct 2008	14,497	9,591	16,818	40,906	8.66	345	48,442	14.17	1,58,562	10.00
Nov 2008	10,906	15,191	24,379	50,476	6.58	319	44,487	12.42	1,51,493	10.36
Dec 2008	10,820	16,943	32,261	60,024	5.37	415	40,391	10.70	1,51,214	8.85
Jan 2009	9,248	18,053	31,794	59,095	3.99	454	51,668	9.48	1,64,979	7.33
Feb 2009	11,121	19,929	38,484	69,534	3.89	669	52,560	8.93	1,75,057	6.73
March 2009 P	11,909	21,593	48,319	81,821	3.76	451	49,953	9.78 #	1,67,320	6.73#

– : Not available. * : Weighted average rate of the call, CBLO and market repo segments.
+ : Fortnightly average for the year. Data for 2008-09 are up to mid-March 2009.
# : Provisional data as on mid-March 2009. P : Provisional.
WADR : Weighted Average Discount Rate.

Treasury Bills

V.38 The notified amounts for 91-day, 182-day and 364-day Treasury Bills (excluding MSS) were raised during the course of the year to finance the temporary cash mismatch, *inter alia*, arising from the expenditure on the Agricultural Debt Waiver

Table 50: Commercial Paper - Major Issuers

(Rupees crore)

Category of Issuer	End of					
	March 2007	March 2008	June 2008	September 2008	December 2008	March 15, 2009
1	2	3	4	5	6	
Leasing and Finance	12,594 (70.5)	24,925 (76.5)	34,957 (76.6)	39,053 (75.0)	27,965 (73.5)	31,528 (63.1)
Manufacturing	2,754 (15.4)	5,687 (17.4)	8,150 (17.4)	9,925 (19.1)	6,833 (18.0)	13,925 (27.9)
Financial Institutions	2,515 (14.1)	1,980 (6.1)	3,740 (8.0)	3,060 (5.9)	3,257 (8.5)	4,500 (9.0)
Total	**17,863 (100.0)**	**32,592 (100.0)**	**46,847 (100.0)**	**52,038 (100)**	**38,055 (100)**	**49,953 (100)**

Note : Figures in parentheses are percentage shares in the total outstanding.

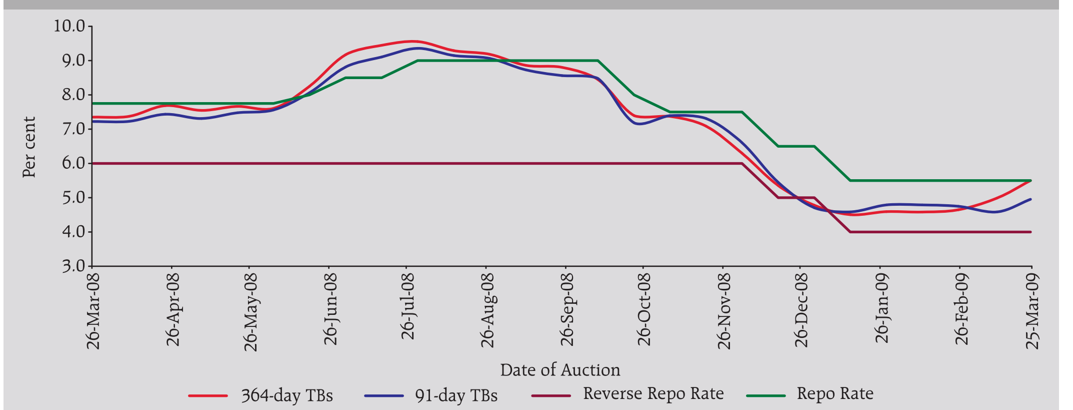
Table 51: Treasury Bills in the Primary Market

Year/Month	Notified Amount (Rupees crore)	Average Implicit Yield at Minimum Cut-off Price (Per cent)			Average Bid-Cover Ratio		
		91-day	182-day	364-day	91-day	182-day	364-day
1	2	3	4	5	6	7	8
2007-08	**2,24,500@**	**7.10**	**7.40**	**7.42**	**2.84**	**2.79**	**3.21**
2008-09	**2,99,000@**	**7.10**	**7.22**	**7.15**	**3.43**	**2.91**	**3.47**
Apr 2008	22,000	7.28	7.41	7.53	1.70	1.36	2.36
May 2008	21,000	7.41	7.55	7.61	2.65	2.78	3.05
Jun 2008	11,500	8.01	8.42	7.93	2.00	2.76	2.80
Jul 2008	16,000	9.07	9.33	9.39	2.35	2.72	2.70
Aug 2008	23,500	9.15	9.31	9.24	2.99	2.86	4.35
Sept 2008	25,000	8.69	8.92	8.83	3.06	3.04	3.57
Oct 2008	35,000	8.13	8.36	7.92	1.95	2.42	4.00
Nov 2008	28,000	7.30	7.13	7.23	7.95	2.97	4.33
Dec 2008	16,500	5.69	5.35	5.07	5.36	4.67	5.14
Jan 2009	38,500	4.69	4.60	4.64	4.56	3.22	4.80
Feb 2009	32,000	4.78	4.71	4.62	2.81	1.86	2.62
March 2009	25,000	4.77	4.86	5.25	2.10	2.67	1.44

@ : Total for the financial year.
Note : Notified amounts are inclusive of issuances under the MSS.

Scheme. Thus, an additional amount of Rs.1,87,500 crore (Rs.97,000 crore, net) was raised over and above the notified amount during the year. During 2008-09, primary market yields on 91-day Treasury Bills increased steadily from 6.94 per cent on April 2, 2008 (first auction of the year 2008-09) and peaked at 9.36 per cent on July 30, 2008, reflecting tight liquidity conditions in response to measures taken to combat inflation such as hike in CRR and repo rate. It started declining thereafter, responding to various measures taken to ease liquidity and stimulate the economy amidst global recessionary trends. Yields on 91-day Treasury Bills declined sharply in December 2008 and were lowest at 4.58 per cent on January 14, 2009 and March 12, 2009 (Table 51 and Chart 27). Similar trend was observed in yields on 182-day and 364-day Treasury Bills.

Chart 27 : Yields on Treasury Bills



The yield spread between 364-day and 91-day Treasury Bills was 48 basis points during March 2009 (8.9 basis points in March 2008).

Foreign Exchange Market

V.39 During 2008-09, the rupee depreciated on account of widened trade deficit, capital outflows and strengthening of the US dollar *vis-à-vis* other major currencies. The rupee/ US dollar exchange rate was Rs. 39.99 per dollar at end-March 2008. It fell to Rs. 52.09 per dollar on March 5, 2009, before recovering to Rs. 50.95 per dollar at end-March 2009. As on March 31, 2009, the Indian rupee had depreciated by 21.5 per cent against the US dollar over its level on March 31, 2008. Over the same period, the rupee experienced a depreciation of 6.5 per cent against the euro, 22.8 per cent against the Japanese yen and 23.6 per cent against the Chinese yuan. However, the rupee showed an appreciation of 9.1 per cent against the pound sterling. The rupee/US dollar exchange rate was 49.90 on April 15, 2009. As on April 15, 2009, the rupee had generally appreciated against the US dollar, the euro and the Japanese yen but depreciated against the pound sterling over the end-March 2009 level (Chart 28).

V.40 It is also useful to look at the indices of NEER and REER, which are often used as indicators of external competitiveness over a period of time. REER captures movements in cross-currency exchange rates as well as inflation differential between India and its major trading partners over time. The average 6-currency trade-based REER (base: 1993-94=100) was 114.09 in 2007-08, indicating an overvaluation of 14.1 per cent in real terms. There was a reduction in the extent of overvaluation during the first half of 2008-09 and the REER has moved closer to its base level (1993-94=100), especially since December 2008 (Chart 29). The 6-currency trade-based REER which stood at 112.16 in April 2008, indicating an overvaluation of 12.2 per cent, gradually declined to 100.07 in February 2009 mainly on account of significant depreciation of the rupee against the US dollar and against other

Chart 28: Movement of Rupee *vis-à-vis* Major Currencies

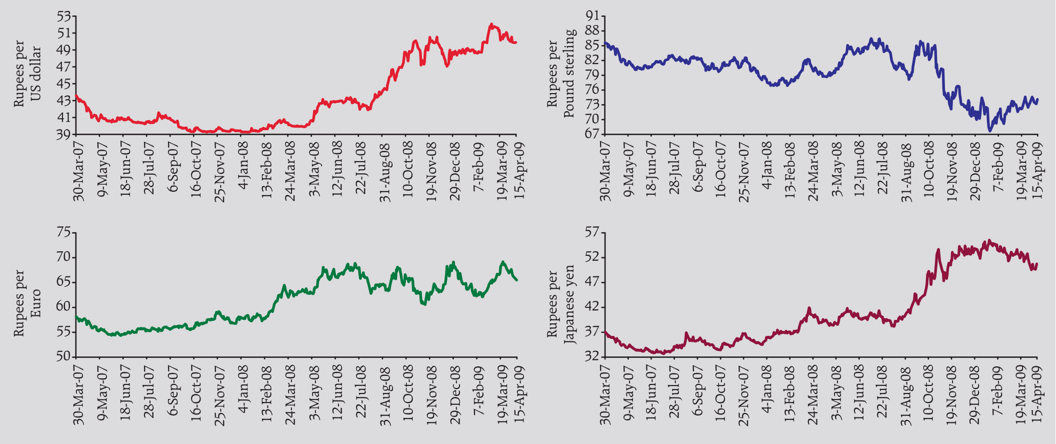
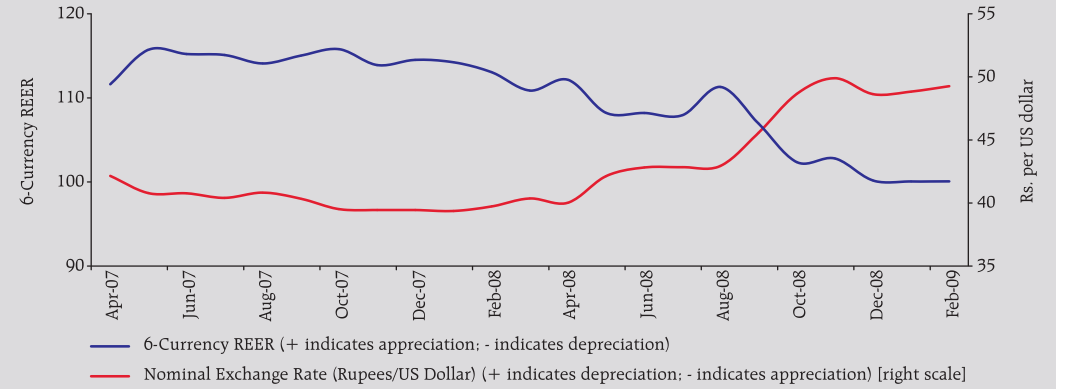


Chart 29: Nominal Exchange Rate (Rs./US Dollar) and 6-Currency REER



major currencies like the euro, the Japanese yen and the Chinese yuan during 2008-09. The sharp decline in inflation rate in India in the recent months has also contributed towards the correction in the extent of the overvaluation of the rupee. Over the same period, the 6-currency NEER declined gradually from 70.63 in April 2008 to 62.75 in February 2009 (Table 52).

V.41 The 36-currency trade-weighted NEER and REER depreciated by 5.3 per cent and 10.7 per cent, respectively, between March 2008 and February 2009 (as against an

Table 52: Nominal and Real Effective Exchange Rate of the Indian Rupee (Trade-based Weights)

Year/Month	Base : 1993-94 (April-March) = 100				Year/Month	Base : 1993-94 (April-March) = 100			
	6-Currency Weights		36-Currency Weights			6-Currency Weights		36-Currency Weights	
	NEER	REER	NEER	REER		NEER	REER	NEER	REER
1	2	3	4	5	1	2	3	4	5
2007-08 (P)	**74.17**	**114.09**	**93.91**	**104.81**	Sep. 2008(P)	64.37	106.96	85.42	95.97
Apr 2008 (P)	70.63	112.16	93.26	101.86	Oct 2008(P)	62.08	102.36	83.23	92.29
May 2008 (P)	67.48	108.23	89.04	97.72	Nov 2008(P)	63.06	102.80	84.69	92.54
Jun 2008 (P)	66.38	108.20	87.65	97.76	Dec 2008(P)	62.12	100.18	83.91	90.40
July 2008(P)	65.83	107.94	87.04	97.40	Jan 2009(P)	62.28	100.06	83.63	90.01
Aug 2008(P)	67.22	111.30	88.60	99.65	Feb 2009(P)	62.75	100.07	85.20	91.07

Movement of Average Exchange Rate – Per cent change

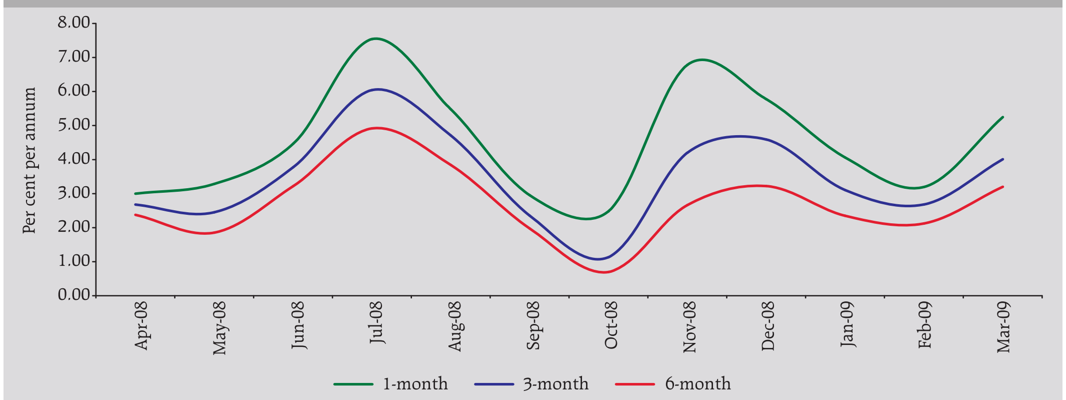
	2007-08	2007-08 (April-Feb)	2008-09 (April-Feb)
36-currency trade-based REER	6.4	6.9	-9.4
36-currency trade-based NEER	9.3	9.9	-8.2
6-Currency trade-based REER	8.1	8.5	-7.8
6-Currency trade-based NEER	6.7	7.3	-12.9
Memo:			
Rupees/ US dollar Exchange Rate	12.5		-12.4*

NEER : Nominal Effective Exchange Rate. REER : Real Effective Exchange Rate. P : Provisional.

* : Average for April-March.

Note : Rise in indices indicates appreciation of the rupee and *vice versa*.

Chart 30: Movement in Rupees/US Dollar Forward Premia



appreciation of 6.9 per cent and 3.0 per cent, respectively, during the corresponding period of the previous year).

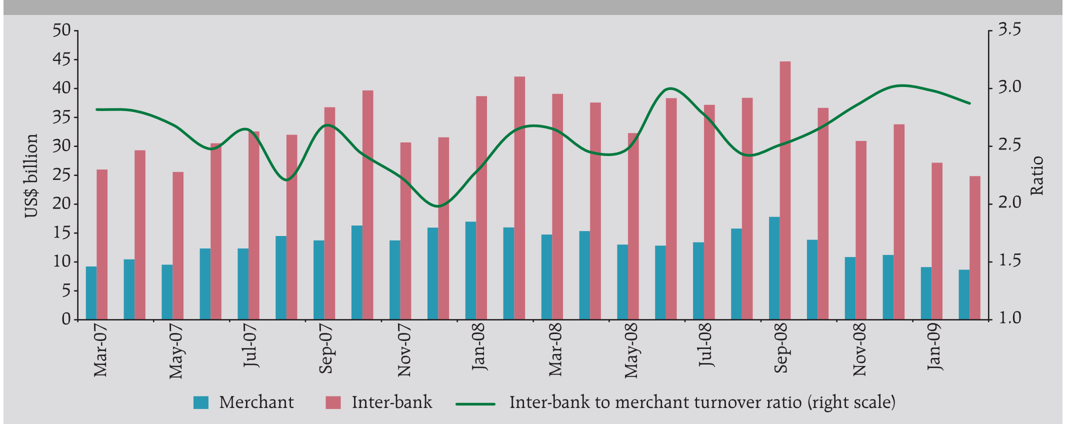
V.42 During 2008-09, forward premia showed significant variation reflecting the underlying supply and demand conditions. As on March 31, 2009, the one month, three month and six month premia were at 4.71 per cent, 3.34 per cent and 2.78 per cent, respectively. As on April 9, 2009, the one month, three month and six month premia were 3.85 per cent, 3.29 per cent and 2.76 per cent, respectively (Chart 30).

V.43 The daily average turnover in the foreign exchange market was lower at US$ 47.8 billion during April-February 2008-09 as compared with US$ 47.4 billion during the corresponding period of the previous year. The ratio of inter-bank to merchant turnover increased to 2.7 from 2.4 during this period (Chart 31).

Credit Market

V.44 Bank deposit and lending rates, which had firmed up during 2008-09 up to October 2008, started easing from November 2008,

Chart 31: Daily (Average) Turonver in Foreign Exchange Market



reflecting measures taken by the Reserve Bank. Interest rates offered by public sector banks (PSBs) on deposits of maturity of one year to three years were in the range of 8.00-9.25 per cent in March 2009 as compared with the range of 8.50-10.75 per cent in December 2008, while those on deposits of maturity of over three years were in the range of 7.50-9.00 per cent as compared with the range of 8.50-9.75 per cent during the same period (Table 53). Similarly, the range of interest rates offered by private sector banks and foreign banks on deposits of varying maturity declined in March 2009 as compared with the range in December 2008. Notably, the administered interest rates on most small savings instruments have remained unchanged since March 2003.

V.45 The benchmark prime lending rates (BPLRs) of PSBs and private sector banks

Table 53: Deposit and Lending Rates

(Per cent)

Item	March 2007	March 2008	September 2008	December 2008	March 2009
1	2	3	4	5	6
1. Domestic Deposit Rate					
Public Sector Banks					
Up to 1 year	2.75-8.75	2.75-8.50	2.75-10.25	2.75-10.25	2.75-8.25
More than 1 year and up to 3 years	7.25-9.50	8.25-9.25	8.75-10.25	8.50-10.75	8.00-9.25
More than 3 years	7.50-9.50	8.00-9.00	8.50-9.75	8.50-9.75	7.50-9.00
Private Sector Banks					
Up to 1 year	3.00-9.00	2.50-9.25	3.00-9.75	3.00-10.00	3.00-8.75
More than 1 year and up to 3 years	6.75-9.75	7.25-9.25	8.30-10.50	9.00-11.00	7.50-10.25
More than 3 years	7.75-9.60	7.25-9.75	8.25-10.25	8.50-11.00	7.50-9.75
Foreign Banks					
Up to 1 year	3.00-9.50	2.25-9.25	3.50-9.75	3.50-9.75	2.50-8.50
More than 1 year and up to 3 years	3.50-9.50	3.50-9.75	3.50-10.50	3.50-11.25	2.50-9.50
More than 3 years	4.05-9.50	3.60-9.50	3.60-11.00	3.60.11.00	2.50-10.00
2. Benchmark Prime Lending Rate					
Public Sector Banks	12.25-12.75	12.25-13.50	13.75-14.75	12.50-14.00	11.50-14.00
Private Sector Banks	12.00-16.50	13.00-16.50	13.75-17.75	13.00-17.25	12.75-16.75
Foreign Banks	10.00-15.50	10.00-15.50	10.00-16.00	10.00-17.00	10.00-17.00
3. Actual Lending Rate*					
Public Sector Banks	4.00-17.00	4.00-17.75	6.00-18.75	5.25-18.00	–
Private Sector Banks	3.15-25.50	4.00-24.00	5.06-23.00	5.06-30.00	–
Foreign Banks	5.00-26.50	5.00-28.00	5.00-25.50	5.00-26.00	–
4. Weighted Average Lending Rate**					
Public Sector Banks	11.81	12.15#	–	–	–
Private Sector Banks	11.91	12.67#	–	–	–
Foreign Banks	13.03	12.94#	–	–	–

– : Not available. # : Provisional.

* : Interest rate on non-export demand and term loans above Rs.2 lakh excluding lending rates at the extreme five per cent on both sides.

** : Data based on the accounts with credit limit of over Rs.2 lakh and is exclusive of inland and foreign bills purchased and discounted. Oustanding amounts are used as weights for calculating average lending rates.

declined from the range of 12.50-14.00 per cent and 13.00-17.25, respectively, in December 2008 to the range of 11.50-14.00 per cent and 12.75-16.75 per cent, respectively, in March 2009 (Chart 32). The range of BPLRs of foreign banks remained unchanged at 10.00-17.00 per cent during the same period. The weighted average BPLR of PSBs and private sector banks decreased from 14.00 per cent and 16.48 per cent, respectively, in October 2008 to 12.48 per cent and 16.03 per cent, respectively, in March 2009. The weighted average BPLR of foreign banks decreased marginally from 15.32 to15.07 per cent during the same period.

V.46 The share of sub-BPLR lending (excluding export credit and small loans) for PSBs decreased to 68.0 per cent in December 2008 from 70.6 per cent in March 2008. The sub-BPLR lending of private sector banks, at 87.9 per cent, decreased from the March 2008 level of 88.7 per cent. The sub-BPLR lending of foreign banks, however, declined significantly from the high of 77.6 per cent in March 2008 to 61.3 per cent in December 2008. Together, the share of sub-BPLR lending for all SCBs (excluding export credit and small loans) declined from 75.9 per cent in March 2008 to 71.5 per cent in December 2008. At the disaggregated level, the major share of sub-BPLR lending of PSBs was for longer tenure term loans (above 5 years), whereas for the private sector banks and foreign banks, the major share of sub-BPLR loans was for consumer credit.

Government Securities Market

Central Government Securities

V.47 The financial year 2008-09 was characterised by a significantly higher level of Central Government market borrowing than budgeted earlier (as detailed in Chapter II), particularly during the second half of the year, in order to finance the expanding fiscal deficit in the wake of fiscal stimulus measures and various other committed expenditure of the Government. During the first six months of 2008-09, all issuances of dated securities were in accordance with the issuance calendar for the first half of the year, except on two occasions (Table 54). On the other hand, for the second half of the year,

Chart 32: Deposit and Lending Rates - Public Sector Banks

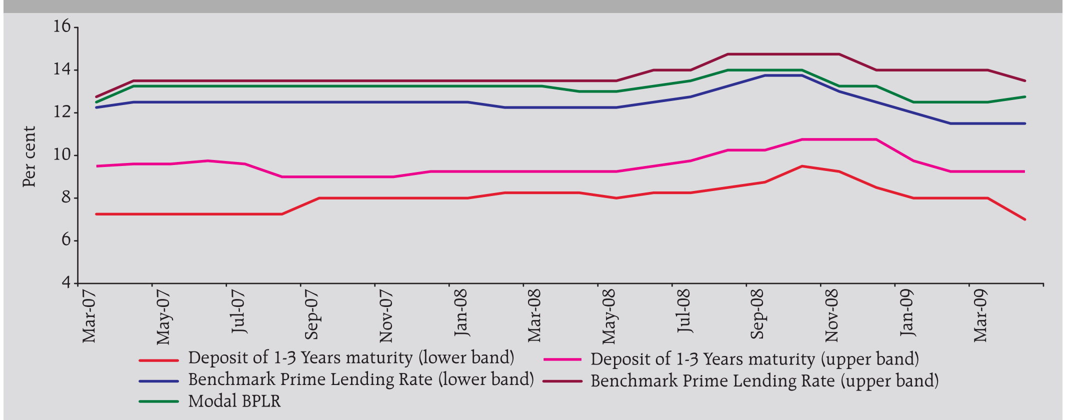


Table 54: Central Government Dated Securities Issued during 2008-09

(Amount in Rupees crore/Maturity in years/Yield in per cent)

Sr. No.	Borrowings as per Auction Calendar			Actual Borrowings			
	Period of auction	Amount	Residual Maturity	Date of Auction	Amount	Residual Maturity	Yield
1	2	3	4	5	6	7	8
1.	April 04 - 11, 2008	6,000	5-9 year	April 11, 2008	6,000	7.38	8.14
		4,000	20- year and above		4,000	24.37	8.67
2.	April 18 - 25, 2008	6,000	10-14 year	April 21, 2008	6,000	10.00	8.24
		4,000	20- year and above		4,000	28.13	8.77
3.	May 2-9, 2008	6,000	5-9 year	May 9,2008	6,000	7.92	7.96
		4,000	20-year and above		4,000	24.29	8.35
4.	May 16-23, 2008	6,000	10-14 year	May 23, 2008	6,000	9.91	8.07
		4,000	20-year and above		4,000	23.72	8.52
5.	May 30- June 6, 2008	6,000	10-14 year	June 6, 2008	6,000	9.87	8.26
		4,000	20 year and above		4,000	24.22	8.72
6.	June 13 - 20, 2008	6,000	15-19 year security	June 20,2008	6,000	18.64	9.25
7.	July 4-11, 2008	6,000	10-14 year	July 4, 2008	6,000	9.79	9.13
		4,000	20 year and above		4,000	23.60	10.02
8.	July 18-25,2008	6,000	15-19 year	July 24,2008	6,000	9.74	9.08
9.	August 1-8, 2008	6,000	10-14 year	August 8, 2008	6,000	9.70	9.14
		4,000	20 year and above		4,000	24.05	9.88
10.	August 14-22, 2008	6,000	15-19 year	August 22, 2008	6,000	18.47	9.86
11.	September 5-12, 2008	5,000	10-14 year	September 12, 2008	5,000	9.60	8.30
		3,000	20-year and above		3,000	23.95	8.70
				September 26,2008	6,000	12.65	9.04
					4,000	23.38	9.26
12.	October 3-10, 2008	6,000	5-9 year	Auction Cancelled	–	–	–
		4,000	20-year and above	Auction Cancelled	–	–	–
13.	October 17-24, 2008	6,000	10-14 year	Auction Cancelled	–	–	–
		4,000	20-year and above	Auction Cancelled	–	–	–
14.	October 31-November 7, 2008	6,000	5-9 year	October 31 , 2008	6,000	6.00	7.56
		4,000	20-year and above		4,000	23.82	8.08
				November 7,2008	6,000	9.45	7.73
					4,000	23.26	8.44
15.	November 14-21, 2008	6,000	5-9 year	November 14,2008	6,000	5.96	7.38
					4,000	23.78	8.21
				November 21,2008	6,000	5.94	7.16
					3,000	12.50	7.42

(Contd...)

Table 54: Central Government Dated Securities Issued during 2008-09 *(Concld.)*

(Amount in Rupees crore/Maturity in years/Yield in per cent)

	Borrowings as per Auction Calendar			Actual Borrowings			
Sr. No.	Period of auction	Amount	Residual Maturity	Date of Auction	Amount	Residual Maturity	Yield
1	2	3	4	5	6	7	8
16.	December 5-12, 2008	3,000	10-14 year	Preponed to November 21, 2008	–	–	–
		6,000	5-9 year	December 12, 2008	6,000	4.72	6.24
		4,000	20-year and above		4,000	25.65	6.98
17.	January 2-9, 2009	6,000	5-9 year	January 2, 2009	6,000	8.65	5.73
		4,000	20-year and above		4,000	26.68	6.53
18.	January 5-9, 2009	7,000	5-9 year	January 9, 2009	7,000	7.25	6.70
		4,000	15-19 year		4,000	14.24	7.35
		4,000	20-year and above		4,000	25.58	7.60
19.	January 12-16, 2009	6,000	5-9 year	January 16, 2009	4,000	5.79	5.5
		4,000	20-year and above		3,000	30.00	6.83
					3,000	9.26	5.45
20.	January 23-30, 2009	6,000	10-14 year	January 30, 2009	3,000	5.75	6.02
		4,000	20-year and above		4,000	10.00	6.05
21.	February 6-9, 2009	5,000	5-9 year		3,000	29.96	7.35
		2,000	15-19 year	February 6, 2009	5,000	8.55	6.83
22.	February 13-20, 2009	6,000	10-14 year		2,000	14.17	7.15
		2,000	20-year and above	February 13, 2009	6,000	9.96	5.94
23.	February 20-27, 2009	6,000-7,000			2,000	29.23	7.37
		2,000-3,000		February 24, 2009	7,000	8.51	6.98
		2,000-3,000			3,000	13.22	7.50
24.	February 28-March 6, 2009	6,000-7,000			2,000	25.46	7.75
		2,000-3,000		March 6, 2009	8,000	9.90	6.50
		2,000-3,000			2,000	15.93	7.75
25.	March 6-March 13, 2009	6,000-7,000			2,000	29.86	7.90
		2,000-3,000		March 20, 2009	4,000	4.92	6.60
		2,000-3,000			6,000	9.86	6.59
26.	March 13-March 20, 2009	6,000-7,000		March 26,2009	5,000	4.43	6.77
		2,000-3,000			7,000	9.84	6.97
		2,000-3,000					

Note : 1. Issuances on December 12, 2008 and January 2, 2009 were as per calendar issued on December 5, 2008.
2. Issuances from January 12, 2009 to February 13, 2009 were as per calendar issued on January 6, 2009.
3. Issuances from February 24, 2009 to March 26, 2009 were as per calendar issued on February 10, 2009.

apart from the scheduled issuance calendar for dated securities released on September 26, 2008 in consultation with the Government of India, three additional indicative calendars were issued on December 5, 2008, January 6, 2009 and February 10, 2009. The Government of India raised Rs.1,16,000 crore to meet the additional expenditure approved by Parliament by way of two supplementary demands for grants and various stimulus packages.

V.48 Furthermore, the MoU on the MSS signed between the Government of India and the Reserve Bank, in March 2004, was amended on February 26, 2009 to enable the Government and the Reserve Bank to de-sequester MSS cash balance for financing the Government's approved expenditure. Accordingly, it was decided to transfer an amount of Rs.45,000 crore, in installments, from the MSS cash account to the normal cash account of Government of India by March 31, 2009. An equivalent amount of government securities was to accordingly form part of the normal borrowing of the Government. In this regard, an amount of Rs.12,000 crore was transferred from the MSS cash account to the normal cash account of the Government of India on March 4, 2009. Inclusive of this amount, gross and net market borrowings (dated securities and 364-day Treasury Bills) of the Central Government during 2008-09 amounted to Rs.3,18,550 crore and Rs.2,42,316 crore, respectively, accounting for 93 per cent and 91 per cent of the revised market borrowings for the year, respectively. In view of the comfortable cash position, the Government of India, in consultation with the Reserve Bank, decided not to effect the transfer of the balance amount of Rs.33,000 crore in 2008-09. Based on the fund requirements of the Government, the balance amount would be de-sequestered against the approved market borrowing for 2009-10 or the MSS securities would be bought back in 2009-10. The MSS outstanding as on March 31, 2009 was Rs.88,773 crore.

V.49 Despite the significantly enhanced level, the market borrowing programme was managed smoothly by undertaking the following measures: (i) synchronising OMO (purchase of government securities) with issuances of dated securities under the market borrowing calendar, (ii) creating fiscal space by way of buyback of securities issued under the MSS, (ii) amending the MoU on MSS in February 2009, allowing transfer from the MSS cash account to the normal cash account of the Government of India for financing of fiscal defict, and (iv) purchase of government securities on NDS-OM platform. All auctions during 2008-09 were for reissuance of existing securities, barring four new issues. The bid-cover ratio during 2008-09 was comparable with that of 2007-08. The devolvement on primary dealers (PDs) was higher in 2008-09 as compared with the previous year. The weighted average maturity and weighted average yield, both declined during 2008-09 (Table 55).

Table 55: Issuances of Central Government Dated Securities

	2007-08	2008-09
1	2	3
Number of Issuances		
Re Issue	34	52
New Issues	1	4
Bid-cover Ratio (Range)	1.58-4.76	1.22-4.51
Weighted Average		
Maturity (years)	14.9	13.8
Yield (per cent)	8.12	7.69
Devolvement on PDs (Rupees crore)	957	10,773

State Government Securities

V.50 The net allocation for the market borrowings of the State Governments during 2008-09 was placed at Rs.51,719 crore. Taking into account repayment of Rs.14,371 crore and additional allocation of Rs.62,990 crore (of which Rs.19,768 crore was on account of shortfall in NSSF collection and Rs.28,896 crore was on account of second fiscal stimulus package), the gross allocation of market borrowings was placed at Rs.1,29,081 crore for 2008-09 as compared with Rs.80,570 crore during the previous year. Twenty six State Governments and the Union Territory of Puducherry raised a total amount of Rs.1,18,138 crore through auctions (Table 56) with cut-off yields in the range 5.80-9.90 per cent as compared with Rs.67,779 crore by 25 State Governments (cut-off yields in the range 7.84-8.90 per cent) during the previous year. The weighted average interest rate on market loans was lower at 7.85 per cent during 2008-09 as compared with 8.25 per cent last year. The spreads of State Government securities over the yields of Central Government securities of corresponding maturity ranged between 21-236 basis points as compared with 19-90 basis points during 2007-08.

Secondary Market

V.51 Yields in the government securities market hardened from April 2008 till the first fortnight of July 2008 on account of the heightened inflationary expectations in the face of sharp increase in global commodity

Table 56: Market Borrowings of the State Governments/U.T.s - 2008-09

Item		Date	Cut-off Yield (Per cent)	Tenor (Years)	Amount Raised (Rupees crore)
1		2	3	4	5
Auction					
i.	First	April 4, 2008	8.50-8.60	10	2,648
ii.	Second	May 27, 2008	8.39-8.68	10	3,264
iii.	Third	June 27, 2008	9.38-9.59	10	2,300
iv.	Fourth	July 10, 2008	9.81	10	500
v.	Fifth	August 31,2008	9.86-9.90	10	2,100
vi.	Sixth	August 26,2008	9.30-9.44	10	2,060
vii.	Seventh	September 9, 2008	8.80	10	1,800
viii.	Eighth	September 25, 2008	8.81-8.88	10	1,212
ix.	Ninth	October 7,2008	8.50-8.89	10	2,012
x.	Tenth	October 22, 2008	7.97-8.11	10	4,300
xi	Eleventh	November 11, 2008	8.21-8.54	10	3,595
xii.	Twelfth	November 20, 2008	7.77-7.86	10	4,850
xiii.	Thirteenth	December 11, 2008	6.95-7.10	10	5,910
xiv.	Fourteenth	December 23, 2008	6.38-6.45	10	4,795
xv.	Fifteenth	January 6, 2009	5.80-6.10	10	5,702
xvi.	Sixteenth	January 13, 2009	6.65-6.73	10	5,795
xvii.	Seventeenth	January 22,2009	7.00-7.13	10	7,001
xviii.	Eighteenth	February 5,2009	7.24-7.29	10	5,149
xix.	Nineteenth	February 17,2009	7.40-7.50	10	8,362
xx.	Twentieth	February 27,2009	7.55-7.93	10	13,424
xxi.	Twenty one	March 9, 2009	8.16-8.89	10	14,095
xxii.	Twenty two	March 17, 2009	8.40-8.59	10	12,215
xxiii.	Twenty three	March 24, 2009	8.08-8.48	10	5,048
	Grand Total				**1,18,138**

prices and concomitant monetary policy responses – hikes in the CRR and the LAF repo rate. Thereafter, the government securities' yields generally eased till around mid-September 2008 as inflationary pressures abated. The yields, however, temporarily hardened around end-September 2008 as liquidity conditions tightened in the wake of adverse developments in the international financial markets and advance tax outflows. In line with the liquidity augmenting measures taken by the Reserve Bank and the sharp decline in WPI inflation, the yields eased substantially till end-December 2008. The 10-year yield stood at 5.31 per cent as at end-December 2008, as compared with 8.63 per cent as at end-September 2008 and 7.93 per cent as at end-March 2008 (Chart 33).

V.52 Notwithstanding further reduction in the CRR and LAF rates in January 2009, market sentiment worsened in January and February 2009, following the large and abrupt increase in the Government's market borrowing programme for 2008-09, at a time when the system had excess SLR investment amounting to around Rs.1,79,000 crore. The large market borrowing requirement of the Government for 2009-10 also weighed on the market. Subsequent to the announcement of the Interim Budget on February 16, 2009, even as the Reserve Bank initiated a series of auction-based purchases of government dated securities in addition to its purchases through the NDS-OM, the 10-year yield increased to 6.02 per cent as at end-February 2009. The yields continued to harden in early March 2009 despite a further cut in the LAF interest rates effective March 5, 2009. The benchmark 10-year paper (6.05 per cent government security 2019), however, dropped sharply by 40 basis points (from the closing level of March 12, 2009) to 7.07 per cent following the rejection of all bids received for sale of Government dated securities on March 13, 2009. The subsequent announcement of enhanced amounts of auction-based purchases of the government dated securities by the Reserve Bank on March 16 and 19, 2009, helped to improve market sentiments. The ten-year yield stood at 7.01 per cent as at end-March 2009.

V.53 The government securities yield curve moved upwards and peaked by end-July 2008

Chart 33: Yields on Central Government Securities

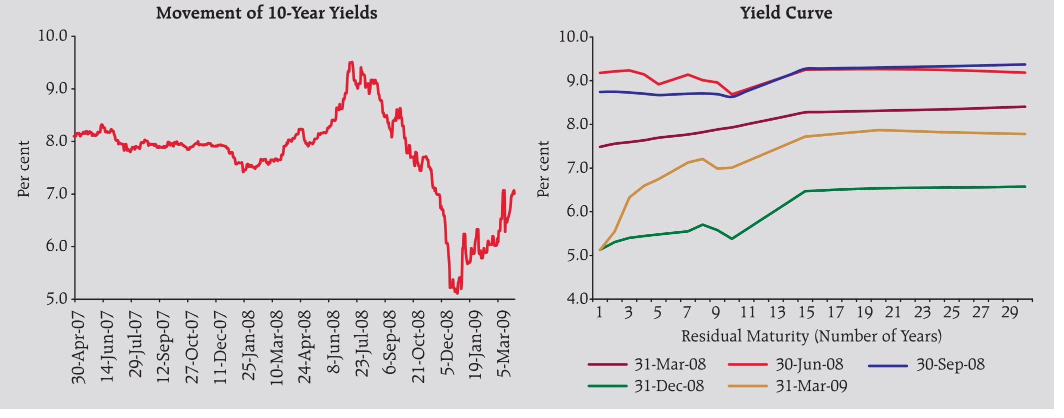
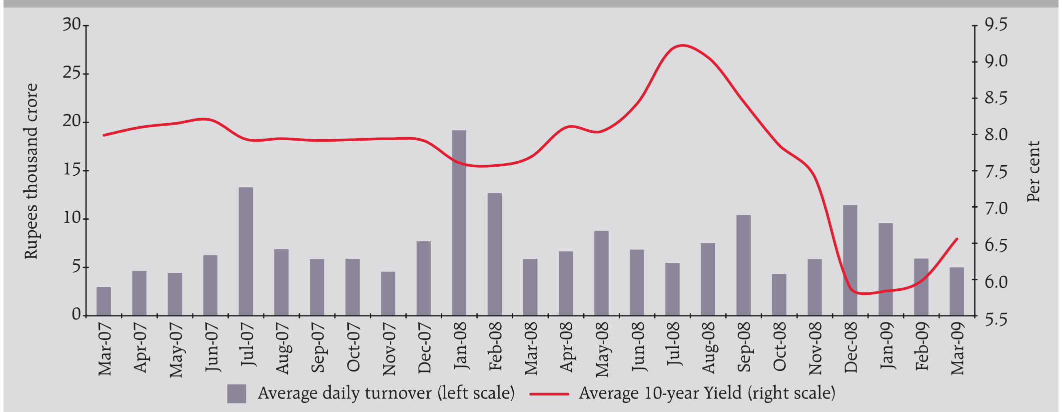


Chart 34: Average Daily Turnover and Yields in Government Securities Market

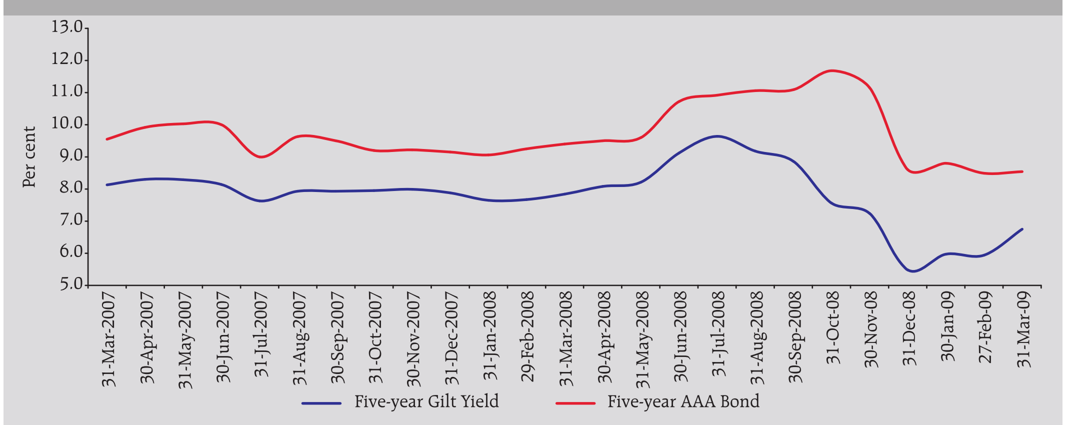


during 2008-09 (Chart 33). Thereafter, it moved downwards till end-December 2008 but again firmed up over the last quarter of 2008-09. The yield curve is kinked at the 5-year and 10-year yields where trading is concentrated and is flat beyond 15 years. As a sequel, the spread between 10-year and 15-year yields was 71 basis points as against the spread of 6 basis points between the 15-year and 30-year yields, as at end-March 2009.

V.54 The daily turnover in the Central Government securities market averaged Rs.6,935 crore during January-March 2009, which was around 4 per cent lower than that in the preceding quarter (Chart 34).

V.55 During 2008-09, the yield on 5-year AAA-rated corporate bonds, witnessed a hardening trend up to October 2008 and began to soften thereafter. The yield has been inching up again since February 2009. The credit spread between the yields on 5-year AAA-rated bonds and 5-year government securities have been wider in the second half of 2008-09 as compared with the first half (Chart 35). However, it narrowed during the fourth quarter of 2008-

Chart 35: Credit Spreads



09, the spread being 179 basis points on March 31, 2009 as compared to 312 basis points on December 31, 2008.

Equity Market

Primary Market

V.56 The primary market segment of the domestic capital market witnessed a marginal increase during the fourth quarter of 2008-09. Cumulatively, resources raised through public issues declined sharply to Rs.14,671 crore during 2008-09 from Rs.83,707 crore during 2007-08. The number of issues also declined considerably from 119 to 45 (Table 57). Out of the 45 issues during 2008-09, 21 were initial public offerings (IPOs) issued by private sector companies, constituting 13.9 per cent of total resource mobilisation. Furthermore, all the issues during 2008-09 were equity issues by private non-financial companies except two by private financial companies. The average size of public issues declined from

Table 57: Mobilisation of Resources from the Primary Market

(Amount in Rupees crore)

Item	No. of Issues	Amount	No. of Issues	Amount
1	2	3	4	5
	2007-08		**2008-09 P**	
A. Prospectus and Rights Issues*				
1. Private Sector (a+b)	**115**	**63,638**	**45**	**14,671**
a) Financial	11	14,676	2	466
b) Non-financial	104	48,962	43	14,205
2. Public Sector (a+b+c)	**4**	**20,069**	–	–
a) Public Sector Undertakings	–	–	–	–
b) Government Companies	2	2,516	–	–
c) Banks/Financial Institutions	2	17,553	–	–
3. Total (1+2)	**119**	**83,707**	**45**	**14,671**
of which:				
(i) Equity	116	82,398	45	14,671
(ii) Debt	3	1,309	–	–
	April-December 2007		**April-December 2008**	
B. Private Placement				
1. Private Sector (a+b)	**1,245**	**94,139**	**522**	**46,687**
a) Financial	693	63,916	235	26,265
b) Non-financial	552	30,223	287	20,422
2. Public Sector (a+b)	**117**	**55,817**	**130**	**65,605**
a) Financial	80	38,621	62	34,773
b) Non-financial	37	17,196	68	30,832
3. Total (1+2)	**1,362**	**1,49,956**	**652**	**1,12,292**
of which:				
(i) Equity	–	–	1	114
(ii) Debt	1,362	1,49,956	651	1,12,178
C. Euro Issues	**26**	**26,556**	**13**	**4,788**

P : Provisional. * : Excluding offers for sale. – : Nil/Negligible.

Rs.703.4 crore during 2007-08 to Rs.326.0 crore during 2008-09.

V.57 Mobilisation of resources through private placement declined by 25.1 per cent during April-December 2008 (the period for which the latest data are available) as against an increase of 35.2 per cent during April-December 2007 (refer Table 57). Public sector entities accounted for 58.4 per cent of total mobilisation as compared with 37.2 per cent during the corresponding period of the previous year. Resource mobilisation through financial intermediaries (both from public and private sector) registered a decline of 40.5 per cent over the corresponding period of last year and accounted for 54.4 per cent of the total mobilisation during April-December 2008. However, resources raised by non-financial intermediaries registered an increase of 8.1 per cent (45.7 per cent of total resource mobilisation) during April-December 2008 over the corresponding period of the previous year.

V.58 During 2008-09, resources raised through Euro issues – American Depository Receipts (ADRs) and Global Depository Receipts (GDRs) – by Indian corporates declined significantly by 82.0 per cent to Rs.4,788 crore as compared with the corresponding period of the previous year. All the Euro issues during the financial year were GDR issues.

V.59 During 2008-09, net resource mobilisation by mutual funds turned negative; there was a net outflow of Rs.28,297 crore during the year as compared to a net inflow of Rs.1,53,801 crore during 2007-08 (Table 58). Scheme-wise, during 2008-09, income/debt oriented schemes witnessed a net outflow of Rs.32,161 crore, while growth/equity oriented schemes registered a net inflow of Rs.4,024 crore. There were substantial outflows during the months of June 2008 (Rs.39,233 crore), September 2008 (Rs.45,651 crore) and October 2008 (Rs.45,796 crore) due to the uncertain conditions in the stock markets and redemption pressures from banks and corporates on account of tight liquidity conditions prevailing at that time. The Reserve Bank then announced immediate measures to provide liquidity support to

Table 58: Resource Mobilisation by Mutual Funds

(Rupees crore)

Category	2007-08		2008-09	
	Net Mobilisation	Net Assets	Net Mobilisation	Net Assets
1	2	3	4	5
Private Sector	1,33,304	4,15,621	-34,018	3,35,527
Public Sector *	20,497	89,531	5,721	81,772
Total	**1,53,801**	**5,05,152**	**-28,297**	**4,17,299**

* : Including UTI Mutual fund.

Note : 1. Data exclude funds mobilised under Fund of Funds Schemes.
2. Net Mobilisation is net of redemptions.
3. Net Assets is for end-period.

Source : Securities and Exchange Board of India.

mutual funds through banks. With the easing of overall liquidity conditions, investment in mutual funds again became attractive. During November 2008 to February 2009, net resource mobilisation by mutual funds turned positive. However, during March 2009 there was a net outflow of Rs.98,697 crore.

Secondary Market

V.60 The domestic stock markets, after remaining weak and volatile during January-February 2009, witnessed gains during March 2009. The losses during the first two months of 2009 were mainly due to the downward trend in international equity markets on account of more than expected contraction of economic growth in the US, the UK, Japan and China pointing towards deepening of recession. Other factors that led to weak equity markets were heavy net sales by FIIs in the Indian equity market, slowdown in industrial and export growth, depreciation of the rupee against the US dollar, fall in ADR prices, lower than expected corporate earnings in the third quarter of 2008-09, revelations about financial irregularities in a particular information technology company and other sector and stock specific news. In line with the behaviour of equity markets across the world, the Indian stock markets have been showing improvement since March 2009. The reasons for the improvement are announcement of the details of US$ 1 trillion public private investment program by the US Treasury, some major US banks posting profits for the first two months of 2009, extention of the deadline for buyback of foreign currency convertible bonds (FCCBs) by the Reserve Bank to December 31, 2009, domestic consumer durable and capital goods output increasing by 2.5 per cent and 15.4 per cent, respectively, in January 2009, lower domestic inflation rate, strengthening of the rupee against the US dollar and net purchases by FIIs and mutual funds in domestic equity market. The BSE Sensex and the S&P CNX Nifty closed at 9709 and 3021 at end-March 2009 registering losses of 37.9 per cent and 36.2 per cent, respectively, over end-March 2008 (Chart 36). The BSE sensex closed at 11,023 on April 17, 2009.

Chart 36: Indian Stock Markets

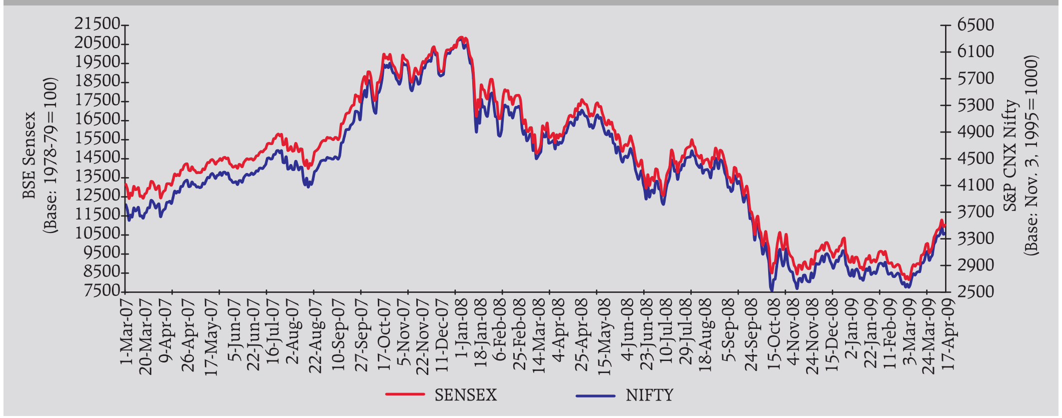
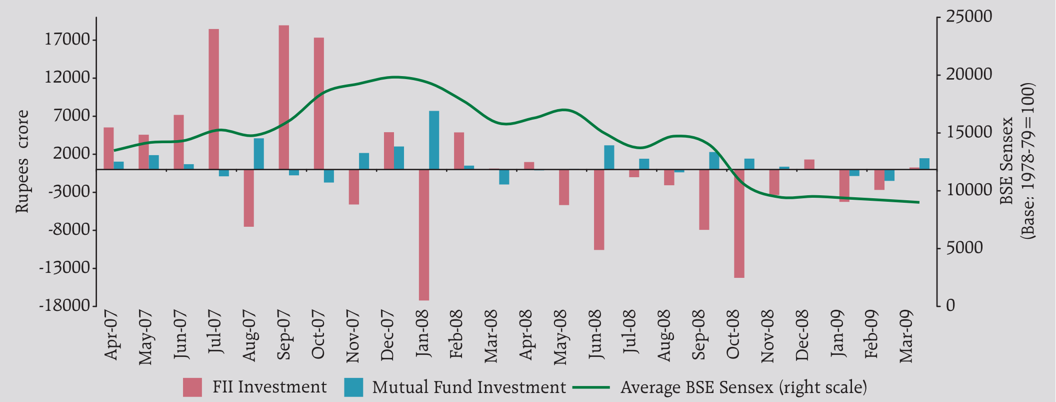


Chart 37: Net FIIs Investments and BSE Sensex



V.61 According to the data released by the Securities and Exchange Board of India (SEBI), FIIs made net sales of Rs.48,249 crore (US $ 12.0 billion) in the Indian equity market during 2008-09 as against net purchases of Rs.52,574 crore (US $ 12.7 billion) during 2007-08 (Chart 37). Mutual funds, on the other hand, made net purchases of Rs.6,985 crore during 2008-09 as compared with net purchases of Rs.15,775 crore in the previous year.

V.62 The sectoral indices witnessed selling pressure across the board during 2008-09 *viz.*, metal, consumer durables, capital goods, banking, IT, oil and gas, auto, public sector undertakings, healthcare and fast moving consumer goods sector (Table 59).

V.63 In line with the downward trend in stock prices, the price-earnings (P/E) ratios of the 30 scrips included in the BSE Sensex declined from 20.1 at end-March 2008 to

Table 59: BSE Sectoral Stock Indices

(Base: 1978-79=100)

Sector	**Variation (per cent)**		
	End-March 2007	**End-March 2008**	**End-March 2009**
1	2	3	4
Fast Moving Consumer Goods	-21.4	31.7	-11.1
Public Sector Undertakings	-3.2	25.4	-29.6
Information Technology	21.6	-27.6	-35.6
Auto	-8.5	-7.1	-32.3
Oil and Gas	30.5	56.0	-29.6
Metal	-4.3	65.2	-58.7
Health Care	-5.4	5.4	-26.5
Bankex	24.2	18.0	-41.8
Capital Goods	11.1	54.4	-53.8
Consumer Durables	11.1	8.8	-58.1
BSE 500	**9.7**	**24.3**	**-42.8**
BSE Sensex	**15.9**	**19.7**	**-37.9**

Source : Bombay Stock Exchange Limited.

13.7 at end-March 2009. The market capitalisation of the BSE also declined by 44.3 per cent between end-March 2008 and end-February 2009. The cash segment turnover of BSE and NSE also declined by 30.2 per cent during April-February 2008-09 over the corresponding period of 2007-08. The turnover in the derivative segment of BSE and NSE also declined by 25.1 per cent during April-February 2008-09 over the corresponding period of the previous year. The volatility in the stock market, measured as coefficient of variation, however, increased during 2008-09 (Table 60).

Table 60: Stock Market Indicators

Indicator	BSE		NSE	
	2007-08	2008-09	2007-08	2008-09
1	2	3	4	5
1. BSE Sensex / S&P CNX Nifty				
(i) End-period	15,644	9,709	4,735	3,021
(ii) Average	16,569	12,366	4,897	3,731
2. Coefficient of Variation	13.7	24.2	14.4	23.2
3. Price-Earning Ratio (end-period)*	20.1	13.7	20.6	14.3
4. Price-Book Value Ratio (end-period)*	5.2	2.7	5.1	2.5
5. Yield* (per cent per annum) (end-period)	1.0	1.8	1.1	1.9
6. Listed Companies	4,887	4924 #	1,381	1425 #
7. Cash Segment Turnover (Rupees crore)	15,78,856	10,30,284 #	35,51,038	25,49,224 #
8. Derivative Segment Turnover (Rupees crore)	2,42,308	12,264 #	1,30,90,478	99,70,552 #
9. Market Capitalisation (Rupees crore) @	51,38,015	28,62,873 #	48,58,122	26,75,622 #
10. Market Capitalisation to GDP Ratio (per cent)	108.8	52.8	102.9	49.3

* : Based on the 30 scrips included in the BSE Sensex and the 50 scrips included in the S&P CNX Nifty.
@ : As at end-period.
\# : As at end-February 2009.
Source : Bombay Stock Exchange Ltd. (BSE) and National Stock Exchange of India Ltd. (NSE).

Annex 2: Policy Response of the Reserve Bank since mid-September 2008

Item	Key Measures
1	2
Monetary Measures	• Cut in the repo rate under the LAF by a cumulative 400 basis points from 9.0 to 5.0 per cent since October 20, 2008. • Cut in the reverse repo rate by a cumulative 250 basis points from 6.0 to 3.5 per cent since December 8, 2008.
Rupee Liquidity/ Credit Delivery	• Cut in the CRR by a cumulative 400 basis points of NDTL from 9.0 per cent to 5.0 per cent since October 11, 2008. • Introduction of a special refinance facility under Section 17(3B) of the Reserve Bank of India Act, 1934 under which all SCBs (excluding RRBs) are provided refinance from the Reserve Bank equivalent to up to 1.0 per cent of each bank's NDTL as on October 24, 2008 at the LAF repo rate up to a maximum period of 90 days. Banks are encouraged to use this facility for the purpose of extending finance to micro and small enterprises. The facility will continue up to September 30, 2009. • Institution of a term repo facility for an amount of Rs.60,000 crore under the LAF to enable banks to ease liquidity stress faced by mutual funds, NBFCs and housing finance companies (HFCs) with associated SLR exemption of 1.5 per cent of NDTL. This facility is available up to September 30, 2009 (banks can avail of this facility either on an incremental or on a rollover basis within their entitlement of up to 1.5 per cent of NDTL). • Reduction in statutory liquidity ratio (SLR) by one percentage point from 25 to 24 per cent of NDTL with effect from the fortnight beginning November 8, 2008. • Introduction of a mechanism to buyback dated securities issued under the MSS so as to provide another avenue for injecting liquidity of a more durable nature into the system. • Extension of the period of entitlement of the first slab of pre-shipment and post-shipment rupee export credit, by 90 days each, with effect from November 15, 2008 and December 1, 2008, respectively. • Increase in the eligible limit of the ECR facility for scheduled banks (excluding RRBs) from 15 per cent to 50 per cent of the outstanding export credit eligible for refinance at the prevailing repo rate under the LAF. • Amounts allocated, in advance, from SCBs for contribution to the SIDBI and the NHB to the extent of Rs.2,000 crore and Rs.1,000 crore, respectively, against banks' estimated shortfall in priority sector lending in March 2009. • Reduction in the provisioning requirements for all types of standard assets (for residential housing loan beyond Rs.20 lakh, standard advances in the commercial real estate sector, personal loans including outstanding credit card

(Contd...)

Annex 2: Policy Response of the Reserve Bank since mid-September 2008

Item	Key Measures
1	2
	receivables, loans and advances qualifying as capital market exposure and non-deposit taking systemically important NBFCs) to a uniform level of 0.40 per cent except in case of direct advances to agricultural and SME sector which shall continue to attract provisioning of 0.25 per cent, as hitherto.
	• Downward revision of risk weights on banks' exposures to certain sectors, which had been increased counter-cyclically earlier. All unrated claims on corporates and claims secured by commercial real estate attract a uniform risk weight of 100 per cent as against the risk weight of 150 per cent prescribed earlier. Claims on rated as well as unrated non-deposit taking systemically important non-banking financial companies (NBFC-ND-SI) are uniformly risk weighted at 100 per cent. As regards the claims on asset financing companies (AFCs), there is no change in the risk weights, which continue to be governed by the credit rating of the AFCs, except the claims that attract a risk weight of 150 per cent under the new capital adequacy framework, reduced to a level of 100 per cent.
	• In order to provide liquidity support to housing, export and MSE sectors, the Reserve Bank provided a refinance facility of Rs.4,000 crore to the NHB, Rs. 5,000 crore to the EXIM Bank and Rs. 7,000 core to the SIDBI up to March 2010.
	• For more effective liquidity management, the Reserve Bank widened the scope of OMO by including purchases of government securities through an auction-based mechanism in addition to operations through NDS-OM.
Foreign Exchange Liquidity	• To continue selling foreign exchange (US dollars) through agent banks to augment supply in the domestic foreign exchange market or intervene directly to meet any demand-supply gaps.
	• To institute special market operations to meet the foreign exchange requirements of public sector oil marketing companies against oil bonds.
	• The ceiling rate on export credit in foreign currency increased to LIBOR plus 350 basis points subject to banks not levying any other charges.
	• Authorised Dealer (AD) category - I banks allowed to borrow funds from their head office, overseas branches and correspondents and overdrafts in nostro accounts up to a limit of 50 per cent of their unimpaired Tier 1 capital as at the close of the previous quarter or US$ 10 million, whichever was higher, as against the earlier limit of 25 per cent.
	• As a temporary measure, HFCs registered with the NHB were allowed to raise short-term foreign currency borrowings under the approval route, subject to compliance with prudential norms laid down by the NHB.

(Contd...)

Annex 2: Policy Response of the Reserve Bank since mid-September 2008

Item	Key Measures
1	2
	• A forex swap facility with tenure up to three months to Indian public and private sector banks having overseas operations in order to provide them flexibility in managing their short term funding requirements at their overseas offices. The facility is available up to March 31, 2010. • Cumulative increase in the interest rate ceilings on FCNR (B) and NR(E)RA term deposits by 175 basis points each since September 16, 2008. • Proposals from Indian companies to prematurely buyback their FCCBs to be considered under the approval or automatic route, depending on the extent of discount of the FCCBs and the source of funds, subject to compliance with certain stipulated conditions. (The buyback should be financed by the company's foreign currency resources held in India or abroad and/or out of fresh external commercial borrowing (ECB) raised in conformity with the current norms for ECBs). Extension of FCCBs also to be permitted at the current all-in-cost for the relative maturity.
ECB Norms	• The all-in-cost ceiling for ECBs of average maturity period of three to five years and of maturity period over five years was enhanced to 300 basis points above LIBOR and 500 basis points above LIBOR, respectively. The all-in-cost ceiling for trade credit less than three years was enhanced to 6-month LIBOR plus 200 basis points. • ECBs up to US$ 500 million per borrower per financial year were permitted for rupee/foreign currency expenditure for permissible end-uses under the automatic route. • The definition of infrastructure sector for availing ECB was expanded to include mining, exploration and refinery sectors. Payment for obtaining license/permit for 3G spectrum by telecom companies was classified as eligible end-use for the purpose of ECB. • The requirement of minimum average maturity period of 7 years for ECB of more than US$ 100 million for rupee capital expenditure by the borrowers in infrastructure sector was dispensed with. • Borrowers were granted the flexibility to keep their ECB proceeds offshore or keep it with the overseas branches/subsidiaries of Indian banks abroad or to remit these funds to India for credit to their rupee accounts with AD category-I banks in India, pending utilisation for permissible end-uses. • NBFCs exclusively involved in financing of the infrastructure sector were permitted to avail of ECBs under the approval route from multilateral/regional financial institutions and Government-owned development financial institutions for on-lending to the borrowers in the infrastructure sector, subject to compliance with certain conditions.

VI. Price Situation

After reaching an intra-year peak of 12.9 per cent on August 02, 2008, inflation, as measured by year-on-year variations in WPI, fell sharply to 0.3 per cent on March 28, 2009. This large order of volatility in the inflation outcome in just one year is unprecedented. The sharp volatility in international commodity prices contributed significantly to the spiralling inflation in the first half, and then to the subsequent decline from a higher base at fast pace in the second half. When external and supply side factors condition the inflation trend along with demand pressures, demand management policy measures have to be employed in a calibrated manner. The surge that was witnessed in oil, food and commodity prices in the first half of 2008 had created testing conditions for the conduct of monetary policy. The sharp fall in inflation in the second half, however, has facilitated aggressive monetary easing, which aim at arresting the economic slowdown. Unlike the WPI based inflation, CPI based inflation in India, however, remains high, with recent evidence of very modest moderation, and the transmission process of lower inflation at the wholesale level to inflation at the retail level has emerged as an important issue in the conduct of Reserve Bank's monetary policy.

VI.1 During the first half of 2008-09, headline inflation increased in major economies, reflecting the combined impact of higher food and fuel prices as well as strong demand conditions, especially in emerging markets. Subsequently, inflation decelerated sharply as international energy and commodity prices declined substantially and demand pressures eased following the impact of global financial crisis. The monetary policy stance pursued by most central banks in advanced economies during 2008-09 was largely expansionary, aimed at mitigating the adverse implications of the financial crisis. The central banks in emerging market economies were engaged in pre-emptive monetary tightening till September 2008 to contain inflation and inflationary expectations. Subsequently, they reversed their policy stance and reduced their policy rates as the spillover of the US subprime crisis turned out to be much wider and deeper, severely affecting growth prospects.

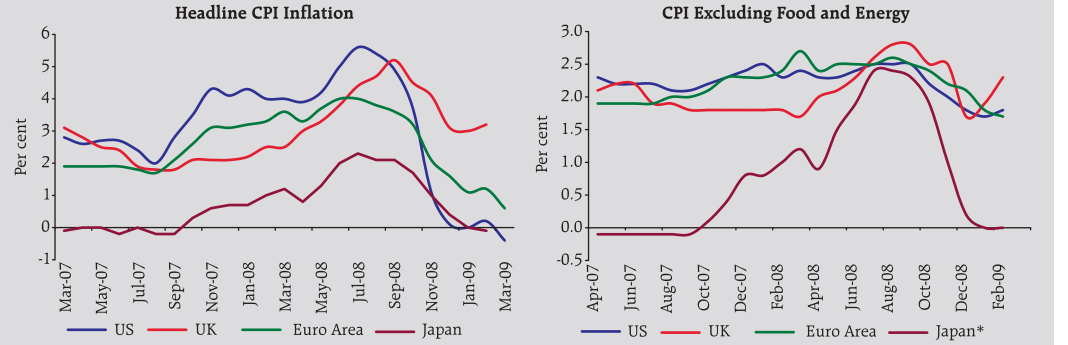
VI.2 In India, inflation as measured by year-on-year variations in the wholesale price index (WPI), increased sharply from 7.7 per cent at end-March 2008 to an intra-year peak of 12.9 per cent on August 2, 2008, reflecting the impact of some pass-through of higher international crude oil prices to domestic prices as well as continued increase in the prices of metals, chemicals, machinery and machinery tools, oilseeds/edible oils/oil cakes and raw cotton. Subsequently, WPI inflation declined sharply to 0.3 per cent as on March 28, 2009, led by the reductions in the administered prices of petroleum products and electricity as well as decline in the prices of freely priced petroleum products, oilseeds/edible oils/oil cakes, raw cotton, cotton textiles and iron & steel. The decline in prices of most of these commodities was in line with the decline in international commodity prices since July 2008. Consumer price inflation as reflected in various consumer price indices continued to remain high in the range of 9.6-10.8 per cent during January/February 2009 as compared with 7.3-8.8 per cent in June 2008 and 5.2-6.4 per cent in February 2008.

Global Inflation

VI.3 Headline inflation in major advanced economies firmed up till the second quarter of 2008-09 on account of higher energy and food prices and declined subsequently. Consumer price index (CPI) inflation in OECD countries increased from 3.6 per cent in March 2008 to 4.9 per cent in July 2008 but declined sharply to 1.3 per cent by February 2009. The recent decline in inflation in OECD countries was led by a decline in inflation of energy and food articles. Amongst major economies, headline inflation in the US declined to (-) 0.4 per cent in March 2009 from 5.6 per cent in July 2008. In the UK, inflation declined to 3.2 per cent in February 2009 from 5.2 per cent in September 2008. In the Euro area, inflation came down to 0.6 per cent in March 2009 from 4.0 per cent in July 2008 (Chart 38). Core inflation also moderated, though modestly in major economies. In OECD countries, inflation, excluding food and energy, came down to 1.9 per cent in February 2009 from 2.4 per cent in September 2008 (2.1 per cent at March 2008). Producer price index (PPI) inflation also moderated in both advanced and emerging market economies (EMEs). PPI inflation in the OECD countries, which firmed up from 6.3 per cent in March 2008 to 9.8 per cent in July 2008 declined sharply to (-)1.0 per cent in February 2009.

VI.4 According to the latest assessment of the US Federal Open Market Committee (FOMC) on March 18, 2009, in the light of

Chart 38: Consumer Price Inflation



* : Data for Japan exclude fresh food only.
Source: International Financial Statistics and official websites of respective countries.

increasing economic slackness in domestic and world economy, it was expected that inflation would remain subdued. Moreover, the Committee saw some risk that inflation rates could persist for a time below the levels that best foster economic growth and price stability in the longer term. However, the economy continued to contract. Furthermore, job losses, declining equity and housing wealth, and tight credit conditions weighed on consumer sentiment and spending. Against this backdrop, as the weak economic conditions warranted for exceptionally low levels of the federal funds rate (US policy rate), the FOMC kept the policy rate unchanged at a target range of 0.0-0.25 per cent since December 16, 2008. During 2008-09, the policy rate was reduced by a total of 200 basis points.

VI.5 According to the latest assessment of Monetary Policy Committee of the Bank of England, inflation is likely to fall below the 2 per cent target by the second half of 2009, reflecting diminishing contributions from retail energy and food prices and the impact of the temporary reduction in Value Added Tax. The committee viewed that there remains a substantial risk of undershooting the 2 per cent CPI inflation target in the medium-term and that a further easing in monetary policy was warranted. Accordingly, the policy rate was reduced by 50 basis points to 0.5 per cent on March 5, 2009, taking the cumulative reduction to 475 basis points during 2008-09 (Table 61).

VI.6 According to the Governing Council of the ECB, inflation rates have decreased significantly and are expected to remain well below 2 per cent over 2009 and 2010 reflecting ongoing sluggish demand in Euro area and other countries. Accordingly, the ECB reduced the policy rate by 25 basis points to 1.25 per cent, effective April 8, 2009. Earlier, the ECB had cut the policy rate thrice by a total of 275 basis points since October 2008 to 1.50 per cent after raising it by 25 basis points in July 2008 (Chart 39).

VI.7 The Bank of Japan (BoJ), in its latest assessment on April 7, 2009, assessed that economic conditions have deteriorated significantly in Japan and are likely to continue deteriorating for the time being. Meanwhile, CPI inflation (excluding fresh

Table 61: Global Inflation Indicators

(Per cent)

Country/ Region	Key Policy Rate	Policy Rate (As on April 16, 2009)	Changes in Policy Rates (basis points)		CPI Inflation (y-o-y)		PPI Inflation (y-o-y)		Real GDP Growth (y-o-y)	
			2007-08 (Apr-Mar)	Since end-March 2008	Mar. 2008	Mar. 2009	Feb. 2008	Feb. 2009	2007 (Q4)	2008 (Q4)
1	2	3	4	5	6	7	8	9	10	11
Developed Economies										
Australia	Cash Rate	3.00 (Apr.8, 2009)	100	(-) 425	3.0^	3.7^	2.8^	6.4^	3.9	0.3
Canada	Overnight Rate	0.50 (Mar. 3, 2009)	(-)75	(-) 300	1.8 *	1.4 *	-0.4	1.6	2.9	-0.7
Euro area	Interest Rate on Main Refinancing Operations	1.25 (Apr. 8, 2009)	25	(-) 275	3.6	0.6	5.3	-1.8	2.2	-1.3
Japan	Uncollateralised Overnight Call Rate	0.10 (Dec.19, 2008)	0	(-) 40	1.0*	-0.1*	3.6	-1.1	2.0	-4.3
UK	Official Bank Rate	0.50 (Mar. 5, 2009)	0	(-) 475	2.5*	3.2*	5.7	3.1	2.9	-2.0
US	Federal Funds Rate	0.00 to 0.25 (Dec.16, 2008)	(-)300	(-) 200	4.0	-0.4	6.4	-1.3	2.3	-0.8
Developing Economies										
Brazil	Selic Rate	11.25 (Mar. 12, 2009)	(-)150	0	4.7	5.6	10.6	7.4	6.2	1.3
India	Reverse Repo Rate	3.50 (Mar. 4, 2009)	0	(-) 250	5.5*	9.6*	7.7#	0.3#	8.9	5.3
	Repo Rate	5.00 (Mar. 4, 2009)	0 (150)	(-) 275 (-250)						
China	Benchmark 1-year Lending Rate	5.31 (Dec. 23, 2008)	108 (550)	(-) 216 (- 300)	8.7*	-1.6*	6.6	-4.5	11.2	6.8
Indonesia	Bank Indonesia Rate	7.50 (Apr.3, 2009)	(-) 100	(-) 50	6.3	7.9	23.8	7.9	6.3	5.2
Israel	Key Rate	0.50 (Apr.1, 2009)	(-) 25	(-) 325	3.7	3.6	10.7	-4.5	6.8	1.2
Korea	Base Rate**	2.00 (Feb 12, 2009)	50	(-) 300	3.9	3.9	6.6	5.2	5.5	-3.4
Philippines	Reverse Repo Rate	4.50 (Apr. 16, 2009)	(-) 250	(-) 50	6.4	6.4	-0.8	2.7	7.3	4.5
Russia	Refinancing Rate	13.00 (Dec.1, 2008)	(-) 25	275	13.3	14.0	25.7	-8.2	7.7	1.1
South Africa	Repo Rate	9.50 (Mar. 25, 2009)	200	(-) 150	9.8*	8.6*	11.3	7.3	4.6	1.0
Thailand	1-day Repurchase Rate	1.25 (Apr. 8, 2009)	(-) 125	(-) 200	5.3	-0.2	11.1#	-4.0#	5.7	-4.3

^ : Q4. *: February. # : March.

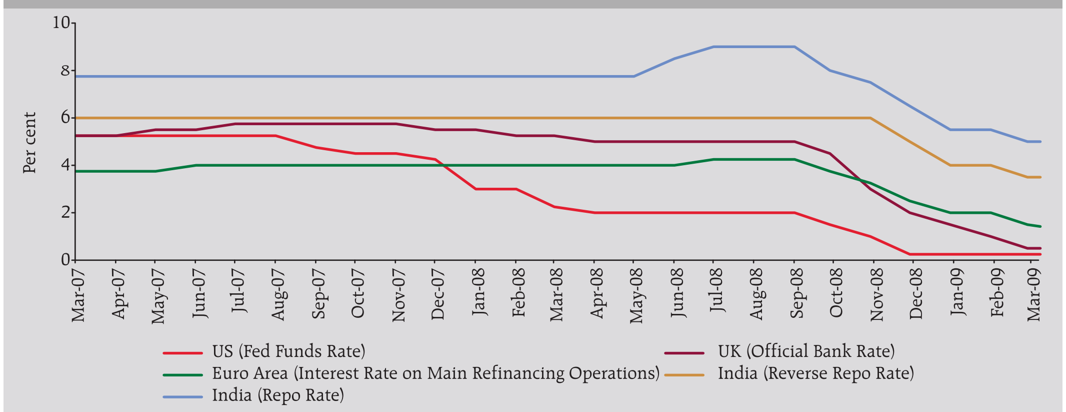
** : Since March 2008, the policy rate has been changed from overnight call rate to 'the Bank of Korea Rate or (Base Rate)' and fixed at the same level as the current call rate target of 5.0 per cent on March 7, 2008.

Note : 1. For India, data on inflation pertain to CPI for Industrial Workers.
2. Figures in parentheses in column (3) indicate the dates when the policy rates were last revised.
3. Figures in parentheses in columns (5) and (6) indicate the variation in the cash reserve ratios during the period.
4. Data for India and Indonesia pertains to WPI in columns (8) and (9).

Source: International Monetary Fund, websites of respective central banks and The Economist.

food) has recently moderated reflecting the decline in the prices of petroleum products and the stabilisation of food prices. Furthermore, with increasing slackness evident in supply and demand conditions, CPI inflation rates are likely to become negative. Accordingly, the BoJ reduced its policy rate by 20 basis points each on October 31, 2008 and December 19, 2008 to 0.1 per cent.

Chart 39: Central Bank Policy Rates

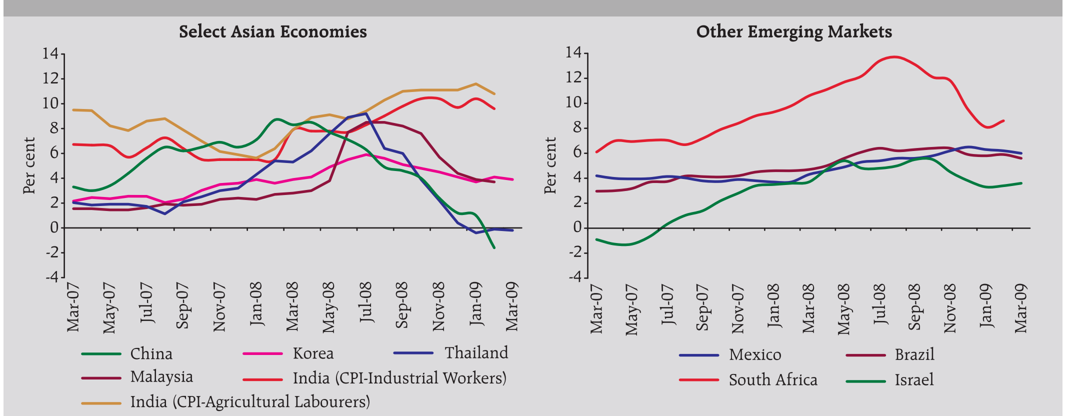


VI.8 The policy rates were also reduced by the Reserve Bank of Australia by a total of 400 basis points to 3.00 per cent; Bank of Canada by a total of 250 basis points 0.50 per cent; Sveriges Riksbank (Sweden) by 375 basis points to 1.0 per cent and Swiss National Bank by 275 basis points to 0.0-0.75 per cent since October 2008.

VI.9 Among the major emerging economies, consumer price inflation in China declined sharply from 8.3 per cent in March 2008 to a negative 1.6 per cent in February 2009 (Chart 40). The Peoples Bank of China (PBC) reduced the benchmark 1-year lending rate by a total of 216 basis points to 5.31 per cent and cash reserve ratio (CRR) by a total of 300 basis points (400 basis points for small and medium-sized depository financial institutions) since September 2008 to facilitate continued, stable and fast development of the national economy.

VI.10 The Bank of Korea reduced its policy rate by a total of 325 basis points since October 2008 to 2.0 per cent. In Thailand, the monetary policy committee (MPC)

Chart 40: Consumer Price Inflation – Emerging Market Economies



viewed that risks to economic growth increased while inflation was expected to decline further. It has reduced the policy rate by a total of 250 basis points since December 2008 to 1.25 per cent. The Bank Indonesia reduced its policy rate by a total of 200 basis points since December 2008 to 7.50 per cent to reinforce the domestic economy, macroeconomic stability and financial system.

VI.11 Amongst the key macroeconomic indicators in select EMEs, consumer price inflation was in the range of (-)1.6 per cent to 14.0 per cent in February/March 2009. Real policy rates ranged between (-)4.6 and 6.9 per cent in March 2009 (Table 62). The real effective exchange rate (REER) for the select EMEs, barring the currency of China, underwent real depreciation, on a year-on-year basis, in March 2009.

Global Commodity Prices

VI.12 During 2008-09, international commodity prices recorded very high level

Table 62: Key Macroeconomic Indicators: Emerging Markets

(Per cent)

Country	Consumer Price Inflation		Real Effective Exchange Rate (REER)		Central Govt. Fiscal Balance (per cent of GDP)		Real Policy Rate		Real GDP Growth	
	Mar. 2008	Mar. 2009	Mar. 2008	Mar. 2009	2007	2008	Mar. 2008	Mar. 2009	2007	2008
1	2	3	4	5	6	7	8	9	10	11
Brazil	4.7	5.6	12.9	-14.0	-2.3	-1.5	6.6	5.7	5.7	5.8
China	8.7 *	-1.6 *	4.7	14.5	1.0	0.8	-0.8	6.9	13.0	9.0
India	**5.5 * (7.7)**	**9.6 * (0.3)**	5.0	-11.5	**-2.7 (60.1)**	**-6.0 @ (57.8)**	**-0.2 (0.0)**	**-4.6 (4.7)**	**9.0**	**7.1**
Indonesia	6.3	7.9	-6.2	-9.7	-1.6	-1.1	1.7	-0.2	6.3	6.1
Israel	3.7	3.6	9.0	-2.2	-0.8	-1.9	0.0	-2.9	5.4	4.3
Korea	3.9	3.9	-13.7	-24.9	-1.5	-1.1	1.1	-1.9	5.0	4.1
Philippines	6.4	6.4	10.0	-1.6	-0.2	-1.0	-1.4	-1.7	7.2	4.4
Russia	13.3	14.0	5.5	-9.8	6.2	6.1	-3.1	-1.0	8.1	6.2
South Africa	9.8 *	8.6 *	-12.1	-1.1	2.0 **	2.8 **	0.4	1.9	5.1	3.1
Thailand	5.3	-0.2	2.4	-4.8	-1.7	-1.8	-2.1	1.7	4.8	4.7

* : February. @ : Revised estimates. ** : Africa.

Note:
1. For India, data pertain to fiscal years 2007-08 and 2008-09.
2. Consumer price inflation data are on a year-on-year basis. Data for India are for CPI-Industrial Workers.
3. Real policy rate is the policy rate less year-on-year consumer price inflation. For India, repo rate is used.
4. Figures in parentheses in columns (2) and (3) refer to wholesale price inflation.
5. Data on fiscal balance for Israel pertain to general government balance.
6. Figures in parentheses in columns (6) and (7) refer to central government debt/GDP ratio.
7. Figures in parentheses in columns (8) and (9) for India are based on wholesale price inflation.
8. Data on REER refer to year-on-year variation in broad indices (CPI-based) compiled by the Bank for International Settlements. A positive figure indicates appreciation while a negative figure indicates depreciation. For India, data are based on movements in 6-currency indices and pertain to February.

Source: International Monetary Fund; Asian Development Bank; Bank for International Settlements; World Bank, The Economist and official websites of respective central banks.

Table 63: International Commodity Prices

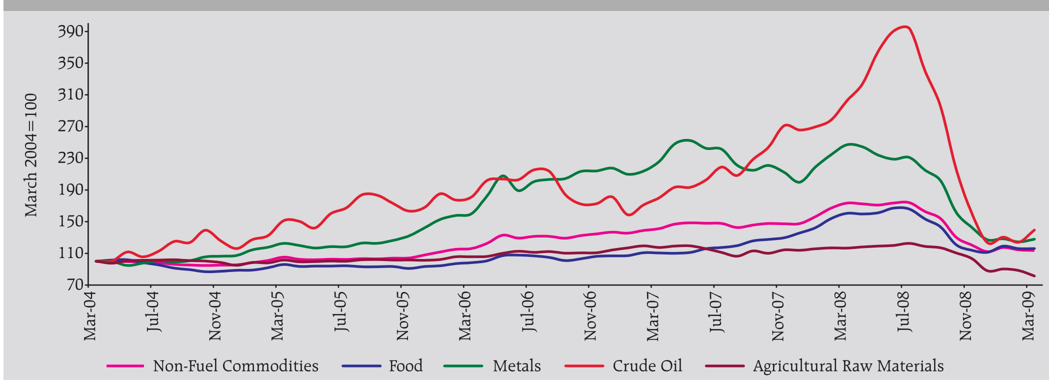
Commodity	Unit	2004 Market Price	Index (2004=100)								Variation (Per cent)	
			2005	2006	2007	Mar. 2008	Jun. 2008	Sep. 2008	Dec. 2008	Mar. 2009	Mar. 09/ Mar. 08	Mar. 09/ Jul. 08
1	2	3	4	5	6	7	8	9	10	11	12	13
Energy												
Coal	$/mt	53.0	90	93	124	223	302	283	149	115	-48.4	-66.1
Crude oil (Average)	$/bbl	37.7	142	170	188	270	349	264	110	124	-54.2	-64.9
Non-Energy Commodities												
Palm oil	$/mt	471.3	90	101	165	265	257	164	107	127	-52.2	-47.1
Soybean oil	$/mt	616.0	88	97	143	240	250	199	120	118	-50.9	-52.0
Soybeans	$/mt	306.5	90	88	125	188	203	166	117	123	-34.3	-40.4
Rice	$/mt	237.7	120	128	137	250	318	288	224	247	-1.0	-19.6
Wheat	$/mt	156.9	97	122	163	280	222	188	140	147	-47.5	-29.6
Maize	$/mt	111.8	88	109	146	210	257	209	142	147	-29.8	-38.0
Sugar	c/kg	15.8	138	206	141	184	169	189	164	187	1.5	-5.8
Cotton A Index	c/kg	136.6	89	93	102	129	124	119	90	83	-35.8	-33.4
Aluminium	$/mt	1716.0	111	150	154	175	172	147	87	78	-55.5	-56.5
Copper	$/mt	2866.0	128	235	248	294	288	244	107	131	-55.6	-55.4
Gold	$/toz	409.2	109	148	170	237	217	203	199	226	-4.6	-1.6
Silver	c/toz	669.0	110	173	200	287	255	182	154	196	-31.8	-27.4
Steel cold-rolled coilsheet	$/mt	607.1	121	114	107	132	181	181	181	148	12.5	-18.2
Steel hot-rolled coilsheet	$/mt	502.5	126	119	109	149	199	199	199	159	6.7	-20.0
Tin	c/kg	851.3	87	103	171	233	261	216	132	125	-46.1	-53.9
Zinc	c/kg	104.8	132	313	309	240	181	166	105	116	-51.5	-34.3

$: US dollar. c: US cent. bbl: barrel. mt: metric tonne. kg: Kilogram. toz: troy oz.

Source: Based on World Bank's actual commodity price data. The year 2004 has been taken as the base to better exhibit price trends over the relevant period.

of volatility. International commodity prices witnessed sharp increases up to July 2008 on account of substantial increases in oil, food and metal prices but declined significantly thereafter. The decline in global commodity prices have been led by sharp fall in price of crude oil, metals as well as agricultural commodities. The global commodity prices have, however, remained broadly stable since December 2008 (Table 63 and Chart 41).

Chart 41: International Commodity Prices



Source: International Monetary Fund.

VI.13 International crude oil prices, represented by the West Texas Intermediate (WTI), increased sharply and reached a historical peak of US $ 145.3 per barrel on July 3, 2008, reflecting tight supply-demand balance, geopolitical tensions, weakening of the US dollar against major currencies and increased interest from investors and financial market participants. Subsequently, the WTI crude oil prices declined precipitously to US $ 39.2 per barrel in February 2009, reflecting falling demand in the Organisation for Economic Co-operation and Development (OECD) countries as well as some developing countries, notably in Asia, following the economic slowdown (Table 64). Subsequently, WTI crude oil prices firmed up to US$ 50.0 per barrel on April 16, 2009.

VI.14 The latest meeting of OPEC on March 15, 2009 projected a decline in world demand for oil by 1 million barrel per day during 2009, indicating that the prices would remain stable at the current level. According to the US Energy Information Administration (EIA), sustainability of recent increase in world oil prices will largely depend upon the timing and pace of the recovery of the global economy. If global economic recovery begins earlier and is stronger, there is an upside risk of even higher oil prices from the current level. Assuming no major crude oil supply disruptions, average WTI prices are expected to be US$ 52.6 per barrel in 2009, which is 47 per cent lower than the average price for the year 2008 (US$ 99.6 per barrel). In view of the relatively tight demand supply-balance over the long run, the long-term outlook for oil, however, remains highly uncertain (Table 65).

VI.15 Iron and steel prices increased sharply up to August 2008, reflecting increasing demand from emerging economies, especially China. Between March and August 2008, the World Bank steel price product index increased by 37 per cent. International steel prices, however, declined by about 25 per cent since August 2008 as

Table 64: International Crude Oil Prices

(US dollars per barrel)

Year/Month	Dubai Crude	UK Brent	US WTI	Average Crude Price	Indian Basket Price
1	2	3	4	5	6
2004-05	36.4	42.2	45.0	41.3	38.9
2005-06	53.4	58.0	59.9	57.1	55.4
2006-07	60.9	64.4	64.7	63.3	62.4
2007-08	77.3	82.4	82.3	80.7	79.2
March 2008	96.8	103.3	105.5	101.8	99.4
June 2008	127.6	133.1	133.9	131.5	129.8
July 2008	131.2	133.9	133.4	132.8	132.3
August 2008	113.2	113.9	116.6	114.6	113.5
September 2008	96.0	99.1	103.9	99.7	97.1
December 2008	41.0	41.6	41.4	41.3	41.2
January 2009	45.0	44.9	41.7	43.9	44.9
February 2009	43.1	43.2	39.2	41.8	43.2
March 2009	45.6	46.8	47.5	46.6	46.1

Source : International Monetary Fund and the World Bank.

Table 65: World Supply-Demand Balance of Oil

(Million barrels per day)

Item	2007	2008	2009 (P)	2009			
				Q1	Q2(P)	Q3(P)	Q4(P)
1	2	3	4	5	6	7	8
Demand							
1. OECD	49.1	47.3	45.7	46.4	44.7	45.2	46.7
2. Non-OECD	36.8	38.1	38.4	37.3	38.4	38.6	39.1
of which: China	7.6	7.9	8.0	7.5	8.0	8.2	8.4
3. Total (1+2)	85.9	85.4	84.1	83.7	83.1	83.8	85.8
Supply							
4. OPEC	34.4	35.7	33.7	33.0	33.4	33.8	34.4
5. Non-OPEC	50.0	49.8	49.8	49.6	49.9	49.8	49.8
6. Total (4+5)	84.4	85.5	83.4	82.6	83.3	83.6	84.1
Stock Changes	-1.5	0.1	-0.7	-1.0	0.2	-0.2	-1.7

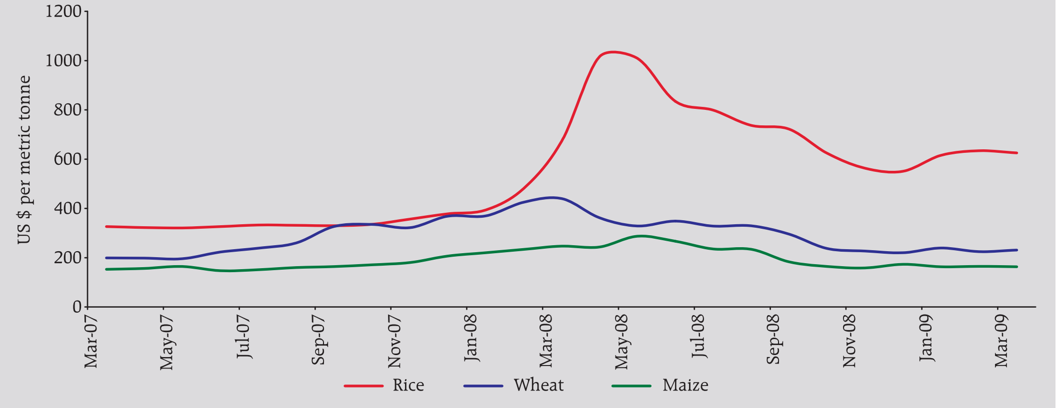
P: Projections.
Source: US Energy Information Administration.

global economic downturn has led to lower prospects for construction activity and investment in capital equipment. Non-ferrous metal prices eased in 2008-09, reflecting weak demand in OECD countries and some improvement in supply. The IMF metals price index (which includes copper, aluminum, iron ore, tin, nickel, zinc, lead, and uranium price indices) declined by 48.2 per cent year-on-year, in March 2009.

VI.16 Food prices continued to increase sharply in the first quarter of 2008-09 led by rice, maize and oilseeds/edible oils prices, reflecting surging demand (both consumption demand and demand for non-food uses such as bio-fuels production) and low stocks of major crops. Food prices, however, eased significantly since the second quarter of the year on the back of improved supply prospects, particularly for oilseeds and grains in major producing countries. The World Bank's food price index declined by about 32 per cent year-on-year by March 2009, led by edible oils, rice, maize and wheat (Chart 42). According to the March 2009 projections of US Department of Agriculture, global wheat and rice production are projected to increase by about 12 per cent and 2 per cent, respectively, during 2008-09 crop season to 682 million metric tonnes and 441 million metric tonnes. Similarly, global supplies of oilseeds are also expected to increase by about 3 per cent during 2008-09 crop season. However, according to the Food and Agriculture Organisation (FAO), early indications for the year 2009 point to a reduction in cereal output.

VI.17 International sugar prices have remained volatile during 2008-09 and the price level in February 2009 was almost the same as at end-March 2008. Since December 2008, international sugar prices rose by 14 per cent on expectations that India will become a net importer due to downward revision in its crop size and expectations of lower crops in the EU, US, China and Australia. Global cotton prices, have also been volatile during August 2008. World cotton prices (represented by the 'Cotton A Index') have declined by 34 per cent since August 2008. However, according to the

Chart 42: International prices of Rice, Wheat and Maize



International Cotton Advisory Committee (ICAC), world cotton production is expected to decline for the third consecutive season during 2009-10 and prices are projected to increase by 5 per cent.

Inflation Conditions in India

VI.18 The Annual Policy Statement for 2008-09 (April 2008) of the Reserve Bank was announced in the background of elevated inflation levels, and the Policy Statement reaffirmed its resolve to bring down inflation to around 5.5 per cent in 2008-09 with a preference for bringing it close to 5.0 per cent as soon as possible, recognising the evolving complexities in globally transmitted inflation. As the potential inflationary pressures from international food and energy prices had amplified, the policy focused on conditioning perceptions for inflation in the range of 4.0-4.5 per cent so that an inflation rate of around 3.0 per cent became a medium-term objective consistent with India's broader integration into the global economy and with the goal of maintaining self-accelerating growth over the medium-term.

VI.19 Inflation hardened during the first quarter of 2008-09 on account of strong demand and significant international commodity price pressures. Therefore, it was recognised that an adjustment of overall aggregate demand on an economy-wide basis was warranted to ensure that generalised instability did not develop and erode the hard-earned gains in terms of both outcomes of and positive sentiments on India's growth momentum. The priority for monetary policy was identified to be eschewing any further intensification of inflationary pressures and to firmly anchor inflation expectations. Accordingly, the Reserve Bank increased the CRR by a total of 100 basis points between May and July 2008 to 8.75 per cent. Furthermore, the repo rate under the LAF was increased by a total of 75 basis points to 8.50 per cent in June 2008. The First Quarter Review of the Annual Statement on Monetary Policy for 2008-09 expected that inflation would moderate from then prevailing high levels in the months to come. In view of the prevailing macroeconomic, liquidity and overall monetary conditions, the First

Quarter Review announced an increase in the fixed repo rate under the LAF by 50 basis points from 8.5 per cent to 9.0 per cent with effect from July 30, 2008 and an increase in the CRR by 25 basis points to 9.0 per cent with effect from August 30, 2008 (Table 66).

Table 66: Movements in Key Policy Rates in India

(Per cent)

Effective since	Reverse Repo Rate	Repo Rate	Cash Reserve Ratio	WPI Inflation	CPI (IW) Inflation
1	2	3	4	5	6
June 9, 2006	5.75 (+0.25)	6.75 (+0.25)	5.00	4.9	7.7
July 25, 2006	6.00 (+0.25)	7.00 (+0.25)	5.00	4.7	6.7
October 31, 2006	6.00	7.25 (+0.25)	5.00	5.4	7.3
December 23, 2006	6.00	7.25	5.25 (+0.25)	5.8	6.9
January 6, 2007	6.00	7.25	5.50 (+0.25)	6.4	6.7
January 31, 2007	6.00	7.50 (+0.25)	5.50	6.7	6.7
February 17, 2007	6.00	7.50	5.75 (+0.25)	6.0	7.6
March 3, 2007	6.00	7.50	6.00 (+0.25)	6.5	6.7
March 31, 2007	6.00	7.75 (+0.25)	6.00	5.9	6.7
April 14, 2007	6.00	7.75	6.25 (+0.25)	6.3	6.7
April 28, 2007	6.00	7.75	6.50 (+0.25)	6.0	6.7
August 4, 2007	6.00	7.75	7.00 (+0.50)	4.4	7.3
November 10, 2007	6.00	7.75	7.50 (+0.50)	3.2	5.5
April 26, 2008	6.00	7.75	7.75 (+0.25)	8.3	7.8
May 10,2008	6.00	7.75	8.00 (+0.25)	8.6	7.8
May 24,2008	6.00	7.75	8.25 (+0.25)	8.9	7.8
June 12, 2008	6.00	8.00 (+0.25)	8.25	11.7	7.7
June 25, 2008	6.00	8.50 (+0.50)	8.25	11.9	7.7
July 5, 2008	6.00	8.50	8.50 (+0.25)	12.2	8.3
July 19, 2008	6.00	8.50	8.75 (+0.25)	12.5	8.3
July 30, 2008	6.00	9.00 (+0.50)	8.75	12.5	8.3
August 30, 2008	6.00	9.00	9.00 (+0.25)	12.4	9.0
October 11, 2008	6.00	9.00	6.50 (–2.50)	11.3	10.4
October 20, 2008	6.00	8.00 (–1.00)	6.50	10.8	10.4
October 25, 2008	6.00	8.00	6.00 (–0.50)	10.7	10.4
November 3, 2008	6.00	7.50 (–0.50)	6.00	8.7	10.4
November 8, 2008	6.00	7.50	5.50 (–0.50)	8.7	10.4
December 8, 2008	5.00 (–1.00)	6.50 (–1.00)	5.50	6.6	9.7
January 5, 2009	4.00 (–1.00)	5.50 (–1.00)	5.50	5.3	10.4
January 17, 2009	4.00	5.50	5.00 (–0.50)	4.9	10.4
March 4, 2009	3.50 (-0.50)	5.00 (-0.50)	5.00	2.4	–

Note: 1. With effect from October 29, 2004, the nomenclature of repo and reverse repo was changed in keeping with international usage. Now, reverse repo indicates absorption of liquidity and repo signifies injection of liquidity. Prior to October 29, 2004, repo indicated absorption of liquidity, while reverse repo meant injection of liquidity.
2. Figures in parentheses indicate change in policy rates.

VI.20 WPI inflation started to decline since August 2008, mainly on account of decline in prices of freely priced petroleum products, edible oils and textiles. The Mid-Term Review of Annual Policy for the Year 2008-09 observed that in the absence of further shocks, generalised inflation could not be sustained, especially with money supply contained at the average rate of 2003-08, a period when inflation was low and stable. The Review also noted that the effect of softening international commodity prices on inflation in India could be muted just as the elevation of international commodity prices was not fully passed on to domestic prices. The challenge for the setting of monetary policy was identified to be balancing the costs of lowering inflation in terms of output volatility (particularly in the context of the moderation in industrial and services sector activity) against the risk of then prevailing levels of inflation persisting and getting embedded in inflation expectations. The review highlighted the importance of remaining focused on bringing inflation down to levels that are compatible with a strong but stable momentum of growth in the economy and financial stability while recognising that there existed high level of uncertainty with this judgment.

VI.21 Since September 2008, the Reserve Bank adjusted its policy stance from demand management to arresting the moderation in growth, as India's growth trajectory has been impacted both by the financial crisis and the global economic downturn. Accordingly, between September 2008 and January 2009, the Reserve Bank reduced the repo rate under the LAF from 9.0 per cent to 5.5 per cent, the reverse repo rate under the LAF from 6.0 per cent to 4.0 per cent and the CRR from 9.0 per cent to 5.0 per cent. The aim of these measures was to augment domestic liquidity and to ensure that credit continues to flow to productive sectors of the economy. The Third Quarter Review of the Annual Statement on Monetary Policy for 2008-09 assessed that the inflation rate was expected to moderate further in the last quarter of 2008-09. Keeping in view the global trend in commodity prices and the domestic demand-supply balance, WPI inflation was projected to decelerate to below 3.0 per cent by end-March 2009 from then prevailing level of 5.6 per cent. The review also noted that the consumer price inflation was yet to moderate and the decline in inflation expectations had not been commensurate with the sharp fall in WPI inflation. It recognised that the headline WPI inflation could fall below 3 per cent in the short-run partly because of statistical reason of high base since early 2008 mainly caused by exceptionally high global oil and commodity prices. It affirmed that with the policy endeavour of ensuring price stability with well-anchored inflation expectations, the Reserve Bank would take into account the behaviour of all the price indices and their components.

VI.22 As the global financial and economic conditions further deteriorated since the Third Quarter Review and the impact on India's growth trajectory has turned out to be deeper and wider than anticipated earlier, the Reserve Bank further announced monetary stimulus measures in terms of reduction in the repo rate under the LAF from 5.5 per cent to 5.0 per cent, the reverse repo rate under the LAF from 4.0 per cent to 3.5 per cent on March 4, 2009.

Wholesale Price Inflation

VI.23 During 2008-09, inflation in India, based on the wholesale price index (WPI) firmed up to an intra-year peak of 12.9 per cent on August 2, 2008 from 7.7 per cent at end-March 2008. The increase in inflation during March-August 2008 was mainly on account of some pass-through of high international crude oil prices to domestic prices as well as elevated levels of prices of iron and steel, basic heavy inorganic chemicals, machinery and machine tools, oilseeds/oil cakes, raw cotton and textiles. The increase in inflation during this period reflected strong demand pressures as well as international commodity price pressures.

VI.24 WPI inflation exhibited strong downward trend since August 2008 and reached 0.3 per cent as on March 28, 2009. Between August 2, 2008 and March 28, 2009, WPI declined by 5.8 per cent driven by the reduction in the administered prices of petroleum products and electricity as well as decline in prices of freely priced minerals oil items, iron and steel, oilseeds, edible oils, oil cakes and raw cotton (Table 67). Significant part of the end year reduction in WPI inflation could also be attributed to the base effect reflecting the rapid increase in inflation recorded during the last quarter of 2007-08.

VI.25 The inflation momentum, as indicated by the movement of the annualised month-over-month (M-o-M) seasonally adjusted WPI inflation, was declining since June 2008 and entered negative territory in September 2008 itself. Thereafter, it maintained a strong and

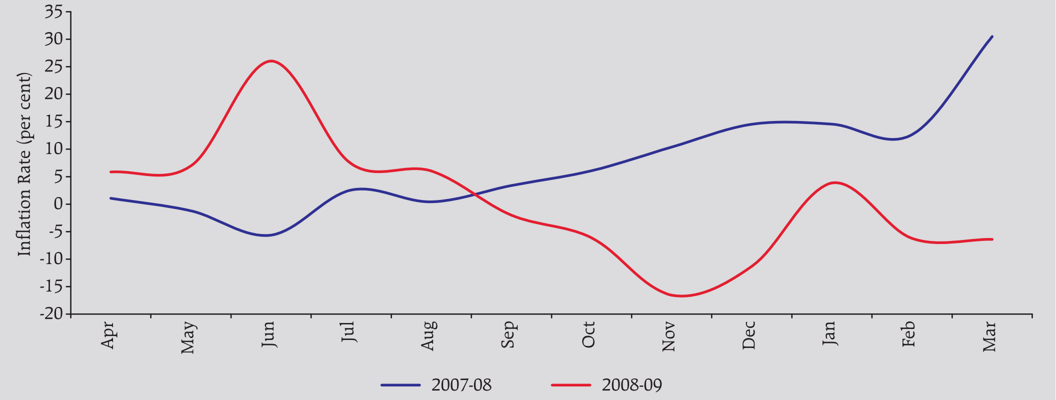
Table 67: Key Commodity Prices – Global *vis-à-vis* Domestic (year-on-year)

(Per cent)

Item	Annual Inflation		Recent trends	
	Global	India	Global	India
	Mar. 2009 over Mar. 2008	Inflation*	Mar. 2009 over July 2008	Mar.28, 2009 over Aug. 2, 2008
1	2	3	4	5
1. Rice	-1.0	12.8	-19.6	11.4
2. Wheat	-47.5	5.2	-29.6	2.8
3. Milk	..	6.1	..	3.9
4. Raw Cotton	-35.8	2.5	-33.4	-17.6
5. Oilseeds	-34.3	-2.3	-40.4	-8.7
6. Iron Ore	0.0	-16.8	0.0	-17.1
7. Coal mining	-48.4	-1.0	-66.1	-1.0
8. Minerals Oil	-54.2	-8.7	-64.9	-23.3
9. Edible Oils	-(51-52)	-10.2	-(47-52)	-11.5
10. Oil Cakes	-22.6	19.4	-32.5	-0.3
11. Basic Heavy Inorganic Chemicals	..	-13.7	..	-20.9
12. Basic Metals, Alloys and Products	-48.2#	-12.2	-44.6#	-14.7
- Iron and Steel	2.7	-18.4	-23.5	-20.6

***** : Based on WPI as on March 28, 2009.
# : Represented by IMF metals price index, which covers copper, aluminium, iron ore, tin, nickel, zinc, lead and uranium.
Note: 1. Global price increases are based on the World Bank and IMF primary commodity prices data.
2. International edible oils prices are represented by palm oil and soybean oil.

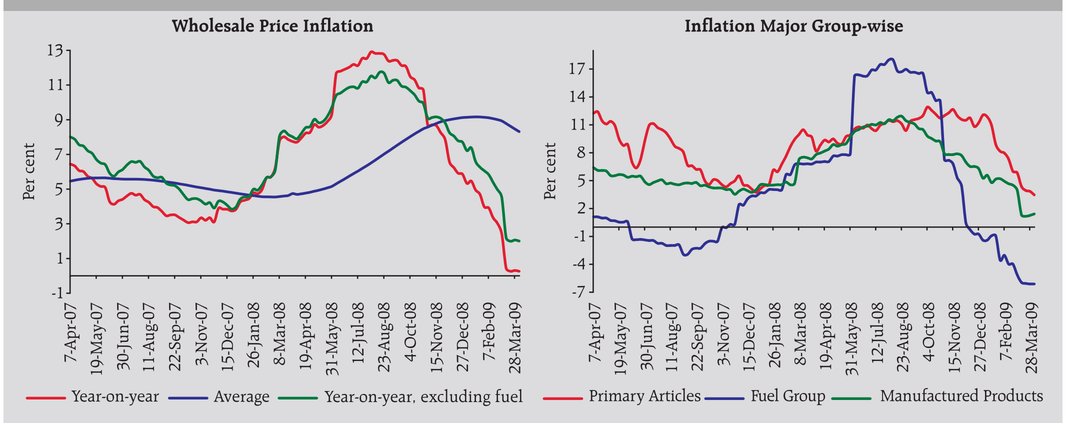
Chart 43: Annualised M-o-M seasonally adjusted inflation of WPI-All Commodities



secular disinflationary momentum till November 2008 and was reversed in January 2009. According to the latest data available, annualised WPI (seasonally adjusted) inflation for the month ended March 2009 remains in the negative territory (Chart 43). It may be noted that though M-o-M seasonally adjusted inflation is a useful indicator of inflationary conditions, it tends to be volatile.

VI.26 At a disaggregated level, the y-o-y inflation, excluding fuel, was at 2.0 per cent as on March 28, 2009 as compared with 8.0 per cent a year ago. It can be observed that during the period June-October 2008, when WPI inflation was at substantially high levels, overall inflation was higher than the WPI excluding fuel inflation. Since October 2008 the overall inflation has been lower than the inflation excluding fuel with some convergence being observed in recent months (Chart 44). The annual average WPI inflation rate (average of 52 weeks) increased to 8.3 per cent as on March 28, 2009 from 5.7 per cent at end-June 2008 and 4.7 per cent at end-March 2008.

Chart 44: Annual WPI Inflation



VI.27 Amongst major groups, primary articles inflation, y-o-y, increased from 9.7 per cent at end-March 2008 to a peak of 12.7 per cent on November 15, 2008. This mainly reflected increase in the prices of food articles as well as non-food articles. The volatility in prices of food articles was of substantially lower magnitude in contrast with sharp increase in international prices of food during the first half of 2008. The y-o-y increase in primary food articles' prices was 6.4 per cent in July 2008 as against 41.2 per cent increase in IMF food price index during the same period. This could be attributed to the various supply-side measures undertaken by the Government as well as improved domestic supply prospects. Some of the non-food articles such as oilseeds and raw cotton also witnessed increase in prices during this period largely on account of elevated global prices. Raw cotton prices increased by 24 per cent between March and September 2008 reflecting estimated lower domestic production (down by 14.3 per cent as per the Second Advance Estimates for 2008-09) as well as higher exports on the back of firm international prices.

VI.28 Primary articles inflation, however, eased substantially since January 2009 and reached 3.5 per cent as on March 28, 2009 as prices declined in the case of food articles, especially vegetables and fruits and non-food articles like raw cotton, oilseeds and minerals. While the decline in prices of food articles partly reflected the improved *rabi* crops during 2008-09 as well as seasonal pattern, the decline in non-food primary articles prices was largely driven by decline in international prices of cotton, oilseeds and minerals. Despite some recent easing, rice and pulses prices continue to be at elevated levels.

VI.29 As international crude oil prices shot up during the first half of 2008-09, fuel group inflation, increased to an intra-year peak of 18.0 per cent on August 2, 2008 from 6.8 per cent at end-March 2008. This was driven by increase in the prices of mineral oils reflecting the effect of the hikes in the prices of petrol (Rs.5 per litre), diesel (Rs.3 per litre) and LPG (Rs.50 per cylinder) on June 4, 2008 as well as increase in the prices of freely priced petroleum products.

VI.30 International crude oil prices started to decline since July 2008, and domestic prices of freely priced petroleum products followed the trends in international prices and declined substantially. Among the various freely priced petroleum products, prices declined by about 66 per cent in case of aviation turbine fuel (beginning the first week of September 2008), about 55 per cent in case of naphtha (beginning the first week of August 2008), about 53 per cent in case of furnace oil (beginning mid-August 2008), about 41 per cent in the case of light diesel oil (beginning the first week of December 2008) and about 32 per cent in the case of bitumen (beginning mid-November 2008) as on March 28, 2009. The monthly average Indian basket price for crude oil came down from US $ 132.3 per barrel in July 2008 to US $ 41.2 per barrel in December 2008. Against this backdrop, the Government cut the price of petrol by Rs.5 per litre and diesel by Rs.2 per litre effective December 6, 2008. As the international crude oil prices continued to remain around US $ 40 per barrel the Government again cut the price of petrol by Rs.5 per litre, diesel by Rs.2 per litre and LPG for domestic use by Rs.25 per cylinder effective January 29, 2009. Consequently, the fuel group inflation turned negative (-6.1 per cent) as on March 28, 2009.

VI.31 Manufactured products inflation, year-on-year, increased to a peak of 11.9 per cent in mid-August 2008 from 7.3 per cent at end-March 2008 (Table 68). This was mainly driven by sharp increase in prices of iron and steel, sugar, edible oils/oil cakes,

Table 68: Wholesale Price Inflation in India (year-on-year)

(Per cent)

Commodity	Weight	2007-08 (March 29)		2008-09 P (March 28)	
		Inflation	WC	Inflation	WC
1	2	3	4	5	6
All Commodities	**100.0**	**7.7**	**100.0**	**0.3**	**100.0**
1. Primary Articles	**22.0**	**9.7**	**28.2**	**3.5**	**301.0**
Food Articles	15.4	6.5	13.2	6.3	369.7
i. Rice	2.4	9.1	2.5	12.8	104.9
ii. Wheat	1.4	5.1	1.0	5.2	28.1
iii. Pulses	0.6	-1.9	-0.2	8.3	20.7
iv. Vegetables	1.5	14.2	2.3	-4.0	-20.2
v. Fruits	1.5	4.1	1.0	8.1	53.7
vi. Milk	4.4	8.7	4.7	6.1	97.5
vii. Eggs, Fish and Meat	2.2	2.4	0.8	3.1	27.2
Non-Food Articles	6.1	11.4	8.8	-0.1	-2.0
i. Raw Cotton	1.4	14.0	2.0	2.5	11.1
ii. Oilseeds	2.7	20.3	6.7	-2.3	-24.4
iii. Sugarcane	1.3	-0.4	-0.1	0.0	0.0
Minerals	0.5	49.9	6.2	-12.8	-65.4
2. Fuel, Power, Light and Lubricants	**14.2**	**6.8**	**18.9**	**-6.1**	**-495.5**
i. Minerals Oil	7.0	9.3	15.1	-8.7	-422.9
ii. Electricity	5.5	1.5	1.4	-2.6	-66.7
iii. Coal Mining	1.8	9.8	2.5	-1.0	-7.6
3. Manufactured Products	**63.8**	**7.3**	**52.8**	**1.4**	**297.3**
i. Food Products	11.5	9.4	12.4	7.5	294.2
of which: Sugar	3.6	1.1	0.4	17.6	159.8
Edible Oils	2.8	20.0	5.5	-10.2	-91.8
ii. Cotton Textiles	4.2	-6.8	-2.8	16.7	174.9
iii. Man-made Fibres	4.4	2.8	0.7	-2.0	-14.0
iv. Chemicals and Products	11.9	6.0	8.7	1.5	61.6
of which : Fertilisers	3.7	5.1	2.0	5.2	60.3
v. Basic Metals, Alloys and Metal Products	8.3	20.3	25.2	-12.2	-496.3
of which: Iron and Steel	3.6	34.2	20.1	-18.4	-394.0
vi. Non-metallic Mineral Products	2.5	6.4	2.0	1.9	17.2
of which: Cement	1.7	5.1	1.1	2.2	13.8
vii. Machinery and Machine Tools	8.4	3.5	2.9	2.7	64.1
of which: Electrical Machinery	5.0	4.8	2.0	1.2	15.0
viii. Transport Equipment and Parts	4.3	3.9	1.7	3.4	41.5
Memo:					
Food Items (Composite)	**26.9**	**7.7**	**25.6**	**6.8**	**663.9**
WPI Excluding Food	**73.1**	**7.8**	**74.4**	**-2.0**	**-563.9**
WPI Excluding Fuel	**85.8**	**8.0**	**81.1**	**2.0**	**595.5**

WC: Weighted Contribution. P: Provisional.

textiles, chemicals, and machinery and machine tools. Since September 2008, manufactured products inflation declined substantially and reached 1.4 per cent as on March 28, 2009.

VI.32 The sharp increase in domestic edible oils and oil cake prices up to August 2008 reflected surge in demand, lower domestic *rabi* oilseeds production during 2007-08 as well as sharp increase in international prices. Thereafter, oilseeds and edible oils prices declined reflecting the effect of fiscal measures as well as easing international prices on the back of projected increase in global production (Chart 45). However, according to the Second Advance Estimates for 2008-09, domestic oilseeds crop is expected to be down by 12.8 per cent. Moreover, the Government has imposed 20 per cent customs duty on import of crude soybean oil to safeguard the interest of domestic producers on November 18, 2008. Reflecting the recent decline in raw cotton prices, cotton textile prices in India also declined since August 2008.

VI.33 Domestic iron and steel prices inflation had reached 36 per cent, y-o-y, by end-August 2008 reflecting sharp increases in global prices. Since then, iron and steel prices have shown a decline and y-o-y change has turned negative (-18.4 per cent as on March 28, 2009) (Chart 46). This decline in domestic iron and steel prices could be attributed to declining global prices, expected deceleration in demand, both domestic and external, as well as various fiscal measures in the form of reductions in customs duties and imposition of export duties on various steel items announced by the Government since April 2008.

VI.34 Overall, during 2008-09 the movement of WPI inflation was largely driven by fuel group and manufactured products group. Since September 2008, the contribution of fuel group to WPI inflation has been declining sharply and entered negative territory by December 2008, leading to faster decline in overall inflation (Chart 47).

VI.35 As per the latest information available, WPI inflation further declined to 0.2 per cent as on April 4, 2009 from 0.3 per cent at end-March 2009.

Chart 45: Edible Oils Inflation

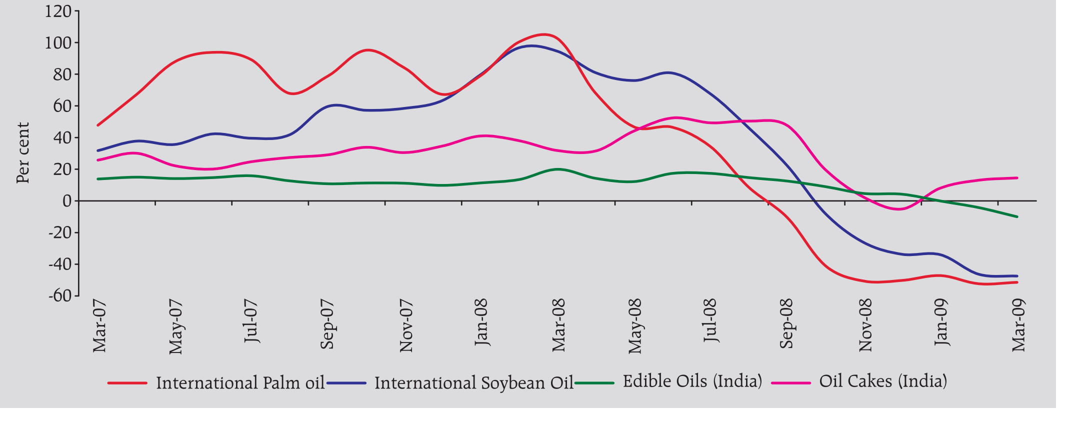
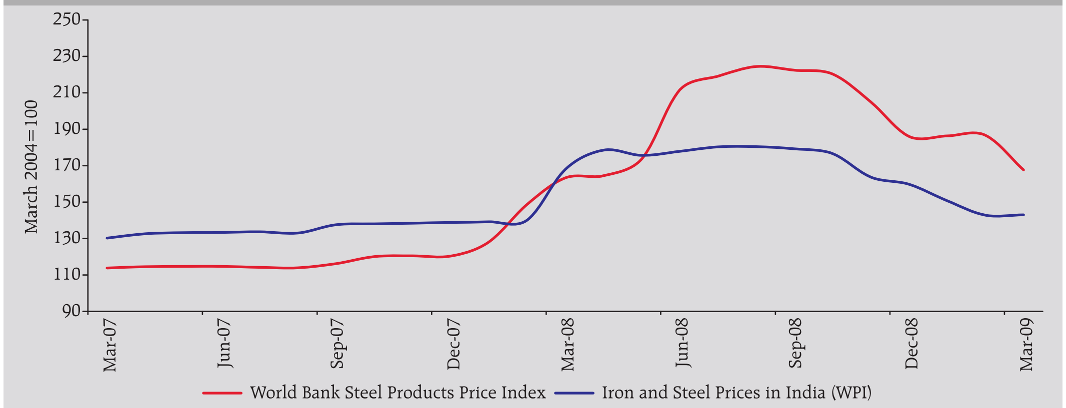


Chart 46: Iron and Steel Prices



Consumer Price Inflation

VI.36 Inflation, based on y-o-y variation in consumer price indices (CPIs), increased since June 2008 mainly due to increase in the prices of food, fuel and services (represented by the 'miscellaneous' group). Various measures of consumer price inflation, though started declining, still remained high in the range of 9.6-10.8 per cent during January/February 2009 as compared with 7.3-8.8 per cent in June 2008 and 5.2-6.4 per cent in February 2008 (Table 69). The higher level of consumer price inflation as compared to WPI inflation in recent months could be attributed to higher prices of food articles which have higher weight in CPIs.

Asset Prices

VI.37 Domestic equity prices underwent sharp corrections during 2008-09 in consonance with trends in major international financial markets, which plunged in the wake of deepening turmoil

Chart 47: Contribution of Major Groups to WPI Inflation

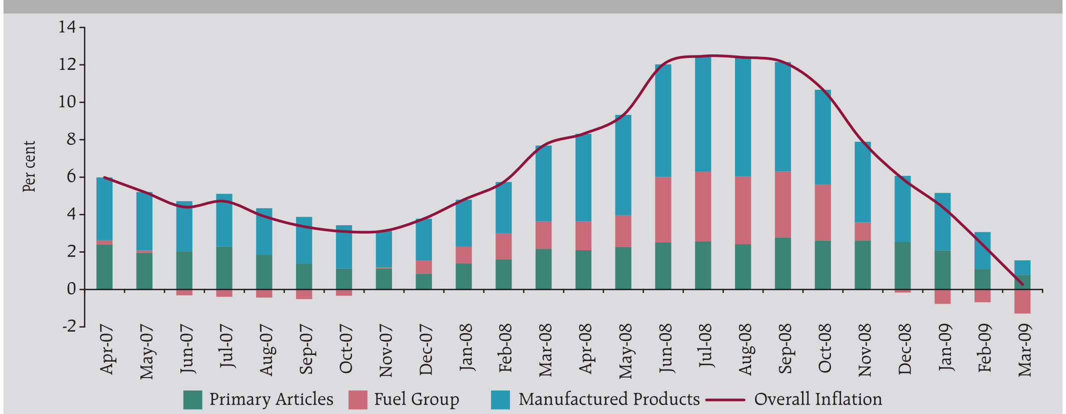


Table 69: Consumer Price Inflation - Major Groups

(Year-on-year variation in per cent)

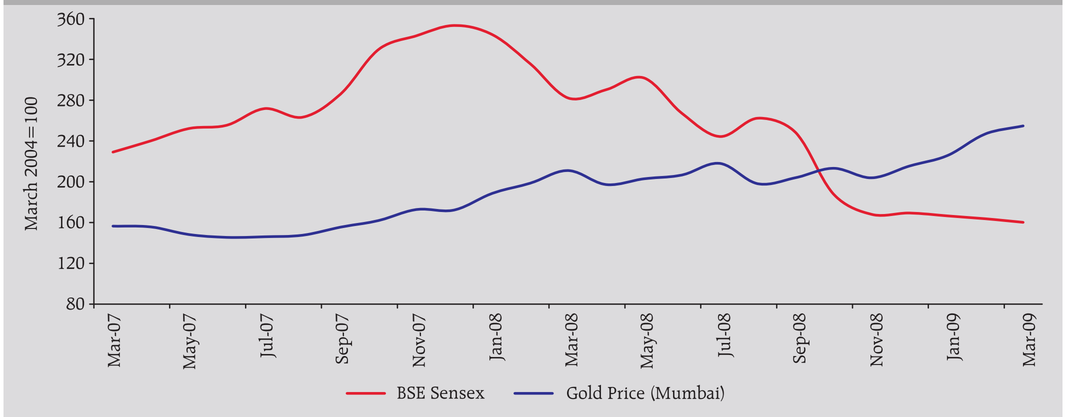
CPI Measure	Weight	Mar-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08	Jan-09	Feb-09
1	2	3	4	5	6	7	8	9	10	11	12	13
CPI-IW (Base: 2001=100)												
General	**100.0**	**4.9**	**6.7**	**5.7**	**6.4**	**5.5**	**7.9**	**7.7**	**9.8**	**9.7**	**10.4**	**9.6**
Food Group	46.2	4.9	12.2	8.1	8.7	6.2	9.3	10.5	13.1	13.1	13.9	–
Pan, Supari *etc.*	2.3	3.1	4.4	9.6	10.3	10.3	10.9	7.1	7.8	8.5	6.8	–
Fuel and Light	6.4	-2.9	3.2	1.6	2.3	2.3	4.6	8.4	9.1	9.7	9.6	–
Housing	15.3	6.6	4.1	4.1	4.0	4.0	4.7	4.7	3.8	3.8	6.0	–
Clothing, Bedding *etc.*	6.6	3.0	3.7	4.4	5.3	3.5	2.6	2.5	2.5	4.2	3.4	–
Miscellaneous	23.3	4.6	3.3	4.0	4.0	4.7	6.3	6.2	7.6	8.3	8.2	–
CPI-UNME (Base: 1984-85=100)												
General	**100.0**	**5.0**	**7.6**	**6.1**	**5.7**	**5.1**	**6.0**	**7.3**	**9.5**	**9.8**	**10.4**	–
Food Group	47.1	5.3	10.9	7.7	7.7	6.2	7.8	9.6	13.2	13.4	14.0	–
Fuel and Light	5.5	1.9	6.4	7.2	7.0	5.4	4.6	5.3	6.2	7.7	8.0	–
Housing	16.4	5.5	5.6	5.6	4.9	4.7	4.0	3.8	3.5	3.5	5.8	–
Clothing, Bedding *etc.*	7.0	2.9	3.6	4.3	4.0	4.1	4.3	3.4	3.1	2.7	2.4	–
Miscellaneous	24.0	5.1	4.4	3.7	3.2	3.8	4.8	6.6	8.4	9.3	9.7	–
CPI-AL (Base: 1986-87=100)												
General	**100.0**	**5.3**	**9.5**	**7.8**	**7.9**	**5.9**	**7.9**	**8.8**	**11.0**	**11.1**	**11.6**	**10.8**
Food Group	69.2	5.5	11.8	8.8	8.8	6.2	8.5	9.6	12.0	11.9	12.7	11.6
Pan, Supari *etc.*	3.8	6.6	5.7	9.1	11.1	11.3	10.4	11.2	12.8	13.7	14.8	14.8
Fuel and Light	8.4	4.3	6.9	7.4	7.2	6.3	8.0	8.9	10.2	11.3	11.7	11.3
Clothing, Bedding *etc.*	7.0	2.2	3.5	2.7	1.9	1.3	1.8	3.1	6.0	7.0	7.0	7.2
Miscellaneous	11.7	5.5	6.8	6.7	5.5	5.2	6.1	6.5	7.1	7.0	6.8	6.5
CPI-RL (Base: 1986-87=100)												
General	**100.0**	**5.3**	**9.2**	**7.5**	**7.6**	**5.6**	**7.6**	**8.7**	**11.0**	**11.1**	**11.4**	**10.8**
Food Group	66.8	5.8	11.5	8.5	8.8	6.2	8.2	9.6	12.0	11.9	13.0	11.6
Pan, Supari *etc.*	3.7	6.3	5.7	9.3	11.6	11.5	10.6	10.9	12.5	13.4	14.8	14.5
Fuel and Light	7.9	4.0	6.9	7.4	7.2	6.3	8.0	8.9	10.5	11.3	11.2	11.0
Clothing, Bedding *etc.*	9.8	2.7	3.1	2.6	2.1	2.6	2.8	4.1	6.5	7.3	7.7	7.7
Miscellaneous	11.9	5.2	6.3	6.2	5.3	5.0	6.2	6.8	7.4	7.5	7.0	6.8
Memo:												
WPI Inflation (End of period)		4.1	5.9	4.4	3.4	3.8	7.7	12.0	12.1	5.9	4.0	2.4
GDP Deflator based Inflation*		4.9	5.5	5.4	3.9	2.7	4.9	8.0	10.6	8.3	–	–

*: Data for March pertain to full year.

IW : Industrial Workers. UNME : Urban Non-Manual Employees. AL : Agricultural Labourers. RL : Rural Labourers.

in international financial markets following the US subprime crisis, and concerns about slowdown in the domestic economy (see Chapter V). Domestic gold prices, which had eased somewhat during the second quarter of 2008-09 mirroring movements in international prices, hardened subsequently to around Rs.15,255 per 10 grams in March 2009 as international prices recorded further increase (Chart 48). Domestic gold prices, however, eased to Rs.14,205 per 10 grams by April 09, 2009.

Chart 48: Asset Price Movements



VII. Macroeconomic Outlook

An assessment of the economic conditions at the current juncture indicates that the global economic conditions deteriorated sharply during 2008 and the forecasts of the various international agencies point to deepening of recessionary conditions during 2009. Reflecting global developments and their impact on the Indian economy, as well as domestic cyclical factors, the various surveys of economic activity point towards prevalence of less than optimistic sentiment for the outlook of the Indian economy in the coming months.

VII.1 Macroeconomic outlook of the Indian economy, based on various business expectations surveys, continues to exhibit the persistence of less than normal sentiments. The professional forecasters' survey conducted by the Reserve Bank in December 2008 suggested further moderation in economic activity in 2008-09. As reported by the respondents, the downside risks to growth seem to have amplified due to projected global economic recession, deterioration in global financial markets and slowdown in domestic demand. The knock-on impact of global downturn is visible as the main drivers of the growth process in the Indian economy have moderated during the third quarter of 2008-09.

Business Expectations Surveys

VII.2 Business Confidence Index (BCI) of the National Council of Applied Economic Research (NCAER) quarterly business expectations survey (67th round) declined sharply from 119.9 in October 2008 to 91.4 in January 2009. Thus, the BCI lost 28.5 points (23.8 per cent) in January 2009 over

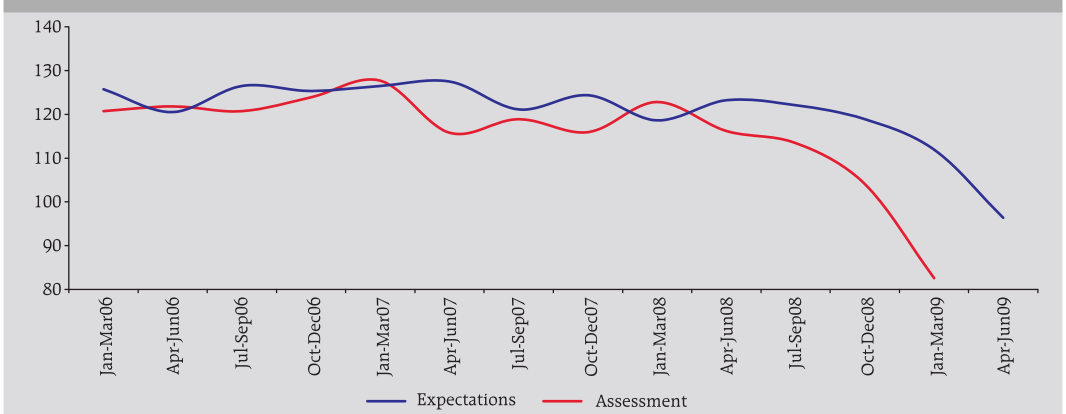
Table 70: Business Expectations Surveys

Organisation	Business Expectations		Growth over a year ago (per cent)	Growth over previous round (per cent)
	Period	Index		
1	2	3	4	5
NCAER	November 2008- January 2009	Business Confidence Index	-40.6	-23.8
CII	October 2008-March 2009	Business Confidence Index	-15.1	-7.7
Dun & Bradstreet	April-June 2009	Business Optimism Index	-39.0	-2.0

its October 2008 level. According to the quarterly business expectations survey of the Confederation of Indian Industry (CII), the business confidence index (CII-BCI) for October 2008-March 2009 has also declined both over the preceding six months as well as over the corresponding period of the previous year (Table 70). The decline reflected uncertainties about global economic outlook and concerns about high cost of funds. The Dun and Bradstreet Business Optimism Index for the second quarter of 2009 declined marginally to 93.8, the lowest since its introduction in the fourth quarter of 2002. This followed a sharp decline by 31 per cent during the first quarter of 2009. The index also reported a decline of 39.0 per cent over the corresponding quarter of last year. Except for inventory levels, all the other indices (volume of sales, net profits, new orders, selling prices and employee levels) registered a decline in the second quarter of 2009 over the previous quarter.

VII.3 According to the Reserve Bank's Industrial Outlook Survey of manufacturing companies in the private sector, the business expectations indices based on the assessment for January-March 2009 and expectations for April-June 2009 declined sharply by 20.7 per cent and 13.9 per cent, respectively, over the previous quarters. Similar trend was observed in these indices when compared with the corresponding quarters of the previous year (Chart 49).

Chart 49: Reserve Bank's Industrial Outlook Survey- Business Expectation Index



VII.4 The optimism for the quarters January-March 2009 and April-June 2009 on major business sentiment indicators such as overall business situation, overall financial situation, production, order books, capacity utilisation, employment, exports, imports and profit margin significantly declined as compared to a year ago. The raw material cost eased substantially during January-March 2009 and significantly higher net proportion of respondents viewed that there would be a 'decline' in selling prices from the respective levels in the previous quarter (Table 71). The industry-wise breakup showed that while the net sentiments on 'overall business situation' for the sample companies were negative for the quarter January-March 2009. The industry groups, *viz.*, food products, pharmaceuticals and cement show positive sentiment with more companies expecting growth than those expecting contraction. For April-June 2009, the overall net sentiment for all industries except textiles is positive. The size-wise breakup shows that the contraction in the quarter January-March 2009 in 'overall business situation' is across the board. Moderate growth is expected across the various companies for the quarter April-June 2009. The expectations are less optimistic for smaller companies as compared to their bigger counterparts.

VII.5 The ABN-AMRO Purchasing Managers' Index (PMI) for March 2009 was at 49.5, just below the neutral 50.0 mark, pointing to a weakening in the health of the Indian manufacturing industry, although the index indicated fractional improvement for the third straight month. Despite some gain in output index since January 2009, manufacturers continued to report decline in new orders from domestic and foreign clients due to global financial and economic conditions. The New Orders Index, a leading indicator of the activity for the next month at 49.5, is marginally lower than the neutral mark but improved significantly from a low of 45.9 in February 2009. Export orders further declined to 43.6 during the same month. Such a decline signals the possibility of further weakening of activity in the manufacturing sector. Low production and stock depletion strategies have led to declines in both pre and post-production stocks. These trends have mainly reflected in the deteriorating outlook for the manufacturing sector.

Survey of Professional Forecasters[1]

VII.6 The results of professional forecasters' survey conducted by the Reserve Bank in March 2009 suggested moderation in economic activity for 2008-09 on the whole (Table 72). Between the sixth round of survey conducted in December 2008 and seventh round survey in March 2009, median forecast of real GDP growth for 2008-09 was revised downwards to 6.6 per cent from 6.8 per cent. The sectoral growth rate forecast for the agriculture sector was revised downwards from 3 per cent to 1.6 per cent and for industry, from 4.9 per cent to 4.1 per cent. However, the sectoral growth rate forecast for services was revised upwards from 9.0 per cent in the last survey to 9.3 per cent in the current survey. According to this survey

[1] Introduced by the Reserve Bank from the quarter ended September 2007. The forecasts made in the section are that of professional forecasters and not that of the Reserve Bank.

Table 71: Reserve Bank's Survey – Net Response on 'A Quarter Ahead' Expectations About the Industrial Performance

Parameter	Response	Apr-Jun 2008	Jul-Sep 2008	Oct-Dec 2008	Jan-Mar 2009	Apr-Jun 2009
1	2	3	4	5	6	7
1 Overall business situation	Better	46.0 (42.7)	41.8 (42.6)	33.7 (44.1)	21.1 (43.9)	11.2 (47.6)
2 Financial situation	Better	36.6 (51.6)	32.7 (53.0)	27.7 (52.5)	16.4 (53.2)	8.4 (52.7)
3 Working capital finance requirement	Increase	36.6 (56.5)	33.6 (57.3)	33.8 (57.7)	32.9 (57.1)	23.2 (61.0)
4 Availability of finance	Improve	32.3 (58.3)	30.2 (57.9)	23.3 (59.0)	13.7 (56.3)	9.3 (61.7)
5 Production	Increase	45.2 (41.0)	43.5 (36.6)	39.8 (42.1)	26.0 (42.3)	9.9 (44.9)
6 Order books	Increase	41.5 (44.3)	38.5 (43.5)	35.7 (46.1)	20.6 (46.1)	6.4 (44.4)
7 Pending orders, if applicable	Below normal	-4.3 (81.3)	2.2 (80.9)	4.6 (82.0)	11.5 (77.8)	23.2 (59.4)
8 Cost of raw material	Decrease	-48.2 (46.0)	-54.7 (39.1)	-61.1 (32.3)	-35.7 (39.7)	-16.2 (33.7)
9 Inventory of raw material	Below average	-7.0 (83.2)	-3.8 (81.8)	-7.6 (77.6)	-3.3 (81.3)	1.1 (80.2)
10 Inventory of finished goods	Below average	-5.8 (84.5)	-1.5 (84.5)	-4.3 (82.6)	-4.4 (80.9)	-4.4 (78.4)
11 Capacity utilisation (Main product)	Increase	25.6 (59.9)	22.2 (58.8)	26.4 (56.0)	12.3 (59.1)	-0.7 (55.0)
12 Level of capacity utilisation (Compared to the average in the preceding four quarters)	Above normal	9.4 (77.0)	3.6 (74.9)	-0.5 (78.7)	-7.4 (73.7)	-20.8 (66.4)
13 Assessment of the production capacity (With regard to expected demand in the next six months)	More than adequate	8.0 (81.2)	4.6 (81.3)	5.7 (81.7)	11.8 (81.0)	8.9 (70.7)
14 Employment in the company	Increase	20.8 (68.2)	15.8 (71.5)	16.6 (70.4)	7.7 (75.7)	-5.1 (74.0)
15 Exports, if applicable	Increase	27.7 (53.3)	27.7 (54.9)	27.3 (54.3)	16.0 (54.8)	-3.8 (57.3)
16 Imports, if any	Increase	25.3 (65.6)	21.3 (66.5)	21.4 (67.9)	9.1 (69.7)	-1.4 (68.8)
17 Selling prices are expected to	Increase	19.1 (66.0)	21.0 (61.5)	26.2 (57.6)	4.1 (61.7)	-9.1 (61.9)
18 If increase expected in selling prices	Increase at lower rate	9.0 (64.0)	3.0 (61.3)	0.6 (54.7)	0.9 (54.0)	25.9 (53.5)
19 Profit margin	Increase	7.2 (61.0)	3.8 (59.8)	-3.6 (54.7)	-12.9 (53.3)	-18.6 (50.6)

Note : 1. 'Net response' is measured as the percentage share differential between the companies reporting 'optimistic' (positive) and 'pessimistic' (negative) responses; responses indicating status quo (no change) are not reckoned. Higher 'net response' indicates higher level of confidence and *vice versa*.

2. Figures in parentheses are the percentages of respondents with 'no change over the preceding quarter' as responses.

Table 72: Median Forecasts of Select Macroeconomic Indicators by Professional Forecasters: 2008-09 and 2009-10

		Actual 2007-08	Annual forecasts				Quarterly forecasts (2009-10)							
			2008-09		2009-10		Q1		Q2		Q3		Q4	
			E	L	E	L	E	L	E	L	E	L	E	L
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Real GDP growth rate at factor cost (in per cent)	9.0	6.8	6.6	6.0	5.7	6.1	5.3	6.3	5.6	6.8	6.2	–	6.5
	a. Agriculture & Allied Activities	4.9	3.0	1.6	3.0	3.0	3.0	3.0	3.0	2.5	3.0	3.0	–	3.0
	b. Industry	7.4	4.9	4.1	5.0	4.1	4.0	2.1	4.5	3.0	5.6	5.3	–	5.9
	c. Services	10.8	9.0	9.3	7.5	7.5	7.6	7.3	8.1	7.4	8.3	7.5	–	8.2
2	Gross Domestic Saving (per cent of GDP at current market price)	37.7	33.0	35.3	33.3	34.6	–	–	–	–	–	–	–	–
3	Gross Domestic Capital Formation (per cent of GDP at current market price)	39.1	34.9	37.5	34.0	35.4	34.0	36.2	34.3	34.5	35.3	34.1	–	33.8
4	Corporate profit after tax (growth rate in per cent)*	26.2	15.0	13.5	12.0	9.0	10.0	-2.5	12.5	2.0	12.5	16.5	–	12.5
5	Inflation WPI	4.7	8.3 #	8.3 #	–	–	2.4	-1.4	0.1	-2.5	3.0	1.6	–	4.8
6	Exchange Rate (US$/INR end period)	39.9	50.9 #	50.9 #	–	–	47.6	50.0	46.5	49.0	45.5	48.0	–	47.0
7	T-Bill 91 days Yield (per cent-end period)	7.1	5.0 #	5.0 #	5.5	5.0	–	–	–	–	–	–	–	–
8	10-year Govt. Securities Yield (per cent-end period)	7.9	7.0 #	7.0 #	6.0	6.5	–	–	–	–	–	–	–	–
9	Export (growth rate in per cent)	28.9	12.0	7.8	10.2	-4.0	–	–	–	–	–	–	–	–
10	Import (Growth rate in per cent)	35.4	17.7	17.2	-4.0	-8.4	–	–	–	–	–	–	–	–
11	Trade Balance (US $ billion)	–	–	–	–	–	-33.3	-25.0	-35.5	-27.0	-31.8	-27.1	–	-28.0

E : Earlier Projection. L : Latest Projection.

– : Not Available. # : Actuals. * : BSE listed companies.

Note : The latest round refers to seventh round for the quarter ended March 2009, while earlier round refers to sixth round for the quarter ended December 2008.

Source : Survey of Professional Forecasters, Fourth Quarter 2008-09.

the median forecast of real GDP growth for 2009-10 has also been revised downwards to 5.7 per cent from 6.0 per cent.

VII.7 Forecasts by select agencies for real GDP growth in 2009-10 are set out in Table 73.

Table 73: Projections of Real GDP for India by Various Agencies – 2009-10

(Per cent)

Agency	Latest Projection				Month of Projection
	Overall Growth	Agriculture	Industry	Services	
1	2	3	4	5	6
ADB*	**5.0**	–	–	–	Mar-09
ASSOCHAM	**6.5**	–	–	–	Dec-08
JP Morgan	**6.2**	–	–	–	Nov-08
CRISIL	**6.1**	3.0	4.5	7.7	Feb-09
EAC to PM	**7.0-7.5**	–	–	–	Jan-09
Merrill Lynch	**5.3**	2.7	3.3	6.7	Mar-09
Citigroup	**5.5**	–	–	–	Mar-09
CMIE	**6.6**	–	–	–	Apr-09
NCAER	**6.9**	2.7	6.6	8.4	Jan-09
OECD	**4.3**	–	–	–	Mar-09
UNCTAD*	**7.0**	–	–	–	Jan-09
IMF	**5.25**	–	–	–	Mar-09
World Bank	**4.0**	–	–	–	Mar-09
ICRIER	**4.8-5.5**	–	–	–	Mar-09
Range	**4.0-7.5**	**2.7-3.0**	**3.3-6.6**	**6.7-8.4**	

* : Calendar year.

Speeches

Platinum Jubilee Celebrations - Governor's Address to Staff
by D. Subbarao

Statement by Dr. D. Subbarao, Alternate Governor at IMFC, Washington D.C.

Global Financial Crisis: Causes, Impact, Policy Responses and Lessons
by Rakesh Mohan

Technology in Banks – Responding to the Emerging Challenges
by Shyamala Gopinath

Platinum Jubilee Celebrations - Governor's Address to Staff*

D. Subbarao

As the Reserve Bank of India enters its 75th year, today marks a momentous milestone in the history of this great institution. I am indeed delighted and privileged to be speaking to all of you, members of the Reserve Bank family, on this historic occasion.

2. Marking the 75th birthday is a time for joy and celebration. It is also an occasion for introspection - an occasion to reflect on the evolution of the Reserve Bank, to look back on the road we traversed, and look ahead to how each of us in the Reserve Bank family can make a positive difference to the life of every Indian, every day.

3. 75 years is a long time from a human perspective; yet 75 years is a relatively short time in the life span of an institution. Even so, the past 74 years have marked a historic journey for the Reserve Bank as it evolved from relatively modest origins to come to be acknowledged today as one of the most professional and responsive public policy institutions in the country. This is an enviable reputation, and for this we are in debt to the past Governors and Deputy Governors, past members of the Board and past staff of the Reserve Bank of India. As today's RBI family, it is both our challenge and our obligation to build on this reputation, and rededicate ourselves to the task of furthering the objectives of the Reserve Bank.

4. Mahatma Gandhi put the test for every action very aptly. He said that the question we must ask ourselves is, "how is what I plan to do going to improve the life of the poorest person?". I want to paraphrase that question for today's context. All of us in the Reserve Bank family must ask ourselves,

* Address by Dr. D. Subbarao, Governor, on the occasion of Platinum Jubilee Celebrations of the Reserve Bank of India (RBI).

"how can I do my job better so that I can make a positive difference to the country?"

5. The Reserve Bank has a rich history going back to pre-independence days. The question of a central banking institution for India had been under examination both by Royal Commissions and by the Legislature long before the Hilton-Young Commission recommended in 1926 that India's financial structure should be completed by the creation of a central bank. The report of the Chamberlain Commission of 1914 included a comprehensive memorandum by John Maynard Keynes, one of its members, proposing that the three Presidency Banks should be merged into one central bank. This led to a legislation, introduced in January 1927, to set up the Reserve Bank of India. However, it was not until seven years later, in March 1934, that the enactment came through. Thus began the exciting and glorious journey of our Bank on 1st April 1935.

6. The Reserve Bank of India was first established as a shareholders' bank. Subsequently, it was nationalised in 1949. As India became independent in 1947, RBI's 'tryst with nation building' ran parallel to the nation's 'tryst with destiny'. The year 1949 also marked the enactment of the Banking Regulation Act which mandated a comprehensive and formal structure of bank regulation and supervision in India.

7. For the first two decades of India's independence, banking was largely concentrated in our cities and major towns. The rural areas were largely left behind. This was a lacuna as the potential of rural savings remained unexploited, and rural credit needs remained unmet. These were also the years when banking had become the centre of political attention.

8. The 1960s were difficult years for the country from an economic perspective. India had fought a war with China in 1962, and soon thereafter with Pakistan in 1965. The country also went through three very bad years of monsoon. The country's financial position became extremely poor and the currency had to be devalued in 1966. Economic distress started growing as evidenced by rising prices, scarcity of essential commodities and services, low growth and widespread unemployment. It was in the backdrop of this scenario that the Union Finance Minister of the time advocated social control over commercial banks.

9. Even as a consensus on social control was emerging, in a swift and unexpected move, 14 major commercial banks were nationalised in July 1969. This decision, justified as being necessary for growth and poverty reduction, was arguably the most important economic decision by the Government since Independence till that date. Nationalisation led to sharp expansion of the banking network and impressive penetration into rural areas.

10. The Reserve Bank evolved in parallel with these socio economic developments. It took a leading role in designing and implementing policies for agricultural and industrial development and for laying the foundations for financial markets. Some of today's premier development and market institutions such as the National Bank for Agriculture and Rural Development (NABARD), the Industrial Development Bank of India (IDBI) and the Unit Trust of

India (UTI) had their beginnings as specialised departments and divisions within the Reserve Bank of India.

11. The context and circumstances that culminated in the path-breaking economic reforms of 1991 are by now standard fare. The programme of 'opening up' launched under the leadership of the then Finance Minister, and the present Prime Minister, Dr. Manmohan Singh – who, incidentally, was also Governor of the Reserve Bank of India – catapulted India into a major emerging economy. Today, India is the fourth largest economy in the world in purchasing power parity (PPP) terms and the second-fastest in terms of growth. It is a tribute to the resilience of the Indian economy that even in the midst of the deep recession that the world is going through today, India remains a growing economy. Our growth, no doubt, has moderated but this moderation is modest compared to the convulsions almost everywhere else in the world.

12. Most importantly, over the years, the mandate of the Reserve Bank has expanded encompassing both its regulatory and developmental responsibilities. Today, we are a large and complex organisation compared to most other central banks in the world. The various departments that have made up the Bank through these years have reflected the diverse financial and economic functions associated with the process of economic development and the growth of the financial sector. When we started in 1935, there were just three departments, namely the Banking Department, the Issue Department and the Agricultural Credit Department. Today, we have 26 departments in the Central Office, have 26 regional and field offices across the country, four subsidiaries (BRB Note Mudran Press Ltd., DICGC, NABARD and NHB,) and a staff of over 20,000 employees.

13. The preamble to the Reserve Bank of India Act lays down the purpose of establishing RBI as "to regulate issue of Bank notes, to keep the reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage". As you will note, this is a broad and flexible mandate. Today, we perform several important functions. We are the monetary authority, and regulator and supervisor for banks and non-banking financial companies. We are the issuer of currency and the debt manager for the central and state governments. Besides, we manage the country's foreign exchange reserves, manage the capital account of the balance of payments, and design and operate payment systems. We also operate a grievance redressal scheme for bank customers through the Banking Ombudsmen and formulate policies for treating customers fairly. Importantly, the RBI has had a decisive influence in shaping and implementing every major economic policy in the monetary and financial sectors. The developmental role of the Reserve Bank has expanded too. Among our major endeavours today are financial inclusion and the strengthening of the credit delivery mechanisms for agriculture, and small and micro-enterprises, specially in the rural areas.

14. With India emerging as a key player in the global growth story, the Reserve Bank's role and responsibilities too have increasingly acquired an international dimension. Today the Reserve Bank is an active participant in several important

international institutions that seek to promote more effective regulatory structures and financial and systemic stability. We have for sometime now been shareholders of the Bank for International Settlements (BIS) and member of the Committee on Global Financial System, the Markets Committee, and the International Liaison Group under the aegis of the Basel Committee on Banking Supervision (BCBS), and are now becoming active members of the Financial Stability Forum and the BCBS.

15. The large and diverse responsibilities of the Bank demand vastly different resources in terms of infrastructure and human competencies. In fact, as our mandate has evolved and grown, our resources and the organisation of these resources too have undergone significant changes. The Bank recognises that our employees are our main assets and that the efficacy of an institution is fundamentally dependent not just on the sum total of its individual human capital, but on how effectively it is able to draw out the best from its talent pool. It has been our constant endeavour to create a work environment where we can deliver our services efficiently, discharge our functions competently and enjoy a wholesome work-life balance.

16. As I had mentioned to you in my New Year Message, today the economy is facing an extraordinary challenge. The global recession, a fall-out of the unprecedented financial crisis, is the most serious economic problem that the world has faced in the post-war era. Contrary to earlier hopes, it is now clear that the downturn will be deeper and the recovery longer than we had earlier anticipated. The Reserve Bank has played, and will continue to play, a leading role in managing the crisis and minimising the pain of adjustment. This affords the Reserve Bank both a challenge and an opportunity. A challenge because a lot is expected of us; and an opportunity because it gives us a chance to demonstrate that we can rise to the occasion, think out of the box, lead from the front and act swiftly and effectively.

17. In the course of the next one month, we will be working out a detailed plan for marking the Platinum Jubilee of the Reserve Bank of India. There will be events of celebration, but I am anxious that this must go beyond mere discrete events of celebration. The Platinum Jubilee must launch a series of initiatives and activities that make the Reserve Bank a more responsive, relevant, professional and effective public policy institution and remind each of us how we can serve the institution, and thereby the country, better. In short, our goal must be to make a difference.

18. In conclusion, on the occasion of this Platinum Jubilee, I wish you and your families all the very best of health, happiness and fulfillment.

*Statement by Dr. D. Subbarao, Alternate Governor at IMFC, Washington D.C.**

1. The IMFC meets today in extraordinarily complex and challenging times. The financial crisis became full-blown in the second half of 2008, and has morphed through negative feedback to real activity, plunging the global economy into the deepest recession since World War II. What started off as a sub-prime crisis in the US housing mortgage sector has turned successively into a global banking crisis, global financial crisis and now a global economic crisis spreading from the littoral Atlantic regions across the world to Europe, Asia-Pacific, Latin America, and most unfortunately, to Africa. The crisis now threatens the recent gains in human livelihood and well-being. It also challenges many of our fundamental beliefs about economic resilience and financial market stability.

The Global Economy and Financial Markets

2. The most frequently asked question today is whether the worst is behind us. While there are incipient signs of business confidence and consumer spending trying to gain toehold, rising unemployment, high inventories and financial stress weigh heavily on overall demand conditions. In financial markets, although spreads have narrowed from September 2008 levels, they remain elevated while bank credit has declined and other markets remain impaired. The estimates of the expected write-downs by banks on global exposures are rising rapidly. For all financial institutions taken together, the expected write-downs over 2007-10 is estimated at $ 2.8 trillion on US-based assets and $ 1.4 trillion in Europe and Japan. The retrenchment from emerging markets is

* Statement by Dr. D. Subbarao, Governor, Reserve Bank of India on behalf of Mr. Palaniappan Chidambaram, Member, IMFC (representing the Constituency consisting of Bangladesh,Bhutan,India and Sri Lanka), Leader of the Indian Delegation to the International Monetary and Financial Committee, Washington D.C., April 25, 2009.

outpacing the overall de-leveraging that is underway, raising serious concerns about refinancing and even default risks.

3. Global economic activity is expected to contract by an annualised 6 percent in the first quarter of 2009 – the same as in the fourth quarter of 2008. Policy making around the world is in clearly uncharted territory. Governments and central banks across countries have responded to the crisis through big, aggressive and unconventional measures. Emboldened by falling inflation, monetary authorities in advanced countries have cut policy rates to unprecedented lows and when credit markets failed to thaw, central bank balance sheets have been expanded alongside funding and guarantees to financial intermediaries. Fiscal stimuli have been employed in conjunction, with large discretionary impulses boosting automatic stabilisers. Even with current levels of policy intensity the trough of the global recession is not seen until the end of 2009 and could get pushed out further if the policy responses fail to gain traction.

4. While the recession has intensified in the advanced economies, emerging economies have been dented by the collapse in external demand and commodity prices, the tightening constraints on access to external financing and the retrenchment of capital flows. Emerging and developing economies could experience capital outflows of the order of 1 percent of GDP in 2009 with growth expected to slump to 1.5 percent. Their prospects could indeed worsen if external financing constraints tighten further, trade and financial protectionism escalates and stress in domestic financial systems heightens and spreads.

5. Inflation is subsiding across the world with cooling demand and weakening commodity prices; however, this has not translated into gains in purchasing power in the face of high job losses and eroded profit margins for firms. In many emerging economies, this has resulted in overvaluation of currencies, partly reflecting the appreciation in the key reserve currencies. As international reserves have been drawn down to stabilise foreign exchange markets, the cushion against the global crisis has been eroded further.

6. Current estimates of write-downs on toxic assets suffered by banks globally are highly contingent on the hope that the global economic situation does not worsen further. Of the write-downs of $ 3 trillion only a third has been capitalised. Uncertainty about potential losses has kept spreads in financial markets elevated with the securities market still impaired and the credit market yet to thaw. In this context the key challenge is to impart credibility to a restructuring strategy comprising, loss recognition; realistic valuation; cleansing balance sheets; and recapitalisation and distress resolution. These issues need to be speedily addressed so that economic recovery takes root in the mature economies and capital flows to emerging and developing economies are revived.

The Role and Response of the Fund

7. The sharp deterioration in the global economic and financial situation has evoked vanguard national efforts towards crisis resolution on a scale, mix and duration that is perhaps unprecedented in

recent history. With the G20 Leaders' Summits in Washington in November, 2008 and in London earlier this month providing direction, a more comprehensive multilateral response involving a range of institutions, with the Fund in the forefront, has now been crafted.

Surveillance

8. Core to the very existence of the IMF is its surveillance role - monitoring global, regional and national economies to assess whether countries' policies are consistent not only with their own interest but also with the interest of the international community. The on-going crisis has highlighted the relevance and importance of strengthening and appropriately focusing Fund's surveillance. I reiterate the need for greater focus on systemically important countries - the more systemically important the country the greater should be the rigour of surveillance. In parallel, the gap between multilateral and bilateral surveillance should be bridged. The IMF's surveillance should not add to the obligations of developing countries.

9. While the Fund's traditional emphasis has been on exchange rates, the crisis has pushed macro-financial sector issues onto centre-stage in IMF surveillance. A key aspect is the integration of macroeconomic and financial sector surveillance. The Financial Sector Assessment Programme (FSAP) should be made more focused and forward-looking so that it could be integrated more effectively into bilateral surveillance. National authorities are closer to the terrain realities of their financial sectors and self-assessment of regulatory frameworks based on internationally agreed methodologies should be a priority. As we have learnt, prescription of standards for the financial sector in itself cannot prevent crises. There is a need for on-going review of the standards by international bodies and greater national commitment for implementation. National authorities should also commit to assist each other in enhancing their capacity to strengthen regulatory frameworks and the IMF has a crucial role to play in this coordination.

10. The IMF has recently stepped up its collaboration with the expanded Financial Stability Board on developing a framework on early warnings for identifying and mitigating systemic risks and vulnerabilities. We welcome this collaboration and while recognising the potential utility of the exercise, we look forward to more details, particularly on the methodology. Strengthening information availability is a key pre-requisite. The effectiveness of this collaboration should be regularly reviewed by the IMFC.

Lending Role of the Fund

11. The Fund as a financing institution should have the lending instruments and the financing capacity to address potential borrowing needs. We welcome the proactive and prompt measures taken by the Fund to reform its lending instruments and policies. The introduction of the Flexible Credit Line (FCL) and the high access precautionary stand-by arrangements (HAPAs) are timely, positive steps. The streamlining of modalities for applying Fund conditionality, including greater use

of *ex-ante* conditionality, appropriately balance the financing needs of the membership with safeguards for Fund resources.

12. These reforms could enable the Fund to re-emerge as the financier of choice not only for balance of payments needs and programmes designed for macroeconomic stability and structural adjustment, but for insurance in these uncertain times. Many member countries who were far removed from the epicentre and had no role or responsibility in the making of the crisis have nevertheless been adversely affected by it. The Fund would have to assist them and ensure that the fallout of the crisis in emerging markets and developing countries is contained. We expect that these facilities will be implemented in an appropriately flexible manner. The Fund should work closely with its membership to ensure that support is provided in a timely manner to prevent crises at an early stage. In this context, the initial response to the FCL is heartening.

13. We also welcome the initiative of the Fund to reform the financing instruments for low income countries (LICs) to better reflect their diverse needs and circumstances and heightened exposure to global volatility. Appropriate precautionary arrangements with higher access levels and ex-ante conditionality for strong performers amongst low income countries also warrant consideration. We call for an early completion of this exercise. The doubling of access limits for concessional lending, including the rapid access component of the Exogenous Shocks Facility (ESF), is a good interim measure.

14. We also support the initiatives that are underway to bridge the gaps in trade financing and restore normalcy to markets for trade finance flows and rollovers. We urge the IMF to collaborate with other international financial institutions (IFIs) and bilateral agencies to support a truly multilateral effort. The unimpeded flow of trade financing to low income countries for imports of essential items such as food, fertilizer, fuel and capital goods should also be ensured.

Augmenting the IMF's Resources

15. In response to the increasing demand for Fund financing to manage the crisis the London Summit of G20 Leaders rightly focused on measures to enhance the resources available with the Fund. These decisions should be speedily implemented.

16. The Fund is a quota based organisation and quotas have to be the primary mechanism through which the resource needs of the Fund are ultimately met. This calls for two tasks on the way forward. The first task is to ensure that the April 2008 package of quota and voice reform is ratified at the earliest. The second task is advancing the completion of the 14th General Review of Quotas from January 2013 to January 2011. This quota review should, at the minimum, aim at doubling the quota resources. A time-sliced work plan should be laid down, commencing at the earliest so that the quota review can be completed in the targeted year and a half time frame.

17. Since the process of increasing and allocating quotas could take some time, the Fund is working on securing alternate resources, including borrowing. We

support these efforts but these should be seen as bridging mechanisms until the quota review is complete.

18. We appreciate the bilateral commitments made so for. We believe that the Fund's borrowings should adhere to certain key principles, consistent with the London Summit decisions. First, the Fund's borrowings should not be seen as a substitute for a substantial quota increase. Second, an appropriate mix should be maintained between the quota resources and borrowings of the Fund. Third, Fund borrowings should be based broadly on present quota shares, preferably within a multilateral framework like a modified NAB. Fourth, to provide greater flexibility for member countries to contribute to the Fund's resources, various modalities should be explored, including note purchase mechanisms. Fifth, resources lent to the Fund should be treated as part of the country's international reserves.

19. An early decision on these modalities would enable a quicker mobilisation of the targeted resources from a wider group of members. On our part, India is prepared to take on its share of responsibility to augment the Fund's resources. We would be able to commit on the extent of participation once the modalities are evolved in keeping the principles enunciated.

20. We call for an early and front-loaded allocation of SDRs worth $250 billion which would amount to about three-quarters of the present quota size of the Fund. This would provide developing countries with additional liquidity of about $100 billion, of which $ 19 billion will go to low income countries. There is a need to widen and deepen the market for SDRs through an expansion of the voluntary agreements. An SDR allocation is a reversible measure and the allocation could be re-considered when the global economic situation shows significant improvement.

21. We call on the Fund to finalise the modalities for raising both loan and subsidy resources for concessional assistance to low income countries. A number of available options need to be explored. We support the proposal to utilise the additional income from the investment of the higher proceeds of the agreed gold sale under the New Income Model to expand subsidised lending to low income countries. Members participating in the multilateral borrowing arrangements with the Fund should have the option of earmarking a portion of their lending for assistance to low income countries. Vigorous efforts to increase donor contributions to the subsidy resources should be pursued.

Governance

22. Governance continues to be critical to the legitimacy, credibility and effectiveness of the Fund. The most crucial issue is the continuance of the process of realignment of quotas and voice. The ensuing quota review should ensure that the IMF is comprehensively reformed so that it reflects the changing economic weights in the world economy and is more responsive to future challenges. Emerging and developing economies should have substantially greater voice and representation in the Fund. This principle was reiterated in the Washington Declaration of the G20 Leaders and

endorsed by the London Summit as well. We now expect that the quota review will result in a comprehensive reform of the governance of the Fund.

23. The initiative towards internal governance reform within the Fund is also relevant, although it should follow the quota and voice reform. We now have the Independent Evaluation Office (IEO) report on Corporate Governance, the report of the Trevor Manuel Committee, and the inputs from civil society. We expect that these inputs would be thoroughly analysed and discussed in the Executive Board and appropriate recommendations for action would be made so that the IMFC could become a more effective forum and the Fund is also strengthened.

24. We call for the introduction of an open, merit-based process, irrespective of nationality and geographical preferences, for the selection of the senior management of the Fund. The next Managing Director of the IMF should be selected in this manner.

Developments in the Constituency

25. I now turn to developments in my constituency.

India

26. The global financial crisis interrupted India's growth momentum. Since downside risks have materialised, the GDP growth for 2008-09 is now projected to turn out to be in the range of 6.5 to 6.7 per cent after clocking annual growth of 8.9 per cent on an average over the preceding five years (2003-08). Domestic demand, in the form of both private consumption and investment expenditure, has slackened although government final consumption rose on account of discretionary fiscal stimulus measures. The global crisis brought to the fore the strong interactions between funding liquidity and market conditions. Both the Government and the Reserve Bank responded to the challenge of minimising the impact of the crisis on India in a coordinated and consultative manner. The Reserve Bank's policy response was aimed at containing the contagion from the global financial crisis whilemaintaining comfortable domestic and forex liquidity. The Government launched three fiscal stimulus packages which came on top of an already announced expanded safety-net programme for the rural poor, the farm loan waiver package and payout following the Sixth Pay Commission report. The combined impact of these fiscal measures is about 3 per cent of GDP. Through the Reserve Bank's actions, the cumulative amount of primary liquidity potentially available to the financial system is about 7 per cent of GDP. There are several challenges on the way forward : implementing the fiscal stimulus packages, particularly stepping up public investment; revival of private investment demand; unwinding of fiscal stimulus in an orderly manner; maintaining the flow of credit while ensuring credit quality; preserving financial stability along with provision of adequate liquidity; and ensuring an interest rate environment that supports the return of the economy to a high growth path.

27. Going forward, the fiscal and monetary stimulus measures initiated during 2008-09 coupled with lower commodity prices will cushion the downturn by stabilising

domestic economic activity. On balance, with the assumption of normal monsoon, real GDP growth for 2009-10 is placed at around 6.0 per cent. Inflation, as measured by variations in WPI, is projected to be around 4.0 by end March, 2010. Consumer price inflation too is declining, *albeit* less sharply. Notwithstanding several challenges, the Indian economy remains resilient with well functioning markets and sound financial institutions. The macro-economic management has helped in maintaining lower volatility in both financial and real sectors in India relative to several other advanced and emerging market economies.

Sri Lanka

28. The Sri Lankan economy was resilient in the face of unfavourable external conditions and registered growth of 6.0 per cent in 2008. High oil and import commodity prices threatened macroeconomic stability resulting in a sharply widening current account deficit and rapidly rising inflation. The global financial turmoil triggered a reversal of capital inflows causing a depletion of reserves and substantial imbalances in the external sector. Despite these challenging circumstances, prudent macroeconomic policies supported the growth momentum while headline inflation dropped to 5.2 per cent in March 2009 from a high of 28.2 per cent in July 2008. The fiscal deficit has remained at a reasonably low level and public debt relative to GDP has been on the decline for the fourth consecutive year. Unemployment has dropped to a historic low of 5.2 per cent while poverty has been falling for the last several years and is currently around 15.0 per cent. Against the back drop of a deteriorating global outlook, growth is expected to drop sharply but would remain around 4.0 per cent in 2009, bolstered by prudent macroeconomic policies and expansion of the domestic economy particularly in the eastern and northern provinces of the country. As normalcy returns, optimism about a resumption of the high growth trajectory and a step-up in the developmental process is gaining ground.

Bangladesh

29. Bangladesh's economy has stood up well in the face of the surge in international food and commodity prices in the first half of 2008 and the outbreak of the global crisis since September 2008. Real GDP growth is expected to remain strong in 2008-09 (July-June) at around 6.0 per cent, benefiting from a favourable agricultural performance and the fall in food, fuel and commodity prices in the second half of the year. As a result and reinforced by a combination of supply management and monetary-fiscal policies, inflation fell on a year-on-year basis to 6.1 per cent in January 2009 from 11.4 per cent a year ago. Public finances have come under some strain with growth in tax revenues falling short of target which is being offset by reduced expenditure due to sluggish demand and lower Annual Development Plan utilisation. With the deepening global downturn affecting major export markets, Bangladesh's balance of payments has come under some pressure, aggravated by some slowing down of remittances although they continue to hold up well. Gross international reserves stood at US $ 5.9 billion at the end

of February 2009, close to three months of imports. Bangladesh has also welcomed the decisions of the G 20 to deal with the current crisis within a multilateral framework while shunning trade protectionism and competitive devaluations. Bangladesh is striving to weather the crisis with a modest stimulus package aimed at boosting domestic demand with investment in rural, agricultural and infrastructure sectors, propping up the export sectors, buttressing food and social security measures and undertaking additional employment programmes.

Bhutan

30. In Bhutan, 2008 was a year of momentous historical significance when the country transitioned into a constitutional monarchy with new democratic institutions. This provides the backdrop for the implementation of the development agenda. Financing for the 10th Plan, which aims to double development spending with a focus on poverty reduction through industrial development, balanced regional growth and infrastructure investment has been tied up. Real GDP growth in 2007/08 was 21.4 per cent reflecting the doubling of hydro power generation capacity with the coming on stream of the Tala hydro project. GDP growth rate is expected to return to a trend level of 5.6 per cent in 2008-09. Regional integration through enhanced trade relationships with neighbouring countries, especially India and Bangladesh are helping growth and diversification. On the external sector, while reserves of convertible currency are comfortable, rupee reserves require careful management to meet the needs for imports.

Concluding Remarks

31. The crisis has put to test the collective leadership of the world and the competence and relevance of multilateral institutions. We are grappling with a crisis that has afflicted the entire world whether at the core or in the periphery. Much depends on a quick and internationally coordinated approach to a daunting, but not an insurmountable, challenge. The IMF is central to this endeavour and all of us have a stake in the role of the Fund in orchestrating the road to recovery. The Fund's capacity to deliver is ultimately connected to how much and how soon we empower it with resources, better governance, greater accountability and a redefined mandate that keeps pace with the requirements of the changing world. Within the IMF too, a radical shift in approach, culture and strategy is urgently warranted so that it divests itself of its past and much of the fallibility that goes with it. The world we will emerge into after the crisis will in all likelihood not be the same again, and the challenge is to re-fashion the IMF so that it becomes more relevant, useful and effective in the future.

*Global Financial Crisis: Causes, Impact, Policy Responses and Lessons**

Rakesh Mohan

The intensification of the global financial crisis, following the bankruptcy of Lehman Brothers in September 2008, has made the current economic and financial environment a very difficult time for the world economy, the global financial system and for central banks. The fall out of the current global financial crisis could be an epoch changing one for central banks and financial regulatory systems. It is, therefore, very important that we identify the causes of the current crisis accurately so that we can then find, first, appropriate immediate crisis resolution measures and mechanisms; second, understand the differences among countries on how they are being impacted; and, finally, think of the longer term implications for monetary policy and financial regulatory mechanisms.

These are all large subjects and I cannot hope to do justice to in the limited space available in one speech. A legion of both policymakers and scholars are at work analysing the causes of the crisis and findings both immediate and longer term solutions (For example, the de Larosiere Report (2009), the Turner Review (2009), the Geneva Report (2009), the Group of Thirty Report (2008) and the IMF Lessons paper (2009b)). I can only attempt some conjectures, raise issues and identify some possible directions in which we should move.

What I will attempt to do is to provide my interpretation of the unfolding of the present global financial crisis; how it is affecting us; why the Indian financial sector has been able to weather the crisis relatively well; the analytics of our policy response; and, finally, some implications of its longer lasting effects.

* Based on remarks delivered by Dr.Rakesh Mohan, Deputy Governor, Reserve Bank of India at the RBI-BIS Seminar on "Mitigating Spillovers and Contagion – Lessons from the Global Financial Crisis" at Hyderabad on December 4, 2008; at the International Chambers of Commerce at New Delhi on January 16, 2009; at the Yale School of Management, Yale University on April 3, 2009; and at the 7th Annual India Business Forum Conference at London Business School, London on April 23, 2009. Assistance of Muneesh Kapur in preparing the speech is gratefully acknowledged.

I. Global Financial Crisis

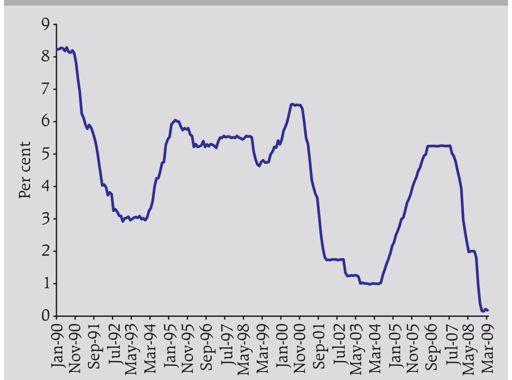
Genesis of Global Financial Crisis

The proximate cause of the current financial turbulence is attributed to the sub-prime mortgage sector in the USA. At a fundamental level, however, the crisis could be ascribed to the persistence of large global imbalances, which, in turn, were the outcome of long periods of excessively loose monetary policy in the major advanced economies during the early part of this decade (Mohan, 2007, Taylor, 2008).

Global imbalances have been manifested through a substantial increase in the current account deficit of the US mirrored by the substantial surplus in Asia, particularly in China, and in oil exporting countries in the Middle East and Russia (Lane, 2009). These imbalances in the current account are often seen as the consequence of the relative inflexibility of the currency regimes in China and some other EMEs. According to Portes (2009), global macroeconomic imbalances were the major underlying cause of the crisis. These saving-investment imbalances and consequent huge cross-border financial flows put great stress on the financial intermediation process. The global imbalances interacted with the flaws in financial markets and instruments to generate the specific features of the crisis. Such a view, however, offers only a partial analysis of the recent global economic environment. The role of monetary policy in the major advanced economies, particularly that in the United States, over the same time period needs to be analysed for a more balanced analysis.

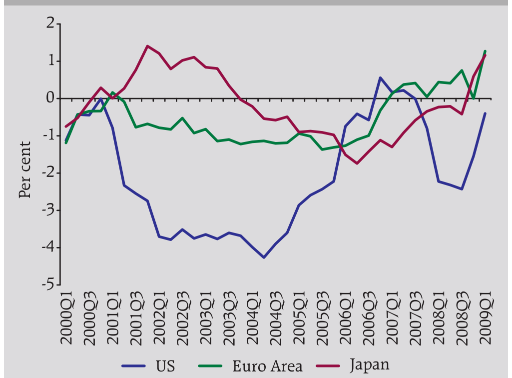
Following the dot com bubble burst in the US around the turn of the decade, monetary policy in the US and other advanced economies was eased aggressively. Policy rates in the US reached one per cent in June 2003 and were held around these levels for an extended period (up to June 2004) (Chart 1). In the subsequent period, the withdrawal of monetary accommodation was quite gradual. An empirical assessment of the US monetary policy also indicates that the actual policy during the period 2002-06, especially during 2002-04, was substantially looser than what a simple Taylor rule would have required (Chart 2). "This was an unusually big deviation

Chart 1: Effective Federal Fund Rate in the US



Source: FRED Database, Federal Reserve of St. Louis

Chart 2: Monetary Policy Rates: Deviation from the Taylor Rule



Source : World Economic Outlook Database (April 2009), IMF (2009c).

from the Taylor Rule. There was no greater or more persistent deviation of actual Fed policy since the turbulent days of the 1970s. So there is clearly evidence that there were monetary excesses during the period leading up to the housing boom" (Taylor, op.cit.). Taylor also finds some evidence (though not conclusive) that rate decisions of the European Central Bank (ECB) were also affected by the US Fed monetary policy decisions, though they did not go as far down the policy rate curve as the US Fed did.

Excessively loose monetary policy in the post dot com period boosted consumption and investment in the US and, as Taylor argues, it was made with purposeful and careful consideration by monetary policy makers. As might be expected, with such low nominal and real interest rates, asset prices also recorded strong gains, particularly in housing and real estate, providing further impetus to consumption and investment through wealth effects. Thus, aggregate demand consistently exceeded domestic output in the US and, given the macroeconomic identity, this was mirrored in large and growing current account deficits in the US over the period (Table 1). The large domestic demand of the US was met by the rest of the world, especially China and other East Asian economies, which provided goods and services at relatively low costs leading to growing surpluses in these countries. Sustained current account surpluses in some of these EMEs also reflected the lessons learnt from the Asian financial crisis. Furthermore, the availability of relatively cheaper goods and services from China and other EMEs also helped to maintain price stability in the US and elsewhere, which might have not been possible otherwise. Thus measured inflation in the advanced economies remained low, contributing to the persistence of accommodative monetary policy.

The emergence of dysfunctional global imbalances is essentially a post 2000 phenomenon and which got accentuated from 2004 onwards. The surpluses of East Asian exporters, particularly China, rose significantly from 2004 onwards, as did those of the oil exporters (Table 1). In fact, Taylor (op. cit.) argues that the sharp hike in oil and other commodity prices in early 2008 was indeed related to the very sharp policy rate cut in late 2007 after the sub-prime crisis emerged.

It would be interesting to explore the outcome had the exchange rate policies in China and other EMEs been more flexible. The availability of low priced consumer goods and services from EMEs was worldwide. Yet, it can be observed that the Euro area as a whole did not exhibit large current account deficits throughout the current decade. In fact, it exhibited a surplus except for a minor deficit in 2008. Thus it is difficult to argue that the large US current account deficit was caused by China's exchange rate policy. The existence of excess demand for an extended period in the US was more influenced by its own macroeconomic and monetary policies, and may have continued even with more flexible exchange rate policies in China. In the event of a more flexible exchange rate policy in China, the sources of imports for the US would have been some countries other than China. Thus, it is most likely that the US current account deficit would have been as

Table 1: Current Account Balance (per cent to GDP)							
Country	**1990-94**	**1995-99**	**2000-04**	**2005**	**2006**	**2007**	**2008**
1	2	3	4	5	6	7	8
China	1.4	1.9	2.4	7.2	9.5	11.0	10.0
France	0.0	2.0	1.3	-0.6	-0.6	-1.0	-1.6
Germany	-0.4	-0.8	1.4	5.1	6.1	7.5	6.4
India	-1.3	-1.3	0.5	-1.3	-1.1	-1.0	-2.8
Japan	2.4	2.3	2.9	3.6	3.9	4.8	3.2
Korea	-1.0	1.9	2.1	1.8	0.6	0.6	-0.7
Malaysia	-5.2	1.8	9.8	15.0	16.7	15.4	17.4
Philippines	-4.0	-2.8	-0.7	2.0	4.5	4.9	2.5
Russia	0.9	3.5	11.2	11.0	9.5	5.9	6.1
Saudi Arabia	-11.7	-2.4	10.6	28.7	27.9	25.1	28.9
South Africa	1.2	-1.3	-0.7	-4.0	-6.3	-7.3	-7.4
Switzerland	5.7	8.8	10.8	13.6	14.5	10.1	9.1
Thailand	-6.4	1.0	4.2	-4.3	1.1	5.7	-0.1
Turkey	-0.9	-0.8	-1.6	-4.6	-6.0	-5.8	-5.7
United Arab Emirates	8.3	4.6	9.9	18.0	22.6	16.1	15.8
United Kingdom	-2.1	-1.0	-2.0	-2.6	-3.4	-2.9	-1.7
United States	-1.0	-2.1	-4.5	-5.9	-6.0	-5.3	-4.7
Memo:							
Euro area	n.a.	0.9@	0.4	0.4	0.3	0.2	-0.7
Middle East	-5.1	1.0	8.4	19.7	21.0	18.2	18.8

Note : (-) indicates deficit. @: 1997-99.
Source : World Economic Outlook Database, April 2009, International Monetary Fund (2009c).

large as it was – only the surplus counterpart countries might have been somewhat different. The perceived lack of exchange rate flexibility in the Asian EMEs cannot, therefore, fully explain the large and growing current account deficits in the US. The fact that many continental European countries continue to exhibit surpluses or modest deficits reinforces this point.

Apart from creating large global imbalances, accommodative monetary policy and the existence of very low interest rates for an extended period encouraged the search for yield, and relaxation of lending standards. Even as financial imbalances were building up, macroeconomic stability was maintained. Relatively stable growth and low inflation have been witnessed in the major advanced economies since the early 1990s and the period has been dubbed as the Great Moderation. The stable macroeconomic environment encouraged underpricing of risks. Financial innovations, regulatory arbitrage, lending malpractices, excessive use of the originate and distribute model, securitisation of sub-prime loans and their bundling into AAA tranches on the back of ratings, all combined to result in the observed excessive leverage of financial market entities.

Components of the Crisis

Most of the crises over the past few decades have had their roots in developing and emerging countries, often resulting from abrupt reversals in capital flows, and from loose domestic monetary and fiscal policies. In contrast, the current ongoing global financial crisis has had its roots in the US. The sustained rise in asset prices, particularly house prices, on the back of excessively accommodative monetary policy and lax lending standards during 2002-2006 coupled with financial innovations resulted in a large rise in mortgage credit to households, particularly low credit quality households. Most of these loans were with low margin money and with initial low teaser payments. Due to the 'originate and distribute' model, most of these mortgages had been securitised. In combination with strong growth in complex credit derivatives and the use of credit ratings, the mortgages, inherently sub-prime, were bundled into a variety of tranches, including AAA tranches, and sold to a range of financial investors.

As inflation started creeping up beginning 2004, the US Federal Reserve started to withdraw monetary accommodation. With interest rates beginning to edge up, mortgage payments also started rising. Tight monetary policy contained aggregate demand and output, depressing housing prices. With low/negligible margin financing, there were greater incentives to default by the sub-prime borrowers. Defaults by such borrowers led to losses by financial institutions and investors alike. Although the loans were supposedly securitised and sold to the off balance sheet special institutional vehicles (SIVs), the losses were ultimately borne by the banks and the financial institutions wiping off a significant fraction of their capital. The theory and expectation behind the practice of securitisation and use of derivatives was the associated dispersal of risk to those who can best bear them. What happened in practice was that risk was parcelled out increasingly among banks and financial institutions, and got effectively even more concentrated. It is interesting to note that the various stress tests conducted by the major banks and financial institutions prior to the crisis period had revealed that banks were well-capitalised to deal with any shocks. Such stress tests, as it appears, were based on the very benign data of the period of the Great Moderation and did not properly capture and reflect the reality (Haldane, 2009).

The excessive leverage on the part of banks and the financial institutions (among themselves), the opacity of these transactions, the mounting losses and the dwindling net worth of major banks and financial institutions led to a breakdown of trust among banks. Given the growing financial globalisation, banks and financial institutions in other major advanced economies, especially Europe, have also been adversely affected by losses and capital write-offs. Inter-bank money markets nearly froze and this was reflected in very high spreads in money markets. There was aggressive search for safety, which has been mirrored in very low yields on Treasury Bills and bonds. These developments were significantly accentuated following the failure of Lehman Brothers in September 2008 and there was a complete loss of confidence.

The deep and lingering crisis in global financial markets, the extreme level of risk aversion, the mounting losses of banks and financial institutions, the elevated level of commodity prices (until the third quarter of 2008) and their subsequent collapse, and the sharp correction in a range of asset prices, all combined, have suddenly led to a sharp slowdown in growth momentum in the major advanced economies, especially since the Lehman failure. Global growth for 2009, which was seen at a healthy 3.8 per cent in April 2008, is now projected to contract by 1.3 per cent (IMF, 2009c) (Table 2). Major advanced economies are in recession and the EMEs - which in the earlier part of 2008 were widely viewed as being decoupled from the major advanced economies – have also been engulfed by the financial crisis-led slowdown. Global trade volume (goods and services) is also expected to contract by 11 per cent during 2009 as against the robust growth of 8.2 per cent during 2006-2007. Private capital inflows (net) to the EMEs fell from the peak of US $ 617 billion in 2007 to US $ 109 billion in 2008 and are projected to record net outflows of US $ 190 billion in 2009. The sharp decline in capital flows in 2009 will be mainly on account of outflows under bank lending and portfolio flows. Thus, both the slowdown in external demand and the lack of external financing have dampened growth prospects for the EMEs much more than that was anticipated a year ago.

Volatility in Capital Flows: Implications for Emerging Market Economies

Monetary policy developments in the leading economies not only affect them domestically, but also have a profound impact on the rest of the world through changes in risk premia and search for yield leading to significant switches in capital flows. While the large volatility in the monetary policy in the US, especially since the beginning of this decade, could have been dictated by internal compulsions to maintain employment and price stability, the consequent volatility in capital flows impinges on exchange rate movements and more generally, on the spectrum of asset

Table 2: Global Economic Outlook for 2009 (per cent)

Indicator	Month of Forecast											
	April 2008		July 2008		October 2008		November 2008		January 2009		April 2009	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Global Growth	3.7	3.8	4.1	3.9	3.9	3.0	3.4	0.5	3.4	0.5	3.2	- 1.3
(a) Advanced Economies	1.3	1.3	1.7	1.4	1.5	0.5	1.0	-2.0	1.0	-2.0	0.9	- 3.8
(b) EMEs	6.7	6.6	6.9	6.7	6.9	6.1	6.3	3.3	6.3	3.3	6.1	1.6
2. World Trade Volume	3.7	3.8	4.1	3.9	3.9	3.0	4.1	-2.8	4.1	-2.8	3.3	- 11.0
3. Consumer Price Inflation												
(a) Advanced Economies	2.6	2.0	3.4	2.3	3.6	2.0	3.5	0.3	3.5	0.3	3.4	- 0.2
(b) EMEs	7.4	5.7	9.1	7.4	9.4	7.8	9.2	5.8	9.2	5.8	9.3	5.7

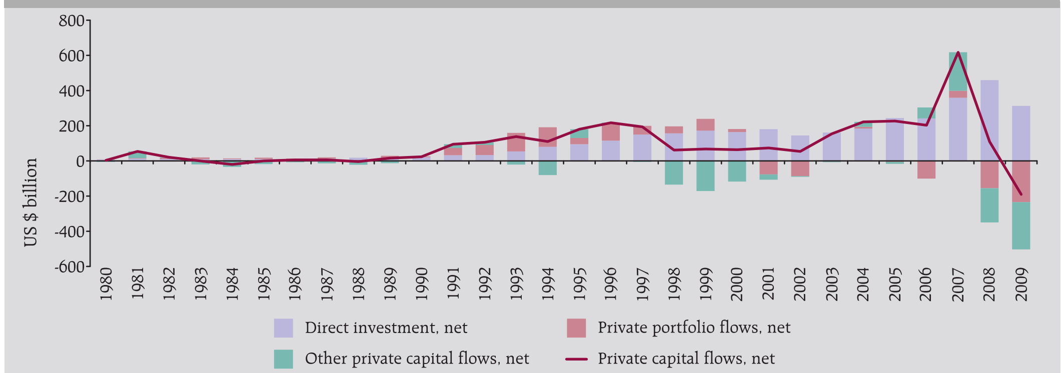
@ : Volume growth in goods and services.
Source : World Economic Outlook, various issues, International Monetary Fund.

and commodity prices. The monetary policy dynamics of the advanced economies thus involve sharp adjustment for the EMEs.

Private capital flows to EMEs have grown rapidly since the 1980s, but with increased volatility over time. Large capital flows to the EMEs can be attributed to a variety of push and pull factors. The pull factors that have led to higher capital flows include strong growth in the EMEs over the past decade, reduction in inflation, macroeconomic stability, opening up of capital accounts and buoyant growth prospects. The major push factor is the stance of monetary policy in the advanced economies. Periods of loose monetary policy and search for yield in the advanced economies encourages large capital inflows to the EMEs and *vice versa* in periods of tighter monetary policy. Thus, swings in monetary policy in the advanced economies lead to cycles and volatility in capital flows to the EMEs. Innovations in information technology have also contributed to the two-way movement in capital flows to the EMEs. Overall, in response to these factors, capital flows to the EMEs since the early 1980s have grown over time, but with large volatility (Committee on Global Financial System, 2009).

After remaining nearly flat in the second half of the 1980s, private capital flows jumped to an annual average of US $ 124 billion during 1990-96[1]. With the onset of the Asian financial crisis, total private capital flows fell to an annual average of US $ 86 billion during 1997-2002. Beginning 2003, a period coinciding with the low interest rate regime in the US and major advanced economies and the concomitant search for yield, such flows rose manifold to an annual average of US $ 285 billion during 2003-2007 reaching a peak of US $ 617 billion in 2007 (Chart 3). As noted earlier, the EMEs, as a group, are now likely to witness outflows of US $ 190 billion in 2009 – the first contraction since 1988. Amongst the major components, while direct investment flows have generally seen a steady increase over the period, portfolio

Chart 3: Capital Flows to Emerging Market Economies



Source: World Economic Outlook Database (April 2009), IMF.

[1] The data on capital flows are based on World Economic Outlook Database (April 2009) of the International Monetary Fund (IMF, 2009c).

flows as well as other private flows (bank loans, *etc.*) have exhibited substantial volatility. While direct investment flows largely reflect the pull factors, portfolio and bank flows reflect both the push and the pull factors. It is also evident that capital account transactions have grown much faster relative to current account transactions, and gross capital flows are a multiple of both net capital flows and current account transactions. Also, large private capital flows have taken place in an environment when major EMEs have been witnessing current account surpluses leading to substantial accumulation of foreign exchange reserves in many of these economies.

As noted earlier, the policy interest rates in the US reached extremely low levels during 2002 – one per cent - and remained at these levels for an extended period of time, through mid 2004. Low nominal interest rates were also witnessed in other major advanced economies over the same period. The extremely accommodative monetary policy in the advanced economies was mirrored in the strong base money expansion during the period 2001-02 – shortly before the beginning of the current episode of strong capital flows to EMEs. As the monetary accommodation was withdrawn in a phased manner, base money growth witnessed correction beginning 2004. However, contrary to the previous episodes, capital flows to the EMEs continued to be strong. The expected reversal of capital flows from the EMEs was somewhat delayed and finally took place in 2008. Similarly, the previous episode (1993-96) of heavy capital inflows was also preceded by a significant expansion of base money during 1990-94, and sharp contraction thereafter. This brief discussion highlights the correlation between monetary policy cycles in the advanced economies on the one hand and pricing/ mispricing of risk and volatility in capital flows on the other hand. At present, monetary policies across the advanced economies have again been aggressively eased and policy interest rates have reached levels even lower than those which were witnessed in 2002. Base money in the US more than doubled over a period of just six months between June and December 2008. Given such a large monetary expansion and given the past experiences, large capital inflows to the EMEs could resume in the foreseeable future, if the unwinding of the current monetary expansion is not made in a timely fashion.

In rapidly growing economies such as India, high real GDP growth needs concomitant growth in monetary aggregates, which also needs expansion of base money. To this extent, the accretion of unsterilised foreign exchange reserves to the central bank's balance sheet is helpful in expanding base money at the required rate. However, net capital flows and accretion to foreign exchange reserves in excess of such requirements necessitate sterilisation and more active monetary and macroeconomic management. Thus, large inflows of capital, well in excess of the current financing needs, can lead to high domestic credit and monetary growth, boom in stock market and other asset prices, and general excess domestic demand leading to macroeconomic and financial instability. Abrupt reversals in capital flows also lead to significant difficulties in monetary and macroeconomic management.

While, in principle, capital account liberalisation is expected to benefit the host economy and raise its growth rate, this theoretical conjecture is not supported by the accumulated empirical evidence. Despite an abundance of cross-section, panel, and event studies, there is strikingly little convincing documentation of direct positive impacts of financial opening on the economic welfare levels or growth rates of developing countries. There is also little systematic evidence that financial opening raises welfare indirectly by promoting collateral reforms of economic institutions or policies. At the same time, opening the financial account does appear to raise the frequency and severity of economic crises (Obstfeld, 2009). The evidence appears to favour a hierarchy of capital flows. While the liberalisation of equity flows seems to enhance growth prospects, the evidence that the liberalisation of debt flows is beneficial to the EMEs is ambiguous (Henry, 2007; Committee on Global Financial System (2009)).

Reversals of capital flows from the EMEs, as again shown by the current financial crisis, are quick, necessitating a painful adjustment in bank credit, and collapse of stock prices. Such reversals also result in the contraction of the central bank's balance sheet, which may be difficult to compensate with accretion of domestic assets as fast as the reserves depletion. These developments can then lead to banking and currency crises, large employment and output losses and huge fiscal costs. Thus, the boom and bust pattern of capital inflows can, unless managed proactively, result in macroeconomic and financial instability. Hence, the authorities in the EMEs need to watch closely and continuously financial and economic developments in the advanced economies on the one hand and actively manage their capital account.

To summarise, excessively accommodative monetary policy for an extended period in the major advanced economies in the post dot com crash period sowed the seeds of the current global financial and economic crisis. Too low policy interest rates, especially in the US, during the period 2002-04 boosted consumption and asset prices, and resulted in aggregate demand exceeding output, which was manifested in growing global imbalances. Too low short-term rates also encouraged aggressive search for yield, both domestically and globally, encouraged by financial engineering, heavy recourse to securitisation and lax regulation and supervision. The global search for yield was reflected in record high volume of capital flows to the EMEs; since such flows were well in excess of their financing requirements, the excess was recycled back to the advanced economies, leading to depressed long-term interest rates. The Great Moderation over the preceding two decades led to under-pricing of risks and the new financial and economic regime was considered as sustainable. The combined effect of these developments was excessive indebtedness of households, credit booms, asset price booms and excessive leverage in the major advanced economies, but also in emerging market economies. While forces of globalisation were able to keep goods and services inflation contained for some time, the aggregate demand pressures of the accommodative monetary policy started getting reflected initially in oil and other commodity prices and finally onto headline inflation. The consequent tightening of monetary policy led to correction in housing prices, encouraged defaults on sub-prime loans, large losses for banks and financial institutions, sharp increase in risk aversion, complete lack of confidence and trust amongst market participants, substantial deleveraging, and large capital outflows from the EMEs. Financial excesses of the 2002-06 were, thus, reversed in a disruptive manner and have now led to the severest post-war recession. In brief, the large volatility in monetary policy in the major reserve currency countries contributed to the initial excesses and their subsequent painful correction.

II. Impact on India

Initial Impact of the Sub-prime Crisis

The initial impact of the sub-prime crisis on the Indian economy was rather muted. Indeed, following the cuts in the US Fed Funds rate in August 2007, there was a massive jump in net capital inflows into the country. The Reserve Bank had to sterilise the liquidity impact of large foreign exchange purchases through a series of increases in the cash reserve ratio and issuances under the Market Stabilisation Scheme (MSS)[2]. With persistent inflationary pressures emanating both from strong domestic demand and elevated global commodity prices, policy rates were also raised. Monetary policy continued with pre-emptive tightening measures up to August 2008.

The direct effect of the sub-prime crisis on Indian banks/financial sector was almost negligible because of limited exposure to complex derivatives and other prudential policies put in place by the Reserve Bank. The relatively lower presence of foreign banks in the Indian banking sector also minimised the direct impact on the domestic economy (Table 3). The larger presence of foreign banks can increase the vulnerability of the domestic economy to foreign shocks, as happened in Eastern European and Baltic countries. In view of significant liquidity and capital shocks to the parent foreign bank, it can be forced to scale down its operations in the domestic economy, even as the fundamentals of the domestic economy remain robust. Thus, domestic bank credit supply can shrink during crisis episodes. For instance, in response to the stock and real estate market collapse of early 1990s, Japanese banks pulled back from foreign markets - including

[2] In view of sustained large capital flows, the finite stock of government securities with the Reserve Bank, and the absence of the option of issuing central bank securities under the RBI Act, a new scheme, Market Stabilisation Scheme (MSS), was introduced in April 2004 to manage the large capital flows. Under this scheme, the Reserve Bank has been empowered to issue government Treasury Bills and medium duration dated securities exclusively for sterilisation purposes, so as to manage liquidity appropriately. The proceeds collected under MSS auctions are kept in a separate identifiable cash account with the RBI, and are used for redemption and/or buy back of securities issued under the MSS. The payments for interest and discount on MSS securities are not made from the MSS Account, but shown in the government budget transparently. The MSS securities are indistinguishable from normal government Treasury Bills and dated securities in the hands of the holders. The introduction of MSS has succeeded broadly in restoring LAF to its intended function of daily liquidity management (see Mohan (2006)). MSS operates symmetrically as a store of liquidity: it helps to absorb excess liquidity in times of large capital flows and to inject liquidity in periods of reversals in capital flows. Thus, balances under MSS rose from around Rs.39,000 crore at end-January 2007 to around Rs.1,75,000 crore by end-May 2008 in the face of large capital flows; in the subsequent period, with reversals in capital flows, MSS balances came down to around Rs. 88,000 crore by end-March 2009 and helped maintain adequate rupee liquidity in the system.

Table 3: Share of banking assets held by foreign banks with majority ownership, 2006

Country	0%–10%	Country	10%–30%	Country	30%–50%	Country	50%–70%	Country	70%–100%
1	2	3	4	5	6	7	8	9	10
Algeria	9	Moldova	30	Senegal	48	Rwanda	70	Madagascar	100
Nepal	9	Honduras	29	Congo	47	Côte d'Ivoire	66	Mozambique	00
Guatemala	8	Ukraine	28	Uruguay	44	Tanzania	66	Swaziland	100
Thailand	5	Indonesia	28	Panama	42	Ghana	65	Peru	95
India	**5**	Cambodia	27	Kenya	41	Burkina Faso	65	Hungary	94
Ecuador	5	Argentina	25	Benin	40	Serbia and Montenegro	65	Albania	93
Azerbaijan	5	Brazil	25	Bolivia	38	Cameroon	63	Lithuania	92
Mauritania	5	Kazakhstan	24	Mauritius	37	Romania	60	Croatia	91
Nigeria	5	Pakistan	23	Burundi	36	Niger	59	Bosnia-Herzegovina	90
Turkey	4	Costa Rica	22	Seychelles	36	Mali	57	Mexico	82
Uzbekistan	1	Malawi	22	Lebanon	34	Angola	53	Macedonia	80
Philippines	1	Tunisia	22	Nicaragua	34	Latvia	52	Uganda	80
South Africa	0	Mongolia	22	Chile	32	Jamaica	51	El Salvador	78
China	0	Sudan	20	Venezuela	32	Zimbabwe	51	Zambia	77
Vietnam	0	Morocco	18	Georgia	32	Namibia	50	Botswana	77
Iran	0	Colombia	18	Armenia	31			Kyrgyzstan	75
Yemen	0	Malaysia	16					Poland	73
Bangladesh	0	Jordan	14					Bulgaria	72
Sri Lanka	0	Russia	13					Paraguay	71
Ethiopia	0	Egypt	12						
Togo	0								

Note: 1. A bank is defined as foreign owned only if 50 percent or more of its shares in a given year are held directly by foreign nationals. Once foreign ownership is determined, the source country is identified as the country of nationality of the largest foreign shareholder(s). The table does not capture the assets of the foreign banks with minority foreign ownership.

2. World Bank staff estimates based on Bankscope data.

Source : World Bank (2008).

the United States - in order to reduce liabilities on their balance sheets and thereby meet capital adequacy ratio requirements. Econometric evidence shows a statistically significant relationship between international bank lending to developing countries and changes in global liquidity conditions, as measured by spreads of interbank interest rates over overnight index swap (OIS) rates and US Treasury Bill rates. A 10 basis-point increase in the spread between the London Interbank Offered Rate (LIBOR) and the OIS sustained for a quarter, for example, is predicted to lead to a decline of up to 3 per cent in international bank lending to developing countries (World Bank, 2008).

Impact of Lehman Failure

Balance of Payments: Capital Outflows

There was also no direct impact of the Lehman failure on the domestic financial sector in view of the limited exposure of the Indian banks. However, following the Lehman failure, there was a sudden change in the external environment. As in the case of other major EMEs, there was a sell-off in domestic equity markets by portfolio investors reflecting deleveraging.

Consequently, there were large capital outflows by portfolio investors during September-October 2008, with concomitant pressures in the foreign exchange market. While foreign direct investment flows exhibited resilience, access to external commercial borrowings and trade credits was rendered somewhat difficult. On the whole, net capital inflows during 2008-09 were substantially lower than in 2007-08 and there was a depletion of reserves (Table 4). However, a large part of the reserve loss (US $ 33 billion out of US $ 54 billion) during April-December 2008 reflected valuation losses.

The contraction of capital flows and the sell-off in the domestic market adversely affected both external and domestic financing for the corporate sector. The sharp slowdown in demand in the major advanced economies is also having an adverse impact

Table 4 : Trends in Capital Flows

(US $ billion)

Component	Period	2007-08	2008-09
1	2	3	4
Foreign Direct Investment to India	April-February	27.6	31.7
FIIs (net)	April-March	20.3	-15.0
External Commercial Borrowings (net)	April- December	17.5	6.0
Short-term Trade Credits (net)	April- December	10.7	0.5
Total capital flows (net)	April- December	82.0	15.3
Memo:			
Current Account Balance	April- December	-15.5	-36.5
Valuation Gains (+)/Losses (-) on Foreign Exchange Reserves	April- December	+ 9.0	-33.4
Foreign Exchange Reserves (variation)	April-December	76.1	-53.8
Foreign Exchange Reserves (variation)	April-March	110.5	-57.7

on our exports and industrial performance. On the positive side, the significant correction in international oil and other commodity prices has alleviated inflationary pressures as measured by wholesale price index. However, various measures of consumer prices remain at elevated levels on the back of continuing high inflation in food prices.

Fiscal Impact

Government finances, which had exhibited a noteworthy correction starting 2002-03, came under renewed pressure in 2008-09 on account of higher expenditure outgoes due to (i) higher international crude oil prices (up to September 2008) and the incomplete pass-through to domestic prices (ii) higher fertiliser prices and associated increase in fertiliser prices (iii) the Sixth Pay Commission award and (iv) debt waiver scheme. The fiscal stimulus packages involving additional expenditures and tax cuts have put further stress on the fisc. Reflecting these factors, the Central Government's fiscal deficit more than doubled from 2.7 per cent of GDP in 2007-08 to 6.0 per cent in 2008-09, reaching again the levels seen around the end of the 1990s. The revenue deficit at 4.4 per cent of GDP will be at its previous peak touched during 2001-02 and 2002-03. Primary balance again turned into deficit in 2008-09, after recording surpluses during the preceding two years (Table 5). Net market borrowings during 2008-09 almost trebled from the budgeted Rs.1,13,000 crore to Rs.3,29,649 in the revised estimates (actual borrowings were Rs.2,98,536 crore as per Reserve Bank records) and are budgeted at Rs.3,08,647 crore (gross borrowings at Rs. 3,98,552 crore) in 2009-10.

Table 5 : Key Fiscal Indicators of the Central Government

(Per cent to GDP)

Year	Gross fiscal deficit	Gross primary deficit	Revenue deficit
1	2	3	4
1990-91	7.8	4.1	3.3
1991-92	5.6	1.5	2.5
1992-93	5.3	1.2	2.5
1993-94	7.0	2.7	3.8
1994-95	5.7	1.3	3.1
1995-96	5.1	0.9	2.5
1996-97	4.8	0.5	2.4
1997-98	5.8	1.5	3.0
1998-99	6.5	2.0	3.8
1999-00	5.4	0.7	3.5
2000-01	5.7	0.9	4.1
2001-02	6.2	1.5	4.4
2002-03	5.9	1.1	4.4
2003-04	4.5	0.0	3.6
2004-05	4.0	0.0	2.5
2005-06	4.1	0.4	2.6
2006-07	3.5	-0.2	1.9
2007-08	2.7	-0.9	1.1
2008-09 RE	6.0	2.5	4.4
2009-10 BE	5.5	1.8	4.0

RE : Revised Estimates. BE : Budget Estimates.

Note : 1. Negative (-) sign indicates surplus.
2. Oil and fertiliser bonds issued during 2008-09 were 1.8 per cent of GDP.

In view of the renewed fiscal deterioration, the credit rating agency Standard and Poor's has changed its outlook on long-term sovereign credit rating from stable to negative, while reaffirming the 'BBB-' rating. If bonds issued to oil and fertiliser companies are taken into account, the various deficit indicators will be even higher. Moreover, in order to boost domestic demand, the Government has announced additional tax sops subsequent to the interim vote-on-account budget putting further pressure on fiscal position. Thus, while the slowdown in the domestic economy may call for fiscal stimulus, fiscal manoeuvrability is limited.

According to the IMF, based on measures already taken and current plans, it is estimated that government debt ratios and fiscal deficits, particularly in advanced economies, will increase significantly. For the G-20 as a whole, the general government balance is expected to deteriorate by 3½ per cent of GDP, on average, in 2009. While the fiscal cost for some countries will be large in the short-run, the alternative of providing no fiscal stimulus or financial sector support would be extremely costly in terms of the lost output (IMF, 2009b).

Impact on the Real Economy

Reflecting the slowdown in external demand, and the consequences of reversal of capital flows, growth in industrial production decelerated to 2.8 per cent in 2008-09 (April-February) from 8.8 per cent in the corresponding period of 2007-08. On the other hand, services sector activity has held up relatively well in 2008-09 so far (April-December) with growth of 9.7 per cent (10.5 per cent in the corresponding period of 2007-08). Services sector activity was buoyed up by acceleration in "community, social and personal services" on the back of higher government expenditure. Overall, real GDP growth has slowed to 6.9 per cent in the first three quarters of 2008-09 from 9.0 per cent in the corresponding period of 2007-08. On the expenditure side, growth of private final consumption expenditure decelerated to 6.6 per cent from 8.3 per cent. On the other hand, reflecting the fiscal stimuli and other expenditure measures, growth in government final consumption expenditure accelerated to 13.3 per cent from 2.7 per cent.

III. Financial Regulatory Policies to Manage Financial Stability: Why the Indian Financial Sector has Weathered the Storm?

As the preceding discussion shows, it is apparent that the Indian banks and financial system had only negligible direct exposure to the type of toxic assets that have contaminated the Western countries' banking system. Bank's credit quality remains of high quality. Although bank credit growth was quite high at around 30 per cent per annum during 2004-07, it would appear that there was no significant relaxation of lending standards. Bank's loans to individuals for housing have been backed by prudent loan-to-value ratios. However, in view of the rapid credit growth to certain sectors, the Reserve Bank had pre-emptively tightened prudential norms (provisioning requirements and risk weights) for these sectors in order to safeguard financial stability; provisioning norms for standard assets were also raised across the board except for agriculture and SMEs. These tightened provisioning norms and risk weights have now been rolled back in the wake of slowdown in order to ensure flow of credit to the productive sectors of the economy. This "dynamic provisioning" approach has facilitated adequate buffers within the banking system. Such "dynamic provisioning" is now being advocated as general practice internationally. Therefore, unlike the banking system in the Western world, domestic banks have not recorded losses so far and there has been no need for any government bailout.

Bank balance sheets remain healthy and adequately capitalised. The CRAR of all scheduled commercial banks (SCBs) taken together was 13.0 per cent at end-March 2008, well-above the regulatory requirement of 9 per cent. No SCB has CRAR below 9 per cent. Of the 79 SCBs, 77 banks had CRAR above 10 per cent, while 2 banks had CRAR between 9 and 10 per cent. Asset quality of the domestic banks also remains satisfactory with net NPAs being only 1.0 per cent of net advances and 0.6 per cent of assets at end-March 2008 (Table 6).

A more rigorous assessment of the health of commercial banks, recently undertaken by the Committee on Financial Sector Assessment (CFSA) (Chairman: Dr. Rakesh Mohan) (RBI, 2009), also shows that the commercial banks are robust and resilient. The single-factor stress tests undertaken by the CFSA reveal that the banking system can withstand significant shocks arising from large potential changes in credit quality, interest rate and liquidity conditions. These stress tests for credit,

Table 6: Key Indicators of Scheduled Commercial Banks in India

Item	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5
Capital to Risk-weighted Assets Ratio (CRAR) (per cent)	12.8	12.3	12.3	13.0
of which: Tier I CRAR (per cent)	8.4	9.3	8.3	9.1
Net Non-Performing Assets (per cent to net advances)	1.9	1.2	1.0	1.0
Net Non-Performing Assets (per cent to assets)	0.9	0.7	0.6	0.6
Net profits (per cent to assets)	0.9	0.9	0.9	1.0
Net interest margin (per cent to assets)	2.8	2.8	2.6	2.3

Source : Report on Trend and Progress of Banking in India, 2007-08, Reserve Bank of India.

market and liquidity risk show that Indian banks are generally resilient. Given the ongoing financial crisis and its likely impact on the Indian economy, the CFSA conducted stress tests for the end of September 2008. Under the worst-case scenario (150 per cent increase in gross NPAs), the overall capital adequacy position of the banking sector would have declined to 10.6 percent in September 2008 – still well-above the regulatory requirement of 9 per cent. Thus, even under the worst case scenario, CRAR remains comfortably above the regulatory minimum.

Growth in bank credit remained strong up to October 2008 but has decelerated since. The financial system is working normally and accordingly there has been no need for any enhancement of government guarantee for bank deposits or banks' other liabilities. In view of the strong balance sheets and the transparency in the operations, there is no mistrust between banks and the interbank money market has been working throughout the period normally (Table 7). Volumes in the money market have in fact grown over the past few months. There was some volatility in the call money rate, but this resulted from the sudden reversal in capital flows and resulting tightening of liquidity in September-October 2008. Thus, the Indian banking system is displaying none of the distresses that the Western banking system has exhibited since the start of the sub-prime crisis.

The resilience of the Indian financial sector in the face of the worst global financial crisis since the 1930s can also be attributed to our approach to financial globalisation. The key features of our

Table 7: Activity in Money Market Segments

(Average Daily Volume (One Leg) in Rs. Crore)

Year/ Month	Call Money	Repo Market (Outside RBI)	CBLO	Total (2+3+4)
1	2	3	4	5
Year				
2006-07	10,863	8,419	16,195	35,477
2007-08	10,697	13,684	27,813	52,194
2008-09	11,218	14,330	30,776	56,323
Month				
Apr-08	9,758	14,966	38,828	63,552
May-08	9,740	14,729	36,326	60,795
Jun-08	10,854	11,262	35,774	57,890
Jul-08	12,368	8,591	23,669	44,628
Aug-08	11,704	10,454	22,110	44,268
Sep-08	11,690	10,654	20,547	42,891
Oct-08	14,497	9,591	16,818	40,906
Nov-08	10,906	15,191	24,379	50,476
Dec-08	10,820	16,943	32,261	60,024
Jan-09	9,248	18,053	31,794	59,095
Feb-09	11,121	19,929	38,484	69,534
Mar-09	11,909	21,593	43,819	81,821

approach have been reflected in a full, but gradual opening up of the current account but a more calibrated approach towards the opening up of the capital account and the financial sector. As far as the capital account is concerned, whereas foreign investment flows, especially direct investment inflows are encouraged, debt flows in the form of external commercial borrowings are generally subject to ceilings and some end-use restrictions. Macro ceilings have also been stipulated for portfolio investment in government securities and corporate bonds. Capital outflows have also been progressively liberalised. Along with the calibrated approach to opening up of the capital account, we have also practised prudential regulation, particularly of banks to manage financial instability.

The financial sector, especially banks, is subject to prudential regulation, with respect to both liquidity and capital. A number of initiatives have been taken by the Reserve Bank over the past 5-6 years with a view to mitigating liquidity risks, at the very short end, systemic level and institution level *viz.*, (i) participation in the overnight unsecured overnight money market has been restricted to banks and primary dealers (PDs) and ceilings have been stipulated on their borrowing and lending operations in this market; (ii) prudential limits have been imposed on banks on their interbank liabilities in relation to their net worth; (iii) asset-liability management guidelines have been framed that take cognizance of both on and off balance sheet items; and (iv) a detailed policy on the provision of liquidity support to Special Purchase Vehicles (SPVs) has been outlined in the guidelines on securitisation of standard assets.

With the objective of further strengthening capital requirements, the credit conversion factors, risk weights and provisioning requirements for specific off-balance sheet items including derivatives have been reviewed. Furthermore, in India, complex structures like synthetic securitisation have not been permitted so far. Introduction of such products, when found appropriate would be guided by the risk management capabilities of the system.

Detailed guidelines have been issued by the Reserve Bank on the implementation of the Basel II framework covering all the three pillars. Minimum CRAR of 9 per cent has been prescribed. Banks have been advised to bring Tier I CRAR to a minimum of 6 per cent before end-March 2010. All foreign banks operating in India and Indian banks having a presence outside India migrated to Basel II by March 31, 2008 and all other scheduled commercial banks have migrated to Basel II by March 31, 2009.

Apart from normal prudential requirements on banks, additional prudential measures in respect of exposures to specific sectors such as real estate, housing loans to individuals and consumer credit, have been successively imposed, on the lines of dynamic provisioning. Furthermore, the regulation and supervision of Non-banking Finance Companies (NBFCs) was tightened by reducing regulatory arbitrage *vis-à-vis* the banking sector. The regulatory requirements are also higher in the case of deposit-taking NBFCs *vis-à-vis* the non-deposit-taking ones which has helped to contain leverage in this sector.

Thus, a number of prudential measures were put in place incrementally over the past five years in order to maintain stability in the Indian financial system and these measures in conjunction with the overall cautious approach to financial and external sector liberalisation have contributed to domestic macroeconomic and financial stability.

IV. Our Response to the Unfolding Impact of the Crisis

As noted earlier, the main impact over the past few months, especially following the collapse of Lehman Brothers in September 2008, has been the outcome of the reduction in net capital inflows and the significant correction in the domestic stock markets on the back of sell-off in the equity market by FIIs. The reduced foreign funding and the lacklustre domestic capital market had put pressures on some segments of the financial system, such as NBFCs and mutual funds. A substantial proportion of collections of mutual funds reflected bulk funds from the corporate sector under the money market schemes, partly reflecting tax and other regulatory arbitrage. As alternative sources of funding dried up and also due to the substantial correction in stock prices, there were large redemption pressures on mutual funds. While the mutual funds promised immediate redemption, their assets were relatively illiquid. Maturity mismatches between assets and liabilities of mutual funds further aggravated the problems. Drying up of funds with mutual funds, which in turn were provider of funds to other sectors, further accentuated the flow of funds. Consequently, all the pressure for fund availability came to rest on banks: from the corporate sector unable to get external funds or equity, from NBFCs and from mutual funds; and the perception of a credit crunch emerged.

Reserve Bank's Policy Response: Analytics

In view of the lower level of capital inflows, there were some pressures in the foreign exchange market. Consistent with its policy objective of maintaining orderly conditions in the foreign exchange market, the Reserve Bank sold foreign exchange in the market. While foreign exchange sales attenuated the mismatch in the foreign exchange market, these operations drained liquidity from the rupee market and accentuated pressures on the rupee liquidity. Accordingly, the Reserve Bank has been pro-actively managing liquidity since mid-September 2008 to assuage the liquidity pressures through a variety of measures. The cash reserve ratio (CRR) was reduced from 9 per cent (September 2008) to 5 per cent by early January 2009 injecting nearly Rs.1,60,000 crore of primary liquidity in the system. Fresh issuances under MSS were stopped and buyback of existing MSS securities was also resorted to to inject liquidity into the system. Buybacks were timed with government market borrowing programme. Following the amendment to the Memorandum of Agreement on the MSS, Rs.12,000 crore was transferred to the Government cash account from the MSS cash account. Reflecting the various operations, MSS balances declined from Rs.1,75,362 crore at end-May 2008 to around Rs.88,000 crore by end-March 2009. Other measures taken by the Reserve Bank in response to the global financial crisis include cut in the statutory liquidity ratio (SLR), opening of new refinancing windows, refinance to SIDBI and EXIM Banks, and clawing back of prudential norms in regard to provisioning and risk weights. The measures to improve forex liquidity included increase in interest rate ceilings on non-resident deposits, and easing of restrictions on external commercial borrowings and on short-term trade credits.

Simultaneously, in view of the adverse impact of the global slowdown on the domestic economy, policy rates were also cut - the reverse repo rate by 425 basis points from 9.00 per cent to 4.75 per cent and the reverse repo rate by 275 basis points from 6.00 per cent to 3.25 per cent. However, it may be noted that, at present, the reverse repo rate (the lower band of the LAF corridor) is the operational policy rate, whereas, in the period prior to mid-September 2008, the repo rate (the upper band of the LAF corridor) was the operational policy rate. The effective policy rate has, thus, seen a larger cut of 575 basis points from 9.00 per cent in mid-September 2008 to 3.25 per cent now. This is mirrored in the money market interest rates (weighted average of call, market repo and CBLO) falling from 9.3 per cent in September 2008 to 3.8 per cent in March 2009 (2.8 per cent as on April 22, 2009).

While in 2007 and previous years, large capital flows and their absorption by the Reserve Bank led to excessive liquidity, which was absorbed through sterilisation operations involving LAF, MSS and CRR. During 2008, in view of reversal in some components of capital flows, fresh MSS issuances were initially scaled down and then reversed. The MSS operates symmetrically, and acts as a store of liquidity and hence has the flexibility to smoothen liquidity in the banking system both during episodes of capital inflows and outflows. The existing set of monetary instruments has, thus, provided adequate flexibility to manage the evolving situation. In view of this flexibility, unlike central banks in major advanced economies, the Reserve Bank did not have to dilute the collateral requirements to inject liquidity. LAF repo operations can, however, be limited by the excess SLR securities held by banks.

Furthermore, in view of the large government market borrowing programme, the Reserve Bank has been conducting purchases of government securities under its open market operations (OMO) as warranted by the evolving monetary and financial market conditions. On March 26, 2009, the Reserve Bank announced a calendar for OMOs for the first half (April-September 2009) of the fiscal year. Taking into account the expected unwinding of MSS securities of Rs.42,000 crore during April-September 2009 and other factors in view, the Reserve Bank announced that it intended to purchase government securities of Rs.80,000 crore under OMOs during the first half. The OMO calendar and amounts are indicative and the Reserve Bank will have the flexibility to make changes in the amount of OMO depending on the evolving liquidity conditions and its other operations. These actions reflect the need for close co-ordination between government debt management and monetary policy operations. This can be done smoothly in our case since the Reserve Bank also acts as the debt manager for the government.

Analytically, the various policy actions by the Reserve Bank since mid-September 2008 have been aimed at offsetting the contraction caused to its balance sheet due to fall in its foreign assets. Policy initiatives have aimed at expanding domestic assets on the Reserve Bank's balance sheet through open market operations, scaling back of MSS, refinance facilities, regular operations under LAF and special market operations for oil bonds. The central bank balance sheet is the ultimate source of money and credit creation and expansion in the economy. It is therefore important that the central bank balance sheet and the monetary base/ reserve money continue to expand so as to meet the normal monetary requirements of a growing economy consistent with price stability. The reduction in CRR is expected to increase the money multiplier. The various monetary and liquidity measures, taken together, have released actual/potential liquidity amounting to over Rs.4,90,000 crore since mid-September 2008 (about 9 per cent of GDP) (Table 8). In brief, the proactive policy initiatives to avoid contraction of the RBI balance sheet coupled with the increase in the money multiplier are aimed at ensuring non-inflationary growth of money supply in the economy to support the needs of the real economy. Despite large capital outflows and the concomitant sales of foreign exchange by the Reserve Bank and the depletion of its assets side, the Reserve Bank was able to substitute them with equivalent domestic assets so as to stabilise the growth of reserve money. Year-on-year growth in reserve money (adjusted for changes in the CRR) was 19.0 per cent at end-March 2009 as compared with 25.3 per cent in the previous year. Reserve money expansion, thus, remains consistent with the growth

Table 8: Actual/Potential Release of Primary Liquidity

(since mid-September 2008)

Measure/Facility	**Amount (Rs.crore)**
1	2
Monetary Policy Operations (1 to 3)	
1. Cash Reserve Ratio (CRR) Reduction	1,60,000
2. Open Market Operations	68,835
3. MSS Unwinding/De-sequestering	97,781
Extension of Liquidity Facilities (4 to 8)	
4. Term Repo Facility	60,000
5. Increase in Export Credit Refinance	25,512
6. Special Refinance Facility for SCBs (Non-RRB)	38,500
7. Refinance Facility for SIDBI/NHB/EXIM Bank	16,000
8. Liquidity Facility for NBFCs through SPV	25,000
Total (1 to 8)	**4,91,628**
Memo:	
Statutory Liquidity Ratio (SLR) Reduction	40,000

requirements of the Indian economy and long-run trends. In contrast to the trends in major advanced economies (discussed next), there has been no excessive expansion of reserve money. Hence, the issue of unwinding and exit of the current excessively accommodative monetary and liquidity policies, which is of extreme concern in the major advanced economies, is not relevant for us in view of the consistent growth in reserve money.

Monetary Aggregates in Major Advanced Economies: Recent Trends

In this regard, the recent behaviour of US monetary aggregates is interesting. With interest rates approaching near zero levels, the US Federal Reserve has resorted to aggressive quantitative easing as reflected in its expansion of balance sheet. In view of the continuing strains in the US financial markets, the Fed's major policy tools - lending to financial institutions, providing liquidity directly to key credit markets, and buying longer-term securities - represent a use of the asset side of the Fed's balance sheet, that is, they all involve lending or the purchase of securities. According to the Federal Reserve, these policies provide it the flexibility to continue to push down interest rates and ease credit conditions in a range of markets, despite the fact that the federal funds rate is close to its zero lower bound. The Fed prefers to dub this approach as "credit easing" - rather than terming it as "quantitative easing", the policy approach used by the Bank of Japan from 2001 to 2006. While both approaches involve an expansion of the central bank's balance sheet, in a pure quantitative easing regime, the focus of policy is the quantity of bank reserves (liabilities of the central bank); the composition of loans and securities on the asset side of the central bank's balance sheet is incidental. In contrast, the Federal Reserve's credit easing approach focuses on the mix of loans and securities that it holds and on how this composition of assets affects credit conditions for households and businesses (Bernanke, 2009). The Bank of England is also now doing similar quantitative easing.

Reflecting the massive liquidity injection operations, monetary base in the US almost doubled between June 2008 and December 2008. Over the same six-month period, money supply (M2) and bank credit increased by only 6 per cent. M2 money multiplier correspondingly fell from 8.8 to 4.9 over the same period. Thus, even as the Fed expanded its balance sheet significantly, money supply and bank credit appeared to maintain their normal growth. This can be attributed to the fact that banks, rather than employing such additional liquidity pumped by the Federal Reserve into the system, have preferred to keep these funds as excess reserves with the Fed itself: banks deposits with the Federal Reserve jumped from around US $ 90 billion to US $ 839 billion between June and December 2008. Thus, all the efforts of the Fed to accelerate the pace of credit and monetary aggregates in the US economy have been largely offset by the increased holdings of commercial bank deposits with the Fed. As noted earlier, the strong growth in monetary base holds the potential to increase capital flows to the EMEs with lags. Since December 2008, there has been some moderation in the expansion of monetary base, and pick-up in money supply growth (Table 9).

Credit Growth in India: Perceptions and Reality

In view of the changed environment due to capital outflows and risk aversion, there was a substantial shrinking of non-bank sources of funding in India – such as domestic capital markets, funding from NBFCs and mutual funds and external funding in the form of commercial borrowings and ADRs/GDRs (Table 10). Accordingly, there was a sudden rush for bank credit from the various sectors of the

Table 9: Recent Behaviour of Monetary Aggregates in the US

(US $ billion)

	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08	Feb-09
1	2	3	4	5	6	7
1. Monetary Base	847	861	863	936	1669	1587
of which: Bank Reserves	92	97	94	160	839	758
2. M1	1364	1373	1384	1452	1596	1556
3. M2	7415	7599	7648	7782	8124	8238
4. Bank Credit	9206	9495	9403	9573	9975	9824
5. M2 Money Multiplier	8.7	8.8	8.9	8.3	4.9	5.2
Memo:	Year-on-year growth (per cent)					
Monetary base	1.2	1.5	1.4	9.9	97.0	85.2
M2	5.6	6.9	6.1	6.3	9.6	9.3

Source : Monetary Trends (April 2009) and FRED database, Federal Reserve of St. Louis.

Table 10 : Flow of Resources to the Commercial Sector

(Rupees crore)

Item	2007-08	2008-09
1	2	3
A. Adjusted non-food Bank Credit by Commercial Banks (1+2) @	4,44,807	4,14,902
1. Non-Food Credit	4,32,846	4,06,287
2. Non-SLR Investments	11,961	8,615
B. Flow from Other Major Sources (3+4)	3,35,698	2,64,138
3. Domestic Sources	1,72,338	1,50,604
4. Foreign Sources	1,63,360	1,13,534
C. Total Credit (A+B)	**7,80,505**	**6,79,040**

Note : Data are provisional.
Source : Reserve Bank of India (2009b).

economy and there were perceptions of credit crunch. Moreover, in view of incomplete pass-through to domestic petroleum prices in the first half of 2008-09 (before the sharp correction in international crude oil prices), there was a large demand from petroleum companies for bank credit. For almost similar reasons, fertiliser companies also had a large resort to bank credit. Reflecting these factors, growth in non-food bank credit (y-o-y) accelerated to around 30 per cent by October 2008. Nonetheless, there was a perception that there was credit crunch during this period, which could be attributed to a large decline in non-bank sources of funding. The slowdown of the manufacturing sector and a temporary build-up in inventories as well as liquidity problems faced by mutual funds and NBFCs during this period added to an increased demand for bank credit. At the same time, there might have been an increase in precautionary demand for bank credit in the last quarter of 2008 in view of the heightened uncertainties. The cumulative impact of all these demand pressures was reflected in acceleration of non-food bank credit from around 25-26 per cent in the quarter July-September 2008 to around 30 per cent in October 2008. Accordingly, a number of steps were taken by the Reserve Bank to make available adequate rupee and forex liquidity and to ensure adequate flow of credit.

Non-food bank credit growth has, however, moderated from the peak of around 30 per cent in October 2008 to around 18 per cent by end-March 2009. This could be attributed to both demand and supply factors. The demand-side factors include the significant moderation in industrial activity over the past few months, the substantial correction in international commodity and raw material prices and the still elevated bank lending rates. On the supply side, some risk-aversion on the part of the banks could have reduced the availability of bank credit. The cumulative impact of deceleration in bank credit, relatively strong deposit growth and various measures by the Reserve Bank to increase liquidity is mirrored in the Reserve Bank's LAF operations – switch from an average net repo (injection) of around Rs. 45,600 crore in September 2008 to an average net reverse repo (absorption) of around Rs.43,000 crore during January-March 2008.

Stickiness in Bank Deposit and Lending Rates

While the policy rates have been substantially eased since early October 2008, some rigidity has been observed in banks' deposit and lending rates. Banks deposit and lending rates continue to be high, *albeit* some easing has been witnessed in the past few months. This rigidity could be attributed to a variety of factors. First, while headline inflation in terms of wholesale price index has seen a significant easing over the past few months (from around 12 per cent in September 2008 to 0.3 per cent by end-March 2009), it is largely due to the substantial decline in international crude oil prices and some reduction in domestic prices of administered oil products. Food articles inflation in the WPI continues to remain at high levels (6 per cent). Reflecting high food inflation, various measures of consumer price inflation – which have a relatively higher weight for food items *vis-a-vis* WPI – also remain at elevated levels (around 10-11 per cent). Second, the interest rate on small savings continues to be administered and any reduction in interest rates on bank deposits can make bank deposits relatively unattractive, which could lead to some deceleration of growth in bank deposits. Third, the bulk of banks' time deposits continue to be at fixed interest rates. While interest rates on incremental time deposits are coming down, the average cost of deposits will remain high till the maturing deposits get renewed. This, in turn, constrains an immediate substantial reduction in lending rates. Thus, for a variety of factors, bank lending rates are expected to exhibit only a gradual softening, which impedes monetary transmission.

V. Conclusions and Lessons

The ongoing global financial crisis can be largely attributed to extended periods of excessively loose monetary policy in the US over the period 2002-04. Very low interest rates during this period encouraged an aggressive search for yield and a substantial compression of risk-premia globally. Abundant liquidity in the advanced economies generated by the loose monetary policy found its way in the form of large capital flows to the emerging market economies. All these factors boosted asset and commodity prices, including oil, across the spectrum providing a boost to consumption and investment. Global imbalances were a manifestation of such an

Tables 11: Measures of Inflation in India

(Per cent)

	March 2008	June 2008	September 2008	December 2008	March 2009
1	2	3	4	5	6
Wholesale price inflation					
All commodities	7.8	12.0	12.1	5.9	0.3
of which:					
Primary articles	9.7	11.0	12.0	11.6	3.5
Fuel	6.8	16.3	16.5	-0.7	-6.1
Manufactured products	7.3	10.9	10.5	6.2	1.4
Consumer price inflation					
Agricultural labourers	7.9	8.8	11.0	11.4	10.8 (Feb)
Rural labourers	7.6	8.7	11.0	11.4	10.8 (Feb)
Urban non-manual employees	6.0	7.3	9.5	9.8	9.9 (Feb)
Industrial workers	7.9	7.7	9.8	9.7	9.6 (Feb)

accommodative monetary policy and the concomitant boost in aggregate demand in the US outstripping domestic aggregate supply in the US. This period coincided with lax lending standards, inappropriate use of derivatives, credit ratings and financial engineering, and excessive leverage. As inflation began to edge up reaching the highest levels since the 1970s, this necessitated monetary policy tightening. The housing prices started to witness some correction. Lax lending standards, excessive leverage and weaknesses of banks' risk models/stress testing were exposed and bank losses mounted wiping off capital of major financial institutions. The ongoing deleveraging in the advanced economies and the plunging consumer and business confidence have led to recession in the major advanced economies and large outflows of capital from the EMEs; both of these channels are now slowing down growth in the EMEs.

Monetary Policy and Asset Prices

The conventional wisdom is that, even if the monetary authority can *ex-ante* identify an asset bubble, the typical monetary policy actions – changes of 25 or 50 basis points – would be insufficient to stop the bubble. It has been argued that only substantial hikes in policy rates could prick the bubble but this would be at a substantial cost to the real economy. The influence of interest rates on the speculative component of asset prices is unclear from both a theoretical and empirical perspective (Kohn, 2008). In the context of the current global financial crisis, with deleterious impact on growth and employment and significant fiscal costs, the issue of relationship between monetary policy and asset prices needs to be revisited. It can be argued that the output losses of a pre-emptive monetary action might have been lower than the costs that have materialised from a non-responsive monetary policy. At least, a tighter monetary policy could have thrown sand in the wheels and could have reduced the amplitude of asset price movements. As asset prices bubbles are typically associated with strong growth in bank credit to certain sectors such as real estate and stock markets, pre-emptive monetary actions could be reinforced by raising risk weights and provisioning norms for sectors witnessing very high credit growth. For both monetary and regulatory actions to be taken in tandem, it is important that both the functions rest with the central banks. In this context, the recent trend of bifurcation of monetary policy responsibility from regulatory responsibility appears to be unhelpful (Mohan, 2006b). On balance, it appears that pre-emptive and calibrated monetary and regulatory measures would be better than an inertial monetary policy response. Such an approach can help in mitigating the amplitude of the bubble in both the upswing and the downswing of the cycle and contribute to both macroeconomic and financial stability. This view seems to be gaining ground. As the IMF in its recent assessment notes: "Central banks should adopt a broader macro-prudential view, taking into account in their decisions asset price movements, credit booms, leverage, and the build up of systemic risk. The timing and nature of pre-emptive policy responses to large imbalances and large capital flows needs to be re-examined" (IMF, 2009b).

It thus appears that the sharp swings in monetary policy, especially periods of prolonged accommodation, in the advanced economies are the underlying causes of the ongoing global financial crisis. While until recently, the 'Great Moderation' since the early 1990s – reduction in inflation and reduction in growth volatility - had been attributed, in part, to the rule-based monetary policy, it now appears that the volatility in monetary policy can also have the side-effect of creating too much volatility in financial markets and financial prices, which can then potentially feed into the real economy with dangerous consequences, as indicated by the ongoing global financial crisis.

Management of Capital Flows by EMEs

Large volatility in capital flows to EMEs has been a recurrent feature of the global economic landscape since the early 1980s. Periods of large capital inflows, well above the financing need, have been followed by a sudden drying up of capital flows. Such large swings in capital flows over a very short period of time impose significant adjustment costs and large output and employment losses on the EMEs. As is well-known, capital flows reflect both push and pull factors. The push factors are critically dependent upon the stance of monetary policy in the advanced economies, a factor over which domestic authorities have no control. In view of these factors, it would be better for the EMEs to manage their capital account. Contrary to the theoretical expectation, empirical evidence does not find any support that free capital movement leads to higher economic growth. While benefits from external debt flows remain unproven, equity flows, especially FDI, are found to be beneficial. This suggests a relatively liberal regime for direct investment flows. Progress in the liberalisation of debt flows, especially short-term debt flows, by EMEs would depend upon greater macroeconomic stability, convergence of inflation levels and development of financial markets.

Issues in Financial Regulation

Finally, the current global financial crisis has again shown that markets can fail and such market failures have huge costs. The financial system is prone to excesses, given the high leverage of banks and other financial institutions. Within the financial system, banks are 'special', whether locally- or foreign-owned, because they effectively act as trustees of public funds through their deposit taking activities and are the lynch pins of the payments systems. The speed with which a bank under a run collapses is incomparable with any other organisation. A failure of one bank can have a strong contagion on the rest of the banks, even if they are healthy. In this age of globalisation, as the current crisis has revealed, the lack of confidence in banks in one country can also have a contagion on banks in the rest of the world. It is because of this that many governments in EMEs had to guarantee the deposits in their banking systems during the later part of 2008. Given the risks to financial stability, governments in advanced economies had to bail out their largest banks and financial institutions. The notion that markets will take care of weaknesses has once again been proven wrong. So far, the focus of banking regulation globally has been on capital adequacy. As this crisis has shown, liquidity issues are equally important and it is appropriate to note that, in India, we have focussed our attention on these issues as well. Given the complex inter-linkages between banks and non-banks and the move towards conglomerates, it is important that regulatory arbitrage loopholes are fixed to avoid regulatory arbitrage. It is in this context that we have tightened the regulatory regime in regard to NBFCs over the past few years in a phased manner. It is, therefore, important that banks and other financial sector players are well-regulated, while permitting them the necessary flexibility to grow and expand and meet the financing needs of a growing economy. A host of other issues such as accounting, auditing and compensation have also received attention in the aftermath of the global financial crisis. All these issues are engaging the active attention of policymakers and academia alike around the world (G-20, 2009). In view of the fast pace of technological and financial innovations, regulatory authorities would have to follow an approach that would have to be dynamic and adjust in response to changing economic environment.

References

Bernanke, Ben (2009), "The Crisis and the Policy Response", Stamp Lecture at London School of Economics, January 13. Available at http://www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm

Committee on the Global Financial System (2009), Report of the Working Group on Capital flows to Emerging Market Economies (Chairman: Rakesh Mohan), Bank for International Settlements, Basel.

Federal Reserve Bank of St. Louis (2009), Monetary Trends, April.

Group of Thirty (2009), "Financial Reform: A Framework for Financial Stability" (Chairman: Paul A. Volcker), Washington D.C.

Geneva Report (2009), "The Fundamental Principles of Financial Regulation", Geneva Reports on the World Economy 11 (by Markus Brunnermeier, Andrew Crocket, Charles Goodhart, Avinash D. Persaud and Hyun Shin).

G-20 (2009), "Working Group on Enhancing Sound Regulation and Strengthening Transparency (Co-Chairs: Tiff Macklem and Rakesh Mohan).

Haldane, Andrew (2009), "Why Banks Failed The Stress Test?", Bank of England.

Henry, Peter Blair (2007), "Capital Account Liberalization: Theory, Evidence, and Speculation", Journal of Economic Literature, Vol. XLV, December.

International Monetary Fund (2009a), "Group of Twenty: Note by the Staff of International Monetary Fund", January.

—— (2009b), "Initial Lessons of the Crisis", February.

—— (2009c), World Economic Outlook Database, April.

Kohn, Donald (2008), "Monetary Policy and Asset Prices Revisited", Remarks at the Cato Institute's 26th Annual Monetary Policy Conference, November 19. Available at http://www.federalreserve.gov/newsevents/speech/kohn20081119a.htm

Lane, Philip (2009), "Global Imbalances and Global Governance", Paper presented at the `Global Economic Governance: Systemic

Challenges, Institutional Responses and the Role of the New Actors', Brussels, February.

de Larosiere Report (2009), "Report of the High-Level Group on Financial Supervision in the EU" (Chairman: Jacques de Larosiere), Brussels.

Mohan, Rakesh (2006a), "Coping With Liquidity Management in India: A Practitioner's View", Reserve Bank of India Bulletin, April.

—— (2006b), "Evolution of Central Banking in India", Reserve Bank of India Bulletin, June

—— (2007), "India's Financial Sector Reforms: Fostering Growth While Containing Risk", Reserve Bank of India Bulletin, December.

Portes, Richard (2009), "Global Imbalances" in Mathias Dewatripont, Xavier Freixas and Richard Portes (Ed.), "Macroeconomic Stability and Financial Regulation: Key Issues for the G20", Centre for Economic Policy Research, London.

Obstfeld, Maurice (2009), "International Finance and Growth in Developing Countries: What Have We Learned?", Working Paper 14691, National Bureau of Economic Research, Cambridge, MA.

Reserve Bank of India (2009a), "India's Financial Sector: An Assessment" Committee on Financial Sector Assessment (Chairman: Rakesh Mohan), March.

—— (2009b), "Macroeconomic and Monetary Developments during 2008-09", April.

Taylor, John (2009), "The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong", Working Paper 14631, January, National Bureau of Economic Research.

Turner Review (2009), "The Turner Review: A Regulatory Response to the Global Banking Crisis" by Lord Turner, Chairman, Financial Services Authority, UK.

World Bank (2008), Global Development Finance 2008: The Role of International Banking, World Bank.

Technology in Banks – Responding to the Emerging Challenges*

Shyamala Gopinath

Ladies and gentlemen, a very good morning. A central banker addressing an impressive gathering of technology experts on a topic which is their very own – to say the least, is a formidable task. In the current global financial context, though, I may not be surprised if many central banks, as regulators of banking and other financial institutions get more engaged with the technology aspects of the regulated institutions' operations.

2. It is not hard to miss the role played by greater technological integration in transforming the image of banking as model centric blackboxes, unrecognisable from the traditional brick-and mortar systems. Not surprisingly, the internal audit and financial reporting systems within the banks were not given similar focus probably because effective, real time data analytics requires huge data crunching that involves cost. It may be something to ponder that while a lot of focus is given to using technology to manage client and customer accounts at banks and the trading systems, the same level of sophistication does not extend to internal auditing, accounting and financial reports.

3. In India, the situation of the banks is quite different from the banks overseas particularly in developed markets. Indian banks are not facing huge write downs or losses and are still quite well capitalised. There may be a slowdown in credit but that is more a reflection of the broader economic slowdown-the impact of the real sector on the financial sector. In this context, for India the theme of the seminar, which refers to 'sustaining the growth momentum' is quite apt.

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4. Globally, the IT spends of financial institutions are expected to go down drastically in 2009-10. In India, however, this could be an opportune moment for banks to focus on the internal processes and consolidate their IT platforms across functionalities to use technology as an effective strategic tool. It is also an opportunity for the technology companies to gear up to meet the demands of the domestic market for new technology as well as expanding existing technologies.

5. The use of technology in India has undergone rapid transformation. The last two decades have witnessed a sea change in the nature of services offered by not only banks but also the financial sector and even the Government - all of which have had a positive impact on the customers of these organisations and the general public at large.

Technology and Payment Systems Initiatives

6. Let me dwell briefly now on the various technological and payment systems developmental initiatives undertaken in the Indian banking and financial sector. Though, we are moving from 'brick and mortar' banking concepts to 'virtual' banking concepts gradually in view of IT penetration in every sphere of banking, banking with physical presence is going to stay in India due to the unique nature of the Indian banking and varied Indian demographic structure.

7. Starting from the Rangarajan Committee report in early 1990s which started the process of branch automation in banks, banks have witnessed a lot of changes on the technology front during the last 18 years. The banks in India started from a disparate IT infrastructure in general and moved over to consolidation and virtualisation of databases and servers gradually over the years in order to achieve efficiency, cost reduction, improvement in customer services and to address the issues arising from competition from the other market players. Use of technology in a large but judicious way provides relief in the form of more effective work processes, reduced costs of processing and the capability to handle relatively large transaction volumes with remarkable ease. The Core Banking concept to a great extent emerged from this centralisation process and has since received a complete and focused attention from all the banks for its rapid implementation. The banks have also undergone a massive change in terms of improvement in the IT Communication network which has greatly facilitated not only the networking of the internal communication processes but the integration with the external payment systems gateways as well.

8. In regard to the implementation of 'Core Banking' and 'Electronic Banking' banks have made considerable progress in recent years as far as the centralisation of customers' accounts are concerned; however, we can also think of making it more useful by expanding the coverage of Core Banking Systems (CBS) and all the essential services / banking products like treasury, Customer Relationship Management (CRM), Corporate Banking, Management Information Systems (MIS), *etc.* getting seamlessly integrated into the present CBS. The offering of electronic

banking service channels like Internet Banking, Mobile Banking, real time fund transfer, ATM Applications and other forms of upcoming electronic banking channels have become important vehicles of offering banking services in a cost-efficient manner with wide geographical spread; enhancing the banks' reputation and brand building addressing the competitive forces as well.

9. We have also seen the developments in the communication network and messaging system in India as a whole in the form of Indian Financial Network (INFINET), Structured Financial Messaging System (SFMS), VSAT connectivity, cable and leased line connection, fiber optics channels, *etc.* There have been marked improvements in the Indian payment and settlement systems in the form of popularising and strengthening of Real Time Gross Settlement (RTGS), Centralised Fund Management System (CFMS), Electronic Clearing System (ECS), National Electronic Fund Transfer (NEFT), Cheque Truncation, National Financial Switch (NFS), developments and initiatives at Clearing Corporation of India Ltd. (CCIL) platform, ATMs, electronic banking channels, *etc.* to name a few.

10. The facility for inter-bank funds settlement through RTGS is available today across more than 53,000 branches of banks spread across the length and breadth of the country. Today while we have settled close to 100,000 transactions in the RTGS, the average is around 60,000 per day. Therefore the volume of transactions per branch is still in single digits. At the same time the country is clearing paper cheques close to 50 lakhs per day, with the so called High Value Clearing clocking large volumes. The high value clearing which settles on T+0 basis was introduced in this country when we did not have any electronic products. Today this clearing entails high levels of operational risk. It is time that we migrate this to electronic mode. The Reserve Bank would soon be coming out with an approach document in this regard.

11. However, despite the use of electronic methods of payments, the use of cheques will continue. In order to improve efficiency, reduce operational risk and time taken for cheque processing, the Reserve Bank has initiated steps to introduce a Cheque Truncation System (CTS). A pilot project has commenced in the National Capital Region in Delhi where processing volumes have picked up substantially and about 70 per cent of the cheques are being routed through the CTS. We are now expanding the CTS to other centres. Ultimately the whole country would be connected through 6 or 7 Grids. The next grid is planned for Chennai covering the southern centres.

12. The Reserve Bank set up an exclusive institution called the Institute for Development Research in Banking Technology more popularly known as IDRBT at Hyderabad in 1997, which implemented, in 1999, the Closed User Group network – the INFINET – as mentioned by me earlier. This was aimed at sharing expensive IT resources so as to achieve the economies of scale. One of the notable achievements of the IDRBT has been the implementation of Public Key Infrastructure (PKI)-based electronic data transfer with very high security levels. It also developed a messaging

standard called SFMS with security features far superior to even SWIFT which hastened the computerisation efforts in the financial sector. Today INFINET has migrated to the latest MPLS technology in an effort to offer state of the art network.

Technological Risk Factors

13. All these technological developments as mentioned earlier have undoubtedly led to greater efficiency and speed which has resulted in enhanced customer satisfaction. At the same it has opened a floodgate of concerns due to the risk factors involved in the implementation. Let me now discuss some of these important risk factors involved in this regard. If we glance across some of the major frauds across countries, it is evident that many institutions and banks have suffered a great deal of loss either due to the deficiencies in the internal control processes of the IT implementation or due to the deficiencies in the software and hardware itself. These frauds were perpetrated usually by a single person by taking advantage of the lax internal control processes, in spite of the technology safeguards put in place to check such deficiencies. It reminds and cautions us of the fact that technology is not an end in itself and at most is a facilitator, to be used optimally and judiciously.

14. Another set of IT risks which are gaining importance these days are related to software and hardware glitches in the technology implementation. To name a few such risks like, 'Phishing', 'SQL Injection', 'Advance Fee frauds', Database and Server Hacking, Network attacks, 'Denial of Service' attack, Web Defacing, Cross Site scripting, IP Spoofing, Man-in-the Middle Attacks, *etc.* have resulted in huge losses for the banks and customers across the globe. Particularly in recent times, security experts and the federal government in the US are warning that scam artists are leveraging public concern over the global financial crisis to steal sensitive financial data and spread malicious software.

15. Credit card frauds are also on the rise. Large numbers of customers' accounts and credit card holders' accounts have been compromised in the past resulting in not only financial loss, but also legal risk and reputational loss in the market. These electronic windows irrespective of the usage percentage and pattern have opened a new gate into the banks' Information Systems' components which can be exploited by hackers, inside employees or even ex-employees to name a few. Money Laundering risk through electronic channel and its countering is also a challenging task for the banking and financial system. Though Indian financial system has not been affected to that extent from these risk factors as compared to its counterparts abroad, the strengthening of the electronic banking channel by the banks and systems' participants will greatly assist in banks' and financial institutions' efforts for sustaining and consolidating the business growth and above all maintaining confidence.

A Few Organisational Issues

IS Security, IS Audit and Adoption of International Standards

16. The Information System (IS) Security issues, Information System Audit and adoption of international standards in the technology domain are the other challenges

for the Indian banks today. These have become more pertinent in view of data breach cases in India as well as abroad in recent times. The financial institutions should conduct IS Auditing in such a manner to ensure that Information Systems security policies and standards are enforced in the bank on a 'continuous' basis rather than at the end of the specified cycle or on a spot basis. The failure to do so may result in serious internal control lapses resulting in loss as I had mentioned earlier.

17. The adoption of international standards and industry's best practices in the IT sphere by the financial institutions would certainly result in benefits for them and supplement their efforts for sustaining growth. In this regard, adoption of ISO/IEC 38500 Standard, which is the first international standard for IT governance may help organisations for establishing an efficient and effective framework for IT governance for a better alignment of IT and business goals. The standard provides a single integrated framework that enables the financial institutions to take the full advantages of other standards / frameworks.

Change Management

18. Another major challenge which Indian banks/financial institutions would encounter apart from the emerging IT threats is the 'Change Management' issue and the shortage of skilled IT personnel in technology development and the Information Systems security and audit area. It is imperative, therefore, that banks adopt standardised methods and procedures for all technological changes in the organisation to bring efficiency and to save the consequent problems that any organisation usually faces due to non-adherence to 'Change Management' principles. In this background and especially in the light of shortage of skilled qualified IS Security and Audit personnel at present, the issues like staff selection, staff retention, staff posting, staff rotation, staff screening, *etc.* have become more relevant today. I would further like to emphasise the fact that the success of any technological initiative is dependent on 'technology' factors only to the extent of 50 per cent and the rest is dependent on how the organisation manages the 'human' element in it.

IT Outsourcing

19. The 'outsourcing' of IT activities in banks is also an area to be looked into closely by the banks. In many countries, frauds or data breach cases leading to legal tangles and reputational loss have been witnessed either due to the 'loose' outsourcing contract, deficient internal controls in managing the vendors or complete reliance on the vendors even for critical banking activities support from technical perspective. More prudence and timely corrective actions would benefit the financial institutions in this regard to avoid any functional, financial or reputational repercussions.

Business Continuity and Disaster Recovery Management

20. A robust and time-tested Business Continuity' and 'Disaster Recovery' Management plan has also become a necessity and need of the hour due to work-processes' dependency on IT. The plan

should not only be a 'good plan' on paper, but one that can be implemented in real life scenario as well with practical ease. To achieve this, the banks must conduct mock test of their BCP and DRP of their IT logistics, Data Centres, Communication channels at regular intervals in real life scenario and compare the 'Recovery Time Objective (RTO)' and 'Recovery Point Objective (RPO)' outputs of the mock runs with the expected planned RTO and RPO and self-judge the efficacy of the plan.

Technology and Basel II Implementation

21. The implementation of Basel II with regard to Operational Risk is also an area where banks would like to focus more from the technology point of view. The capturing of the operational loss data and to correctly assess the capital charge on this account would be a challenging task as the same is very much a data and technology intensive endeavour. The banks may like to put in place an efficient operational risk management system for this purpose from not only the compliance perspective but from the perspective of the benefits that would accrue to the banks in the long run.

Governance and regulatory compliance

22. To sustain growth and enhance efficiency, Governance and Regulatory Compliance are two issues which appear very critical as the rest of the business and IT activities of the institution emanate from them. A proper handling of the IT Governance issues by synergising the disparate 'silos' within the organisation would help in creating a robust system internally and provide a solid platform to prosper in the long run.

23. Another important aspect of regulatory compliance is the reporting returns to the various wings of the regulator. In this regard implementation of XBRL (Extensible Business Reporting Language) in the banking and financial system is a welcome sign as it will not only help in regulatory compliance but also act as an effective tool for Management Information System (MIS) within the organisation. In general, XBRL reduces the cost of analysing and reporting business information, helps in effective MIS and increases the speed and efficiency of business decisions.

24. XBRL as we all know is a standard based electronic format for communication of business and financial data which provides a lot of benefits in the preparation, analysis and communication of business information in different formats; extraction and automatic exchange of the financial data; and enhancing the usability and transparency of financial information reported under existing accounting standards. This is helpful in preparation of not only financial statements like balance sheet, profit and loss accounts, flow of funds or financial disclosures, *etc.* but includes any type of financial reporting, like Basel II system, statutory reporting, regulatory or supervisory reporting systems.

Future Prospects and Way Forward

25. The downturn in the BFSI sector overseas may prove to be an advantage for the Indian financial system as availability of highly skilled people at a reasonable cost in view of employment cuts abroad may propel India for high speed growth in all the sectors. The IT-BPO industry is expected to grow at a reasonable rate of around 16

per cent in India. This opportunity may churn out another set of dynamic entrepreneurs and intrapreneurs (term coined by Gifford Pinchot) who would lead the march for business transformation and provide opportunities for sustained growth of the financial system.

26. For Indian banks and financial institutions in India the issue is not of pruning IT programs but making these more cost effective and revenue generating. India's value proposition in the financial sector I believe will continue to be strong and even in the current context IT may provide support in the re-structuring of the work-processes, products and may be the institution itself, thereby fulfilling the growth sustenance objectives of the institutions.

27. This period also provides excellent opportunities and avenues for the banks and the financial institutions to reach out to the people in the rural and semi-urban areas and bring them under the fold of our banking and financial system. The percentage of no-frills account holders and coverage of people under the banking umbrella is still miniscule. This prospect in fact throws a lot of opportunities for the technology driven initiatives to expand the coverage of the Indian banking and financial system. The use of technology like Smart card, mobile ATMs, e-Chowpals, coverage of post-offices under electronic payments network in far flung areas, *etc.* in providing financial services to the people holds a tremendous potential for the business growth of the financial institutions on one hand and the inclusive growth of India on the other.

28. Another opportunity lies in the form of integration of the Indian banking and financial system with the Government's e-Governance initiatives. The electronic benefits in this regard would be passed on to the beneficiaries directly thereby preventing the leakage of the funds provided under various Government schemes like NREGA payments, *etc.* for the upliftment of the people. The collective efforts of the Government, banks, financial institutions and the IT firms to provide innovative solutions for an inclusive growth of the Indian economy will certainly go a long way not only for the sustained growth of the financial system but the Indian economy as a whole.

29. The role of technology providers becomes critical in enabling the users to use technology as a strategic tool in their business pursuits. I would like to mention a few fundamental tenets in regard to expectations from the technology providers.

- The first relates to affordability. In times where margins of the user organisations are under pressure, affordability assumes significance. We have to recognise that unless there is a perceptible value addition to the user organisation, investment in any area, including technology, will be looked at with a skeptical mind set.
- The second relates to availability. IT based operations have jerked the world out of a slumber to a 24 by 7 operational cycle for most businesses, If this has to be sustained, then technology providers will also have to ensure uninterrupted availability. While I am aware that this is

something that is currently also being provided for by most technology service providers, the need for this to become a way of operations of these entities – at affordable costs for customers – gains significance. With the narrowing of geographical distances and the existence of safe and effective network based communication, juxtaposed with the trend of most user organisations migrating to off-site support, this aspect assumes criticality.

- Closely related to the first two is reliability. With the margins of IT companies coming under pressure, it is essential that Reliability of support provisions to customers does not get impacted in any way. I am fully aware that Indian Technology Service providers have always been providing services with a high level of operational reliability, but now is the time to redeem our efforts in this direction if sustenance with high growth has to continue for the technology services sector of the economy.
- The fourth pertains to adaptability which is something Indian companies have always excelled in. If this is translated as the business objectives of technology service providers as well, then it would be easy for businesses to realign to changing global scenarios and tailor make their offerings to suit the changing requirements of the target sections which they service.
- Finally, convenience. Today, most users look for operational comfort and convenience of operations in a highly challenging environment . The most important requirement relates to looking at the convenience of customers as the most important gospel for survival of the organisation and has to be a *mantra* which has to percolate to all the employees in the organisation.

30. To conclude, RBI's stance has always been to progressively develop the Indian banking and financial system through various measures and focus on technology driven initiatives for an inclusive growth. I would like to take this opportunity to urge upon all the banks, financial institutions and the technology solution providers to gear up to face the new challenges facing the financial system, some of which I shared with you today. I fully understand that this is an on-going process and the banks and financial institutions will continue to address these challenges in right earnest for the sustained growth of the financial system as a whole.

Articles

India's Foreign Trade: 2008-09
(April 2008-February 2009)

*India's Foreign Trade: 2008-09 (April 2008-February 2009)**

Provisional data on India's merchandise trade for April 2008-February 2009 and commodity-wise details for April-December 2008 have been recently released by the Directorate General of Commercial Intelligence and Statistics (DGCI&S). This article reviews India's merchandise trade on the basis of these data.

Highlights

- India's merchandise exports during February 2009 at US$ 11.9 billion recorded a sharp decline of 21.7 per cent as against a sizeable growth of 44.6 per cent registered in the corresponding month of the previous year. With exports recording a steady decline since October 2008, the overall exports during April 2008- February 2009 at US$ 154.9 billion decelerated to 6.4 per cent (28.4 per cent a year ago). This was on account of sharp deceleration in the export of textiles and textile products, gems and jewellery, leather products and agriculture and allied products and iron ore and minerals as these sectors have been adversely affected under the impact of demand recession, mainly in the developed regions, *viz.,* the US and the EU.

- Imports during February 2009 at US$ 16.8 billion also showed substantial decline by 23.3 per cent for the second consecutive month during the current fiscal year 2008-09 so far, as against a sharp increase of 55.0 per cent in February 2008, mainly due to sharp decline in oil imports. The overall imports during April 2008- February 2009 at US$ 268.7 billion, showed a

* Prepared in the Division of International Trade, Department of Economic Analysis and Policy. The previous issue of the article was published in RBI Bulletin, April 2009.

growth of 17.9 per cent lower than that registered during the comparable period of previous year (40.2 per cent) on account of deceleration in both oil and non-oil imports.

- Petroleum, oil and lubricants (POL) imports during April 2008-February 2009 at US$ 87.8 billion, grew by 24.4 per cent (35.3 per cent in April 2007-February 2008). However, the average price of Indian basket of crude oil during April 2008-February 2009 remained higher at US$ 86.4 per barrel than US$ 77.4 per barrel during April 2007-February 2008 due to the impact of higher international crude oil prices that prevailed during April-August 2008.

- Non-oil imports during April 2008-February 2009 at US$ 180.9 billion recorded a lower growth of 15.0 per cent than that of 42.6 per cent a year ago, mainly due to decline in the growth in imports of gold and silver, electronic goods and deceleration in transport equipments.

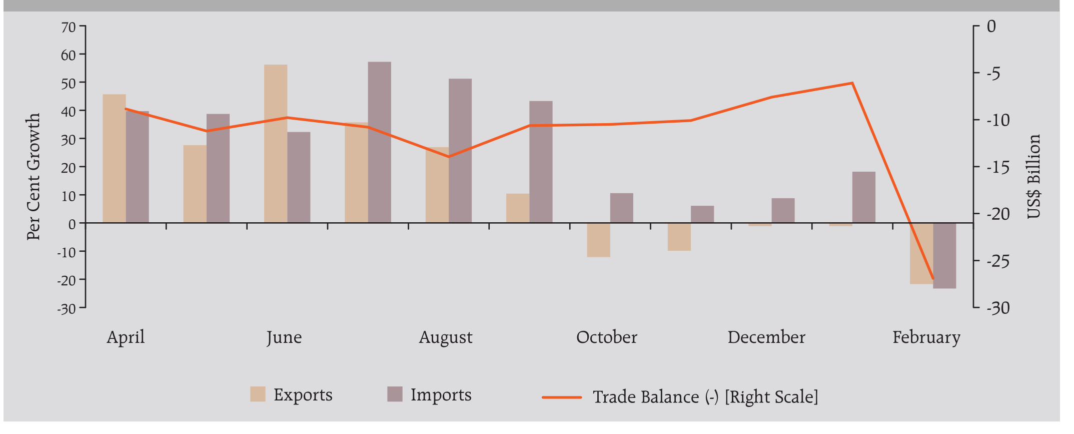
- Trade deficit during April 2008-February 2009 widened to US$ 113.8 billion, an increase of US$ 31.6 billion (38.4 per cent) over the corresponding period of the previous year.

India's Merchandise Trade during 2008-09 (April 2008-February 2009)

Exports

India's merchandise exports, after recording a steady growth of 35.3 per cent during April-August 2008, showed deceleration in September 2008. However, from the subsequent month onwards, exports recorded decline, *viz.,* (-12.1 per cent in October), (-9.9 per cent in November), (-1.1 per cent in December), (-15.9 per cent in January 2009) and February 2009 (-21.7 per cent) mainly on account of global financial turmoil and economic slowdown (Chart 1). With the result, growth in overall exports during April 2008- February 2009 at US$ 154.9 billion moderated to 6.4 per cent as compared with 28.4 per cent during the corresponding period of previous year

Chart 1: Exports, Imports and Trade Balance



(Table 1). Exports of labour intensive sectors such as, gems and jewellery, textiles and textile products, agricultural and allied products and ores and minerals have registered decelerated growth as these sectors have been adversely affected under the impact of demand recession, mainly in the developed regions, *viz.,* the US and the EU.

The detailed commodity-wise exports data released by DGCI&S for the period April-December 2008 revealed that engineering goods, chemicals and related products, petroleum products and agricultural and allied products maintained the largest share in exports, while ores and minerals, leather and manufactures, textile and textiles products and gems and jewellery reduced their shares (Table 2). Sector-wise, manufactured goods continued to maintain largest share at 65.3 per cent,

Table 1: India's Merchandise Trade: April 2008-February 2009

(US $ billion)

Items	2007-08 R		2008-09 P	
1		2		3
Exports		145.6 (28.4)		154.9 (6.4)
Oil Exports	24.3 (42.6)		22.8* (16.7)*	
Non-Oil Exports	121.3 (25.9)		107.9* (14.9)*	
Imports		227.9 (40.2)		268.7 (17.9)
Oil Imports	70.6 (35.3)		87.8 (24.4)	
Non-Oil Imports	157.3 (42.6)		181.0 (15.0)	
Trade Balance		-82.2		-113.8
Oil Trade Balance	-46.3		-56.9*	
Non-Oil Trade Balance	-36.0		-47.8*	

* : Figures pertain to April-December.
R : Revised. P : Provisional.
Note : Figures in parentheses show percentage change over the corresponding period of the previous year.
Source : Compiled from DGCI&S data.

Table 2: India's Exports of Principal Commodities

(Percentage Shares)

Commodity	2006-07	2007-08	2007-08	2008-09
	April-March		April-December	
1	2	3	4	5
I. Primary products	**15.6**	**16.9**	**15.6**	**14.8**
Agriculture and allied products	10.0	11.3	10.5	10.5
Ores and minerals	5.5	5.6	5.0	4.4
II. Manufactured goods	**67.2**	**63.2**	**64.6**	**65.3**
Leather and manufactures	2.4	2.2	2.2	2.1
Chemicals and Related products	13.7	13.0	13.1	13.5
Engineering goods	23.4	22.9	23.0	26.3
Textile and textile products	13.7	11.9	12.2	11.1
Gems and jewellery	12.6	12.1	12.9	11.2
III.Petroleum products	**14.8**	**17.4**	**17.2**	**17.4**
IV. Others	**2.4**	**2.5**	**2.6**	**2.5**
Total Exports	**100.0**	**100.0**	**100.0**	**100.0**

Source : Compiled from DGCI&S data.

followed by petroleum products (17.4 per cent) and primary products (14.8 per cent).

Exports of primary products during April-December 2008 at US$ 19.4 billion experienced a decelerated growth of 9.9 per cent from 33.6 per cent during the corresponding period of the previous year. Within primary products both agricultural and allied products (from 39.1 per cent to 14.6 per cent) and ores and minerals (from 23.4 per cent to 0.1 per cent) witnessed a sharp deceleration in growth. Among agricultural and allied products, while tea, coffee, oil meal, tobacco, and cashew maintained the growth momentum, exports of rice, cotton raw incl.waste, spices, sugar and molasses and marine products continued to show deceleration /decline (Statement 3).

Exports of manufactured goods during April-December 2008 at US$ 85.3 billion moderated by recording a growth of 16.3 per cent than 19.2 per cent a year ago. Within manufactured products, engineering goods and chemicals and related products exhibited higher growth, while other major items, *viz.,* leather and manufactures, textiles and textile products and gems and jewellery witnessed a deceleration in growth.

Engineering goods exports during April-December 2008 at US$ 34.3 billion, which constituted more than one-fourth of total exports of India, continued to accelerate with 31.7 per cent growth, on top of 22.3 per cent growth reached a year ago, largely contributed by transport equipments, iron and steel and electronic goods. Exports of transport equipments to the major markets, such as Singapore, the US and the UK increased substantially on the back of strong export performance, particularly during the first half of the year.

Chemicals and related products exports during April-December 2008 at US$ 17.6 billion registered a higher growth of 18.7 per cent as compared with 17.6 per cent during the similar period of last year, on the back of basic chemicals, pharmaceuticals, plastic and linoleum and residual chemicals and allied products contributing the major chunk, while exports of rubber, glass and paints showed deceleration.

Exports by textiles and textile products, an important employment intensive sector, during April-December 2008 at US$ 14.6 billion sharply slowed down to 4.8 per cent (9.7 per cent a year ago). The major component, viz., the readymade garments, which accounted for about 50 per cent share in textiles and textile products exports, however, maintained its growth. The other major items, viz., cotton yarn, fabrics, madeups, manmade yarn, fabrics, etc., however, showed either deceleration or decline.

Growth in the gems and jewellery exports, the other major employment intensive sector, at US$ 14.6 billion recorded a sharp deceleration to 0.1 per cent during April-December 2008 from 26.8 per cent a year ago, reflecting the recessionary conditions in the major export destinations for India's gems and jewellery, *viz.,* Hong Kong, the US and the UAE.

Petroleum products at US$ 22.8 billion, which constituted the second largest components of India's exports, witnessed decelerated growth of 16.7 per cent during April- December 2008 as compared with 36.4 per cent a year ago (Statement 2).

Destination-wise, during April-December 2008, developing countries constituted highest share of 39.6 per cent of India's exports, followed by OECD countries (38.8 per cent) and OPEC (19.7 per cent). The US with a share of 12.0 per cent continued to be the single largest importer of India's exports, even while its share has declined over the previous year (13.4 per cent) [Table 3]. The other major market for India's exports were the UAE (11.0 per cent), Singapore (5.0 per cent), China (4.7 per cent) and Hong Kong (3.7 per cent).

Table 3: India's Exports to Principal Regions

(Percentage Shares)

Region	2006-07	2007-08	2007-08	2008-09
	April-March		April-December	
1	2	3	4	5
I. OECD countries	**41.2**	**38.5**	**40.4**	**38.8**
EU	20.4	20.2	21.5	21.9
North America	15.8	13.5	14.2	12.8
U.S.	14.9	12.7	13.4	12.0
Asia and Oceania	3.4	3.2	3.0	2.6
Other OECD countries	1.6	1.6	1.7	1.5
II. OPEC	**16.4**	**16.4**	**17.1**	**19.7**
III. Eastern Europe	**2.0**	**2.1**	**1.2**	**1.2**
IV. Developing countries	**40.2**	**42.7**	**41.1**	**39.6**
Asia	29.8	31.6	30.2	28.8
SAARC	5.1	5.9	5.5	5.1
Other Asian developing countries	24.6	25.7	24.7	23.8
Africa	7.0	7.7	7.7	7.0
Latin American countries	3.4	3.4	3.1	3.8
V. Others / unspecified	**0.3**	**0.4**	**0.3**	**0.7**
Total Exports	**100.0**	**100.0**	**100.0**	**100.0**

Source : Compiled from DGCI&S data.

Imports

India's merchandise imports witnessed a growth of 44.9 per cent during April-September 2008, and thereafter it showed a deceleration, reflecting the slowdown in industrial activities due to global economic crisis. The overall imports during April 2008-Februray 2009 at US$ 268.7 billion, recorded a lower growth of 17.9 per cent than 40.2 per cent recorded a year ago. POL imports during April 2008-February 2009 at US$ 87.8 billion, also recorded a lower growth of 24.4 per cent (35.3 per cent a year ago), however, the effect of higher crude oil prices prevailed during the first half seems to have had a persisting impact. The average price of Indian basket of crude oil during April 2008-February 2009 was at US$ 86.4 per barrel (ranged between US$ 41.2 – 132.2 per barrel) was higher by 11.6 per cent than US$ 77.4 per barrel (ranged between US$ 65.2–91.8 per barrel) during April 2007- February 2008 (Table 4). Growth in non-oil imports during April 2008-February 2009 also decelerated considerably to 15.0 per cent from 42.6 per cent a year ago.

Commodity-wise imports data for the period April-December 2008 indicated 46.3 per cent growth in POL imports (24.0 per cent a year ago) under the impact of high crude oil prices prevailed in the past months, together with the continued increase of quantum of POL imports. During April–December 2008, POL imports in terms of volume, increased by 9.5 per cent as against an increase of 7.5 per cent during

Table 4: Trends in Crude Oil Prices

(US $/barrel)

Year	Dubai	Brent	WTI*	Indian Basket**
1	2	3	4	5
2000-01	25.9	28.1	30.3	26.8
2001-02	21.8	23.2	24.1	22.4
2002-03	25.9	27.6	29.2	26.6
2003-04	26.9	29.0	31.4	27.8
2004-05	36.4	42.2	45.0	39.2
2005-06	53.4	58.0	59.9	55.7
2006-07	60.9	64.4	64.7	62.4
2007-08	77.3	82.4	82.3	79.5
April- February 2008	75.5	80.4	80.2	77.4
April- February 2009	83.6	88.2	89.2	86.4
February 08	90.0	94.8	95.4	93.8
February 09	43.1	43.2	39.2	41.8

* : West Texas Intermediate.

** : The composition of Indian basket of crude represents average of Oman and Dubai for sour grades and Brent (dated) for sweet grade in the ratio of 62.3:37.7 for 2008-09.

Sources: International Monetary Fund, *International Financial Statistics*, World Bank's Commodity Price Pink Sheet for March 2009.

the similar period of the previous year. Non-POL imports witnessed moderation in growth (from 32.3 per cent to 29.8 per cent), mainly due to deceleration in imports of capital goods and gold and silver and bulk consumption goods (Statement 5). In terms of percentage share, POL increased to 33.8 per cent from 31.6 per cent, while the share of capital goods, gold and silver showed decline (Table 5).

Source-wise, during April-December 2008, OPEC had the highest share in India's imports (33.9 per cent), followed by developing countries (31.9 per cent) and OECD countries (31.4 per cent) [Table 6]. China continued to be the single largest source of imports, with a share of 10.3 per cent in total imports, followed by Saudi Arabia (7.3 per cent), the UAE (6.5 per cent), the US (5.9 per cent), Switzerland (4.6 per cent) and Iran (4.3 per cent).

Table 5: Imports of Principal Commodities

(Percentage Shares)

Commodity	2006-07	2007-08	2007-08	2008-09
	(April- March)		(April-December)	
1	2	3	4	5
1. Petroleum, crude and products	30.8	31.7	31.6	33.8
2. Capital goods	25.3	28.2	23.9	21.0
3. Gold and silver	7.9	7.1	8.4	7.2
4. Organic and inorganic chemicals	4.2	3.9	4.3	4.3
5. Coal, coke and briquettes, *etc.*	2.5	2.6	2.7	3.6
6. Fertilizers	1.7	2.2	2.4	5.3
7. Metalliferrous ores, metal scrap, *etc.*	4.5	3.1	3.4	2.9
8. Iron and steel	3.5	3.5	3.8	3.2
9. Pearls, precious and semi precious stone	4.0	3.2	4.1	4.6
10. Others	19.6	18.7	20.7	20.0
Total Imports	**100.0**	**100.0**	**100.0**	**100.0**

Source: Compiled from DGCI&S.

Table 6: Shares of Groups/Countries in India's Imports

(Percentage Shares)

Group/Country	2006-07	2007-08	2007-08	2008-09
	April-March		April-December	
1	2	3	4	5
I. O E C D Countries	**34.5**	**34.8**	**33.5**	**31.4**
E U	15.3	14.6	14.9	13.3
France	2.3	2.5	1.2	1.0
Germany	4.1	3.9	3.9	3.5
U K	2.2	2.0	2.2	2.1
North America	7.3	9.1	6.7	6.6
U S A	6.3	8.4	5.8	5.9
Asia and Oceania	6.4	5.8	6.2	5.9
Other O E C D Countries	5.5	5.2	5.7	5.5
II. O P E C	**30.2**	**30.3**	**31.3**	**33.9**
III. Eastern Europe	**2.7**	**2.1**	**1.7**	**2.4**
IV. Developing Countries	**32.2**	**32.1**	**33.2**	**31.9**
Asia	25.5	25.5	27.0	25.6
S A A R C	0.8	0.8	0.8	0.6
Other Asian Developing Countries	24.7	24.7	26.2	25.0
Of which:				
People's Rep of China	9.4	10.8	11.5	10.3
Africa	3.7	4.1	4.0	4.5
Latin American Countries	3.0	2.4	2.3	1.8
Total Imports	**100.0**	**100.0**	**100.0**	**100.0**

Source: Compiled from DGCI&S data.

Trade Deficit

The overall trade deficit during April 2008-February 2009 amounted to US$ 113.8 billion, showing an increase of US$ 31.6 billion (38.4 per cent) over the trade deficit of US$ 82.2 billion during April 2007- February 2008. Trade deficit on oil account during April-December 2008 at US$ 56.8 billion, was higher by US$ 21.9 billion (62.7 per cent) than US$ 34.9 billion a year ago. Trade deficit on non-oil account during this period amounted to US$ 47.8 billion, higher by US$ 24.1 billion (101.4 per cent) than US$ 23.8 billion a year back.

Global Trade

The *World Economic Outlook (WEO) [April 2009]* projections assume that financial market stabilisation will take longer than previously envisaged, with strong efforts by policymakers. Even with determined policy actions, and anticipating a moderation in the rate of contraction from the second quarter onward, global activity is now projected to decline 1.3 per cent in 2009, a substantial downward revision from the January WEO Update. Incidentally, this is by far the deepest post–World War II recession. As the downturn is truly global: output per capita is projected to decline in countries representing three-quarters of the global economy, and growth in virtually all countries has decelerated sharply. Accordingly, growth is projected to reemerge only in 2010, at just 1.9 per cent. Earlier WTO projected that the world merchandise trade is likely to fall some 9 per cent in volume terms in 2009 (i.e., where price changes have been removed from the calculation), with developed economy exports falling by some 10 per cent on average and developing country exports shrinking by 2-3 per cent.

Based on the provisional data from IMF's International Financial Statistics (IFS), world merchandise exports, in dollar terms, which grew on an average 22.7 per cent during January-September 2008, declined by 1.1 per cent in October 2008 and the declining trend continued in the subsequent months as well, *viz.*, November (-15.0 per cent) and December (-13.6) (Chart 2). However, the average growth for the year 2008 (January–December) worked out to be 14.3 per cent (13.9 per cent for the corresponding period of previous year). Exports from emerging and developing economies for the same period during the year 2008 grew by 21.1 per cent (14.7 per cent for previous year), while that from advanced economies moderated to 11.3 per cent (from 14.7 per cent). The overall exports during January- December 2008 recorded a higher growth mainly because of the higher export growth recorded in the first half of 2008 (Table 7).

Chart 2: Monthly Trends in World Exports Growth - 2008

Table 7: Growth in Exports: Global Scenario

(Per cent)

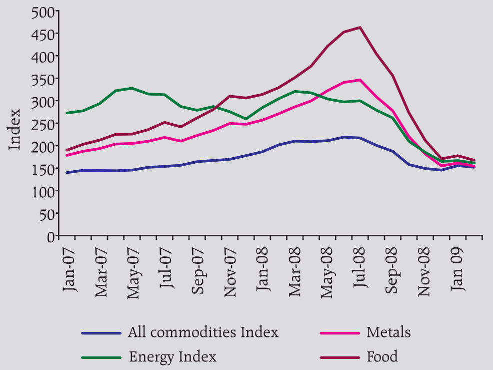
Region/Country	2006	2007	2008
	January-December		
1	2	3	4
World	**16.1**	**13.9**	**14.3**
Advanced Economies	**12.6**	**13.5**	**11.3**
US	14.5	12.0	11.9
France	10.1	12.3	9.8
Germany	14.7	18.0	10.8
Japan	9.2	7.8	12.3
Emerging and Developing Economies	**22.8**	**14.7**	**21.1**
Singapore	18.4	10.1	13.0
China	27.2	25.6	17.3
India	21.4	21.5	20.6
Indonesia	19.0	14.7	24.4
Korea	14.4	14.1	13.6
Malaysia	14.0	9.6	19.1
Thailand	18.7	17.0	12.9

Sources : (1) IMF (www.imfstatistics.org).
(2) DGCI&S for India.

Commodity Prices

The world commodity prices persisted to show downward trend. According to IFS, world commodity prices decelerated since August 2008 and declined in all the subsequent months of 2008. The declining trend continued in the year 2009 as well, *viz.*, in January(-16.4 per cent) and in February (-24.5 per cent). The decline was seen in energy, metal and food prices also. Energy prices declined by around 47.0 per cent, metals prices declined by 42.9 per cent and food prices by 49.0 per cent during February 2009 (Chart 3).

Chart 3: World Commodity Prices
(Base: 2000 = 100)



Source : World Commodity Price indices, IMF (www.imfstatistics.org)

Statement 1: India's Foreign Trade - February 2009

Year	Exports			Imports			Trade Balance		
	Total	Oil	Non-Oil	Total	Oil	Non-Oil	Total	Oil	Non-Oil
1	2	3	4	5	6	7	8	9	10
Rupees crore									
2006-07	46,484	5,645	40,839	62,470	19,852	42,618	-15,986	-14,207	-1,779
	(15.8)	(8.7)	(16.9)	(22.2)	(9.0)	(29.5)			
2007-08 R	60,476	9,453	51,023	87,151	30,645	56,506	-26,675	-21,192	-5,483
	(30.1)	(67.5)	(24.9)	(39.5)	(54.4)	(32.6)			
2008-09 P	58,685	..	..	82,872	19,937	62,935	-24,187		
	(-3.0)			(-4.9)	(-34.9)	(11.4)			
US dollar million									
2006-07	10,527	1,278	9,248	14,147	4,496	9,651	-3,620	-3,217	-403
	(16.2)	(9.1)	(17.3)	(22.6)	(9.4)	(30.0)			
2007-08 R	15,221	2,379	12,842	21,934	7,713	14,222	-6,714	-5,334	-1,380
	(44.6)	(86.1)	(38.9)	(55.0)	(71.6)	(47.4)	(85.4)		
2008-09 P	11,913	..	..	16,823	4,047	12,776	-4,910		
	(-21.7)			(-23.3)	(-47.5)	(-10.2)	(-26.9)		
SDR million									
2006-07	7,030	854	6,176	9,448	3,002	6,446	-2,418	-2,149	-269
	(11.5)	(4.6)	(12.5)	(17.6)	(4.9)	(24.6)			
2007-08 R	9,600	1,501	8,100	13,835	4,865	8,970	-4,234	-3,364	-870
	(36.6)	(75.8)	(31.1)	(46.4)	(62.0)	(39.2)			
2008-09 P	8,022	..	..	11,328	2,725	8,603	-3,306		
	(-16.4)			(-18.1)	(-44.0)	(-4.1)			

P : Provisional. R : Revised. .. : Not available.

Note : Figures in brackets relate to percentage variation over the corresponding previous period.

Source : DGCI & S.

Statement 2: India's Foreign Trade

Year	Exports			Imports			Trade Balance		
	Total	Oil	Non-Oil	Total	Oil	Non-Oil	Total	Oil	Non-Oil
1	2	3	4	5	6	7	8	9	10
April-March									
Rupees crore									
2005-06	4,56,418	51,533	4,04,885	6,60,409	1,94,640	4,65,769	-2,03,991	-1,43,107	-60,884
	(21.6)	(64.1)	(17.7)	(31.8)	(45.2)	(26.9)			
2006-07	5,71,779	84,520	4,87,259	8,40,506	2,58,572	5,81,935	-2,68,727	-1,74,052	-94,675
	(25.3)	(64.0)	(20.3)	(27.3)	(32.8)	(24.9)			
2007-08 R	6,55,864	1,14,192	5,41,672	10,12,312	3,20,655	6,91,657	-3,56,448	-2,06,463	-1,49,985
	(14.7)	(35.1)	(11.2)	(20.4)	(24.0)	(18.9)			
US dollar million									
2005-06	1,03,091	11,640	91,451	1,49,166	43,963	1,05,203	-46,075	-32,323	-13,752
	(23.4)	(66.5)	(19.5)	(33.8)	(47.3)	(28.8)			
2006-07	1,26,361	18,679	1,07,683	1,85,749	57,144	1,28,606	-59,388	-38,465	-20,923
	(22.6)	(60.5)	(17.7)	(24.5)	(30.0)	(22.2)			
2007-08 R	1,62,904	28,363	1,34,541	2,51,439	79,645	1,71,795	-88,535	-51,281	-37,254
	(28.9)	(51.8)	(24.9)	(35.4)	(39.4)	(33.6)			
SDR million									
2005-06	70,774	7,991	62,783	1,02,405	30,182	72,224	-31,632	-22,191	-9,441
	(26.2)	(70.3)	(22.2)	(36.8)	(50.6)	(31.7)			
2006-07	85,018	12,567	72,451	1,24,975	38,447	86,528	-39,957	-25,880	-14,077
	(20.1)	(57.3)	(15.4)	(22.0)	(27.4)	(19.8)			
2007-08 R	1,04,686	18,227	86,459	1,61,581	51,181	1,10,399	-56,895	-32,955	-23,940
	(23.1)	(45.0)	(19.3)	(29.3)	(33.1)	(27.6)			
April-February									
Rupees crore									
2006-07	5,14,395	77,308	4,37,087	7,37,122	2,36,601	5,00,521	-2,22,728	-1,59,294	-63,434
	(27.0)	(64.4)	(22.1)	(23.5)	(34.5)	(18.9)			
2007-08 R	5,86,233	97,803	4,88,430	9,17,179	2,84,029	6,33,150	-3,30,946	-1,86,226	-1,44,720
	(14.0)	(26.5)	(11.7)	(24.4)	(20.0)	(26.5)			
2008-09 P	7,05,232	..	..	12,23,213	3,99,502	8,23,711	-5,17,981		
	(20.3)			(33.4)	(40.7)	(30.1)			
US dollar million									
2006-07	1,13,401	17,043	96,358	1,62,502	52,160	1,10,342	-49,101	-35,117	-13,984
	(23.9)	(60.4)	(19.1)	(20.5)	(31.2)	(16.0)			
2007-08 R	1,45,641	24,298	121,343	2,27,859	70,563	1,57,296	-82,219	-46,265	-35,954
	(28.4)	(42.6)	(25.9)	(40.2)	(35.3)	(42.6)	(67.4)		
2008-09 P	1,54,937	22783*	107926*	2,68,736	87,769	1,80,966	-113,799		
	(6.4)	(16.7)	(14.9)	(17.9)	(24.4)	(15.0)	(38.4)		
SDR million									
2006-07	76,393	11,481	64,912	1,09,470	35,138	74,332	-33,077	-23,657	-9,421
	(21.7)	(57.6)	(17.0)	(18.4)	(28.9)	(14.0)			
2007-08 R	94,017	15,685	78,332	1,47,093	45,551	1,01,542	-53,076	-29,866	-23,210
	(23.1)	(36.6)	(20.7)	(34.4)	(29.6)	(36.6)			
2008-09 P	99,545	..	..	1,72,660	56,391	1,16,269	-73,114		
	(5.9)			(17.4)	(23.8)	(14.5)			

P : Provisional. R : Revised. .. : Not available. * : Figures pertain to the month of April-December.

Note : 1. Figures in brackets relate to percentage variation over the corresponding period of the previous year.
2. Data conversion has been done using period average exchange rates.

Source : DGCI & S.

Statement 3: India's Exports of Principal Commodities

(US$ million)

Commodity/Group	April-December			Percentage Variation	
	2006-07	2007-08	2008-09 P	(3)/(2)	(4)/(3)
1	2	3	4	5	6
I. Primary Products	**13,212.9**	**17,657.2**	**19,404.0**	33.6	9.9
	(14.5)	**(15.6)**	**(14.8)**		
A. Agricultural & Allied Products	**8,596.9**	**11,960.4**	**13,703.0**	39.1	14.6
of which :	**(9.4)**	**(10.5)**	**(10.5)**		
1. Tea	355.5	383.7	450.8	7.9	17.5
2. Coffee	316.0	298.9	375.6	-5.4	25.7
3. Rice	1,075.7	1,881.7	1,811.0	74.9	-3.8
4. Wheat	7.6	0.1	0.1	-99.3	151.8
5. Cotton Raw incl. Waste	637.5	951.4	473.5	49.2	-50.2
6. Tobacco	272.3	353.8	537.5	29.9	51.9
7. Cashew incl. CNSL	413.5	398.2	511.4	-3.7	28.4
8. Spices	485.8	942.5	1,064.3	94.0	12.9
9. Oil Meal	724.8	1,061.9	1,770.7	46.5	66.7
10. Marine Products	1,245.8	1,376.3	1,224.3	10.5	-11.0
11. Sugar & Mollases	546.3	906.7	993.2	66.0	9.5
B. Ores & Minerals	**4,616.0**	**5,696.8**	**5,700.9**	23.4	0.1
of which :	**(5.1)**	**(5.0)**	**(4.4)**		
1. Iron Ore	2,569.1	3,295.4	3,177.8	28.3	-3.6
2. Processed Minerals	963.9	904.2	1,095.9	-6.2	21.2
II. Manufactured Goods	**61,537.7**	**73,327.9**	**85,310.7**	19.2	16.3
of which :	**(67.4)**	**(64.6)**	**(65.3)**		
A. Leather & Manufactures	2,222.9	2,539.1	2,755.3	14.2	8.5
B. Chemicals & Related Products	12,643.1	14,867.8	17,644.9	17.6	18.7
1. Basic Chemicals, Pharmaceuticals & Cosmetics	7,930.8	9,726.0	11,991.1	22.6	23.3
2. Plastic & Linoleum	2,438.4	2,395.8	2,420.0	-1.7	1.0
3. Rubber, Glass, Paints & Enamels etc.,	1,743.9	2,086.0	2,346.0	19.6	12.5
4. Residual Chemicals & Allied Products	530.0	660.0	887.8	24.5	34.5
C. Engineering Goods	**21,315.8**	**26,068.4**	**34,336.4**	22.3	31.7
of which :					
1. Manufactures of metals	3,707.4	4,889.2	5,927.1	31.9	21.2
2. Machinery & Instruments	4,873.4	6,446.2	8,339.0	32.3	29.4
3. Transport equipments	3,333.5	4679.3	7,802.9	40.4	66.8
4. Iron & steel	3,868.6	3,870.7	4,825.7	0.1	24.7
5. Electronic goods	2,115.4	2,379.1	3,342.6	12.5	40.5
D. Textiles and Textile Products	**12,653.8**	**13,882.3**	**14,554.6**	9.7	4.8
1. Cotton Yarn, Fabrics, Made-ups, etc.,	3,092.4	3,297.6	3,291.5	6.6	-0.2
2. Natural Silk Yarn, Fabrics Madeups etc. (incl.silk waste)	332.0	279.0	287.8	-16.0	3.2
3. Manmade Yarn, Fabrics, Made-ups, etc.,	1,605.8	2,114.1	2,371.6	31.7	12.2
4. Manmade Staple Fibre	134.7	190.1	210.7	41.2	10.8
5. Woolen Yarn, Fabrics, Madeups etc.	63.1	65.5	78.2	3.8	19.4
6. Readymade Garments	6,400.6	6,851.2	7,348.2	7.0	7.3
7. Jute & Jute Manufactures	220.3	247.6	241.8	12.4	-2.3
8. Coir & Coir Manufactures	102.9	116.1	109.0	12.9	-6.2
9. Carpets	702.1	721.1	616.0	2.7	-14.6
(a) Carpet Handmade	677.8	708.2	609.0	4.5	-14.0
(b) Carpet Millmade	0.0	0.0	0.0	-	-
(c) Silk Carpets	24.3	13.0	7.0	-46.8	-45.7
E. Gems & Jewellery	**11,518.6**	**14,600.7**	**14,614.2**	**26.8**	**0.1**
F. Handicrafts	**336.1**	**417.7**	**242.0**	**24.3**	**-42.1**
III. Petroleum Products	**14,323.7**	**19,531.0**	**22,783.4**	**36.4**	**16.7**
	(15.7)	**(17.2)**	**(17.4)**		
IV. Others	**2,287.0**	**2,959.1**	**3,211.8**	**29.4**	**8.5**
	(2.5)	**(2.6)**	**(2.5)**		
Total Exports	**91,361.3**	**1,13,475.2**	**1,30,709.8**	**24.2**	**15.2**

P : Provisional.
Note : Figures in brackets relate to percentage to total exports for the period.
Source : DGCI & S.

Statement 4: Direction of India's Foreign Trade - Exports

(US$ million)

Group/Country	April-December			Percentage Variation	
	2006-07	2007-08	2008-09 P	(3)/(2)	(4)/(3)
1	2	3	4	5	6
I. O E C D Countries	**38,503.9**	**45,808.2**	**50,739.9**	**19.0**	**10.8**
A. E U	**19,234.2**	**24,347.1**	**28,670.4**	**26.6**	**17.8**
of which:					
1. Belgium	2,428.3	2,998.4	3,462.6	23.5	15.5
2. France	1,512.1	1,835.4	2,171.4	21.4	18.3
3. Germany	2,810.6	3,626.1	4,359.2	29.0	20.2
4. Italy	2,585.7	2,781.7	2,844.8	7.6	2.3
5. Netherland	1,868.8	3,576.0	4,816.0	91.4	34.7
6. U K	4,093.9	4,826.5	4,781.7	17.9	-0.9
B. North America	**14,763.2**	**16,159.7**	**16,676.0**	**9.5**	**3.2**
1. Canada	824.2	904.2	1,006.8	9.7	11.3
2. U S A	13,939.03	15,255.47	15,669.27	9.4	2.7
C. Asia and Oceania	**3,192.0**	**3,428.5**	**3,428.6**	**7.4**	**0.0**
of which:					
1. Australia	676.6	842.2	1,023.2	24.5	21.5
2. Japan	2,045.8	2,482.8	2,258.7	21.4	-9.0
D. Other O E C D Countries	**1,314.5**	**1,872.9**	**1,964.9**	**42.5**	**4.9**
of which:					
1. Switzerland	315.5	427.7	507.2	35.6	18.6
II. O P E C	**15,451.4**	**19,366.2**	**25,711.7**	**25.3**	**32.8**
of which:					
1. Indonesia	1,428.2	1,325.4	1,816.0	-7.2	37.0
2. Iran	1,187.7	1,655.7	1,991.1	39.4	20.3
3. Iraq	139.3	162.1	265.2	16.3	63.6
4. Kuwait	462.9	472.6	602.8	2.1	27.6
5. Saudi Arabia	1,830.2	2,490.2	4,088.8	36.1	64.2
6. U A E	8,917.8	11,365.8	14,421.4	27.5	26.9
III. Eastern Europe	**1,119.0**	**1,321.1**	**1,558.6**	**18.1**	**18.0**
of which:					
1 Russia	638.5	664.6	806.4	4.1	21.3
IV. Developing Countries	**36,080.3**	**46,612.3**	**51,726.9**	**29.2**	**11.0**
of which:					
A. Asia	**26,922.1**	**34,304.2**	**37,675.1**	**27.4**	**9.8**
a) S A A R C	**4,704.5**	**6,238.0**	**6,617.4**	**32.6**	**6.1**
1. Afghanistan	127.4	175.6	284.6	37.8	62.1
2. Bangladesh	1,193.6	1,658.7	1,973.4	39.0	19.0
3. Bhutan	40.1	62.7	79.1	56.6	26.1
4. Maldives	49.2	61.9	80.2	25.8	29.5
5. Nepal	701.1	1,022.1	1,110.0	45.8	8.6
6. Pakistan	982.7	1,246.7	1,084.0	26.9	-13.1
7. Sri Lanka	1,610.4	2,010.2	2,006.1	24.8	-0.2
b) Other Asian Developing Countries	**22,217.6**	**28,066.2**	**31,057.7**	**26.3**	**10.7**
of which:					
1. People's Rep of China	5,589.7	6,805.2	6,123.3	21.7	-10.0
2. Hong Kong	3,257.1	4,450.5	4,846.0	36.6	8.9
3. South Korea	1,675.1	1,726.4	2,627.5	3.1	52.2
4. Malaysia	995.7	1,566.8	2,025.7	57.4	29.3
5. Singapore	4,768.8	5,141.6	6,507.4	7.8	26.6
6. Thailand	1,022.6	1,258.1	1,423.4	23.0	13.1
B. Africa	**6,260.4**	**8,760.0**	**9,125.6**	**39.9**	**4.2**
of which:					
1. Benin	113.1	189.8	159.0	67.8	-16.2
2. Egypt Arab Republic	508.3	961.5	1,308.3	89.2	36.1
3. Kenya	1,039.0	1,041.5	1,094.3	0.2	5.1
4. South Africa	1,691.9	1,725.3	1,556.3	2.0	-9.8
5. Sudan	300.3	277.1	331.9	-7.7	19.8
6. Tanzania	210.2	391.1	849.7	86.1	117.2
7. Zambia	81.3	108.3	78.6	33.1	-27.4
C. Latin American Countries	**2,897.7**	**3,548.1**	**4,926.2**	**22.4**	**38.8**
V. Others	**88.4**	**217.0**	**403.5**	**145.3**	**85.9**
VI. Unspecified	**118.2**	**150.4**	**569.1**	**27.2**	**278.5**
Total Exports	**91,361.3**	**1,13,475.2**	**1,30,709.8**	**24.2**	**15.2**

P : Provisional.

Source : DGCI & S.

Statement 5: India's Imports of Principal Commodities

(US$ million)

Commodity/Group	April-December			Percentage Variation	
	2006-07	2007-08	2008-09 P	(3)/(2)	(4)/(3)
1	2	3	4	5	6
I. Bulk Imports	**63,427.4**	**78,910.2**	**1,15,377.1**	24.4	46.2
	(47.2)	**(45.8)**	**(49.0)**		
A. Petroleum, Petroleum Products & Related Material	**43,871.2**	**54,420.2**	**79,635.3**	24.0	46.3
	(32.6)	**(31.6)**	**(33.8)**		
B. Bulk Consumption Goods	**2,603.3**	**3,324.3**	**3,493.9**	27.7	5.1
1. Wheat	304.1	372.3	0.0	22.4	-100.0
2. Cereals & Cereal Preparations	26.2	28.5	34.2	8.9	19.9
3. Edible Oil	1,661.9	1,979.2	2,453.5	19.1	24.0
4. Pulses	610.4	943.8	977.5	54.6	3.6
5. Sugar	0.7	0.5	28.8	-27.4	5548.2
C. Other Bulk Items	**16,952.8**	**21,165.7**	**32,247.9**	24.9	52.4
1. Fertilisers	2,628.2	4,123.4	12,407.0	56.9	200.9
a) Crude	260.5	336.4	843.7	29.2	150.8
b) Sulphur & Unroasted Iron Pyrites	78.3	200.0	630.1	155.6	215.0
c) Manufactured	2,289.5	3,587.0	10,933.2	56.7	204.8
2. Non-Ferrous Metals	1,908.5	2,521.5	2,659.8	32.1	5.5
3. Paper, Paperboard & Mgfd. incl. Newsprint	934.3	1,031.9	1,493.1	10.4	44.7
4. Crude Rubber, incl. Synthetic & Reclaimed	439.7	565.4	781.4	28.6	38.2
5. Pulp & Waste Paper	466.2	575.8	655.5	23.5	13.8
6. Metalliferrous Ores & Metal Scrap	6,058.8	5,810.4	6,741.1	-4.1	16.0
7. Iron & Steel	4,517.1	6,537.3	7,510.0	44.7	14.9
II. Non-Bulk Imports	**71,091.8**	**93,209.3**	**1,20,032.5**	31.1	28.8
	(52.8)	**(54.2)**	**(51.0)**		
A. Capital Goods	**30,886.5**	**41,056.4**	**49,501.3**	32.9	20.6
1. Manufactures of Metals	1,119.4	1,875.0	2,550.7	67.5	36.0
2. Machine Tools	1,062.4	1,538.9	1,880.0	44.8	22.2
3. Machinery except Electrical & Electronics	9,902.0	13,485.5	16,351.7	36.2	21.3
4. Electrical Machinery except Electronics	1,446.3	2,067.5	2,587.1	43.0	25.1
5. Electronic Goods incl. Computer Software	12,628.5	16,068.1	17,474.7	27.2	8.8
6. Transport Equipments	3,372.3	5,114.1	6,332.6	51.6	23.8
7. Project Goods	1,355.6	907.3	2,324.5	-33.1	156.2
B. Mainly Export Related Items	**13,703.1**	**16,588.7**	**23,359.8**	21.1	40.8
1. Pearls, Precious & Semi-Precious Stones	5,907.8	7,137.2	10,752.1	20.8	50.6
2. Chemicals, Organic & Inorganic	5,824.4	7,327.2	10,157.3	25.8	38.6
3. Textile Yarn, Fabric, etc.	1,649.4	1,835.6	1,948.4	11.3	6.1
4. Cashew Nuts, raw	321.4	288.7	502.1	-10.2	73.9
C. Others	**26,502.2**	**35,564.2**	**47,171.5**	34.2	32.6
of which :					
1. Gold & Silver	10,711.6	14,410.0	17,033.3	34.5	18.2
2. Artificial Resins & Plastic Materials	1,907.3	2,670.2	2,937.8	40.0	10.0
3. Professional Instruments etc. except electrical	1,710.2	2,222.9	3,147.7	30.0	41.6
4. Coal, Coke & Briquittes etc.	3,275.2	4,597.8	8,402.0	40.4	82.7
5. Medicinal & Pharmaceutical Products	882.7	1,201.7	1,394.0	36.1	16.0
6. Chemical Materials & Products	1,004.3	1,161.5	1,568.4	15.7	35.0
7. Non-Metallic Mineral Manufactures	576.1	742.3	936.3	28.9	26.1
Total Imports	**1,34,519.2**	**1,72,119.5**	**2,35,409.6**	28.0	36.8
Memo items:					
Non-oil imports	90,648.0	1,17,699.3	1,55,774.3	29.8	32.3
Non-oil imports excl. Gold & Silver	79,936.4	1,03,289.3	1,38,740.9	29.2	34.3
Mainly industrial input*	73,333.4	94,155.1	1,21,166.1	28.4	28.7

P : Provisional.

* : Non oil imports net of gold and silver, bulk consumption goods, manufactured fertilizers and professional instruments.

Note : Figures in brackets relate to percentage to total imports for the period.

Source : DGCI & S.

Statement 6: Direction of India's Foreign Trade-Imports

(US$ million)

Group / Country	April-December			Percentage Variation	
	2006-07	2007-08	2008-09 P	(3)/(2)	(4)/(3)
1	2	3	4	5	6
I. O E C D Countries	**44,471.1**	**57,619.0**	**73,845.8**	**29.6**	**28.2**
A. E U	**20,056.9**	**25,634.5**	**31,289.7**	**27.8**	**22.1**
of which:					
1. Belgium	3,188.6	3,933.1	4,735.1	23.3	20.4
2. France	1,596.1	1,989.3	2,349.8	24.6	18.1
3. Germany	5,457.0	6,760.2	8,295.8	23.9	22.7
4. Italy	1,916.1	2,751.5	3,427.7	43.6	24.6
5. Netherland	815.3	1,425.5	1,384.2	74.8	-2.9
6. U K	3,103.1	3,810.6	5,045.5	22.8	32.4
B. North America	**8,734.1**	**11,486.3**	**15,648.0**	**31.5**	**36.2**
1. Canada	1,032.3	1,432.8	1,780.7	38.8	24.3
2. U S A	7,701.8	10,053.5	13,867.3	30.5	37.9
C. Asia and Oceania	**8,727.9**	**10,731.3**	**13,927.3**	**23.0**	**29.8**
of which:					
1. Australia	5,242.8	5,930.9	7,582.4	13.1	27.8
2. Japan	3,286.5	4,551.3	5,968.3	38.5	31.1
D. Other O E C D Countries	**6,952.3**	**9,767.0**	**12,980.7**	**40.5**	**32.9**
of which:					
1. Switzerland	6,333.7	7,837.8	10,796.0	23.7	37.7
II. O P E C	**42,732.3**	**53,923.9**	**79,830.6**	**26.2**	**48.0**
of which:					
1. Indonesia	2,803.3	3,484.2	5,044.5	24.3	44.8
2. Iran	5,702.4	7,254.1	10,101.5	27.2	39.3
3. Iraq	4,455.1	4,397.4	7,042.5	-1.3	60.1
4. Kuwait	4,403.7	4,883.8	7,915.3	10.9	62.1
5. Saudi Arabia	10,262.8	13,511.8	17,072.8	31.7	26.4
6. U A E	6,498.1	9,691.0	15,370.1	49.1	58.6
III. Eastern Europe	**2,717.9**	**2,872.3**	**5,611.8**	**5.7**	**95.4**
of which:					
1 Russia	1,515.1	1,858.5	3,775.9	22.7	103.2
IV. Developing Countries	**44,022.3**	**57,116.7**	**75,096.9**	**29.7**	**31.5**
of which:					
A. Asia	**35,196.3**	**46,429.7**	**60,277.3**	**31.9**	**29.8**
a) S A A R C	**1,140.3**	**1,368.0**	**1,407.6**	**20.0**	**2.9**
1. Afghanistan	30.9	74.0	97.6	139.1	31.9
2. Bangladesh	184.5	192.6	263.0	4.4	36.5
3. Bhutan	92.0	154.0	119.1	67.3	-22.7
4. Maldives	2.2	2.8	3.3	23.5	17.8
5. Nepal	229.5	402.5	369.2	75.4	-8.3
6. Pakistan	247.8	211.9	293.1	-14.5	38.3
7 Sri Lanka	353.4	330.3	262.3	-6.5	-20.6
b) Other Asian Developing Countries	**34,056.0**	**45,061.7**	**58,869.7**	**32.3**	**30.6**
of which:					
1. People's Rep of China	12,640.1	19,854.7	24,169.4	57.1	21.7
2. Hong Kong	1,842.6	2,192.0	4,397.2	19.0	100.6
3. South Korea	3,572.2	4,288.5	6,536.8	20.1	52.4
4. Malaysia	4,013.9	4,464.5	5,866.4	11.2	31.4
5. Singapore	4,176.9	5,620.2	5,823.8	34.6	3.6
6. Thailand	1,246.6	1,719.4	2,065.4	37.9	20.1
B. Africa	**5,049.7**	**6,802.5**	**10,540.2**	**34.7**	**54.9**
of which:					
1. Benin	71.5	62.7	106.4	-12.3	69.7
2. Egypt Arab Republic	1,368.4	1,525.8	1,612.0	11.5	5.6
3. Kenya	41.1	65.3	60.7	58.6	-6.9
4. South Africa	1,936.4	2,679.7	4,550.5	38.4	69.8
5. Sudan	83.6	241.6	359.1	189.1	48.6
6. Tanzania	58.8	73.1	108.9	24.3	49.0
7. Zambia	74.9	66.2	127.6	-11.6	92.7
C. Latin American Countries	**3,776.3**	**3,884.5**	**4,279.5**	**2.9**	**10.2**
V. Others	**53.4**	**52.1**	**50.6**	**-2.3**	**-3.0**
VI. Unspecified	**522.2**	**535.4**	**973.9**	**2.5**	**81.9**
Total Imports	**1,34,519.2**	**1,72,119.5**	**2,35,409.6**	**28.0**	**36.8**

P : Provisional.

Note : The figures for 2006-07, which include country-wise distribution of petroleum imports, are not strictly comparable with the data for previous years.

Source : DGCI & S.

Other Items

Press Releases

Regulatory and Other Measures

Foreign Exchange Developments

Press Releases

March 2009

India to become member of Financial Stability Forum

March 17, 2009

The Financial Stability Forum (FSF) has decided at its plenary meeting in London on 11-12 March 2009 to broaden its membership and to invite India as a new member. Other countries invited to become as new members are the G-20 countries that are not currently in the FSF and these, apart from India, are Argentina, Brazil, China, Indonesia, Korea, Mexico, Russia, Saudi Arabia, South Africa,Turkey, Spain and the European Commission.

The FSF was established by the G7 finance ministers and central bank governors in 1999 to promote international financial stability through enhanced information exchange and international cooperation in financial market supervision and surveillance. The current FSF comprises national financial authorities (central banks, supervisory authorities and finance ministries) from the G7 countries, Australia, Hong Kong, Netherlands, Singapore and Switzerland, as well as international financial institutions, international regulatory and supervisory groupings, committees of central bank experts and the European Central Bank. The FSF Secretariat is based at the Bank for International Settlements in Basel, Switzerland.

India to become member of Basel Committee on Banking Supervision

March 17, 2009

The Basel Committee on Banking Supervision (BCBS) has decided at its meeting on 10-11 March 2009 to expand its membership and invite India as a new member. Other countries invited to become new members are Australia, Brazil, China, Korea, Mexico and Russia. The Basel Committee's governance body will also be enlarged to include the Central Bank Governors and Heads of Supervision from these new member organisations.

The Basel Committee on Banking Supervision provides a forum for regular cooperation on banking supervisory matters. It seeks to promote and strengthen supervisory and risk management practices globally. With its expanded membership, the Committee is comprised of representatives from Australia, Belgium, Brazil, Canada, China, France, Germany, India, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Spain, Sweden, Switzerland, the United Kingdom and the United States. The Committee's Secretariat is based at the Bank for International Settlements in Basel, Switzerland.

GoI issues Oil Bonds worth Rs.10,000 crore Today

March 23, 2009

The Government of India have announced the issue of '8.00 per cent Oil Marketing Companies' Government of India Special Bonds, 2026' for Rs.10,000 crore (nominal). The Special Bonds are being issued to three Oil Marketing Companies as compensation towards estimated under-recoveries on account of sale of sensitive petroleum products during the current financial year. The Special Bonds are being issued at par to the following Oil Marketing Companies on March 23, 2009 (Monday):

(1) Indian Oil Corporation Ltd (IOCL)for Rs.5,817.27 crore

(2) Bharat Petroleum Corporation Ltd. (BPCL)for Rs.2,144.32 crore

(3) Hindustan Petroleum Corporation Ltd. (HPCL)for Rs.2,038.41 crore

The investment in the Special Bonds by the banks and Insurance Companies will not be reckoned as an eligible investment in Government securities for their statutory requirements. However, such investment by the insurance companies will be eligible to be reckoned as investment under "other Approved Securities" category as defined under Insurance Regulatory and Development Authority (Investment) Regulations, 2000. Further, the investment by the Provident Funds, Gratuity Funds, Superannuation Funds, *etc.* in the Special Bonds will be treated as an eligible investment under the administrative order of the Ministry of Finance.

The Special Bonds will be transferable and eligible for market ready forward transactions (Repo).

Framework for addressing the liquidity constraints of NBFCs

March 31, 2009

The Government of India had announced an arrangement for providing liquidity support to meet the temporary liquidity mismatches for eligible Non-Banking Financial Companies-Non-Deposit Taking-Systemically Important (NBFC-ND-SI) through the Industrial Development Bank of India Stressed Asset Stabilisation Fund (IDBI SASF) Trust, which has been notified as Special Purpose Vehicle for undertaking this operation.

The facility is currently available for any paper issued by NBFCs up to March 31, 2009. It has now been decided to extend the facility for any paper issued up to June 30, 2009. The SPV would cease to make fresh purchases after September 30, 2009 and would recover all dues by December 31, 2009.

All other terms and conditions remain unchanged.

Regulatory and Other Measures

March 2009

RBI/2008-09/407 Ref. No. UBD.PCB.Cir.No. 54/13.05.000/2008-09 dated March 9, 2009

The Chief Executive officers of all Primary (Urban) Co-operative Banks

Agricultural Debt Waiver and Debt Relief Scheme, 2008 – Prudential Norms on Income Recognition, Asset Classification, Provisioning and Capital Adequacy

Please refer to our circular UBD.PCB.Cir.No. 5/13.05.000/08-09 dated July 30, 2008 and UBD.PCB.Cir.No. 27/13.05.000/08-09 dated November 17, 2008 on the captioned subject.

2. In this regard, we advise that under the captioned scheme, the Government of India has since decided to extend the last date of repayment of first instalment by the "other farmers" under the Debt Relief Scheme from September 30, 2008 to March 31, 2009. The dates of payment of second and third instalments remain unchanged at March 31, 2009 and June 30, 2009. All other terms of the aforesaid circulars remain unchanged.

3. It is also clarified that the additional period of one month from the pre-specified due dates, permitted to the farmers eligible under the Debt Relief Scheme, for paying their share of the settlement, without affecting the standard asset classification status of the relevant account, shall be available only for the first two instalments *viz.* those due on March 31, 2009. However, no grace period is allowed for the last instalment and the entire share of the farmer is payable by June 30, 2009 itself, in order to maintain the eligibility of the 'other farmers' for Debt Relief Scheme and to retain the standard asset classification status.

RBI/2008-09/403 Ref. No. UBD.PCB. BPD. No. 53 /13.05.000 / 2008-09 dated March 6, 2009

The Chief Executive Officer of all Primary (Urban) Co-operative Banks

Prudential Guidelines on Restructuring of Advances by UCBs.

Please refer to the prudential guidelines on income recognition, asset classification and provisioning in respect of restructured accounts issued to Urban Cooperative Banks on November 12, 2001. As part of announcement made by the Hon'ble Finance Minister in 2005, separate guidelines were also issued for restructuring of debt of all eligible Small and Medium Enterprises (SMEs) in order to improve the flow of credit to the small scale sector.

2. In view of the current economic downturn and the spillover effects of the global recession on the Indian economy particularly from September 2008 onwards, which has created stress on liquidity and payments for the otherwise viable units/ activities, certain modifications in the guidelines are considered necessary. The matter has been reviewed and it has now been decided to introduce revised guidelines on restructuring of advances and also realign the extant instructions on the Debt Restructuring Mechanism for SMEs.

3. The revised guidelines on restructuring of advances are enclosed. These guidelines are in supercession of all the guidelines issued on the subject so far and will be applicable to all accounts restructured after the date of issue of the circular.

RBI/2008-09/445 Ref. No. MPD.BC. 321/ 07.01.279/ 2008-09 dated April 21, 2009

All Schedule Banks [excluding Regional Rural Banks] and Primary Dealers

Standing Liquidity Facilities for Banks and Primary Dealers

Please refer to the Reserve Bank's Annual Policy Statement 2009-2010 dated April 21, 2009, in terms of which the fixed repo rate under the Liquidity Adjustment Facility (LAF) has been reduced by 25 basis points from 5.0 per cent to 4.75 per cent with immediate effect.

Accordingly, the Standing Liquidity Facilities provided to banks (export credit refinance) and Primary Dealers (PDs) (collateralised liquidity support) from the Reserve Bank would be available at the revised repo rate, *i.e.*, at 4.75 per cent with effect from April 21, 2009.

Foreign Exchange Developments

March 2009

(i) Memorandum of Instructions governing money changing activities

In view of the growth in money changing activities and issuance of several instructions including AML Guidelines on money changing activities, instructions governing money changing activities issued to AMCs were reviewed.

[A.P. (DIR Series) Circular No.57 dated March 9, 2009]

(ii) Buyback / Prepayment of Foreign Currency Convertible Bonds (FCCBs)

The date for completing the entire procedure for buyback of FCCBs has been extended up to December 31, 2009 from March 31, 2009.

[A.P. (DIR Series) Circular No.58 dated March 13, 2009]

(iii) Deferred Payment Protocols dated April 30, 1981 and December 23, 1985 between Government of India and erstwhile USSR

Rupee value of the special currency basket was revised on March 02, 2009 and was fixed at Rs.67.2425 with effect from March 05, 2009.

[A.P. (DIR Series) Circular No.59 dated March 24, 2009]

(iv) On-line downloading of GR Forms

At present, GR Forms [to be completed in duplicate for export otherwise than by

Post including export of software in physical form, *i.e.* magnetic tapes/discs and paper media] can be obtained by the exporters from the Regional Offices of the Reserve Bank at the cost of Re.1. As part of simplifying the procedures, it has been decided to make the GR Forms available on-line on the Reserve Bank's website www.rbi.org.in. Accordingly, the exporters have the option to use the GR Forms available on-line as well. While downloading the GR-Forms, the exporter may ensure to use 'Legal' size paper i.e. 8.5 x 14 inches. Further, both the printer (printing preference) and the paper size in the page setup option have to be set to legal size before printing. The GR number will be automatically allotted when the document goes to the print queue.

The exporters will continue to have the facility of purchasing the GR Forms from the Regional Offices of the Reserve Bank, as hitherto. However, this facility would be phased out within a period of one year.

[A.P. (DIR Series) Circular No.60
dated March 26, 2009]

Current Statistics

General

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Notes :

(1) The coverage of data will be expanded from time to time to include new statistical information as and when it becomes available.

(2) Some of the figures included in the tables are provisional and may be revised in later issues. Each issue contains all the revisions made upto the date of publication of the Bulletin.

(3) The following symbols have been used throughout this Section :

.. = Figure is not available.

– = Figure is nil or negligible.

P = Provisional.

(4) Where necessary, each figure has been rounded off to the nearest final digit. For this reason, there may be, in some tables, a slight discrepancy between the sum of the constituent items and the total.

(5) A line drawn across a column between two consecutive figures indicates that the figures above and below the line have been compiled on different basis and are not strictly comparable. In each case, a suitable footnote is added.

(6) For definitions of important items, sources of data, coverage, scope, method of compilation, etc. a reference may be made to the Explanatory Notes, issued as a supplement to the October 1978 issue of the Bulletin.

(7) 1 Lakh = 1,00,000, 1 Million = 10 lakh, 1 Crore = 10 Million.

General

No. 1: Selected Economic Indicators

Item	Unit / Base	1990-91	2006-07	2007-08	2008-09	2009		
						Jan.	Feb.	Mar.
1	2	3	4	5	6	7	8	9
Output								
1. Gross Domestic Product at Factor Cost (at 1999-00 prices)	Rs. crore	10,83,572	28,71,120	31,29,717 (Q.E.)	33,51,653 (A.E.)			
2. Index number of Agricultural Production (All crops)	Triennium ended 1993-94=100	148.4	167.2	168.6 ($)	–			
a. Foodgrains Production	Million tonnes	176.4	217.3	230.8	227.9 £			
3. General Index of Industrial Production (1)	1993-94=100	212.6 *	247.1	268.0 (P)	–	280.4 (P)	272.8 (P)	–
Money and Banking								
Reserve Bank of India (2)								
4. Notes in Circulation	Rs. crore	53,784	4,96,775	5,82,055	6,81,058	6,49,226	6,65,243	6,81,058
5. Rupee Securities (3)	"	86,035	96,861	83,707	1,21,962	51,965	52,320	1,21,962
6. Loans and Discount	"	19,900	6,585	4,579	21,562	19,305	22,500	21,562
(a) Scheduled Commercial Banks (4)	"	8,169	6,245	4.000	11,728	6,261	7,113	11,728
(b) Scheduled State Co-operative Banks (4)	"	38	–	–	–	–	–	–
(c) Bills Purchased and Discounted (internal)	"	–	–	–	–	–	–	–
Scheduled Commercial Banks								
7. Aggregate Deposits (5)	Rs. crore	1,92,541	26,11,933	31,96,939	38,30,322 (P)	36,68,375	37,34,739	38,30,322 (P)
8. Bank Credit (5)	"	1,16,301	19,31,189	23,61,914	27,70,012 (P)	26,37,780	26,67,928	27,70,012 (P)
9. Investment in Govt. Securities (5)	"	49,998	7,76,058	9,58,661	11,48,168 (P)	11,58,338	11,76,105	11,48,168 (P)
10. Cheque Clearances (6)	Rs. thousand crore	1,703	6,467	7,044 (P)	508 (P)	426 (P)	397 (P)	508 (P)
11. Money Stock Measures (7)								
(a) M_1	Rs. crore	92,892	9,65,989	11,52,432	12,45,557	11,52,555	11,80,385	12,45,557
(b) M_3	"	2,65,828	33,15,993	40,17,573	47,58,504	45,54,150	46,42,531	47,58,504
Cash Reserve Ratio and Interest Rates								
12. Cash Reserve Ratio (2), (16)	Per cent	15.00	6.50	7.50	5.00	5.00	5.00	5.00
13. Bank Rate	Per cent Per annum	10.00	6.00	6.00	6.00	6.00	6.00	6.00
14. Inter-bank Call Money Rate (Mumbai) (8)	"	4.00-70.00	0.50-4.90	6.15-9.30	2.50-5.75	2.00-4.20	2.50-4.15	2.50-5.75
15. Deposit Rate (9)								
(a) 30 days and 1 year	"	8.00 (11)	3.00-9.50	3.00-7.50	3.25-8.00	3.25-8.00	3.25-8.00	3.25-8.00
(b) 1 year and above	"	9.00-11.00	7.50-9.60	8.25-9.00	8.00-8.50	8.00-9.00	8.00-8.50	8.00-8.50

Q.E. : Quick Estimate. A.E. : Advance Estimate.
* : Base : 1980-81 = 100. + : Base : Triennium ending 1981-82=100. ‡ : Base 1982=100. £ : Second Advance Estimates for 2008-09.
^ : Base : 2001 = 100 from January 2006 onwards. ^^ : CPI (UNME) are Linked All - India Index from the April 2008 onwards.
$: Based on Fourth Advance Estimates for 2007-08 as released on July 9, 2008.
@ : As the security 12.50% 2004 had matured on March 23, 2004, it has been substituted by 11.40% Loan 2008, with effect from March 2004, to represent the short-term yield.
# : As the maturity of the security 11.50% 2008, which represents the trends in long term yield, had become less than 5 years, it has been substituted by 7.40% Loan 2012, with effect from April 2004.
Also see 'Notes on Tables'.

No. 1: Selected Economic Indicators *(Concld.)*

Item	Unit / Base	1990-91	2006-07	2007-08	2008-09	2009		
						Jan.	Feb.	Mar.
1	2	3	4	5	6	7	8	9
16. Prime Lending Rate (10)	"	—	12.25-12.50	12.25-12.75	11.50-12.50	12.00-12.50	11.50-12.50	11.50-12.50
17. Yield on 11.40% Loan 2008 @	"	—	7.22	7.26	—	—	—	—
18. Yield on 7.40% Loan 2012 #	"	—	7.55	7.83	6.06	5.69	5.67	6.06
Government Securities Market (2)								
19. Govt. of India 91-day Treasury Bills (Total outstandings)	Rs. crore		45,229	39,957	75,549	76,448	76,025	75,549
Price Indices								
20. Wholesale Prices (13)	1993-94=100							
(a) All Commodities	"	182.7 +	206.1	215.9	..	228.9	..	..
(b) Primary Articles	"	184.9 +	208.6	224.8	..	248.6	..	..
(c) Fuel, Power, Light and Lubricants	"	175.8 +	324.9	327.2	..	328.8	..	..
(d) Manufactured Products	"	182.8 +	179.0	188.0	..	199.9	..	..
(e) Foodgrains (Cereals + Pulses)	"	179.2 +	205.9	215.6	..	242.2	..	..
(f) Edible Oils	"	223.3 +	154.6	175.4	..	182.2	..	..
(g) Sugar, Khandsari & Gur	"	152.3 +	179.8	155.2	..	175.8	..	..
(h) Raw Cotton	"	145.5 +	151.8	193.0	..	215.6	..	..
21. Consumer Prices (All-India) (1)								
(a) Industrial Workers ^	2001=100	193	125	133	..	148	148	..
(b) Urban Non-Manual Employees ^^	1984-85=100	161	486	515	..	574	575	..
(c) Agricultural Labourers	July 1986-June 1987=100	..	388	417	..	461	462	..
Foreign Trade								
22. Value of Imports	U.S. $ Million	24,073	1,85,749	2,39,651	..	18,455 (P)	16,823 (P)	..
23. Value of Exports	"	18,145	1,26,361	1,59,007	..	12,381 (P)	11,913 (P)	..
24. Balance of Trade	"	–5,927	–59,388	–80,644	..	–6,075 (P)	–4,910 (P)	..
25. Foreign Exchange Reserves (14)								
(a) Foreign Currency Assets	U.S. $ Million	2,236	1,91,924	2,99,230	2,41,426	2,38,894	2,38,715	2,41,426
(b) Gold	"	3,496	6,784	10,039	9,577	8,884	9,746	9,577
(c) SDRs	"	102	2	18	1	3	1	1
Employment Exchange Statistics (15)								
26. Number of Registrations	Thousand	6,541	..	..	..	..	..	..
27. Number of Applicants								
(a) Placed in Employment	"	265	..	..	..	..	..	..
(b) On live Register (14)	"	34,632	..	..	..	..	..	..

Money and Banking

No. 2: Reserve Bank of India

(Rs. crore)

Last Friday / Friday	1990-91	2007-08	2008-09	2008				2009						
				Apr.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. 3	Apr. 10	Apr. 17	Apr. 24
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Issue Department														
Liabilities														
Notes in Circulation	53,784	5,82,055	6,81,058	6,01,629	6,38,204	6,32,454	6,41,245	6,49,226	6,65,243	6,81,058	6,81,396	6,95,954	7,04,002	7,04,302
Notes held in Banking Department	23	20	16	20	26	112	23	15	17	16	22	22	15	17
Total Liabilities (Total Notes Issued) or Assets	**53,807**	**5,82,075**	**6,81,074**	**6,01,649**	**6,38,230**	**6,32,566**	**6,41,267**	**6,49,241**	**6,65,261**	**6,81,074**	**6,81,417**	**6,95,977**	**7,04,016**	**7,04,319**
Assets														
Gold Coin and Bullion	6,654	31,170	40,390	32,779	33,724	32,006	32,006	35,577	40,390	40,390	39,862	39,862	39,862	39,862
Foreign Securities	200	5,49,722	6,39,531	5,67,752	6,03,430	5,99,341	6,08,097	6,12,574	6,23,648	6,39,531	6,40,416	6,54,989	6,62,848	6,63,172
Rupee Coin (1)	29	136	106	71	29	173	119	43	176	106	93	80	260	240
Government of India Rupee Securities	46,924	1,046	1,046	1,046	1,046	1,046	1,046	1,046	1,046	1,046	1,046	1,046	1,046	1,046
Banking Department														
Liabilities														
Deposits	**38,542**	**5,36,851**	**3,52,156**	**4,73,445**	**4,59,304**	**3,91,077**	**3,64,407**	**3,31,042**	**3,21,405**	**3,52,156**	**3,33,032**	**2,81,915**	**3,06,288**	**3,23,041**
Central Government	61	83,645	101	16,649	100	101	101	100	101	101	100	100	101	101
Market Stabilisation Scheme	-	1,68,392	88,077	1,72,444	1,65,187	1,32,531	1,20,050	1,08,764	1,01,991	88,077	88,077	71,145	71,145	70,216
State Governments	33	41	1,045	41	41	41	41	41	41	1,045	48	41	41	41
Scheduled Commercial Banks	33,484	2,57,122	2,38,195	2,54,548	2,65,773	2,33,607	2,19,867	1,96,677	1,94,466	2,38,195	2,15,273	1,80,724	2,09,772	2,22,852
Scheduled State Co-operative Banks	244	3,396	3,142	3,584	3,467	2,780	2,745	2,619	2,636	3,142	3,456	2,750	2,943	3,122
Non-Scheduled State Co-operative Banks	13	62	96	72	62	158	60	61	65	96	75	103	70	66
Other Banks	88	11,946	9,732	12,977	12,294	9,895	9,836	9,390	9,345	9,732	9,917	9,874	9,965	10,211
Others	4,619	12,247	11,768	13,129	12,380	11,964	11,706	13,389	12,761	11,768	16,085	17,177	12,251	16,432
Other Liabilities (2)	28,342	2,14,216	3,96,402	2,18,137	3,40,946	3,40,802	3,26,592	3,22,393	3,66,203	3,96,402	4,07,186	3,87,626	3,81,147	3,91,711
Total Liabilities or Assets	**66,884**	**7,51,067**	**7,48,557**	**6,91,581**	**8,00,250**	**7,31,880**	**6,90,999**	**6,53,435**	**6,87,608**	**7,48,557**	**7,40,218**	**6,69,541**	**6,87,435**	**7,14,752**

See 'Notes on Tables'.

No. 2: Reserve Bank of India *(Concld.)*

(Rs. crore)

Last Friday / Friday	1990-91	2007-08	2008-09	2008				2009						
				Apr.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. 3	Apr. 10	Apr. 17	Apr. 24
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Assets														
Notes and Coins	23	20	16	20	27	112	23	15	18	16	22	23	15	18
Balances held Abroad (3)	4,008	6,49,661	5,82,537	6,46,809	5,98,272	5,91,453	5,69,154	5,58,269	5,87,132	5,82,537	5,90,940	5,55,974	5,40,691	5,49,049
Loans and Advances														
Central Government	–	–	–	–	–	–	–	9,166	9,603	–	–	13,779	30,203	40,412
State Governments (4)	916	–	–	471	948	–	–	779	243	–	971	1,257	–	731
Scheduled Commercial Banks	8,169	4,000	11,728	474	8,454	6,029	13,516	6,261	7,113	11,728	6,555	6,968	1,970	2,902
Scheduled State Co-op.Banks	38	–	–	–	–	25	19	–	–	–	–	10	10	10
Industrial Dev. Bank of India	3,705	–	–	–	–	–	–	–	–	–	–	–	–	–
NABARD	3,328	–	–	–	13,329	16,312	–	–	–	–	–	–	–	–
EXIM Bank	745	–	–	–	–	–	–	–	–	–	–	–	–	–
Others	1,615	579	9,834	83	848	175	781	3,099	5,541	9,834	12,340	12,070	11,670	11,736
Bills Purchased and Discounted														
Internal	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Government Treasury Bills	1,384	–	–	–	–	–	–	–	–	–	–	–	–	–
Investments	40,286	85,607	1,23,891	30,006	1,58,100	98,259	86,854	53,886	54,245	1,23,891	1,02,268	49,128	74,551	82,051
Other Assets (5)	2,666	11,201	20,552	13,720	20,272	19,514	20,652	21,961	23,714	20,552	27,122	30,332	28,326	27,844
	(–)	(6,984)	(9,050)	(7,345)	(7,557)	(7,172)	(7,172)	(7,972)	(9,050)	(9,050)	(8,932)	(8,932)	(8,932)	(8,932)

No. 3: All Scheduled Banks – Business in India

(Rs. crore)

Last Reporting Friday (in case of March)/ Last Friday	1990-91	2007-08	2008-09(P)	2008					2009		
				Mar.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar. (P)
1	2	3	4	5	6	7	8	9	10	11	12
Number of Reporting Banks	299	239	234	239	234	234	234	233	234	234	234
Liabilities to the Banking System (1)	**6,673**	**1,01,724**	**1,01,154**	**1,01,724**	**1,10,040**	**1,32,529**	**1,31,965**	**1,08,525**	**99,540**	**1,06,370**	**1,01,154**
Demand and Time Deposits from Banks (2)	5,598	50,306	49,901	50,306	46,046	48,760	49,990	50,304	48,490	48,319	49,901
Borrowings from Banks (3)	998	33,034	29,432	33,034	29,090	43,029	37,733	29,413	25,641	27,928	29,432
Other Demand and Time Liabilities (4)	77	18,385	21,821	18,385	34,904	40,740	44,242	28,808	25,409	30,123	21,821
Liabilities to Others (1)	**2,13,125**	**37,06,404**	**43,76,538**	**37,06,404**	**39,59,768**	**41,13,920**	**40,83,689**	**41,13,621**	**42,03,542**	**42,71,383**	**43,76,538**
Aggregate Deposits (5)	**1,99,643**	**32,97,074**	**39,46,592**	**32,97,074**	**35,45,151**	**36,22,174**	**36,50,162**	**36,78,196**	**37,79,670**	**38,48,855**	**39,46,592**
Demand	34,823	5,35,930	5,31,649	5,35,930	5,10,555	4,86,886	4,65,580	4,71,786	4,73,197	4,86,608	5,31,649
Time (5)	1,64,820	27,61,144	34,14,943	27,61,144	30,34,596	31,35,288	31,84,581	32,06,410	33,06,473	33,62,247	34,14,943
Borrowings (6)	645	1,07,712	1,13,178	1,07,712	1,14,403	1,16,147	1,26,311	1,26,205	1,15,258	1,16,495	1,13,178
Other Demand and Time Liabilities (4)	12,838	3,01,618	3,16,768	3,01,618	3,00,214	3,75,599	3,07,216	3,09,220	3,08,614	3,06,032	3,16,768
Borrowings from Reserve Bank (7)	**3,483**	**4,000**	**11,728**	**4,000**	**6,116**	**8,454**	**6,054**	**13,535**	**6,261**	**7,113**	**11,728**
Against Usance Bills / Promissory Notes	–	–	–	–	–	–	–	–	–	–	–
Others (8)	3,483	4,000	11,728	4,000	6,116	8,454	6,054	13,535	6,261	7,113	11,728
Cash in Hand and Balances with Reserve Bank	**25,995**	**2,83,514**	**2,65,791**	**2,83,514**	**3,52,557**	**3,01,099**	**2,63,791**	**2,50,077**	**2,24,985**	**2,22,394**	**2,65,791**
Cash in Hand	1,847	18,593	20,917	18,593	24,089	27,289	23,744	23,882	22,222	21,917	20,917
Balances with Reserve Bank (9)	24,147	2,64,921	2,44,874	2,64,921	3,28,468	2,73,811	2,40,046	2,26,194	2,02,762	2,00,477	2,44,874

See "Notes on Tables"

No. 3: All Scheduled Banks – Business in India *(Concld.)*

(Rs. crore)

Last Reporting Friday (in case of March)/ Last Friday	1990-91	2007-08	2008-09(P)	2008					2009		
				Mar.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar. (P)
1	2	3	4	5	6	7	8	9	10	11	12
Assets with the Banking System	**6,848**	**1,03,411**	**1,43,298**	**1,03,411**	**1,18,777**	**1,43,898**	**1,48,352**	**1,25,131**	**1,23,895**	**1,41,312**	**1,43,298**
Balances with Other Banks	3,347	41,310	57,216	41,310	41,271	45,690	44,419	46,842	48,677	51,339	57,216
In Current Account	1,926	16,553	13,223	16,553	15,436	15,340	13,255	12,537	11,780	11,765	13,223
In Other Accounts	1,421	24,757	43,993	24,757	25,835	30,350	31,164	34,306	36,897	39,574	43,993
Money at Call and Short Notice	2,201	25,766	26,091	25,766	21,022	31,540	33,139	24,865	23,029	29,776	26,091
Advances to Banks (10)	902	4,157	3,195	4,157	2,804	3,117	3,327	3,251	3,079	2,984	3,195
Other Assets	398	32,177	56,796	32,177	53,680	63,552	67,467	50,173	49,110	57,213	56,796
Investment	**76,831**	**10,05,952**	**12,03,438**	**10,05,952**	**10,20,670**	**10,37,540**	**10,97,458**	**11,25,219**	**12,07,584**	**12,25,285**	**12,03,438**
Government Securities (11)	51,086	9,91,899	11,84,540	9,91,899	10,07,334	10,24,263	10,84,919	11,13,223	11,96,446	12,13,641	11,84,540
Other Approved Securities	25,746	14,053	18,897	14,053	13,336	13,277	12,539	11,996	11,138	11,644	18,897
Bank Credit	**1,25,575**	**24,47,646**	**28,51,982**	**24,47,646**	**26,37,632**	**27,32,555**	**27,25,663**	**27,30,889**	**27,22,061**	**27,52,547**	**28,51,982**
Loans, Cash-credits and Overdrafts	1,14,982	23,45,470	27,50,171	23,45,470	25,29,105	26,26,412	26,26,362	26,32,542	26,27,855	26,56,246	27,50,171
Inland Bills-Purchased	3,532	12,988	12,474	12,988	13,872	14,486	13,525	13,833	13,550	12,344	12,474
Inland Bills-Discounted	2,409	41,400	44,084	41,400	44,334	42,724	39,135	39,582	38,818	41,651	44,084
Foreign Bills-Purchased	2,788	16,535	18,310	16,535	19,449	18,720	17,945	17,648	16,407	16,463	18,310
Foreign Bills-Discounted	1,864	31,253	26,944	31,253	30,871	30,213	28,696	27,284	25,431	25,843	26,944
Cash-Deposit Ratio	13.0	8.6	6.7	8.6	9.9	8.3	7.2	6.8	6.0	5.8	6.7
Investment-Deposit Ratio	38.5	30.5	30.5	30.5	28.8	28.6	30.1	30.6	31.9	31.8	30.5
Credit-Deposit Ratio	62.9	74.2	72.3	74.2	74.4	75.4	74.7	74.2	72.0	71.5	72.3

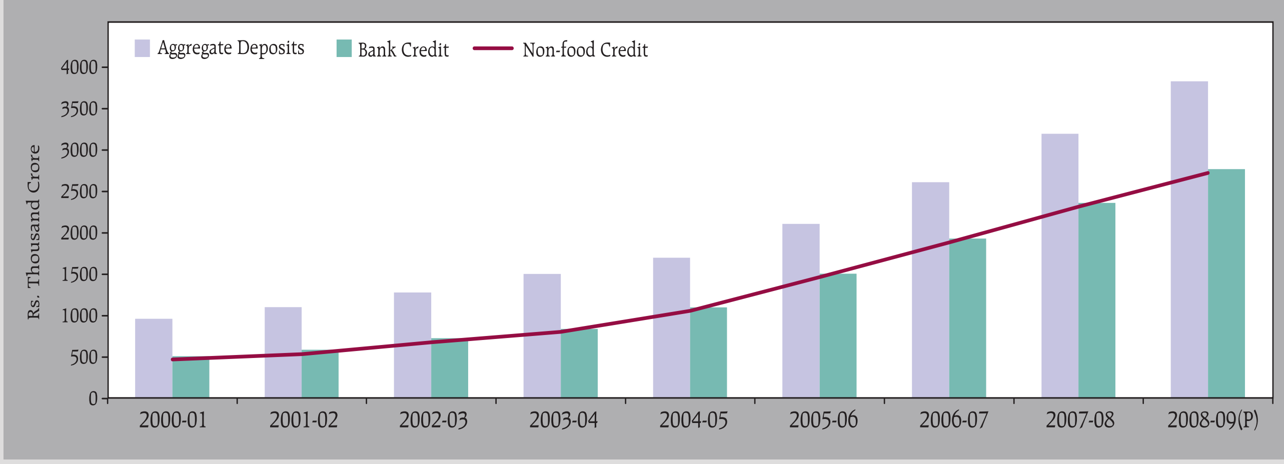
No. 4: All Scheduled Commercial Banks – Business in India

(Rs. crore)

Last Reporting Friday (in case of March)/ Last Friday	1990-91	2007-08	2008-09(P)	2008					2009		
				Mar.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar. (P)
1	2	3	4	5	6	7	8	9	10	11	12
Number of Reporting Banks	271	170	165	170	165	165	165	164	165	165	165
Liabilities to the Banking System (1)	**6,486**	**98,154**	**99,369**	**98,154**	**1,06,292**	**1,28,447**	**1,27,413**	**1,04,008**	**95,272**	**1,02,158**	**99,369**
Demand and Time Deposits from Banks **(2), (12)**	5,443	46,778	48,143	46,778	42,327	45,057	45,810	46,148	44,271	44,138	48,143
Borrowings from Banks (3)	967	32,996	29,409	32,996	29,064	42,651	37,362	29,053	25,595	27,901	29,409
Other Demand and Time Liabilities (4)	76	18,379	21,818	18,379	34,902	40,738	44,241	28,807	25,406	30,119	21,818
Liabilities to Others (1)	**2,05,600**	**36,01,799**	**42,54,805**	**36,01,799**	**38,48,201**	**40,02,820**	**39,72,304**	**40,01,432**	**40,87,546**	**41,52,351**	**42,54,805**
Aggregate Deposits (5)	**1,92,541**	**31,96,939**	**38,30,322**	**31,96,939**	**34,39,327**	**35,15,923**	**35,42,931**	**35,69,805**	**36,68,375**	**37,34,739**	**38,30,322**
Demand	33,192	5,24,310	5,20,130	5,24,310	4,98,899	4,75,193	4,54,602	4,58,379	4,62,461	4,75,791	5,20,130
Time (5)	1,59,349	26,72,630	33,10,191	26,72,630	29,40,428	30,40,730	30,88,329	31,11,426	32,05,913	32,58,948	33,10,191
Borrowings (6)	470	1,06,504	1,11,739	1,06,504	1,12,404	1,15,080	1,25,690	1,25,818	1,14,178	1,15,244	1,11,739
Other Demand and Time Liabilities (4), (13)	12,589	2,98,355	3,12,744	2,98,355	2,96,469	3,71,817	3,03,684	3,05,809	3,04,993	3,02,367	3,12,744
Borrowings from Reserve Bank (7)	**3,468**	**4,000**	**11,728**	**4,000**	**6,094**	**8,454**	**6,029**	**13,516**	**6,261**	**7,113**	**11,728**
Against Usance Bills/ Promissory Notes	–	–	–	–	–	–	–	–	–	–	–
Others	3,468	4,000	11,728	4,000	6,094	8,454	6,029	13,516	6,261	7,113	11,728

See 'Notes on Tables'.

Select Banking Aggregates



No. 4: All Scheduled Commercial Banks – Business in India *(Concld.)*

(Rs. crore)

Last Reporting Friday (in case of March)/ Last Friday	1990-91	2007-08	2008-09(P)	2008					2009		
				Mar.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar. (P)
1	2	3	4	5	6	7	8	9	10	11	12
Cash in Hand and Balances with Reserve Bank	**25,665**	**2,75,166**	**2,58,566**	**2,75,166**	**3,41,783**	**2,92,197**	**2,56,707**	**2,43,093**	**2,18,287**	**2,15,788**	**2,58,566**
Cash in Hand	1,804	18,044	20,371	18,044	23,482	26,424	23,100	23,226	21,609	21,322	20,371
Balances with Reserve Bank (9)	23,861	257,122	2,38,195	2,57,122	3,18,301	2,65,773	2,33,607	2,19,867	1,96,677	1,94,466	2,38,195
Assets with the Banking System	**5,582**	**90,877**	**1,19,325**	**90,877**	**1,03,184**	**1,27,149**	**1,29,819**	**1,07,238**	**1,05,897**	**1,18,622**	**1,19,325**
Balances with Other Banks	2,846	36,016	50,617	36,016	35,276	40,346	38,659	41,392	43,047	44,989	50,617
In Current Account	1,793	14,871	11,899	14,871	13,562	13,941	11,979	11,344	10,507	10,502	11,899
In Other Accounts	1,053	21,145	38,719	21,145	21,714	26,406	26,680	30,048	32,540	34,487	38,719
Money at Call and Short Notice	1,445	19,925	15,451	19,925	15,602	24,390	24,999	17,085	15,599	19,998	15,451
Advances to Banks (10)	902	3,779	2,875	3,779	2,419	2,763	3,022	2,944	2,753	2,672	2,875
Other Assets	388	31,156	50,382	31,156	49,888	59,649	63,139	45,818	44,498	50,963	50,382
Investment	**75,065**	**9,71,715**	**11,65,746**	**9,71,715**	**9,84,558**	**10,01,092**	**10,60,574**	**10,87,996**	**11,68,305**	**11,86,557**	**11,65,746**
Government Securities (11)	49,998	9,58,661	11,48,168	9,58,661	9,72,265	9,88,906	10,49,160	10,77,126	11,58,338	11,76,105	11,48,168
Other Approved Securities	25,067	13,053	17,578	13,053	12,293	12,186	11,414	10,870	9,967	10,452	17,578
Bank credit (14)	**1,16,301**	**23,61,914**	**27,70,012**	**23,61,914**	**25,51,026**	**26,48,660**	**26,42,543**	**26,47,241**	**26,37,780**	**26,67,928**	**27,70,012**
	(4,506)	**(44,399)**	**(46,211)**	**(44,399)**	**(45,175)**	**(51,473)**	**(50,394)**	**(53,123)**	**(45,521)**	**(48,430)**	**(46,211)**
Loans,Cash-Credits and Overdrafts	1,05,982	22,61,576	26,70,205	22,61,576	24,44,734	25,44,715	25,45,547	25,51,143	25,45,620	25,73,670	26,70,205
Inland Bills-Purchased	3,375	12,594	11,740	12,594	13,118	13,861	12,851	13,091	12,790	11,619	11,740
Inland Bills-Discounted	2,336	40,553	43,332	40,553	43,436	41,746	38,067	38,627	38,011	40,759	43,332
Foreign Bills-Purchased	2,758	16,499	18,181	16,499	19,416	18,690	17,916	17,616	16,380	16,432	18,181
Foreign Bills-Discounted	1,851	30,691	26,555	30,691	30,322	29,648	28,162	26,765	24,979	25,448	26,555
Cash-Deposit Ratio	13.3	8.6	6.8	8.6	9.9	8.3	7.2	6.8	6.0	5.8	6.8
Investment- Deposit Ratio	39.0	30.4	30.4	30.4	28.6	28.5	29.9	30.5	31.8	31.8	30.4
Credit-Deposit Ratio	60.4	73.9	72.3	73.9	74.2	75.3	74.6	74.2	71.9	71.4	72.3

No. 5: Scheduled Commercial Banks' Investments

(Rs. crore)

Outstanding as on	SLR Securities	Commercial Paper	Shares Issued by			Bonds / Debentures issued by			Instruments Issued by	
			PSUs	Private Corporate Sector	Others	PSUs	Private Corporate Sector	Others	Mutual Funds	Financial Institutions
1	2	3	4	5	6	7	8	9	10	11
March 21, 2003	5,47,546	4,041	1,639	7,591	–	48,258	33,026	–	6,455	31,066
March 19, 2004	6,77,588	3,835	1,565	7,400	41	49,720	27,966	5,232	11,930	32,988
March 18, 2005	7,39,154	3,944	1,886	10,289	44	46,939	31,994	6,980	12,744	31,557
March 31, 2006	7,17,454	4,837	2,627	10,502	41	33,018	29,550	15,153	10,410	29,203
March 30, 2007	7,91,516	9,038	2,129	16,225	74	29,232	27,641	17,787	11,761	26,568
March 28, 2008	9,71,715	13,270	3,025	23,389	294	27,935	28,700	29,230	18,824	25,942
March 27, 2009	11,65,746	19,260	2,775	25,111	407	24,009	32,966	31,236	45,134	31,055
March 14, 2008	9,82,827	11,698	3,016	23,691	299	27,622	27,170	19,167	40,386	25,352
March 28, 2008	9,71,715	13,270	3,025	23,389	294	27,935	28,700	29,230	18,824	25,942
April 11, 2008	10,13,780	11,198	3,271	24,020	345	26,899	27,892	28,868	51,078	26,121
April 25, 2008	10,18,104	11,433	3,516	23,598	318	26,323	27,172	27,539	44,778	27,158
May 9, 2008	10,09,815	11,123	3,712	23,119	303	25,603	26,696	26,971	61,992	26,900
May 23, 2008	10,22,294	11,101	3,775	23,734	276	26,065	26,880	23,901	51,766	26,820
June 6, 2008	10,21,217	11,037	3,892	23,835	346	25,827	26,850	25,436	48,450	26,648
June 20, 2008	10,04,766	11,794	3,782	23,939	345	25,977	27,076	24,344	36,429	27,060
July 4, 2008	10,14,992	10,160	3,554	23,362	120	25,266	27,069	24,703	36,877	26,150
July 18, 2008	9,82,096	9,949	3,509	23,632	147	24,788	26,917	23,654	20,587	25,746
August 1, 2008	10,02,019	10,980	3,459	23,241	180	24,263	27,139	25,134	23,508	25,340
August 15, 2008	9,96,496	11,565	3,508	23,916	144	23,847	27,361	23,628	21,492	25,415
August 29, 2008	10,15,797	11,482	3,553	23,969	143	24,588	27,053	26,367	21,526	24,985
September 12, 2008	10,01,328	12,538	3,497	24,219	169	25,548	27,889	27,031	22,042	23,835
September 26, 2008	9,84,558	11,311	3,424	24,193	150	27,538	28,728	24,882	10,736	24,676
October 10, 2008	9,77,884	11,957	3,403	24,339	149	24,320	29,101	24,077	9,229	24,213
October 24, 2008	10,55,599	15,788	3,443	24,694	119	23,915	28,415	26,274	14,879	23,325
November 7, 2008	10,71,338	15,919	3,405	24,891	110	24,610	29,442	26,530	18,865	23,510
November 21, 2008	10,67,608	16,297	3,429	24,978	110	25,119	28,706	29,256	29,194	24,355
December 5, 2008	11,02,953	17,280	3,450	25,008	114	23,836	29,812	29,751	34,982	24,232
December 19, 2008	10,82,764	17,927	3,398	25,246	114	24,486	30,567	30,311	32,482	23,983
January 2, 2009	11,50,038	16,730	3,358	25,157	114	25,056	31,183	26,261	43,185	25,347
January 16, 2009	11,39,279	18,702	2,988	25,073	516	25,610	33,522	30,056	60,355	26,148
January 30, 2009	11,68,305	17,174	3,005	25,178	359	26,195	34,226	30,170	71,246	28,767
February 13, 2009	11,68,869	17,717	2,771	25,400	355	25,825	33,765	30,178	83,258	30,282
February 27, 2009	11,87,689	15,693	3,191	25,247	251	25,526	33,490	29,744	90,109	29,452
March 13, 2009	11,83,870	15,171	2,777	25,490	251	23,776	33,545	29,877	83,964	29,822
March 27, 2009	11,65,746	19,260	2,775	25,111	407	24,009	32,966	31,236	45,134	31,055

PSUs : Public Sector Undertakings.

Note : Data on Investments are based on Statutory Section 42(2) Returns.
Final data upto : February 13, 2009.

No. 6: State Co-operative Banks - Maintaining Accounts with the Reserve Bank of India

(Rs. crore)

Last Reporting Friday (in case of March)/ Last Friday/ Reporting Friday	1990-91	2006-07	2007-08	2007	2008							
				Dec.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec. 5	Dec. 19	Dec. 26
1	2	3	4	5	6	7	8	9	10	11	12	13
Number of Reporting Banks	28	31	31	31	31	31	31	31	31	31	31	31
Demand and Time Liabilities												
Aggregate Deposits (1)	**2,152**	**17,105**	**19,611**	**19,448**	**20,602**	**20,563**	**20,827**	**20,805**	**21,010**	**20,821**	**20,834**	**21,001**
Demand Liabilities	**1,831**	**7,324**	**6,636**	**6,863**	**7,081**	**7,261**	**7,566**	**6,880**	**7,105**	**7,216**	**7,135**	**7,035**
Deposits												
Inter-Bank	718	1,921	1,539	1,441	1,383	1,408	1,204	1,371	1,727	1,849	1,909	1,872
Others	794	3,571	3,628	3,971	3,691	3,675	3,721	3,849	3,758	3,768	3,660	3,718
Borrowings from Banks	181	914	428	309	272	807	1,333	303	338	332	303	242
Others	139	918	1,041	1,141	1,736	1,371	1,309	1,356	1,282	1,267	1,262	1,202
Time Liabilities	**3,963**	**39,425**	**47,523**	**42,972**	**50,572**	**50,096**	**50,353**	**51,261**	**51,749**	**51,781**	**52,072**	**52,513**
Deposits												
Inter-Bank	2,545	25,540	31,111	27,050	33,220	32,754	32,764	33,769	34,004	34,239	34,410	34,732
Others	1,359	13,534	15,983	15,477	16,911	16,888	17,106	16,955	17,252	17,053	17,174	17,283
Borrowings from Banks	–	10	8	9	8	8	16	8	8	7	7	7
Others	59	341	421	436	432	446	467	529	486	481	481	490
Borrowing from Reserve Bank	**15**	**–**	**–**	**29**	**9**	**2**	**22**	**–**	**–**	**–**	**–**	**19**
Borrowings from the State Bank and / or a Notified bank (2) and State Government	**1,861**	**13,639**	**13,988**	**13,065**	**13,024**	**12,735**	**13,340**	**11,214**	**11,639**	**11,521**	**11,348**	**11,322**
Demand	116	3,292	3,378	2,822	3,154	3,314	3,279	3,120	3,189	3,143	2,967	2,922
Time	1,745	10,347	10,610	10,243	9,870	9,421	10,061	8,094	8,450	8,378	8,381	8,400
Assets												
Cash in Hand and Balances with Reserve Bank	**334**	**3,054**	**3,639**	**3,225**	**4,501**	**4,495**	**4,453**	**3,687**	**3,089**	**2,952**	**2,860**	**2,962**
Cash in Hand	24	153	143	156	156	149	154	158	149	145	153	156
Balance with Reserve Bank	310	2,900	3,496	3,069	4,345	4,346	4,299	3,529	2,941	2,807	2,707	2,806
Balances with Other Banks in Current Account	93	486	486	352	440	424	440	449	514	414	428	377
Investments in Government Securities (3)	1,058	14,146	16,806	16,142	19,123	18,907	17,401	17,996	17,970	17,345	18,008	18,053
Money at Call and Short Notice	498	6,749	7,855	8,056	7,408	7,280	7,723	10,410	12,005	12,147	12,009	11,939
Bank Credit (4)	**2,553**	**17,017**	**17,345**	**15,768**	**17,486**	**17,306**	**17,169**	**16,855**	**16,563**	**16,786**	**16,877**	**17,201**
Advances												
Loans, Cash-Credits and Overdrafts	2,528	17,001	17,336	15,756	17,478	17,298	17,163	16,846	16,555	16,779	16,870	17,194
Due from Banks (5)	5,560	30,098	32,466	31,701	30,942	31,717	32,976	29,357	28,620	28,594	28,450	28,443
Bills Purchased and Discounted	25	16	9	12	8	8	6	9	7	7	7	7
Cash - Deposit Ratio	15.5	17.9	18.6	16.6	21.8	21.9	21.4	17.7	14.7	14.2	13.7	14.1
Investment - Deposit Ratio	49.2	82.7	85.7	83.0	92.8	91.9	83.5	86.5	85.5	83.3	86.4	86.0
Credit - Deposit Ratio	118.6	99.5	88.4	81.1	84.9	84.2	82.4	81.0	78.8	80.6	81.0	81.9

See 'Notes on Tables'.

No. 7: Reserve Bank's Standing Facilities to Scheduled Commercial Banks

(Rs. crore)

As on last reporting Friday of	Export Credit Refinance (1)		General Refinance (2)		Special Liquidity Support (3)		Total Refinance (4)	
	Limit	Outstanding	Limit	Outstanding	Limit	Outstanding	Limit	Outstanding
1	2	3	4	5	6	7	8	9
1996-97	6,654.40	559.97	–	–			6,654.40	559.97
1997-98	2,402.96	394.52	1,115.02	0.11			3,517.98	394.63
1998-99	7,269.27	2,616.57	1,115.02	19.23	3,235.02	258.00	11,619.31	2,893.80
March 1999	7,269.27	2,616.57	1,115.02	19.23	3,235.02	258.00	11,619.31	2,893.80
April 1999	8,638.29	5,164.76	1,115.02	56.31	–	–	9,753.31	5,221.07

As on last reporting Friday of	Export Credit Refinance (1)						Others @						Total Standing Facility	
	Normal *		Back Stop **		Total ***		Normal *		Back Stop **		Total			
	Limit	Out-standing	Limit	Out-standing	Limit	Out-standing	Limit	Out-standing	Limit	Out-standing	Limit	Out-standing	Limit	Out-standing
1	2	3	4	5	6 =(2+4)	7 =(3+5)	8	9	10	11	12 =(8+10)	13 =(9+11)	14 =(6+12)	15 =(7+13)
2001-02	6,060.29	3,144.11	3,025.60	49.83	9,085.89	3,193.94	837.62	422.35	218.65	–	1,056.27	422.35	10,142.16	3,616.29
2002-03	2,524.13	61.51	2,524.13	23.00	5,048.26	84.51	399.66	–	–	–	399.66	–	5,447.92	84.51
2003-04	1,553.25	–	3,111.17	–	4,664.42	–	399.66	–	–	–	399.66	–	5,064.08	–
2004-05	–	–	–	–	4,912.13	50.00	399.66	–	–	–	399.66	–	5,311.79	50.00
2005-06	–	–	–	–	6,050.63	1,567.68	–	–	–	–	–	–	6,050.63	1,567.68
2006-07	–	–	–	–	8,110.33	4,984.94	–	–	–	–	–	–	8,110.33	4,984.94
2007-08	–	–	–	–	9,103.46	2,825.00	–	–	–	–	–	–	9,103.46	2,825.00
Sep. 2007	–	–	–	–	7,505.46	45.00	–	–	–	–	–	–	7,505.46	45.00
Dec. 2007	–	–	–	–	7,818.76	779.00	–	–	–	–	–	–	7,818.76	779.00
Mar. 2008	–	–	–	–	9,103.46	2,825.00	–	–	–	–	–	–	9,103.46	2,825.00
Jun. 2008	–	–	–	–	9,052.03	1,132.14	–	–	–	–	–	–	9,052.03	1,132.14
Feb. 2008	–	–	–	–	8,709.42	172.50	–	–	–	–	–	–	8,709.42	172.50
Mar. 2008	–	–	–	–	9,103.46	2,825.00	–	–	–	–	–	–	9,103.46	2,825.00
Apr. 2008	–	–	–	–	9,509.23	474.00	–	–	–	–	–	–	9,509.23	474.00
May 2008	–	–	–	–	9,264.62	166.00	–	–	–	–	–	–	9,264.62	166.00
Jun. 2008	–	–	–	–	9,052.03	1,132.14	–	–	–	–	–	–	9,052.03	1,132.14
Jul. 2008	–	–	–	–	9,763.13	3,129.09	–	–	–	–	–	–	9,763.13	3,129.09
Aug. 2008	–	–	–	–	9,449.95	976.58	–	–	–	–	–	–	9,449.95	976.58
Sep. 2008	–	–	–	–	9,434.35	4,481.44	–	–	–	–	–	–	9,434.35	4,481.44
Oct. 2008	–	–	–	–	9,653.48	91.00	–	–	–	–	–	–	9,653.48	91.00
Nov. 2008	–	–	–	–	34,740.28	2,697.63	–	–	–	–	–	–	34,740.28	2,697.63
Dec. 2008	–	–	–	–	35,991.95	5,330.51	–	–	–	–	–	–	35,991.95	5,330.51
Jan. 2009	–	–	–	–	37,367.21	1,037.00	–	–	–	–	–	–	37,367.00	1,037.00
Feb. 2009	–	–	–	–	35,173.13	1,531.59	–	–	–	–	–	–	35,173.13	1,531.59

@ : 'Others' include Collateralised Lending Facility (CLF) (withdrawn completely effective from October 5, 2002) / Additional CLF (withdrawn effective from June 5, 2000), *etc.*

* : Normal Limit = 1/2 of total limit effective from November 16, 2002; 1/3 rd of the total limit effective from December 27, 2003.

** : Back-Stop Limit = 1/2 of total limit effective from November 16, 2002; 2/3 rd of the total limit effective from December 27, 2003.

*** : Total limits under Normal Facility and Back-Stop facility merged in to a single facility effective from March 29, 2004.

Also see 'Notes on Tables'.

No. 8: Cheque Clearing Data

(Number in Lakhs and Amount in Rs. crore)

Month/Year	Total		Total MICR* Centres		Total Non-MICR** Centres		Total of RBI Centres		RBI Centres***					
									Ahmedabad		Bangalore		Bhopal	
1	2 = (3+4)		3 = (5+22)		4		5		6		7		8	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
2001-02	9,015.0	1,25,75,254.0	5,377.0	1,09,47,391.0	3,638.0	16,27,863.0	5,377.0	1,09,47,391.0	414.0	2,07,524.0	445.0	2,69,346.0	–	–
2002-03	10,139.0	1,34,24,313.0	5,980.0	1,09,78,762.0	4,159.0	24,45,551.0	5,980.0	1,09,78,762.0	434.0	2,25,060.0	485.0	3,07,577.0	–	–
2003-04	10,228.0	1,15,95,960.0	6,241.0	91,78,751.0	3,987.0	24,17,209.0	6,241.0	91,78,751.0	473.0	2,80,649.0	547.0	3,75,885.0	–	–
2004-05	11,668.5	1,04,58,894.9	9,414.6	93,56,252.2	2,253.9	11,02,642.7	7,384.8	84,93,320.7	525.5	3,52,696.6	601.6	4,77,810.1	59.3	47,188.1
2005-06	12,867.6	1,13,29,133.5	10,318.4	94,74,370.8	2,549.2	18,54,762.8	7,942.4	81,94,976.7	603.7	4,06,598.7	656.1	4,98,344.5	71.9	32,181.0
2006-07	13,672.8	1,20,42,425.7	11,441.0	1,04,35,436.1	2,231.8	16,06,989.5	8,309.9	85,99,494.3	594.4	4,29,955.8	702.5	5,58,675.6	71.7	52,224.6
2007-08	14,605.6	1,33,96,065.9	12,229.6	1,15,28,690.2	2,376.0	18,67,375.7	8,775.9	94,51,748.3	647.3	5,06,759.2	734.5	6,32,327.8	77.4	62,651.9
2008-09 (P)	13,959.1	1,24,61,201.7	11,623.4	1,04,00,308.7	2,335.7	20,60,892.9	8,332.4	82,89,452.1	570.3	4,77,112.7	687.6	5,46,017.8	74.5	70,837.6
2008-09 (P)														
April	1,189.1	12,07,897.2	990.1	9,72,117.8	199.0	2,35,779.4	711.8	7,93,764.5	48.8	42,523.7	59.7	50,815.7	6.2	6,141.1
May	1,156.6	10,97,478.6	965.8	9,14,063.8	190.8	1,83,414.8	688.4	7,35,573.5	49.4	44,123.5	59.2	47,445.8	6.7	5,431.2
June	1,125.4	10,73,408.2	933.8	9,11,800.1	191.6	1,61,608.1	671.6	7,38,462.2	47.6	40,484.2	57.3	47,982.1	5.6	4,784.8
July	1,223.9	11,15,084.0	1,018.8	9,48,393.9	205.1	1,66,690.1	745.2	7,82,797.7	50.7	41,511.1	63.5	51,084.8	6.6	6,334.2
August	1,144.2	10,00,694.3	961.0	8,62,233.0	183.3	1,38,461.3	687.0	6,74,870.0	46.8	38,179.2	57.7	45,389.6	6.1	4,885.8
September	1,120.9	10,45,407.1	938.7	9,09,992.5	182.1	1,35,414.6	676.5	7,17,759.1	44.9	38,924.6	52.1	43,490.3	6.3	4,969.9
October	1,247.7	10,72,497.2	1,049.0	9,31,616.6	198.7	1,40,880.6	736.8	7,34,950.9	55.0	41,697.0	60.4	52,112.4	6.7	6,034.7
November	1,104.3	8,96,451.0	916.4	7,52,536.0	188.0	1,43,914.9	649.5	5,93,325.3	40.5	35,366.3	53.9	37,748.8	5.9	5,373.9
December	1,173.4	9,36,948.1	964.0	8,04,450.9	209.4	1,32,497.1	699.1	6,40,108.8	45.5	37,278.9	58.0	43,832.8	6.1	6,756.2
January	1,138.6	9,38,909.5	947.5	7,64,997.5	191.1	1,73,912.0	678.1	5,99,237.5	45.5	37,052.0	55.4	41,128.3	6.2	5,738.4
February	1,087.9	8,59,981.6	901.4	7,15,893.1	186.6	1,44,088.5	646.4	5,60,954.3	42.5	33,371.1	52.1	38,879.2	5.7	6,105.2
March	1,247.1	12,16,444.9	1,037.2	9,12,213.5	209.9	3,04,231.4	742.1	7,17,648.3	53.0	46,601.0	58.2	46,108.1	6.5	8,282.2
Total (upto Mar. 09)	**13,959.1**	**1,24,61,201.7**	**11,623.4**	**1,04,00,308.7**	**2,335.7**	**20,60,892.9**	**8,332.4**	**82,89,452.1**	**570.3**	**4,77,112.7**	**687.6**	**5,46,017.8**	**74.5**	**70,837.6**

* : MICR - Magnetic Ink Character Recognition - automated CPC (Cheque Processing Centres).

** : Non MICR - Clearing done at the clearing house where MICR cheque processing centres have not been setup. The processing is done either using magnetic media based clearing system (MMBCS) or is done manually.

*** : RBI Centres (MICR) refers to all centres where RBI is the manager of Clearing House.

No. 8: Cheque Clearing Data *(Contd.)*

(Number in Lakhs and Amount in Rs. crore)

Month/Year	RBI Centres***													
	Bhubaneswar		Chandigarh		Chennai		Guwahati		Hyderabad		Jaipur		Kanpur	
1	9		10		11		12		13		14		15	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
2001-02	27.0	21,625.0	–	–	522.0	5,00,872.0	30.0	19,592.0	305.0	1,82,764.0	123.0	54,432.0	67.0	32,369.0
2002-03	33.0	26,349.0	–	–	557.0	5,52,913.0	34.0	22,436.0	337.0	2,15,035.0	130.0	58,202.0	73.0	34,532.0
2003-04	37.0	37,136.0	–	–	602.0	6,12,158.0	37.0	27,840.0	369.0	2,75,503.0	148.0	70,122.0	78.0	41,397.0
2004-05	41.8	47,252.7	112.8	1,11,091.8	735.1	7,59,883.1	42.4	32,713.9	390.2	3,01,678.8	168.0	89,086.6	87.1	47,225.8
2005-06	48.6	53,649.7	123.8	1,27,037.9	813.2	6,55,277.9	48.2	39,660.5	416.8	3,63,317.1	187.4	1,13,452.5	92.7	55,328.7
2006-07	56.2	64,833.9	140.7	1,98,205.1	803.5	6,92,201.6	55.1	49,100.5	438.9	3,95,911.4	197.8	1,37,784.8	96.9	64,396.1
2007-08	60.0	80,993.5	141.4	1,61,218.5	854.1	7,78,853.6	59.5	55,169.2	454.6	4,52,498.8	219.3	1,62,021.8	100.0	69,885.1
2008-09 (P)	57.9	88,061.5	131.8	1,45,451.1	832.0	8,01,963.7	59.7	62,085.7	447.8	4,34,737.4	197.6	1,50,889.6	92.8	72,692.4
2008-09 (P)														
April	4.8	7,898.6	11.1	15,341.9	70.7	72,489.2	4.9	6,274.0	38.4	40,598.4	16.6	13,502.7	8.1	6,010.4
May	4.8	8,125.9	11.4	13,000.7	69.6	69,582.6	5.1	5,392.7	38.8	38,131.8	16.6	13,568.5	8.3	6,029.0
June	4.5	6,632.5	10.2	11,862.1	68.7	71,149.3	4.6	4,930.8	37.3	38,755.0	15.6	12,802.2	7.1	5,740.4
July	5.3	8,800.5	11.4	11,275.7	75.6	78,720.8	5.1	5,111.4	41.1	41,507.0	17.3	13,557.8	8.0	5,968.0
August	4.7	6,984.8	10.7	11,619.5	70.3	70,375.1	4.6	4,265.3	36.9	36,005.4	16.0	12,053.7	7.6	5,526.9
September	4.9	6,957.5	10.5	13,186.6	70.2	72,544.8	4.8	4,809.8	37.8	36,634.4	15.8	14,134.9	6.4	4,998.1
October	5.3	7,253.1	11.9	13,155.4	72.0	71,608.6	4.9	4,905.6	38.0	36,958.1	18.4	14,329.4	8.7	7,371.3
November	4.7	6,844.5	10.7	11,879.8	63.8	61,432.9	5.0	4,954.1	37.1	34,102.3	15.7	11,459.3	8.3	5,956.9
December	4.9	7,605.8	11.1	10,674.5	69.4	61,611.0	5.2	4,780.9	35.4	32,809.5	15.8	11,200.5	7.4	6,203.8
January	4.5	6,374.5	11.1	1,11,66.4	64.0	57,150.4	5.0	5,294.0	35.0	31,278.3	16.4	11,180.4	7.7	6,086.7
February	4.4	6,598.2	10.0	10,250.6	65.4	52,115.5	4.9	4,834.0	33.4	31,257.2	15.1	10,078.4	6.9	5,633.2
March	5.1	7,985.6	11.7	12,037.9	72.4	63,183.7	5.7	6,533.1	38.7	36,699.8	18.2	13,021.7	8.2	7,167.7
Total (upto Mar, 09)	**57.9**	**88,061.5**	**131.8**	**1,45,451.1**	**832.0**	**8,01,963.7**	**59.7**	**62,085.7**	**447.8**	**4,34,737.4**	**197.6**	**1,50,889.6**	**92.8**	**72,692.4**

No. 8: Cheque Clearing Data *(Contd.)*

(Number in Lakhs and Amount in Rs. crore)

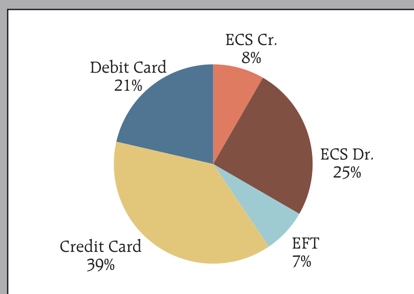
Month/Year	RBI Centres***											
	Kolkata		Mumbai		Nagpur		New Delhi		Patna		Thiruvananthapuram	
1	16		17		18		19		20		21	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
2001-02	523.0	3,73,131.0	1,679.0	82,17,816.0	102.0	41,151.0	1,079.0	9,90,315.0	27.0	17,421.0	34.0	19,032.0
2002-03	531.0	4,19,164.0	2,019.0	76,94,748.0	109.0	46,924.0	1,164.0	13,19,625.0	37.0	19,506.0	37.0	36,691.0
2003-04	470.0	4,65,308.0	2,162.0	55,11,293.0	120.0	56,330.0	1,107.0	13,54,677.0	50.0	26,739.0	41.0	43,714.0
2004-05	599.9	5,60,659.9	2,304.1	37,53,670.3	124.4	63,495.1	1,479.3	17,73,610.1	65.0	30,861.7	48.2	44,396.1
2005-06	642.4	6,58,639.7	2,391.9	33,42,829.4	134.8	75,772.3	1,597.2	16,97,583.2	59.2	36,819.8	54.6	38,484.0
2006-07	684.2	6,82,358.0	2,518.3	33,19,090.1	145.6	92,546.6	1,690.9	17,73,548.3	56.8	47,968.8	56.2	40,693.0
2007-08	730.5	7,78,304.3	2,651.6	36,85,407.3	151.3	1,06,351.7	1,775.7	18,00,975.6	62.6	61,006.5	56.0	57,323.4
2008-09 (P)	692.3	7,53,067.8	2512.7	27,99,764.9	146.2	1,06,246.5	1,726.9	16,64,709.4	62.0	67,977.2	55.0	55,769.9
2008-09 (P)												
April	57.9	67,101.2	215.7	2,83,396.5	12.4	9,090.9	146.9	1,61,140.8	5.0	5,581.2	4.7	5,858.2
May	58.3	64,139.9	206.7	2,65,785.6	12.4	9,361.1	146.2	1,43,245.2	5.1	5,105.0	4.7	5,038.1
June	53.1	64,292.9	201.7	2,64,352.0	11.5	9,176.0	137.8	1,45,474.3	4.6	5,939.4	4.4	4,104.2
July	61.9	70,511.5	221.9	2,75,708.5	12.7	9,900.2	153.8	1,52,336.3	5.3	5,540.7	4.9	4,929.1
August	56.7	61,340.9	209.1	2,28,975.1	11.8	8,125.4	138.5	1,32,723.4	4.9	4,566.5	4.5	3,853.2
September	59.5	66,626.1	201.0	2,46,840.5	11.3	8,364.3	141.5	1,46,688.8	5.2	4,539.5	4.3	4,048.7
October	55.4	52,842.5	223.5	2,54,526.8	13.2	9,625.6	152.4	1,49,637.9	5.9	6,788.9	5.0	6,103.7
November	56.0	55,757.8	194.2	1,90,205.0	11.8	7,845.1	132.2	1,15,444.6	5.0	5,122.5	4.6	3,831.4
December	57.5	61,904.2	214.4	2,07,613.3	12.2	8,255.4	146.2	1,30,249.6	5.3	5,432.2	4.6	3,900.1
January	54.9	56,491.2	205.3	1,91,938.8	12.3	8,204.8	145.2	1,20,465.4	5.1	5,344.5	4.6	4,343.6
February	56.2	56,321.9	195.2	1,71,979.0	11.4	8,103.0	134.2	1,16,729.6	4.9	4,921.4	4.1	3,776.7
March	64.8	75,737.5	224.0	2,18,443.9	13.2	10,194.7	152.0	1,50,573.3	5.6	9,095.2	4.7	5,982.9
Total (upto Mar, 09)	**692.3**	**7,53,067.8**	**2,512.7**	**27,99,764.9**	**146.2**	**1,06,246.5**	**1,726.9**	**16,64,709.4**	**62.0**	**67,977.2**	**55.0**	**55,769.9**

No. 8: Cheque Clearing Data *(Concld.)*

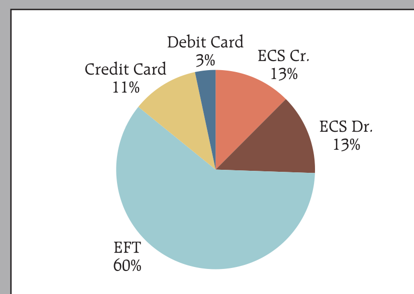
(Number in Lakhs and Amount in Rs. crore)

Month/Year	Other MICR Centres	
1	22	
	Number	Amount
2001-02	–	–
2002-03	–	–
2003-04	–	–
2004-05	2,029.8	8,62,931.5
2005-06	2,375.9	12,79,394.1
2006-07	3,131.1	18,35,941.8
2007-08	3,453.7	20,76,941.9
2008-09 (P)	3,291.0	21,10,856.7
2008-09 (P)		
April	278.2	1,78,353.3
May	277.4	1,78,490.3
June	262.2	1,73,337.9
July	273.5	1,65,596.2
August	274.0	1,87,363.0
September	262.3	1,92,233.3
October	312.2	1,96,665.7
November	266.9	1,59,210.7
December	264.9	1,64,342.2
January	269.3	1,65,760.0
February	255.0	1,54,938.8
March	295.1	1,94,565.2
Total (upto Mar. 09)	**3,291.0**	**21,10,856.7**

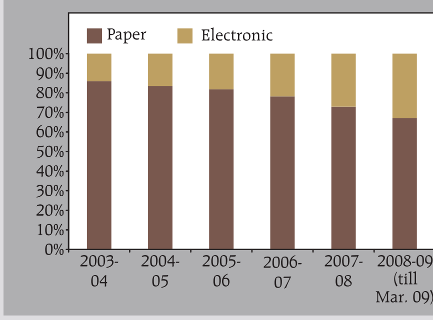
Retail Electronic Transactions - Volume in percentage



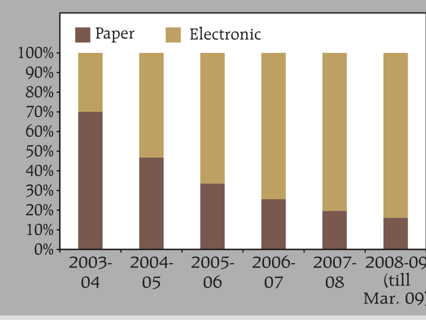
Retail Electronic Transactions- Value in percentage



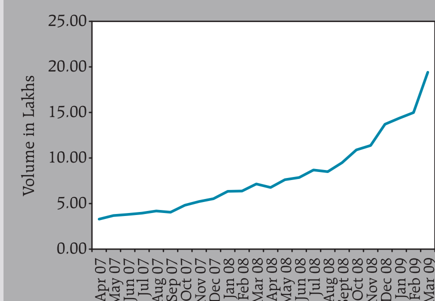
Representation of Electronic Transactions Volume in Total



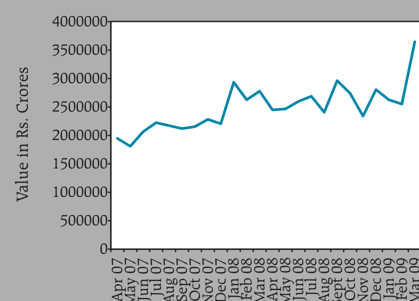
Representation of Electronic Transaction Value in Total



Growth in RTGS Volume



Growth in RTGS Value



No. 9A: Retail Electronic Payment Systems

(Number in Lakh and Amount in Rs. crore)

Year / Period	Total Electronic Payments		Electronic Clearing Services (ECS)				Electronic Funds Transfer EFT/NEFT		Card Payments#					
			ECS (Credit)		ECS (Debit)				Credit			Debit*		
1	2=(3+4+5+6+7)		3		4		5		6			7		
	Volume	Amount	Volume	Amount	Volume	Amount	Volume	Amount	Number of Out-standing Cards**	Volume	Amount	Number of Out-standing Cards**	Volume	Amount
2003-04	1,669.55	52,142.78	203.00	10,228.00	79.00	2,253.58	8.19	17,124.81	–	1,001.79	17,662.72	–	377.57	4,873.67
2004-05	2,289.04	1,08,749.83	400.51	20,179.81	153.00	2,921.24	25.49	54,601.38	–	1,294.72	25,686.36	–	415.32	5,361.04
2005-06	2,850.13	1,46,382.68	442.16	32,324.35	359.58	12,986.50	30.67	61,288.22	173.27	1,560.86	33,886.47	497.63	456.86	5,897.14
2006-07	3,787.09	2,35,693.12	690.19	83,273.09	752.02	25,440.79	47.76	77,446.31	231.23	1,695.36	41,361.31	749.76	601.77	8,171.63
2007-08	5,353.09	10,41,991.93	783.65	7,82,222.30	1,271.20	48,937.20	133.15	1,40,326.48	275.47	2,282.03	57,984.73	1,024.37	883.06	12,521.22
2008-09 (P)	6,678.24	5,00,321.79	883.94	97,486.58	1,600.55	66,975.89	321.61	2,51,956.38	246.99	2,595.61	65,355.80	1,374.31	1,276.54	18,547.14
2008-09 (P)														
April	504.99	38,723.13	60.96	8,590.47	127.11	5,009.43	17.02	18,286.34	283.12	215.45	5,611.38	1,049.91	84.44	1,225.51
May	506.95	37,466.82	47.25	5,314.57	132.70	5,129.74	18.71	20,067.09	267.34	214.96	5,581.88	1,082.53	93.33	1,373.54
June	514.71	32,493.74	64.17	7,553.91	132.26	5,196.29	19.16	13,194.69	270.16	206.21	5,261.63	1,101.52	92.91	1,287.22
July	573.60	45,791.13	92.35	10,371.04	133.35	5,447.80	22.93	22,999.52	268.68	224.47	5,578.37	1,130.39	100.49	1,394.40
August	616.33	37,792.91	121.09	9,493.34	133.94	5,546.76	22.61	15,213.86	267.33	226.28	5,801.48	1,140.63	112.41	1,737.47
September	576.27	39,119.45	96.34	9,122.00	131.57	5,627.37	25.25	17,221.08	268.20	219.16	5,635.60	1,197.44	103.96	1,513.40
October	642.60	49,765.73	121.40	9,733.60	134.92	5,906.58	30.77	25,722.44	266.75	236.47	6,442.34	1,219.60	119.03	1,960.77
November	532.91	41,524.54	57.72	6,758.28	137.13	5,755.72	27.19	22,097.04	265.74	205.74	5,355.01	1,255.11	105.13	1,558.49
December	560.72	41,535.94	48.31	7,202.24	135.93	5,901.41	31.95	21,449.44	261.53	225.97	5,311.21	1,275.33	118.56	1,671.64
January	558.77	49,523.22	52.93	9,153.85	137.01	5,845.04	32.27	27,635.01	258.71	217.87	5,171.06	1,314.18	118.69	1,718.27
February	544.10	40,681.80	75.48	8,431.26	129.05	5,688.24	33.21	20,367.58	255.12	195.98	4,659.48	1,342.36	110.38	1,535.25
March	546.29	45,903.38	45.93	5,762.04	135.58	5,921.52	40.54	27,702.30	246.99	207.04	4,946.34	1,374.31	117.21	1,571.18
Total (upto Mar, 09)	**6,678.24**	**5,00,321.79**	**883.94**	**97,486.58**	**1,600.55**	**66,975.89**	**321.61**	**2,51,956.38**	**246.99**	**2,595.61**	**65,355.80**	**1,374.31**	**1,276.54**	**18,547.14**

No. 9B: Large Value Clearing and Settlement Systems

(Number in Lakh and Amount in Rs. crore)

Year / Period	Real Time Gross Settlement System									
	Total		Customer Remittance		Inter-Bank Remittance		Inter-bank Clearing Settlement**		Total Inter-bank	
1	2=(3+4+5)		3		4		5		6=(4+5)	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
2003-04	0.001	1,965.49	0.00	0.00	0.001	1,965.49	–	–	0.001	1,965.49
2004-05	4.604	40,66,184.00	0.68	2,49,662.00	3.92	38,16,522.00	–	–	3.92	38,16,522.00
2005-06	17.670	1,15,40,836.25	7.13	25,70,212.29	10.54	89,70,623.96	–	–	10.54	89,70,623.96
2006-07	38.80	2,46,19,179.99	24.82	71,67,807.91	13.94	1,13,13,346.69	0.04	61,38,025.39	13.98	1,74,51,372.08
2007-08	58.54	4,82,94,558.97	41.46	1,61,00,172.88	16.94	1,12,18,157.41	0.14	2,09,76,228.68	17.08	3,21,94,386.10
2008-09	133.84	6,11,39,912.44	112.34	2,00,04,107.80	21.32	1,22,75,773.49	0.19	2,88,60,031.15	21.50	4,11,35,804.65
2008-09										
April	6.78	48,47,956.95	5.19	15,95,777.62	1.57	8,53,187.78	0.011	23,98,991.55	1.58	32,52,179.34
May	7.63	44,48,417.00	5.95	15,80,007.83	1.67	8,85,628.25	0.012	19,82,780.92	1.68	28,68,409.17
June	7.87	45,13,960.83	6.21	16,46,155.13	1.65	9,51,811.99	0.012	19,15,993.71	1.66	28,67,805.70
July	8.70	49,62,469.06	6.92	15,87,652.09	1.76	11,00,562.35	0.016	22,74,254.62	1.78	33,74,816.97
August	8.52	41,00,796.82	6.86	14,36,487.67	1.64	9,70,634.47	0.014	16,93,674.67	1.65	26,64,309.14
September	9.50	54,67,011.33	7.83	18,56,151.15	1.66	11,07,216.33	0.016	25,03,643.85	1.67	36,10,860.18
October	10.91	57,09,503.32	9.17	16,00,262.02	1.72	11,38,951.40	0.019	29,70,289.89	1.74	41,09,241.29
November	11.39	40,13,012.27	9.64	13,33,676.48	1.73	10,05,503.61	0.018	16,73,832.18	1.75	26,79,335.79
December	13.72	52,94,123.86	11.76	17,33,974.18	1.94	10,71,438.17	0.017	24,88,711.51	1.96	35,60,149.68
January	14.39	56,25,933.45	12.44	16,17,258.72	1.93	10,07,993.11	0.018	30,00,681.62	1.95	40,08,674.73
February	15.00	55,82,079.52	13.15	15,88,921.37	1.84	9,62,785.66	0.015	30,30,372.49	1.85	39,93,158.15
March (P)	19.43	65,74,648.05	17.22	24,27,783.53	2.20	12,20,060.37	0.020	29,26,804.14	2.22	41,46,864.51
Total (upto Mar, 09)	**133.84**	**6,11,39,912.44**	**112.34**	**2,00,04,107.80**	**21.32**	**1,22,75,773.49**	**0.19**	**2,88,60,031.15**	**21.50**	**4,11,35,804.65**

* : Inter-Bank Clearing Settlement pertains to the MNSB batches. MNSB settlement in RTGS started from 12 August, 2006.

** : The MNSB Settlement relates to the settlement of ECS, EFT, NEFT, REPO, Outright, FOREX, CBLO and Cheque Clearing at Mumbai.

No. 9B: Large Value Clearing and Settlement Systems *(Concld.)*

(Number in Lakh and Amount in Rs. crore)

Year / Period	CCIL Operated Systems							
	Government Securities Settlement				Forex Settlement		CBLO Settlement	
	Outright		Repo					
1	7		8		9		10	
	Number of Trades	Value	Number of Trades	Value	Number of Trades	Value	Number of Trades	Value
2003-04	2.44	15,75,133.00	0.21	9,43,189.00	3.31	23,18,530.80	0.03	76,850.70
2004-05	1.61	11,34,222.08	0.24	15,57,906.55	4.66	40,42,434.86	0.29	9,76,757.10
2005-06	1.25	8,64,751.40	0.25	16,94,508.70	4.90	52,39,673.90	0.68	29,53,133.90
2006-07	1.37	10,21,535.70	0.30	25,56,501.50	6.06	80,23,078.00	0.86	47,32,271.30
2007-08	1.89	16,53,851.30	0.27	39,48,750.70	7.57	1,27,26,831.90	1.13	81,10,828.60
2008-09	2.46	21,60,233.30	0.24	40,94,285.90	8.38	1,69,37,488.60	1.19	88,24,784.30
2008-09								
April	0.12	1,08,602.80	0.02	3,44,220.20	0.56	12,06,935.70	0.11	8,93,038.50
May	0.17	1,42,728.70	0.02	3,68,236.20	0.75	12,28,186.00	0.11	9,08,156.90
June	0.10	1,09,956.10	0.02	2,81,545.80	0.69	13,67,490.70	0.11	8,94,344.20
July	0.10	93,002.60	0.01	2,23,370.40	0.83	15,57,981.60	0.10	6,15,406.80
August	0.16	1,21,961.30	0.01	2,50,899.70	0.76	14,50,096.30	0.09	5,30,643.70
September	0.22	1,66,720.60	0.01	2,55,691.60	0.81	17,15,233.60	0.09	4,93,139.60
October	0.18	1,42,787.80	0.02	2,10,993.60	0.76	17,12,726.60	0.08	3,69,994.30
November	0.23	1,92,139.70	0.02	3,49,388.60	0.69	14,66,754.00	0.09	5,60,709.60
December	0.44	3,76,930.40	0.02	4,23,566.00	0.69	14,83,818.30	0.11	8,06,517.70
January	0.37	3,17,482.70	0.02	4,51,316.30	0.64	12,40,573.00	0.10	7,94,849.10
February	0.21	1,91,203.20	0.03	4,38,427.00	0.51	9,99,461.50	0.09	8,46,655.30
March (P)	0.17	1,96,717.40	0.03	4,96,630.50	0.68	15,08,231.30	0.11	11,11,328.60
Total (upto Mar, 09)	**2.46**	**21,60,233.30**	**0.24**	**40,94,285.90**	**8.38**	**1,69,37,488.60**	**1.19**	**88,24,784.30**

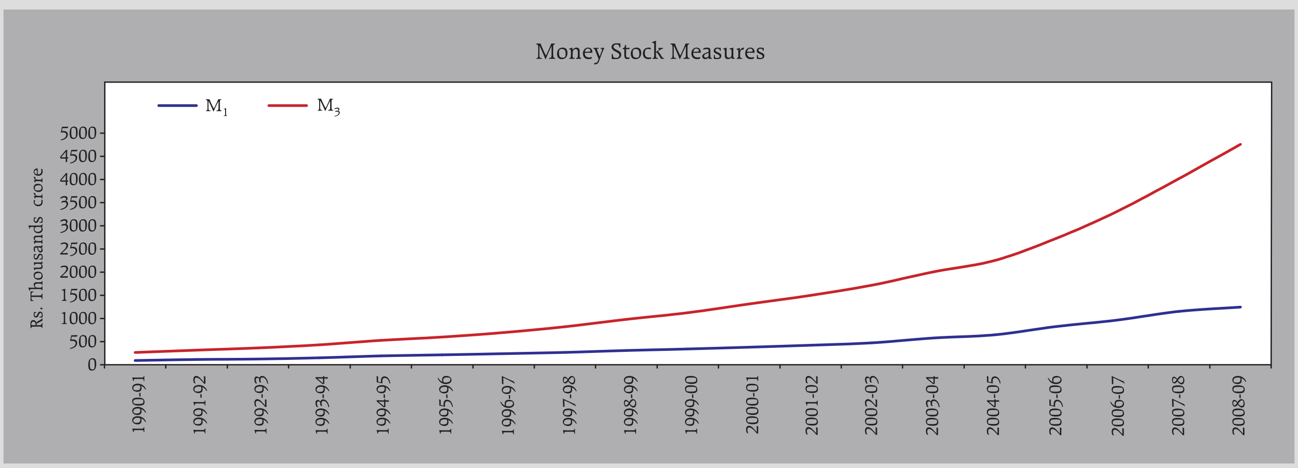
No. 10: Money Stock Measures

(Rs. crore)

March 31/ Reporting Fridays of the month/ Last reporting Friday of the month	Currency with the Public					Deposit money of the Public			M_1 (6+9)	Post Office Savings Bank Deposits	M_2 (10+11)	Time Deposits with Banks	M_3 (10+13)	Total Post Office Deposits	M_4 (14+15)
	Notes in Circulation(1)	Circulation of Rupee Coins (2)	Circulation of Small Coins (2)	Cash on Hand with Banks	Total (2+3+4-5)	Demand Deposits with Banks	'Other' Deposits with Reserve Bank (3)	Total (7+8)							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2006-2007	4,95,938	6,684	1,477	21,293	4,82,805	4,75,687	7,496	4,83,183	**9,65,989**	5,041	**9,71,030**	23,50,004	**33,15,993**	25,969	**33,41,962**
2007-2008	5,81,577	7,656	1,567	22,520	5,68,281	5,75,097	9,054	5,84,151	**11,52,432**	5,041	**11,57,473**	28,65,141	**40,17,573**	25,969	**40,43,542**
2008-2009	6,81,099	8,417	1,567	24,988	6,66,095	5,73,918	5,544	5,79,462	**12,45,557**	5,041	**12,50,598**	35,12,947	**47,58,504**	25,969	**47,84,473**
March 14, 2008	5,81,622	7,579	1,558	20,393	5,70,366	4,90,297	4,846	4,95,143	**10,65,509**	5,041	**10,70,550**	28,24,322	**38,89,830**	25,969	**39,15,799**
March 28, 2008	5,82,055	7,656	1,567	21,617	5,69,662	5,72,744	5,274	5,78,018	**11,47,680**	5,041	**11,52,721**	28,62,848	**40,10,528**	25,969	**40,36,497**
November 2008	6,35,845	8,220	1,567	26,755	6,18,877	4,91,156	4,939	4,96,095	**11,14,972**	5,041	**11,20,013**	32,69,184	**43,84,156**	25,969	**44,10,125**
December 2008	6,41,579	8,274	1,567	24,931	6,26,489	4,86,271	12,503	4,98,775	**11,25,264**	5,041	**11,30,305**	33,11,422	**44,36,686**	25,969	**44,62,655**
January 2009	6,49,226	8,250	1,567	25,164	6,33,879	5,10,815	6,590	5,17,405	**11,51,284**	5,041	**11,56,325**	34,02,206	**45,53,490**	25,969	**45,79,459**
February 2009	6,65,243	8,417	1,567	24,578	6,50,650	5,23,936	5,978	5,29,914	**11,80,564**	5,041	**11,85,605**	34,62,146	**46,42,710**	25,969	**46,68,679**
March 13, 2009	6,83,997	8,417	1,567	23,989	6,69,993	5,25,334	6,720	5,32,054	**12,02,047**	5,041	**12,07,088**	34,53,962	**46,56,009**	25,969	**46,81,978**
March 27, 2009	6,81,058	8,417	1,567	24,988	6,66,054	5,73,918	4,986	5,78,903	**12,44,958**	5,041	**12,49,999**	35,12,947	**47,57,905**	25,969	**47,83,874**

Note : Monetary aggregates as at end-March incorporate data on i) scheduled commercial banks as on last reporting Friday and ii) the Reserve Bank of India pertaining to the last working day of the fiscal year.

Also see 'Notes on Tables'.



No. 11: Sources of Money Stock (M_3)

(Rs. crore)

Source	Outstandings as on March 31/Reporting Fridays of the Month/Last Reporting Friday of the Month				
	2006-07	2007-08	2008-09	March14, 2008	March 28, 2008
1	2	3	4	5	6
1. Net Bank Credit to Government (A+B)	**8,34,235**	**9,05,847**	**12,83,165**	**8,68,424**	**8,50,767**
A. RBI's net credit to Government (i-ii)	2,423	-1,13,209	69,913	-1,61,454	-1,68,235
(i) Claims on Government (a+b)	97,512	1,16,194	1,58,132	56,079	83,843
(a) Central Government (1)	97,184	1,14,725	1,57,488	56,079	83,843
(b) State Governments	328	1,468	644	–	–
(ii) Government deposits with RBI (a+b)	95,089	2,29,403	88,218	2,17,532	2,52,078
(a) Central Government	95,048	2,29,361	88,177	2,17,491	2,52,037
(b) State Governments	41	41	41	41	41
B. Other Banks' Credit to Government	8,31,812	10,19,056	12,13,252	10,29,877	10,19,003
2. Bank Credit to Commercial Sector(A+B)	**21,30,078**	**25,77,137**	**30,12,673**	**24,88,232**	**25,75,581**
A. RBI's credit to commercial sector (2)	1,537	1,788	13,820	1,383	1,879
B. Other banks' credit to commercial sector (i+ii+iii)	21,28,541	25,75,349	29,98,853	24,86,849	25,73,703
(i) Bank credit by commercial banks	19,31,189	23,61,914	27,70,012	22,77,640	23,61,914
(ii) Bank credit by co-operative banks	1,78,229	1,96,695	2,07,464	1,92,507	1,95,030
(iii) Investments by commercial and co-operative banks in other securities	19,123	16,740	21,376	1,6703	16,759
3. Net Foreign Exchange Assets of Banking Sector (A+B)	**9,13,179**	**12,95,131**	**13,22,847**	**12,67,628**	**12,96,718**
A. RBI's net foreign exchange assets (i-ii)(3)	8,66,153	12,36,130	12,80,116	12,37,461	12,37,716
(i) Gross foreign assets	8,66,170	12,36,147	12,80,133	12,37,479	12,37,734
(ii) Foreign liabilities	17	17	17	17	17
B. Other banks' net foreign exchange assets	47,026	59,001	42,731	30,167	59,001
4. Government's Currency Liabilities to the Public	**8,161**	**9,224**	**9,984**	**9,137**	**9,224**
5. Banking Sector's net Non-monetary Liabilities Other than Time Deposits (A+B)	**5,69,660**	**7,69,767**	**8,70,165**	**7,43,591**	**7,21,762**
A. Net non-monetary liabilities of RBI(3)	1,77,019	2,10,221	3,96,289	2,23,048	2,15,505
B. Net non-monetary liabilities of other banks(residual)	3,92,641	5,59,546	4,73,877	5,20,543	5,06,257
M_3 (1+2+3+4-5)	**33,15,993**	**40,17,573**	**47,58,504**	**38,89,830**	**40,10,528**

No. 11: Sources of Money Stock (M_3) *(Concld.)*

(Rs.crore)

Source	Outstandings as on March 31/Reporting Fridays of the Month/Last Reporting Friday of the Month					
	November 2008	December 2008	January 2009	February 2009	March 13, 2009	March 27, 2009
1	8	9	10	11	12	13
1. Net Bank Credit to Government (A+B)	**10,55,253**	**11,02,280**	**11,77,182**	**11,97,044**	**12,28,861**	**12,46,097**
A. RBI's net credit to Government (i-ii)	-61,506	-31,632	-46,952	-39,791	-3,278	32,845
(i) Claims on Government (a+b)	81,002	88,560	61,954	62,342	84,941	1,22,068
(a) Central Government (1)	80,964	88,255	61,174	62,099	84,941	1,22,068
(b) State Governments	39	305	779	243	–	–
(ii) Government deposits with RBI (a+b)	1,42,508	1,20,192	1,08,906	1,02,133	88,219	89,223
(a) Central Government	1,42,467	1,20,151	1,08,864	1,02,091	88,178	88,178
(b) State Governments	41	41	41	41	41	1,045
B. Other Banks' Credit to Government	11,16,759	11,33,913	12,24,134	12,36,834	12,32,139	12,13,252
2. Bank Credit to Commercial Sector(A+B)	**28,43,044**	**28,56,874**	**28,58,871**	**29,01,670**	**29,23,100**	**30,09,987**
A. RBI's credit to commercial sector (2)	1,514	1,381	4,399	6,841	8,103	11,134
B. Other banks' credit to commercial sector (i+ii+iii)	28,41,529	28,55,494	28,54,472	28,94,830	29,14,998	29,98,853
(i) Bank credit by commercial banks	26,33,180	26,43,734	26,37,780	26,68,090	26,90,513	27,70,012
(ii) Bank credit by co-operative banks	1,93,425	1,96,917	2,03,199	2,05,624	2,03,225	2,07,464
(iii) Investments by commercial and co-operative banks in other securities	14,924	14,843	13,493	21,115	21,259	21,376
3. Net Foreign Exchange Assets of Banking Sector (A+B)	**12,45,691**	**12,36,799**	**12,57,323**	**13,03,156**	**13,22,711**	**13,14,447**
A. RBI's net foreign exchange assets (i-ii)(3)	12,26,829	11,94,068	12,14,592	12,60,424	12,79,980	12,71,716
(i) Gross foreign assets	12,26,847	11,94,086	12,14,609	12,60,442	12,79,997	12,71,734
(ii) Foreign liabilities	17	17	17	17	17	17
B. Other banks' net foreign exchange assets	18,862	42,731	42,731	42,731	42,731	42,731
4. Government's Currency Liabilities to the Public	**9,787**	**9,841**	**9,817**	**9,984**	**9,984**	**9,984**
5. Banking Sector's net Non-monetary Liabilities Other than Time Deposits (A+B)	**7,69,620**	**7,69,109**	**7,49,702**	**7,69,144**	**8,28,648**	**8,22,611**
A. Net non-monetary liabilities of RBI(3)	3,24,871	2,98,807	3,13,735	3,56,854	3,88,606	3,90,215
B. Net non-monetary liabilities of other banks(residual)	4,44,749	4,70,302	4,35,967	4,12,290	4,40,042	4,32,396
M_3 (1+2+3+4-5)	**43,84,156**	**44,36,686**	**45,53,490**	**46,42,710**	**46,56,009**	**47,57,905**

Note : 1. Monetary aggregates as at end-March incorporate data on i) scheduled commercial banks as on last reporting Friday and ii) the Reserve Bank of India pertaining to the last working day of the fiscal year.

2. Government Balances as on March 31, 2009 are before closure of accounts.

3. Net Foreign Exchange Assets of the RBI includes investments in foreign currency denominated bonds issued by IIFC (UK) since March 20, 2009.

Also see 'Notes on Tables'.

No. 11A: Commercial Bank Survey

(Rs. crore)

Item		Outstanding as on				
		March 30, 2007	March 14, 2008	March 28, 2008	March 13, 2009	March 27, 2009
1		2	3	4	5	6
Components						
C.I	**Aggregate Deposits of Residents** (C.I.1+C.I.2)	**25,44,473**	**30,21,968**	**31,40,004**	**36,65,711**	**37,63,019**
C.I.1	Demand Deposits	4,29,731	4,43,755	5,24,310	4,76,271	5,20,130
C.I.2	Time Deposits of Residents (C.I.2.1+C.I.2.2)	21,14,742	25,78,213	26,15,695	31,89,440	32,42,888
C.I.2.1	Short-term Time Deposits	9,51,634	11,60,196	11,77,063	14,35,248	14,59,300
C.I.2.1.1	Certificates of Deposits (CDs)	97,442	1,46,309	1,66,642	1,66,905	1,98,386
C.I.2.2	Long-term Time Deposits	11,63,108	14,18,017	14,38,632	17,54,192	17,83,589
C.II	**Call/Term Funding from Financial Institutions**	**85,836**	**1,07,956**	**1,06,504**	**1,17,313**	**1.11.739**
Sources						
S.I	**Domestic Credit (S.I.1+S.I.2)**	**28,65,959**	**34,44,667**	**35,07,759**	**41,26,732**	**41.53.817**
S.I.1	Credit to the Government	7,76,058	9,69,774	9,58,661	11,66,237	11.48.168
S.I.2	Credit to the Commercial Sector (S.I.2.1+S.I.2.2+S.I.2.3+S.I.2.4)	20,89,901	24,74,893	25,49,097	29,60,496	30.05.649
S.I.2.1	Bank Credit	19,31,189	22,77,640	23,61,914	26,90,513	27.70.012
S.I.2.1.1	Non-food Credit	18,84,669	22,34,134	23,17,515	26,42,611	27.23.801
S.I.2.2	Net Credit to Primary Dealers	2,799	5,799	3,521	7,677	6.106
S.I.2.3	Investments in Other Approved Securities	15,458	13,052	13,053	17,633	17.578
S.I.2.4	Other Investments (in non-SLR Securities)	1,40,455	1,78,402	1,70,609	2,44,672	2.11.953
S.II	**Net Foreign Currency Assets of Commercial Banks (S.II.1-S.II.2-S.II.3)**	**-40,612**	**-79,683**	**-70,196**	**-60,112**	**-52,707**
S.II.1	Foreign Currency Assets	58,754	24,221	31,189	50,801	56,251
S.II.2	Non-resident Foreign Currency Repatriable Fixed Deposits	67,461	58,093	56,935	66,790	67,303
S.II.3	Overseas Foreign Currency Borrowings	31,905	45,812	44,451	44,123	41,655
S.III	**Net Bank Reserves (S.III.1+S.III.2-S.III.3)**	**1,90,116**	**2,69,759**	**2,71,166**	**2,13,253**	**2,46,838**
S.III.1	Balances with the RBI	1,80,222	2,53,293	2,57,122	2,00,876	2,38,195
S.III.2	Cash in Hand	16,139	16,949	18,044	20,369	20,371
S.III.3	Loans and Advances from the RBI	6,245	483	4,000	7,992	11,728
S.IV	**Capital Account**	**2,02,800**	**2,70,243**	**2,72,622**	**3,28,189**	**3,28,689**
S.V.	**Other items (net) (S.I+S.II+S.III-S.IV-C.I-C.II)**	**1,82,354**	**2,34,575**	**1,89,598**	**1,68,661**	**1,44,502**
S.V.1	Other Demand & Time Liabilities (net of S.II.3)	2,10,329	2,60,114	2,53,905	2,68,727	2,71,089
S.V.2	Net Inter-Bank Liabilities (other than to PDs)	13,903	11,583	10,797	-7,671	-13,850

Note : Data are provisional.

No. 11B: Monetary Survey

(Rs. crore)

Item		Outstanding as on						
		March 31, 2007	March 14, 2008	March 28, 2008	March 31, 2008	March 13, 2009	March 27, 2009	March 31, 2009
1		2	3	4	5	6	7	8
Monetary Aggregates								
M_1 (C.I+C.II.1+C.III)		9,69,308	10,67,518	11,48,186	11,52,736	12,04,539	12,43,723	12,44,323
NM_2 (M_1+C.II.2.1)		19,90,517	23,01,101	23,97,939	24,00,740	27,14,907	27,78,142	27,78,742
NM_3 (NM_2+C.II.2.2+C.IV = S.I+S.II+S.III-S.IV-S.V)		**33,24,498**	**39,16,769**	**40,31,919**	**40,32,584**	**46,78,224**	**47,65,282**	**47,65,882**
Components								
C.I	**Currency with the Public**	**4,82,877**	**5,70,487**	**5,69,876**	**5,67,514**	**6,70,162**	**6,67,221**	**6,67,261**
C.II	**Aggregate Deposits of Residents** (C.II.1+C.II.2)	**27,48,289**	**32,33,480**	**33,50,264**	33,49,511	**38,84,029**	**39,81,337**	**39,81,337**
C.II.1	Demand Deposits	4,78,935	4,92,185	5,73,036	5,76,167	5,27,657	5,71,517	5,71,517
C.II.2	Time Deposits of Residents (C.II.2.1+C.II.2.2)	22,69,354	27,41,295	27,77,228	27,73,344	33,56,372	34,09,820	34,09,820
C.II.2.1	Short-term Time Deposits	10,21,209	12,33,583	12,49,753	12,48,005	15,10,367	15,34,419	15,34,419
C.II.2.1.1	Certificates of Deposits (CDs)	97,442	1,46,309	1,66,642	1,66,642	1,66,905	1,98,386	1,98,386
C.II.2.2	Long-term Time Deposits	12,48,144	15,07,712	15,27,475	15,25,339	18,46,004	18,75,401	18,75,401
C.III	**'Other' Deposits with RBI**	**7,496**	**4,846**	**5,274**	**9,054**	**6,720**	**4,986**	**5,544**
C.IV	**Call/Term Funding from Financial Institutions**	**85,836**	**1,07,956**	**1,06,504**	**1,06,504**	**1,17,313**	**1,11,739**	**1,11,739**
Sources								
S.I	**Domestic Credit (S.I.1+S.I.2)**	**30,96,138**	**35,22,212**	**35,76,501**	**36,31,337**	**43,79,442**	**44,45,681**	**44,85,435**
S.I.1	Net Bank Credit to the Government (S.I.1.1+S.I.1.2)	8,25,557	8,57,896	8,39,631	8,96,064	12,15,531	12,33,586	12,70,654
S.I.1.1	Net RBI credit to the Government	2,423	-1,61,454	-1,68,235	-1,13,209	-3,278	32,845	69,913
S.I.1.2	Credit to the Government by the Banking System	8,23,135	10,19,349	10,07,866	10,09,273	12,18,809	12,00,740	12,00,740
S.I.2	Bank Credit to the Commercial Sector (S.I.2.1+S.I.2.2)	22,70,580	26,64,317	27,36,870	27,35,273	31,63,911	32,12,095	32,14,781
S.I.2.1	RBI Credit to the Commercial Sector	1,537	1,383	1,879	1,788	8,103	11,134	13,820
S.I.2.2	Credit to the Commercial Sector by the Banking System	22,69,043	26,62,933	27,34,991	27,33,485	31,55,809	32,00,962	32,00,962
S.I.2.2.1	Other Investments (Non-SLR Securities)	1,49,417	1,87,364	1,79,572	1,79,572	2,53,634	2,20,916	2,20,916
S.II	**Government's Currency Liabilities to the Public**	**8,161**	**9,137**	**9,224**	**9,224**	**9,984**	**9,984**	**9,984**
S.III	**Net Foreign Exchange Assets of the Banking Sector (S.III.1+S.III.2)**	**8,25,541**	**11,57,778**	**11,67,520**	**11,65,934**	**12,19,868**	**12,19,009**	**12,27,409**
S.III.1	Net Foreign Exchange Assets of the RBI	8,66,153	12,37,461	12,37,716	12,36,130	12,79,980	12,71,716	12,80,116
S.III.2	Net Foreign Currency Assets of the Banking System	-40,612	-79,683	-70,196	-70,196	-60,112	-52,707	-52,707
S.IV	**Capital Account**	**3,84,250**	**4,89,833**	**4,79,574**	**4,75,973**	**7,11,836**	**7,04,587**	**7,12,937**
S.V	**Other items (net)**	**2,21,092**	**2,82,525**	**2,41,752**	**2,97,938**	**2,19,234**	**2,04,806**	**2,44,009**

Notes :
1. Data are provisional.
2. Monetary aggregates as at end-March incorporate data on i) scheduled commercial banks as on last reporting Friday and ii) the Reserve Bank of India pertaining to the last working day of the fiscal year.
3. Government Balances as on March 31, 2009 are before closure of accounts.
4. Net Foreign Exchange Assets of the RBI includes investments in foreign currency denominated bonds issued by IIFC (UK) since March 20, 2009.

No. 11C: Reserve Bank of India Survey

(Rs. crore)

Item		Outstanding as on						
		March 31, 2007	March 14, 2008	March 28, 2008	March 31, 2008	March 13, 2009	March 27, 2009	March 31, 2009
1		2	3	4	5	6	7	8
Components								
C.I	Currency in Circulation	5,04,099	5,90,759	5,91,279	5,90,801	6,93,982	6,91,042	6,91,083
C.II	Bankers' Deposits with the RBI	1,97,295	2,68,378	2,72,526	3,28,447	2,13,474	2,51,165	2,91,275
C.II.1	Scheduled Commercial Banks	1,86,322	2,53,293	2,57,122	3,11,880	2,00,876	2,38,195	2,77,462
C.III	'Other' Deposits with the RBI	7,496	4,846	5,274	9,054	6,720	4,986	5,544
C.IV	**Reserve Money (C.I+C.II+C.III = S.I + S.II + S.III - S.IV - S.V)**	**7,08,890**	**8,63,982**	**8,69,078**	**9,28,302**	**9,14,176**	**9,47,193**	**9,87,902**
Sources								
S.I	**RBI's Domestic Credit (S.I.1+S.I.2+S.I.3)**	**11,596**	**-1,59,568**	**-1,62,357**	**-1,06,831**	**12,817**	**55,707**	**94,091**
S.I.1	Net RBI credit to the Government (S.I.1.1+S.I.1.2)	2,423	-1,61,454	-1,68,235	-1,13,209	-3,278	32,845	69,913
S.I.1.1	Net RBI credit to the Central Government (S.I.1.1.1+S.I.1.1.2+S.I.1.1.3+S.I.1.1.4-S.I.1.1.5)	2,136	-1,61,412	-1,68,194	-1,14,636	-3,237	33,890	69,311
S.I.1.1.1	Loans and Advances to the Central Government	–	–	–	–	–	–	–
S.I.1.1.2	Investments in Treasury Bills	–	–	–	–	–	–	–
S.I.1.1.3	Investments in dated Government Securities	97,172	55,911	83,707	1,14,593	84,796	1,21,962	1,57,389
S.I.1.1.3.1	Central Government Securities	96,125	54,864	82,660	1,13,547	83,749	1,20,916	1,56,343
S.I.1.1.4	Rupee Coins	12	168	137	132	145	106	99
S.I.1.1.5	Deposits of the Central Government	95,048	2,17,491	2,52,037	2,29,361	88,178	88,178	88,177
S.I.1.2	Net RBI credit to State Governments	287	-41	-41	1,427	-41	-1,045	602
S.I.2	RBI's Claims on Banks	7,635	502	4,000	4,590	7,992	11,728	10,357
S.I.2.1	Loans and Advances to Scheduled Commercial Banks	6,310	483	4,000	4,571	7,992	11,728	10,164
S.I.3	RBI's Credit to Commercial Sector	1,537	1,383	1,879	1,788	8,103	11,134	13,820
S.I.3.1	Loans and Advances to Primary Dealers	153	–	495	405	200	200	750
S.I.3.2	Loans and Advances to NABARD	–	–	–	–	–	–	–
S.II	**Government's Currency Liabilities to the Public**	**8,161**	**9,137**	**9,224**	**9,224**	**9,984**	**9,984**	**9,984**
S.III	**Net Foreign Exchange Assets of the RBI**	**8,66,153**	**12,37,461**	**12,37,716**	**12,36,130**	**12,79,980**	**12,71,716**	12,80,116
S.III.1	Gold	29,573	38,154	38,154	40,124	49,440	49,440	48,793
S.III.2	Foreign Currency Assets	8,36,597	11,99,324	11,99,579	11,96,023	12,30,557	12,22,293	12,31,340
S.IV	**Capital Account**	**1,57,279**	**1,95,420**	**1,82,782**	**1,79,181**	**3,59,477**	**3,51,727**	**3,60,078**
S.V	**Other Items (net)**	**19,740**	**27,628**	**32,723**	**31,040**	**29,129**	**38,488**	**36,211**

Note : 1. Data are provisional.
2. Government Balances as on March 31, 2009 are before closure of accounts.
3. Net Foreign Exchange Assets of the RBI includes investments in foreign currency denominated bonds issued by IIFC (UK) since March 20, 2009.

No. 11D: Liquidity Aggregates (Outstanding Amounts)

(Rs. crore)

Month/Year	NM_3	Postal Deposits	L_1	Liabilities of Financial Institutions				L_2	Public Deposits with NBFCs	L_3
				Term Money Borrowings	CDs	Term Deposits	Total			
1	2	3	**4=(2+3)**	5	6	7	8=(5+6+7)	**9=(4+8)**	10	**11=(9+10)**
2007-08										
April	33,28,080	1,15,589	**34,43,669**	2,656	31	245	2,932	**34,46,601**		
May	33,43,020	1,16,135	**34,59,155**	2,656	31	245	2,932	**34,62,087**		
June	33,96,184	1,16,573	**35,12,757**	2,656	31	245	2,932	**35,15,689**	24,215	**35,39,904**
July	34,62,951	1,16,874	**35,79,825**	2,656	31	245	2,932	**35,82,757**		
August	34,97,482	1,16,886	**36,14,368**	2,656	31	245	2,932	**36,17,300**		
September	35,96,705	1,16,882	**37,13,587**	2,656	31	245	2,932	**37,16,519**	24,663	**37,41,182**
October	36,21,894	1,16,886	**37,38,780**	2,656	31	245	2,932	**37,41,712**		
November	36,88,660	1,16,994	**38,05,654**	2,656	31	245	2,932	**38,08,586**		
December	37,23,456	1,16,901	**38,40,357**	2,656	31	245	2,932	**38,43,289**	24,670	**38,67,959**
January	38,21,484	1,15,871	**39,37,355**	2,656	31	245	2,932	**39,40,287**		
February	39,11,043	1,14,579	**40,25,622**	2,656	31	245	2,932	**40,28,554**		
March	40,32,584	1,14,851	**41,47,435**	2,656	31	245	2,932	**41,50,367**	24,852	**41,75,219**
2008-09										
April	40,49,937	1,14,497	**41,64,434**	2,656	31	245	2,932	**41,67,366**		
May	40,99,258	1,15,131	**42,14,389**	2,656	31	245	2,932	**42,17,321**		
June	41,15,905	1,15,471	**42,31,376**	2,656	31	245	2,932	**42,34,308**	24,647	**42,58,955**
July	41,52,509	1,15,714	**42,68,223**	2,656	31	245	2,932	**42,71,155**		
August	42,36,688	1,15,507	**43,52,195**	2,656	31	245	2,932	**43,55,127**		
September	42,91,632	1,15,451	**44,07,083**	2,656	31	245	2,932	**44,10,015**	24,647	**44,34,662**
October	43,68,895	1,15,441	**44,84,336**	2,656	31	245	2,932	**44,87,268**		
November	44,04,614	1,15,157	**45,19,771**	2,656	31	245	2,932	**45,22,703**		
December	44,54,451	1,14,988	**45,69,439**	2,656	31	245	2,932	**45,72,371**	24,647	**45,97,018**
January	45,76,844	1,13,965	**46,90,809**	2,656	31	245	2,932	**46,93,741**		
February	46,58,593	1,13,471	**47,72,064**	2,656	31	245	2,932	**47,74,996**		
March	47,65,882	1,13,471	**48,79,353**	2,656	31	245	2,932	**48,82,285**	24,647	**49,06,932**

CDs: Certificates of Deposits; L_1, L_2 and L_3: Liquidity Aggregates; NBFCs: Non-Banking Financial Companies.

Notes:
1. Postal Deposits comprise post office savings bank deposits, post office time deposits, post office recurring deposits, other deposits and post office cumulative time deposits.
2. Financial Institutions (FIs), here, comprise IFCI, EXIM Bank, IIBI, SIDBI, NABARD, NHB, TFCI and IDFC. Since October 2004, data on FIs do not include that of IDBI reflecting its conversion into a banking entity.
3. Since July 2001, the term money borrowings of the FIs comprise borrowings from corporates and others.
4. Since August 2002, Term Deposits include CPs and Others.
5. Estimates of public deposits are generated on the basis of returns received from all NBFCs with public deposits of Rs. 20 crore and more as had been recommended by the Working Group.
6. While L_1 and L_2 are compiled on a monthly basis, L_3 is compiled on a quarterly basis.
7. Data are provisional. Wherever data are not available, the estimates for the last available month have been repeated.

No. 12: Reserve Money and its Components

(Rs. crore)

Outstandings as on March 31/each Friday/ last reporting Friday of the month	Currency in Circulation		'Other' Deposits with RBI	Bankers' Deposits with RBI	**Reserve Money (2+4+5)**
	Total	o / w cash with banks			
1	2	3	4	5	6
2006-2007	5,04,099	21,293	7,496	1,97,295	**7,08,890**
2007-2008	5,90,801	22,520	9,054	3,28,447	**9,28,302**
2008-2009	6,91,083	24,988	5,544	2,91,275	**9,87,902**
March 7, 2008	5,85,495	–	4,842	2,82,784	**8,73,122**
March 14, 2008	5,90,759	20,393	4,846	2,68,378	**8,63,982**
March 21, 2008	5,93,602	–	4,906	2,95,730	**8,94,238**
March 28, 2008	5,91,279	21,617	5,274	2,72,526	**8,69,078**
November 2008	6,45,632	26,755	4,939	2,24,258	**8,74,829**
December 2008	6,51,421	24,931	12,503	2,22,561	**8,86,485**
January 2009	6,59,043	25,164	6,590	2,08,748	**8,74,381**
February 2009	6,75,228	24,578	5,978	2,06,512	**8,87,717**
March 6, 2009	6,84,793	–	4,984	2,17,937	**9,07,714**
March 13, 2009	6,93,982	23,989	6,720	2,13,474	**9,14,176**
March 20, 2009	6,92,071	–	4,863	2,31,531	**9,28,465**
March 27, 2009	6,91,042	24,988	4,986	2,51,165	**9,47,193**

See 'Notes on Tables'.

No. 13: Sources of Reserve Money

(Rs. crore)

Outstanding as on March 31/each Friday/ last reporting Friday of the month	Reserve Bank's claims on				Net Foreign Exchange Assets of RBI (3)	Government's Currency Liabilities to the Public	Net Non-Monetary Liabilities of RBI (3)	**Reserve Money (2+3+4+5 +6+7-8)**
	Government (net)(1)	Commercial & Co-operative banks	National Bank for Agriculture and Rural Development	Commercial sector(2)				
1	2	3	4	5	6	7	8	9
2006-2007	2,423	7,635	–	1,537	8,66,153	8,161	1,77,019	**7,08,990**
2007-2008	-1,13,209	4,590	–	1,788	12,36,130	9,224	2,10,221	**9,28,302**
2008-2009	69,913	10,357	–	13,820	12,80,116	9,984	3,96,289	**9,87,902**
March 7, 2008	-1,50,024	1,147	–	1,383	12,27,575	9,137	2,16,097	**8,73,122**
March 14, 2008	-1,61,454	502	–	1,383	12,37,461	9,137	2,23,048	**8,63,982**
March 21, 2008	-1,39,020	6,269	–	2,305	12,29,993	9,137	2,14,446	**8,94,238**
March 28, 2008	-1,68,235	4,000	–	1,879	12,37,716	9,224	2,15,505	**8,69,078**
November 2008	- 61,506	6,794	16,281	1,514	12,26,829	9,787	3,24,871	**8,74,829**
December 2008	-31,632	11,634	–	1,381	11,94,068	9,841	2,98,807	**8,86,485**
January 2009	-46,952	6,261	–	4,399	12,14,592	9,817	3,13,735	**8,74,381**
February 2009	-39,791	7,113	–	6,841	12,60,424	9,984	3,56,854	**8,87,717**
March 6, 2009	-9,618	2,890	–	7,703	12,68,806	9,984	3,72,051	**9,07,714**
March 13, 2009	-3,278	7,992	–	8,103	12,79,980	9,984	3,88,606	**9,14,176**
March 20, 2009	13,096	13,810	–	9,834	12,70,273	9,984	3,88,532	**9,28,465**
March 27, 2009	32,845	11,728	–	11,134	12,71,716	9,984	3,90,215	**9,47,193**

Note : 1. Government Balances as on March 31, 2009 are before closure of accounts.

2. Net Foreign Exchange Assets of the RBI includes investments in foreign currency denominated bonds issued by IIFC (UK) since March 20, 2009.

See 'Notes on Tables'.

No. 14: Daily Call Money Rates

As on	Range of Rates		Weighted Average Rates	
	Borrowings	Lendings	Borrowings	Lendings
1	2	3	4	5
March 2, 2009	2.50 – 4.10	2.50 – 4.10	4.08	4.08
March 3, 2009	2.50 – 4.10	2.50 – 4.10	4.07	4.07
March 4, 2009	2.50 – 4.10	2.50 – 4.10	4.07	4.07
March 5, 2009	2.00 – 3.85	2.00 – 3.85	3.64	3.64
March 6, 2009	2.00 – 3.65	2.00 – 3.65	3.58	3.58
March 7, 2009	2.00 – 3.58	2.00 – 3.58	3.49	3.49
March 9, 2009	2.15 – 3.75	2.15 – 3.75	3.58	3.58
March 10, 2009	2.15 – 3.75	2.15 – 3.75	3.58	3.58
March 11, 2009	2.15 – 3.75	2.15 – 3.75	3.58	3.58
March 12, 2009	2.00 – 3.70	2.00 – 3.70	3.59	3.59
March 13, 2009	2.00 – 4.50	2.00 – 4.50	3.77	3.77
March 14, 2009	2.00 – 4.60	2.00 – 4.60	4.27	4.27
March 16, 2009	2.25 – 4.35	2.25 – 4.35	4.08	4.08
March 17, 2009	2.25 – 4.55	2.25 – 4.55	4.33	4.33
March 18, 2009	2.75 – 4.70	2.75 – 4.70	4.57	4.57
March 19, 2009	2.75 – 5.00	2.75 – 5.00	4.78	4.78
March 20, 2009	3.25 – 5.05	3.25 – 5.05	4.78	4.78
March 21, 2009	2.25 – 5.00	2.25 – 5.00	4.15	4.15
March 23, 2009	2.50 – 4.80	2.50 – 4.80	4.57	4.57
March 24, 2009	2.50 – 4.55	2.50 – 4.55	4.21	4.21
March 25, 2009	2.50 – 4.30	2.50 – 4.30	4.17	4.17
March 26, 2009	2.50 – 5.00	2.50 – 5.00	4.66	4.66
March 27, 2009	2.50 – 5.00	2.50 – 5.00	4.66	4.66
March 28, 2009	2.30 – 4.85	2.30 – 4.85	4.56	4.56
March 30, 2009	2.50 – 5.20	2.50 – 5.20	4.75	4.75
March 31, 2009	2.50 – 5.75	2.50 – 5.75	4.98	4.98
April 2, 2009	2.50 – 4.90	2.50 – 4.90	4.37	4.37
April 3, 2009	2.50 – 4.90	2.50 – 4.90	4.37	4.37
April 4, 2009	1.25 – 4.00	1.25 – 4.00	1.87	1.87
April 6, 2009	2.10 – 3.90	2.10 – 3.90	3.56	3.56
April 7, 2009	2.10 – 3.90	2.10 – 3.90	3.56	3.56
April 8, 2009	2.00 – 3.55	2.00 – 3.55	3.44	3.44
April 9, 2009	2.00 – 3.60	2.00 – 3.60	3.50	3.50
April 10, 2009	2.00 – 3.60	2.00 – 3.60	3.50	3.50
April 11, 2009	1.50 – 3.75	1.50 – 3.75	3.54	3.54
April 13, 2009	2.00 – 3.65	2.00 – 3.65	3.52	3.52
April 14, 2009	2.00 – 3.65	2.00 – 3.65	3.52	3.52
April 15, 2009	2.00 – 3.60	2.00 – 3.60	3.49	3.49

No. 15: Average Daily Turnover in Call Money Market

(Rs. crore)

Fortnight ended			Average Daily Call Money Turnover				
			Banks		Primary Dealers		**Total**
			Borrowings	Lendings	Borrowings	Lendings	
1			2	3	4	5	6
March	14,	2008	8,,493	9,688	1,202	8	**19,391**
March	28,	2008	13,366	14,339	973	–	**28,678**
April	11,	2008	6,289	7,285	1,055	59	**14,688**
April	25,	2008	9.011	10.020	1,127	117	**20,275**
May	9,	2008	9,706	10,560	997	143	**21,406**
May	23,	2008	7,970	8,910	1,032	92	**18,004**
June	6,	2008	9,716	10,706	1,001	11	**21,435**
June	20,	2008	9,229	9,929	711	10	**19,878**
July	4,	2008	11,049	11,845	828	33	**23,756**
July	18,	2008	13,007	13,363	399	42	**26,811**
August	1,	2008	11,185	11,475	347	57	**23,063**
August	15.	2008	12,401	12,661	313	53	**25,428**
August	29.	2008	11,321	11,692	411	41	**23,466**
September	12,	2008	11,812	12,389	587	9	**24,797**
September	26,	2008	10,756	11,205	472	22	**22,455**
October	10,	2008	12,426	12,909	510	28	**25,873**
October	24,	2008	12,500	13,288	1,022	234	**27,044**
November	7,	2008	12,473	13,338	914	48	**26,773**
November	21,	2008	9,655	10,713	1,069	11	**21,449**
December	5,	2008	10,090	11,106	1,040	24	**22,260**
December	19,	2008	11,001	12,170	1,175	6	**24,353**
January	2,	2009	7,749	8,747	1,005	8	**17,508**
January	16,	2009	8,907	10,280	1,376	4	**20,567**
January	30,	2009	7,129	8,802	1,682	9	**17,622**
February	13,	2009	8,838	10,548	1,711	2	**21,099**
February	27,	2009	9,637	11,534	1,906	9	**23,087**
March	13,	2009	10,473	12,600	2,127	–	**25,199**
March	27,	2009	10,610	12,154	1,551	6	**24,320**
April	10,	2009	7,658	9,807	2,148	–	**19,613**

Notes : 1. Data are provisional.

2. Since August 6, 2005 eligible participants are Banks and Primary Dealers.

No. 16: Issue of Certificates of Deposit by Scheduled Commercial Banks

(Amount in Rs. crore)

Fortnight ended		Total Amount Outstanding	Range of Discount Rate (per cent) @	Fortnight ended		Total Amount Outstanding	Range of Discount Rate (per cent) @	Fortnight ended		Total Amount Outstanding	Range of Discount Rate (per cent) @
1		2	3	1		2	3	1		2	3
2006-07				**2007-08**				**2008-09**			
April	14	38,568	6.00-8.90	April	13	93,808	9.50-11.50	April	11	1,49,986	8.00-9.72
	28	44,059	6.00-8.45		27	95,980	9.40-11.50		25	1,50,865	7.70-9.96
May	12	48,515	6.50-7.90	May	11	97,292	10.05-11.50	May	9	1,53,410	7.75-10.20
	26	50,228	6.37-8.67		25	99,715	7.00-10.82		23	1,56,780	8.00-10.20
June	9	53,863	5.75-7.96	June	8	99,287	6.13-10.95	June	6	1,59,696	8.60-10.20
	23	56,390	5.50-8.16		22	98,337	7.00-10.20		20	1,63,143	8.62-9.79
July	7	57,256	6.00-8.70	July	6	1,02,992	6.25-9.69	July	4	1,64,557	8.30-10.60
	21	59,167	4.35-8.21		20	1,05,317	5.50-10.82		18	1,64,892	8.92-10.95
August	4	64,748	6.00-8.62	August	3	1,03,750	6.05-10.75	August	1	1,63,546	8.92-11.05
	18	65,621	4.75-8.50		17	1,06,350	6.87-8.91		15	1,66,996	8.92-11.11
September	1	66,340	4.60-8.50		31	1,09,224	6.87-10.75		29	1,71,966	10.00-11.57
	15	63,864	7.13-8.50	September	14	1,13,892	6.87-10.00	September	12	1,78,280	8.92-12.00
	29	65,274	7.25-8.50		28	1,18,481	6.87-10.00		26	1,75,522	8.92-12.35
October	13	64,482	4.75-8.50	October	12	1,22,142	6.87-10.00	October	10	1,74,975	8.92-21.00
	27	65,764	6.00-8.50		26	1,24,232	6.85-10.00		24	1,58,562	8.80-12.90
November	10	67,694	6.75-8.50	November	9	1,25,653	6.87-9.00	November	7	1,54,172	8.92-11.50
	24	68,911	7.50-8.33		23	1,27,143	6.87-9.03		21	1,51,493	8.80-11.75
December	8	69,664	6.00-8.36	December	7	1,25,327	8.05-9.25	December	5	1,50,779	8.50-11.00
	22	68,619	7.25-8.90		21	1,23,466	8.05-10.00		19	1,51,214	7.00-11.50
January	5	68,928	8.26-9.25	January	4	1,27,154	6.87-9.82	January	2	1,52,901	7.00-11.50
	19	70,149	8.00-9.55		18	1,29,123	7.90-9.21		16	1,62,883	6.10-11.50
February	2	70,727	8.41-9.80	February	1	1,32,395	7.90-9.85		30	1,64,979	5.25-11.50
	16	72,795	9.40-10.83		14	1,35,097	6.83-9.75	February	13	1,74,088	5.40-11.50
March	2	77,971	9.90-11.30		29	1,39,160	9.22-10.27				
	16	92,468	10.30-11.25	March	14	1,43,714	7.00-10.48				
	30	93,272	10.23-11.90		28	1,47,792	9.00-10.75				

@ : Effective discount rate range per annum.

No. 17: Issue of Commercial Paper* By Companies

(Amount in Rs. crore)

Fortnight ended		Total Amount Outstanding	Rate of Interest (per cent) @	Fortnight ended		Total Amount Outstanding	Rate of Interest (per cent) @	Fortnight ended		Total Amount Outstanding	Rate of Interest (per cent) @
1		2	3	1		2	3	1		2	3
2006-07				**2007-08**				**2008-09**			
April	15	12,968.25	6.77-8.95	April	15	19,012.70	10.00-14.00	April	15	35,793.55	7.74-10.25
	30	16,550.15	6.35-9.25		30	18,759.00	9.65-11.75		30	37,583.55	7.35-10.10
May	15	17,264.35	6.32-7.95	May	15	19,288.00	9.25-11.45	May	15	41,005.55	7.15-10.75
	31	17,066.51	6.40-9.25		31	22,024.00	8.71-12.00		31	42,031.55	7.70-10.50
June	15	18,932.51	6.44-9.25	June	15	25,499.75	7.00-10.80	June	15	45,982.80	8.25-11.60
	30	19,649.51	6.59-9.25		30	26,256.25	7.35-12.00		30	46,847.30	9.00-12.25
July	15	21,652.30	6.25-8.30	July	15	28,129.25	4.00-11.50	July	15	48,342.30	9.50-12.25
	31	21,110.30	6.50-8.25		31	30,631.25	7.05-11.50		31	51,569.30	9.60-12.00
August	15	23,084.30	6.25-8.10	August	15	31,784.25	7.59-13.50	August	15	52,830.55	9.54-12.50
	31	23,299.30	6.60-9.00		31	31,527.00	8.30-10.25		31	55,035.55	10.20-14.75
September	15	24,011.30	6.40-8.17	September	15	33,227.00	6.35-10.90	September	15	54,181.95	10.25-14.25
	30	24,444.30	7.10-9.25		30	33,614.05	7.70-12.00		30	52,037.60	11.40-13.95
October	15	23,521.00	7.20-8.65	October	15	38,494.55	7.00-13.00	October	15	49,359.00	11.90-17.75
	31	23,171.00	7.00-8.75		31	42,182.55	6.70-12.00		31	48,442.00	11.55-16.90
November	15	23,450.20	7.25-9.25	November	15	41,677.55	7.50-12.00	November	15	45,382.10	11.50-15.50
	30	24,238.20	7.50-9.50		30	41,307.55	8.05-11.50		30	44,487.10	9.00-15.50
December	15	23,827.20	7.50-8.75	December	15	40,913.55	8.22-11.50	December	15	40,166.00	10.40-16.00
	31	23,536.20	7.74-10.00		31	40,231.17	8.40-11.70		31	38,055.00	8.96-14.00
January	15	23,758.20	8.30-9.58	January	15	42,391.55	7.35-12.50	January	15	48,802.60	7.75-14.00
	31	24,398.20	8.25-10.50		31	50,063.05	7.55-16.00		31	51,668.00	6.75-13.00
February	15	23,999.20	8.00-11.25	February	15	43,920.58	6.95-11.00	February	15	53,614.60	5.25-12.50
	28	21,167.20	8.70-12.00		29	40,642.05	7.40-11.00		28	52,559.60	5.80-11.75
March	15	19,102.20	7.50-13.35	March	15	37,282.76	9.50-11.00	March	15	49,952.75	7.50-12.50
	31	17,688.20	10.25-13.00		31	32,591.55	9.50-14.25		31	44,171.25	6.40-12.50

* : Issued at face value by companies.
@ : Typical effective discount rate range per annum on issues during the fortnight.

Government Accounts

No. 18: Union Government Accounts at a Glance

(Amount in Rs. crore)

Item	Financial Year	April - February			
	2008-09 (Revised Estimates)	2007-08 (Actuals)	2008-09 (Actuals)	Percentage to Revised Estimates	
				2007-08	2008-09
1	2	3	4	5	6
1. Revenue Receipts	**5,62,173**	**4,36,389**	**4,37,397**	**83.1**	**77.8**
2. Tax Revenue (Net)	4,65,970	3,52,356	3,56,390	81.6	76.5
3. Non-Tax Revenue	96,203	84,033	81,007	90.0	84.2
4. Capital Receipts	**3,38,780**	**1,47,744**	**3,10,927**	**80.2**	**91.8**
5. Recovery of Loans	9,698	4,542	3,751	101.0	38.7
6. Other Receipts	2,567	37,800	43	104.6	1.7
7. Borrowings and Other Liabilities	3,26,515	1,05,402	3,07,133	73.4	94.1
8. Total Receipts (1+4)	**9,00,953**	**5,84,133**	**7,48,324**	**82.3**	**83.1**
9. Non-Plan Expenditure	**6,17,996**	**4,12,850**	**5,15,747**	**82.3**	**83.5**
10. On Revenue Account	5,61,790	3,45,686	4,82,062	83.7	85.8
of which :					
(i) Interest Payments	1,92,694	1,44,340	1,65,799	83.9	86.0
11. On Capital Account	56,206	67,164	33,685	75.6	59.9
12. Plan Expenditure	**2,82,957**	**1,71,283**	**2,32,577**	**82.5**	**82.2**
13. On Revenue Account	2,41,656	1,45,669	1,99,848	82.9	82.7
14. On Capital Account	41,301	25,614	32,729	80.3	79.2
15. Total Expenditure (9+12)	**9,00,953**	**5,84,133**	**7,48,324**	**82.3**	**83.1**
16. Revenue Expenditure (10+13)	8,03,446	4,91,355	6,81,910	83.5	84.9
17. Capital Expenditure (11+14)	97,507	92,778	66,414	76.8	68.1
18. Revenue Deficit (16-1)	**2,41,273**	**54,966**	**2,44,513**	**86.6**	**101.3**
19. Fiscal Deficit {15-(1+5+6)}	**3,26,515**	**1,05,402**	**3,07,133**	**73.4**	**94.1**
20. Gross Primary Deficit [19-10(i)]	**1,33,821**	**-38,938**	**1,41,334**	**137.5**	**105.6**

Notes : 1. Financial year runs from "April to March".
2. Actuals are unaudited figures.

Source : Controller General of Accounts, Ministry of Finance, Government of India.

Government Securities Market

No. 19: Government of India : 91 Day Treasury Bills (Outstanding at Face Value)

(Rs. crore)

March 31/ Last Friday/ Friday	Reserve Bank of India			Banks		State Governments		Others		Foreign Central Banks	
	Tap*		Auction	Tap*	Auction	Tap*	Auction	Tap*	Auction	Tap*	Auction
	Re-discounted	Ad hocs									
1	2	3	4	5	6	7	8	9	10	11	12
Mar. 31, 2000	–	–	288	–	557	–	–	–	455	–	220
Mar. 31, 2001	–	–	67	–	868	–	–	–	153	–	630
Mar. 31, 2002	–	–	154	–	2,292	–	450	–	360	–	1,301
Mar. 31, 2003	–	–	–	–	6,427	–	800	–	780	–	700
Mar. 31, 2004	–	–	–	–	3,948	–	600	–	1,452	–	39
Mar. 31, 2005	–	–	–	–	21,176	–	1,755	–	4,829	–	32
Mar. 31, 2006	–	–	–	–	5,943	–	9,762	–	576	–	37
Mar. 31, 2007	–	–	–	–	12,684	–	24,250	–	6,743	–	5
Mar. 31, 2008	–	–.	–	–	6,057	–	23,825	–	10,075	–	–
Oct. 2007	–	–	–	–	23,927	–	26,503	–	15,573	–	–
Nov. 2007	–	–	–	–	21,013	–	24,028	–	12,397	–	–
Dec. 2007	–	–	–	–	13,999	–	21,978	–	8,501	–	20
Jan. 2008	–	–	–	–	11,143	–	23,278	–	6,946	–	20
Feb. 2008	–	–	–	–	8,503	–	26,135	–	8,629	–	–
Mar. 2008	–	–	–	–	6,057	–	23,825	–	10,075	–	–
Apr. 2008	–	–	–	–	7,596	–	23,547	–	10,946	–	–
May 2008	–	–	–	–	10,949	–	24,951	–	16,051	–	–
Jun. 2008	–	–	–	–	15,065	–	26,704	–	18,435	–	–
July 2008	–	–	–	–	12,320	–	27,131	–	16,181	–	–
Aug. 2008	–	–	–	–	12,874	–	28,939	–	16,626	–	–
Sep. 2008	–	–	–	–	18,140	–	23,706	–	18,110	–	–
Oct. 2008	–	–	–	–	28,100	–	20,456	–	18,650	–	–
Nov. 2008	–	–	–	–	33,507	–	16,029	–	22,243	–	–
Dec. 2008	–	–	–	–	36,193	–	15,846	–	17,807	–	–
Jan. 2009	–	–	–	–	40,741	–	10,446	–	25,261	–	–
Feb. 2009	–	–	–	–	43,910	–	7,020	–	25,094	–	–
Week Ended											
Mar. 6, 2009	–	–	–	–	13,252	–	6,870	–	57,253	–	–
Mar. 13, 2009	–	–	–	–	42,420	–	1,595	–	28,085	–	–
Mar. 20, 2009	–	–	–	–	43,264	–	663	–	27,241	–	–
Mar. 27, 2009	–	–	–	–	49,914	–	544	–	25,092	–	–

* : The rate of discount is 4.60 per cent –per annum.

No. 21: Auctions of 91 Day Government of India Treasury Bills

(Amount in Rs. crore)

Date of Auction	Date of Issue	Notified Amount	Bids Received			Bids Accepted			Devolvement on PDs/ SDs*	Total Issue (8+9+10)	Cut-off Price	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
			Number	Total Face Value		Number	Total Face Value						
				Competitive	Non-Competitive		Competitive	Non-Competitive					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2008-09													
Apr. 2	Apr. 4	500	49	2,633.08	4,500.00	3	500.00	4,500.00	–	5,000.00	98.30	6.9366	43,457.06
Apr. 9	Apr. 11	6,000	135	8,076.23	2,422.12	113	6,000.00	2,422.12	–	8,422.12	98.23	7.2274	44,879.18
Apr. 16	Apr. 17	5,500	117	7,192.80	–	56	3,000.00	–	–	3,000.00	98.18	7.4353	44,679.18
Apr. 23	Apr. 25	2,500	106	6,747.10	500.00	40	2,500.00	500.00	–	3,000.00	98.18	7.4353	42,090.18
Apr. 30	May 2	3,000	111	7,695.28	–	52	3,000.00	–	–	3,000.00	98.20	7.3521	43,706.86
May 7	May 9	3,000	132	8,457.10	2,635.68	76	3,000.00	2,635.68	–	5,635.68	98.21	7.3105	45,042.54
May 14	May 16	3,500	115	8,527.07	250.50	67	3,500.00	250.50	–	3,750.50	98.19	7.3937	47,047.27
May 21	May 23	3,000	91	7,919.91	4,000.00	52	3,000.00	4,000.00	–	7,000.00	98.17	7.4769	52,197.27
May 28	May 30	500	43	1,882.72	503.48	23	500.00	503.48	–	1,003.48	98.17	7.4769	51,951.78
Jun. 4	Jun. 6	3,000	82	5,569.37	4,426.94	67	3,000.00	4,426.94	–	7,426.94	98.15	7.5602	56,678.72
Jun. 11	Jun. 13	3,000	75	5,211.37	1,450.00	50	3,000.00	1,450.00	–	4,450.00	98.12	7.6851	60,428.72
Jun. 18	Jun. 20	2,000	80	4,164.30	715.38	55	2,000.00	715.38	–	2,715.38	98.03	8.0604	61,944.10
Jun. 25	Jun. 27	500	60	2,068.80	5,300.00	9	500.00	5,300.00	–	5,800.00	97.87	8.7293	60,204.10
Jul. 2	Jul. 4	500	68	2,130.75	750.00	10	500.00	750.00	–	1,250.00	97.85	8.8131	56,454.10
Jul. 9	Jul. 11	3,500	118	6,508.94	4,100.00	26	500.00	4,100.00	–	4,600.00	97.80	9.0227	52,631.98
Jul. 16	Jul. 18	3,000	130	8,219.61	2,250.00	66	3,000.00	2,250.00	–	5,250.00	97.78	9.1066	54,881.98
Jul. 23	Jul. 25	3,000	115	6,685.73	750.00	43	3,000.00	750.00	–	3,750.00	97.79	9.0646	55,631.98
Jul. 30	Aug. 1	3,000	132	9,274.83	800.00	62	3,000.00	800.00	–	3,800.00	97.72	9.3584	56,431.98
Aug. 6	Aug. 8	3,000	128	7,893.64	2,639.10	78	3,000.00	2,638.10	–	5,638.10	97.75	9.2325	56,434.40
Aug. 13	Aug. 14	3,000	116	9,177.67	2,150.00	56	3,000.00	2,150.00	–	5,150.00	97.77	9.1485	57,833.90
Aug. 20	Aug. 22	3,000	101	8,778.52	2,000.00	21	3,000.00	2,000.00	–	5,000.00	97.77	9.1485	55,833.90
Aug. 27	Aug. 29	2,000	83	6,721.82	1,608.09	32	2,000.00	1,608.09	–	3,608.09	97.79	9.0646	58,438.51
Sep. 2	Sep. 5	5,000	110	11,692.25	1,000.00	58	5,000.00	1,000.00	–	6,000.00	97.80	9.0227	57,011.57
Sep. 10	Sep. 12	5,000	154	13,638.73	4,836.00	65	5,000.00	4,836.00	–	9,836.00	97.87	8.7293	62,397.57
Sep. 17	Sep. 19	5,000	140	10,967.30	573.48	68	5,000.00	573.48	–	5,573.48	97.89	8.6456	65,255.67
Sep. 24	Sep. 26	500	58	2,493.14	0.04	16	500.00	0.04	–	500.04	97.91	8.5619	59,955.71

No. 21: Auctions of 91 Day Government of India Treasury Bills *(Concld.)*

(Amount in Rs. crore)

Date of Auction		Date of Issue		Notified Amount	Bids Received			Bids Accepted			Devolvement on PDs/ SDs*	Total Issue (8+9+10)	Cut-off Price	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
					Number	Total Face Value		Number	Total Face Value						
						Competitive	Non-Competitive		Competitive	Non-Competitive					
1		2		3	4	5	6	7	8	9	10	11	12	13	14
2008-09															
Oct.	1	Oct.	3	5,000	109	7,752.00	500.00	10	500.00	500.00	–	1,000.00	97.84	8.8550	59,705.71
Oct.	8	Oct.	10	5,000	147	9,520.27	500.00	94	5,000.00	500.00	–	5,500.00	97.93	8.4782	60,605.71
Oct.	15	Oct.	17	5,000	138	9,103.80	2,000.00	91	5,000.00	2,000.00	–	7,000.00	97.88	8.6875	62,355.71
Oct.	22	Oct.	24	5,000	169	13,426.53	1,000.00	29	5,000.00	1,000.00	–	6,000.00	98.24	7.1858	64,605.71
Oct.	29	Oct.	31	5,000	158	8,835.26	1,400.00	106	5,000.00	1,400.00	–	6,400.00	98.18	7.4353	67,205.71
Nov.	5	Nov.	7	5,000	123	12,732.65	141.19	62	5,000.00	141.19	–	5,141.19	98.19	7.3937	66,708.80
Nov.	12	Nov.	14	5,000	133	8,873.07	753.00	89	5,000.00	753.00	–	5,753.00	98.20	7.3521	67,311.80
Nov.	19	Nov.	21	5,000	136	14,842.52	1,762.00	85	5,000.00	1,762.00	–	6,762.00	98.21	7.3105	69,073.80
Nov.	26	Nov.	28	5,000	157	11,617.88	1,313.79	70	5,000.00	1,313.79	–	6,313.79	98.25	7.1443	71,779.50
Dec.	3	Dec.	5	3,000	179	15,189.80	150.00	20	3,000.00	150.00	–	3,150.00	98.38	6.6048	68,929.50
Dec.	10	Dec.	12	5,000	183	15,176.55	5,275.00	114	5,000.00	5,275.00	–	10,275.00	98.61	5.6539	69,368.50
Dec.	17	Dec.	19	5,000	164	13,297.72	932.37	47	5,000.00	932.37	–	5,932.37	98.66	5.4477	69,727.39
Dec.	24	Dec.	26	500	72	5,340.91	119.00	8	500.00	119.00	–	619.00	98.76	5.0361	69,846.35
Dec.	31	Jan.	2	500	85	6,796.87	–	8	500.00	–	–	500.00	98.84	4.7074	69,346.35
Jan.	7	Jan.	9	8,000	194	23,148.72	–	21	8,000.00	–	–	8,000.00	98.84	4.7074	71,846.35
Jan.	14	Jan.	16	8,000	156	18,212.00	1.00	73	8,000.00	1.00	–	8,001.00	98.87	4.5842	72,847.35
Jan.	21	Jan.	23	8,000	143	18,886.80	0.30	66	8,000.00	0.30	–	8,000.30	98.85	4.6663	74,847.65
Jan.	28	Jan.	30	8,000	153	13,498.65	0.50	107	8,000.00	0.50	–	8,000.50	98.82	4.7895	76,448.15
Feb.	4	Feb.	6	8,000	157	16,458.20	543.72	81	8,000.00	543.72	–	8,543.72	98.81	4.8306	79,850.68
Feb.	11	Feb.	13	5,000	134	16,067.99	0.50	72	5,000.00	0.50	–	5,000.50	98.82	4.7895	79,098.18
Feb.	18	Feb.	21	5,000	131	15,552.04	2.30	37	5,000.00	2.30	–	5,002.30	98.83	4.7484	77,338.48
Feb.	25	Feb.	27	5,000	107	14,373.88	0.23	46	5,000.00	0.23	–	5,000.23	98.83	4.7484	76,024.92
Mar.	4	Mar	6	4,500	111	16,008.35	0.30	41	4,500.00	0.30	–	4,500.30	98.85	4.6663	77,375.22
Mar.	12	Mar.	13	5,000	99	8,467.05	–	66	5,000.00	–	–	5,000.00	98.87	4.5842	72,100.22
Mar.	18	Mar.	20	5,000	136	12,741.75	–	58	5,000.00	–	–	5,000.00	98.80	4.8716	71,167.85
Mar	25	Mar	26	5,000	123	13,051.57	0.15	50	5,000.00	0.15	–	5,000.15	98.78	4.9538	75,549.00

* : Effective from auction dated May 14,1999, devolvement would be on RBI only.

Note : The presentation of implicit yield at cut-off price has been changed from actual/364-day count convention to actual/365-day count convention from auction dated October 27, 2004.

No. 22: Auctions of 182-day Government of India Treasury Bills

(Amount in Rs. crore)

Date of Auction	Date of Issue	Notified Amount	Bids Received			Bids Accepted			Devolvement on PDs	Total Issue (8+9+10)	Cut-off Price	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
			Number	Total Face Value		Number	Total Face Value						
				Competitive	Non-Competitive		Competitive	Non-Competitive					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2007-08													
Dec. 26	Dec. 28	500	57	2,135.50	–	22	500.00	–	–	500.00	96.35	7.5974	22,880.00
Jan. 9	Jan. 11	1,500	62	3,102.00	–	29	1,500.00	–	–	1,500.00	96.52	7.2308	22,880.00
Jan. 23	Jan. 25	2,500	60	2,855.00	–	41	2,105.00	–	–	2,105.00	96.51	7.2523	22,585.00
Feb. 6	Feb. 8	1,500	60	3,267.00	–	26	1,500.00	–	–	1,500.00	96.50	7.2738	22,085.00
Feb. 20	Feb. 22	500	40	1,822.00	–	12	500.00	–	–	500.00	96.38	7.5326	19,585.00
Mar. 5	Mar. 7	500	57	1,827.50	855.00	34	500.00	855.00	–	1,355.00	96.38	7.5326	17,585.00
Mar. 19	Mar. 24	500	42	2,340.00	1,200.00	6	500.00	1,200.00	–	1,700.00	96.46	7.3600	16,785.00
2008-09													
Apr. 2	Apr. 4	500	52	2,095.00	–	2	500.00	–	–	500.00	96.54	7.1877	14,785.00
Apr. 16	Apr. 17	3,000	77	2,663.00	1,500.00	28	500.00	1,500.00	–	2,000.00	96.35	7.5974	13,785.00
Apr. 30	May 2	1,000	84	4,430.25	750.00	8	1,000.00	750.00	–	1,750.00	96.42	7.4462	15,035.00
May 14	May 16	2,000	85	3,431.00	553.00	61	2,000.00	553.00	–	2,553.00	96.36	7.5758	17,088.00
May 28	May 30	500	52	1,872.00	700.00	6	500.00	700.00	–	1,200.00	96.38	7.5326	17,788.00
Jun. 11	Jun. 13	500	52	1,366.20	1,125.00	17	500.00	1,125.00	–	1,625.00	96.31	7.6838	18,788.00
Jun. 25	Jun. 27	500	41	1,393.00	1,000.00	18	500.00	1,000.00	–	1,500.00	95.63	9.1645	19,788.00
Jul. 9	Jul. 11	1,500	84	3,923.46	500.00	44	1,500.00	500.00	–	2,000.00	95.55	9.3401	20,288.00
Jul. 23	Jul. 25	1,500	83	4,232.25	–	23	1,500.00	–	–	1,500.00	95.56	9.3181	19,683.00
Aug. 6	Aug. 8	1,500	91	4,666.50	1,000.00	39	1,500.00	1,000.00	–	2,500.00	95.57	9.2962	20,683.00
Aug. 20	Aug. 22	1,500	86	3,915.65	1,000.00	32	1,500.00	1,000.00	–	2,500.00	95.56	9.3181	22,683.00
Sep. 2	Sep. 5	2,500	96	8,519.50	–	17	2,500.00	–	–	2,500.00	95.67	9.0768	23,828.00
Sep. 17	Sep. 19	2,000	94	5,328.50	–	31	2,000.00	–	–	2,000.00	95.81	8.7705	24,128.00
Oct. 1	Oct. 3	2,000	77	3,252.00	175.00	11	500.00	175.00	–	675.00	95.70	9.0111	24,303.00
Oct. 15	Oct. 17	2,000	128	4,592.47	–	64	2,000.00	–	–	2,000.00	95.85	8.6832	24,303.00
Oct. 29	Oct. 31	2,000	146	6,649.00	–	32	2,000.00	–	–	2,000.00	96.45	7.3816	24,553.00
Nov. 12	Nov. 14	2,000	102	5,322.25	–	21	2,000.00	–	–	2,000.00	96.53	7.2092	24,000.00
Nov. 26	Nov. 28	2,000	94	6,566.00	–	27	2,000.00	–	–	2,000.00	96.60	7.0587	24,800.00
Dec. 10	Dec. 12	500	59	1,773.70	–	30	500.00	–	–	500.00	97.28	5.6075	23,675.00
Dec. 24	Dec. 26	500	59	2,891.20	–	7	500.00	–	–	500.00	97.52	5.1001	22,675.00
Jan. 7	Jan. 9	1,500	90	5,331.00	–	6	1,500.00	–	–	1,500.00	97.74	4.6372	22,175.00
Jan. 21	Jan. 23	1,500	74	4,321.00	–	23	1,500.00	–	–	1,500.00	97.78	4.5533	22,175.00
Feb. 4	Feb. 6	1,500	51	2,820.00	–	20	1,500.00	–	–	1,500.00	97.71	4.7002	21,175.00
Feb. 18	Feb. 21	1,500	63	2,760.00	–	40	1,500.00	–	–	1,500.00	97.70	4.7212	20,175.00
Mar. 4	Mar 6	1,500	51	4,925.00	–	16	1,500.00	–	–	1,500.00	97.75	4.6162	19,175.00
Mar. 18	Mar 20	3,000	99	6,166.00	–	59	3,000.00	–	–	3,000.00	97.52	5.1001	20,175.00

Notes : 1. Outstanding amount is net of redemption during the week.

2. The presentation of implicit yield at cut-off price has been changed from actual/364-day count convention to actual/365-day count convention from auction dated April 6, 2005.

3. The auctions of 182-day Treasury Bills (TBs) which were discontinued effective May 14, 2001 have been reintroduced from April 6, 2005 onwards.

No. 23: Auctions of 364-day Government of India Treasury Bills

(Amount in Rs. crore)

Date of Auction	Date of Issue	Notified Amount	Bids Received			Bids Accepted			Devolvement on PDs/ SDs*	Total Issue (8+9+10)	Cut-off Price	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
			Number	Total Face Value		Number	Total Face Value						
				Competitive	Non-Competitive		Competitive	Non-Competitive					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2007-08													
Mar. 26	Mar. 28	1,000	79	5,573.36	–	5	1,000	–	–	1,000.00	93.17	7.3508	57,205.30
2008-09													
Apr. 9	Apr. 11	2,000	95	4,697.50	–	44	2,000	–	–	2,000.00	93.15	7.3739	57,075.30
Apr. 23	Apr. 25	2,000	102	4,735.00	–	55	2,000	–	–	2,000.00	92.88	7.6869	56,775.30
May 7	May 9	3,500	166	9,640.50	650.00	68	3,500	650.00	–	4,150.00	93.00	7.5476	58,925.30
May 21	May 23	1,000	109	4,100.00	1,500.00	42	1,000	1,500.00	–	2,500.00	92.90	7.6636	59,425.30
Jun. 4	Jun. 6	1,000	79	3,695.00	1,400.00	5	1,000	1,400.00	–	2,400.00	92.95	7.6056	58,706.76
Jun. 18	Jun. 20	1,000	68	1,900.70	–	54	1,000	–	–	1,000.00	92.40	8.2477	56,210.80
Jul. 2	Jul. 4	1,000	107	3,385.55	8.75	14	1,000	8.75	–	1,008.75	91.62	9.1716	56,219.55
Jul. 16	Jul. 18	2,000	110	4,703.50	250.00	49	2,000	250.00	–	2,250.00	91.39	9.447	55,886.12
Jul. 30	Aug. 1	2,000	154	9,661.00	36.55	26	2,000	36.55	–	2,036.55	91.30	9.5552	55,922.67
Aug. 13	Aug. 14	2,500	138	8,411.50	–	53	2,500	–	–	2,500.00	91.52	9.2912	56,422.67
Aug. 27	Aug. 29	2,000	140	10,229.00	26.65	24	2,000	26.65	–	2,026.65	91.61	9.1835	56,416.05
Sep. 10	Sep. 12	4,000	194	15,037.00	–	46	4,000	–	–	4,000.00	91.88	8.8619	57,416.05
Sep. 24	Sep. 26	1,000	87	3,383.98	–	36	1,000	–	–	1,000.00	91.93	8.8025	55,041.05
Oct. 8	Oct. 10	2,000	131	7,344.00	–	38	2,000	–	–	2,000.00	92.23	8.4477	54,041.05
Oct. 22	Oct. 24	2,000	153	8,652.50	32.00	14	2,000	32.00	–	2,032.00	93.13	7.3971	53,049.05
Nov. 5	Nov. 7	2,000	85	5,310.00	–	16	2,000	–	–	2,000.00	93.15	7.3739	52,049.05
Nov. 19	Nov. 21	2,000	136	8,735.00	–	22	2,000	–	–	2,000.00	93.40	7.0858	53,049.05
Dec. 3	Dec. 5	1,000	118	6,471.00	–	4	1,000	–	–	1,000.00	94.09	6.2985	52,049.05
Dec. 17	Dec. 19	1,000	83	2,987.00	250.00	33	1,000	250.00	–	1,250.00	94.93	5.3554	52,049.05
Dec. 31	Jan. 2	1,000	74	7,301.00	–	6	1,000	–	–	1,000.00	95.45	4.7800	52,049.05
Jan. 14	Jan. 16	1,000	69	4,235.00	–	19	1,000	–	–	1,000.00	95.70	4.5056	49,930.30
Jan. 28	Jan. 30	1,000	69	2,850.50	13.50	30	1,000	13.50	–	1,013.50	95.62	4.5932	48,943.80
Feb 11	Feb. 13	3,000	116	9,810.00	–	22	3,000	–	–	3,000.00	95.63	4.5822	48,440.10
Feb. 25	Feb. 27	3,000	70	5,915.00	108.50	34	3,000	108.50	–	3,108.50	95.57	4.6481	50,548.60
Mar. 12	Mar. 13	3,000	58	3,985.00	250.00	50	3,000	250.00	–	3,250.00	95.26	4.9895	52,525.95
Mar. 25	Mar. 26	3.000	88	4,645.00	23.85	78	3,000	23.85	–	3,023.85	94.80	5.5003	54,549.80

* : Effective from auction dated May 19, 1999, devolvement would be on RBI only.

Notes: 1. Outstanding amount is net of redemption during the week.

2. The presentation of implicit yield at cut-off price has been changed from actual/364-day count convention to actual/365-day count convention from auction dated October 27, 2004.

No. 24: Turnover in Government Securities Market (Face Value) at Mumbai @

(Rs. crore)

Week / Month +	Govt. of India Dated Securities	State Govt. Securities	Treasury Bills			RBI*
			91 Day	182 Day	364 Day	
1	2	3	4	5	6	7
2006-07						
April	1,10,559.28	851.16	2,193.88	2,046.40	16,666.50	922.00
May	1,00,542.72	4,781.64	6,217.52	4,076.30	10,766.88	1,453.00
June	77,255.06	2,395.66	5,996.84	8,689.56	12,871.16	883.00
July	65,538.70	1,376.06	5,206.80	3,761.72	8,127.34	387.88
August	1,48,081.02	1,048.40	10,290.66	8,646.20	12,898.72	166.48
September	2,84,464.66	1,893.48	8,821.54	6,014.18	17,127.28	279.19
October	1,22,101.80	776.32	5,898.98	3,134.06	9,134.16	233.42
November	2,57,667.60	1,358.46	4,857.48	8,209.80	13,484.26	151.08
December	2,39,765.16	3,072.80	6,087.18	2,928.06	9,965.98	58.44
January	1,40,660.36	1,319.26	6,006.94	3,306.44	6,204.12	551.14
February	1,13,360.08	1,362.28	4,998.06	2,854.74	4,948.44	72.88
March	1,10,983.52	4,861.96	5,968.82	4,739.42	6,464.76	1,405.99
2007-08						
April	1,29,393.26	3,090.88	9,866.80	2,869.22	5,782.54	333.23
May	1,14,658.96	2,481.32	7,160.10	1,498.68	3,183.70	680.35
June	2,20,172.02	2,078.77	29,236.33	7,998.44	10,091.95	266.57
July	3,83,106.46	1,906.39	19,820.37	3,291.27	22,143.25	715.20
August	2,41,706.99	2,514.20	11,899.43	6,877.99	13,643.66	482.50
September	1,74,533.46	1,201.42	5,521.11	8,768.86	10,539.40	428.36
October	1,45,814.85	1,714.00	22,191.32	13,299.05	20,733.58	531.41
November	1,73,573.07	3,058.32	8,788.56	6,219.26	14,338.14	193.03
December	2,12,467.87	2,344.34	5,998.32	2,498.72	13,450.44	5,372.60
January	5,54,272.55	4,412.28	5,581.92	6,000.66	21,903.31	5,344.63
February	4,34,802.32	4,730.56	2,810.06	4,485.10	11,915.60	2,998.80
March	1,72,568.68	1,962.38	2,892.25	2,054.68	8,168.54	3,429.97
2008-09						
April	1,63,277.17	2,403.36	8,859.65	2,530.12	8,201.96	1,590.93
May	3,18,354.85	11,798.94	11,537.89	2,526.64	4,653.09	350.87
June	1,95,337.16	1,445.24	10,065.13	1,546.76	4,919.92	13,982.55
July	1,44,355.59	4,278.14	4,681.45	2,666.96	7,285.49	7,236.53
August	2,67,462.66	1,453.34	14,490.31	2,031.75	6,843.55	8,110.26
September	2,98,155.18	658.34	16,333.94	2,676.00	5,348.21	2,680.46
October	2,81,273.76	3,210.06	12,052.81	2,694.73	6,280.86	1,264.93
November	3,52,322.10	2,854.11	20,603.48	3,193.06	11,987.06	883.69
December	6,07,851.56	8,459.43	28,399.05	2,698.80	8,698.45	9,436.27
January	6,95,344.05	5,979.19	28,907.53	3,098.29	12,589.53	5,833.07
February	3,31,881.02	3,012.96	39,519.13	5,003.80	8,568.70	6,254.99
Week Ended						
March 6, 2009	89,306.35	3,832.78	9,087.21	1,824.24	1,996.00	10,426.22
March 13, 2009	49,332.25	3,223.24	5,877.71	855.08	1,743.08	12,800.62
March 20, 2009	82,842.52	5,493.58	8,133.60	1,572.22	3,359.22	11,780.14
March 27, 2009	52,077.74	12,393.36	5,901.74	647.50	2,683.60	19,271.78

@ : Based on SGL outright transactions in government securities in secondary market at Mumbai. It excludes repo transactions.

\+ : Turnover upto the last Friday of the month over the last Friday of preceding month.

* : RBI's Sales and Purchases include transactions in other offices also. It excludes transactions relating to the Government of India and the Welfare Commissioner, Bhopal.

No. 25: Repo / Reverse Repo Auctions under Liquidity Adjustment Facility

(Amount in Rs. crore)

LAF Date	Repo/ Reverse Repo Period (Day(s))	REPO (INJECTION)					REVERSE REPO (ABSORPTION)					Net Injection (+)/ Absorption (–) of liquidity [(6) – (11)]	Outstanding Amount @
		Bids Received		Bids Accepted		Cut-off Rate (%)	Bids Received		Bids Accepted		Cut-off Rate (%)		
		Number	Amount	Number	Amount		Number	Amount	Number	Amount			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
March 2, 2009	1	–	–	–	–	–	13	21,690	13	21,690	4.00	-21,690	
#	14	–	–	–	–	–	–	–	–	–	–	–	
$	1	–	–	–	–	–	18	20,810	18	20,810	4.00	-20,810	40,970
March 3, 2009	1	–	–	–	–	–	14	25,375	14	25,375	4.00	-25,375	
#	14	–	–	–	–	–	–	–	–	–	–	–	
$	1	–	–	–	–	–	24	35,520	24	35,520	4.00	-35,520	59,365
March 4, 2009	1	–	–	–	–	–	14	27,155	14	27,155	4.00	-27,155	
#	14	–	–	–	–	–	–	–	–	–	–	–	
$	1	–	–	–	–	–	25	40,750	25	40,750	4.00	-40,750	66,375
March 5, 2009	1	–	–	–	–	–	13	30,100	13	30,100	3.50	-30,100	
#	14	–	–	–	–	–	–	–	–	–	–	–	
$	1	–	–	–	–	–	25	37,725	25	37,725	3.50	-37,725	66,795
March 6, 2009	3	–	–	–	–	–	16	31,530	16	31,530	3.50	-31,530	
#	14	–	–	–	–	–	–	–	–	–	–	–	
$	3	–	–	–	–	–	25	35,250	25	35,250	3.50	-35,250	65,750
March 9, 2009	3	–	–	–	–	–	11	19,240	11	19,240	3.50	-19,240	
#	14	2	170	2	170	5.00	–	–	–	–	–	170	
$	3	–	–	–	–	–	32	23,460	32	23,460	3.50	-23,460	41,500
March 12, 2009	1	–	–	–	–	–	13	21,925	13	21,925	3.50	-21,925	
#	14	1	1,500	1	1,500	5.00	–	–	–	–	–	1,500	
$	1	1	950	1	950	5.00	29	30,570	29	30,570	3.50	-29,620	48,845
March 13, 2009	3	1	225	1	225	5.00	7	17,950	7	17,950	3.50	-17,725	
#	17	1	100	1	100	5.00	–	–	–	–	–	100	
$	3	1	75	1	75	5.00	28	32,515	28	32,515	3.50	-32,440	47,365
March 16, 2009	1	–	–	–	–	–	1	5,000	1	5,000	3.50	-5,000	
#	14	–	–	–	–	–	–	–	–	–	–	–	
$	1	–	–	–	–	–	8	17,755	8	17,755	3.50	-17,755	19,955
March 17, 2009	1	–	–	–	–	–	–	–	–	–	–	–	
#	14	1	30	1	30	5.00	–	–	–	–	–	30	
$	1	–	–	–	–	–	9	16,015	9	16,015	3.50	-16,015	13,185
March 18, 2009	1	–	–	–	–	–	–	–	–	–	–	–	
#	15	2	610	2	610	5.00	–	–	–	–	–	610	
$	1	–	–	–	–	–	4	20,190	4	20,190	3.50	-20,190	16,750
March 19, 2009	1	–	–	–	–	–	–	–	–	–	–	–	
#	14	–	–	–	–	–	–	–	–	–	–	–	
$	1	–	–	–	–	–	8	21,195	8	21,195	3.50	-21,195	17,755
March 20, 2009	3	–	–	–	–	–	–	–	–	–	–	–	
#	17	2	140	2	140	5.00	–	–	–	–	–	140	
$	3	–	–	–	–	–	5	11,065	5	11,065	3.50	-11,065	7,485
March 23, 2009	1	–	–	–	–	–	2	10,000	2	10,000	3.50	-10,000	
#	14	–	–	–	–	–	–	–	–	–	–	–	
$	1	–	–	–	–	–	23	21,840	23	21,840	3.50	-21,840	28,430
March 24, 2009	1	–	–	–	–	–	3	10,350	3	10,350	3.50	-10,350	
#	15	–	–	–	–	–	–	–	–	–	–	–	
$	1	–	–	–	–	–	14	16,095	14	16,095	3.50	-16,095	23,035
March 25, 2009	1	–	–	–	–	–	5	11,300	5	11,300	3.50	-11,300	
#	14	–	–	–	–	–	–	–	–	–	–	–	
$	1	–	–	–	–	–	25	33,135	25	33,135	3.50	-33,135	41,025
March 26, 2009	4	1	1,700	1	1,700	5.00	3	1,530	3	1,530	3.50	170	
#	14	5	4,000	5	4,000	5.00	–	–	–	–	–	4,000	
$	4	4	900	4	900	5.00	17	12,220	17	12,220	3.50	-11,320	5,240
March 30, 2009	1	1	1,200	1	1,200	5.00	3	5,700	3	5,700	3.50	-4,500	
#	14	–	–	–	–	–	–	–	–	–	–	–	
$	1	2	1,025	2	1,025	5.00	23	25,455	23	25,455	3.50	-24,430	23,120
March 31, 2009	2	4	3,175	4	3,175	5.00	1	1,000	1	1,000	3.50	2,175	
#	15	–	–	–	–	–	–	–	–	–	–	–	
$	2	11	6,405	11	6,405	5.00	15	15,845	15	15,845	3.50	-9,440	1,485

$: Second LAF
@ : Net of Repo.
# : Special Fixed Rate Repo under LAF.
'–' No bid was received in the auction.

No. 26: Open Market Operations of Reserve Bank of India*

(Rs. crore)

Month End		Government of India Dated Securities - Face Value			Treasury Bills		
		Purchase	Sale	Net Purchases (+) / Net Sales (–)	Purchase	Sale	Net Purchases (+) / Net Sales (–)
1		2	3	4	5	6	7
2006-07							
April	2006	405.00	516.80	-111.80	–	–	–
May	2006	85.00	1,386.74	-1,301.74	–	–	–
June	2006	55.00	809.88	-754.88	–	–	–
July	2006	25.00	374.36	-349.36	–	–	–
August	2006	80.00	127.64	-47.64	–	–	–
September	2006	40.00	237.24	-197.24	–	–	–
October	2006	–	191.10	-191.10	–	–	–
November	2006	10.00	140.20	-130.20	–	–	–
December	2006	15.00	36.41	-21.41	–	–	–
January	2007	–	571.36	-571.36	–	–	–
February	2007	–	118.09	-118.09	–	–	–
March	2007	5.00	1,335.56	-1,330.56	–	–	–

Year / Month	Government of India Dated Securities - Face Value					Treasury bills				
	Purchase		Sale		Net purchase (+)/net sale (-)	Purchase		Sale		Net purchase (+)/net sale (-)
	Market	State Government	Market	State Government		Market	State Government	Market	State Government	
1	2	3	4	5	6	7	8	9	10	11
2007- 08										
April	10.00	–	–	332.24	-322.24	–	–	–	–	–
May	–	–	–	742.80	-742.80	–	–	–	–	–
June	–	–	–	254.86	-254.86	–	–	–	–	–
July	25.00	–	–	656.74	-631.74	–	–	–	–	–
August	–	–	–	456.28	-456.28	–	–	–	–	–
September	15.00	–	–	413.35	-398.35	–	–	–	–	–
October	–	–	–	539.93	-539.93	–	–	–	–	–
November	–	–	–	184.51	-184.51	–	–	–	–	–
December	5,485.00	–	–	167.44	5,317.56	–	–	–	–	–
January	2,535.00	–	–	2,577.82	-42.82	–	–	–	–	–
February	2,660.00	–	–	290.27	2,369.73	–	–	–	–	–
March	2,780.00	–	–	970.93	1,809.07	–	–	–	–	–
2008-09										
April	745.58	–	–	861.19	-115.61	–	–	–	–	–
May	127.50	–	–	216.63	-89.13	–	–	–	–	–
June	15,238.80	–	–	310.18	14,928.62	–	–	–	–	–
July	5,218.50	–	–	701.20	4,517.30	–	–	–	–	–
August	4,338.00	–	–	4,446.59	-108.59	–	–	–	–	–
September	922.17	–	–	930.92	-8.75	–	–	–	–	–
October	627.75	–	–	530.30	97.46	–	–	–	–	–
November	757.20	–	–	127.51	629.69	–	–	–	–	–
December	11,901.38	–	–	295.74	11,605.64	–	–	–	–	–
January	2,568.00	–	–	504.21	2,063.79	–	–	–	–	–
February	6,027.80	–	–	236.59	5,791.22	–	–	–	–	–
March	56,007.66 +	–	–	770.98	55,236.68	–	–	–	–	–

* : Excluding transactions of RBI with the Government of India and the Welfare Commissioner, Bhopal.

\+ : Includes purchase of Oil Marketing Companies Government of India Special Bonds (Oil Bonds) of Rs.9,110 crore (face value) under Special Market Operations (SMOs).

No. 27 A: Secondary Market Outright Transactions in Government Dated Securities (Face Value)

(Amount in Rs. crore)

Week ended	Government of India Dated Securities – Maturing in the year										State Govt. Securities
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-17	2017-18	2018-19	Beyond 2019	
1	2	3	4	5	6	7	8	9	10	11	12
I March 6, 2009											
a. Amount	40.00	1,448.25	1,170.87	1,275.40	2,278.30	505.50	2,724.26	9,236.48	18,964.85	7,009.27	1,916.39
b. YTM *											
Min.	4.2847	4.5586	4.6768	5.0000	5.4762	5.8593	5.7183	6.4895	5.9748	6.9286	7.3604
Max.	4.7323	5.2948	5.0703	5.2314	6.6758	6.2103	6.8648	6.9714	7.8018	8.2186	7.9696
II. March 13, 2009											
a. Amount	–	930.41	816.47	310.00	752.00	1,311.00	1,056.39	1,159.19	8,900.99	9,429.69	1,611.62
b. YTM *											
Min.	–	4.5984	4.9000	5.1000	5.7000	6.0819	6.2247	6.7913	6.0422	6.9207	7.6007
Max.	–	5.3091	6.1253	6.0020	6.4000	6.5988	7.5011	7.5402	7.1707	8.4907	8.5298
III. March 20, 2009											
a. Amount	729.00	4,904.63	640.27	1,804.77	1,049.40	2,232.62	5,341.29	4,569.82	10,203.21	9,946.25	2,746.79
b. YTM *											
Min.	4.3823	4.5749	4.7438	5.2500	5.8976	6.2282	6.0707	6.3672	6.1857	7.3696	7.7456
Max.	5.0541	6.0997	6.0681	7.0094	6.5004	6.7426	7.5499	7.8529	8.6923	8.6293	8.5899
IV. March 27, 2009											
a. Amount	–	2,326.79	535.80	265.01	682.10	2,107.28	4,054.18	1,615.40	9,206.39	5,245.93	6,196.68
b. YTM *											
Min.	–	4.5906	5.0726	5.9000	6.2118	5.8808	6.4385	6.8004	6.1982	6.7003	7.7450
Max.	–	6.5460	5.9244	7.0000	6.5000	7.1000	7.5500	7.0999	7.3317	8.1870	8.3513

* : Minimum and maximum YTMs (% PA) indicative have been given excluding transactions of non-standard lot size (less than Rs.5 crore).

No. 27 B: Secondary Market Outright Transactions in Treasury Bills

(Amount in Rs. crore, YTM in per cent per annum)

Week ended	Treasury Bills Residual Maturity in Days			
	up to 14 days	15 - 91 days	92 - 182 days	183 - 364 days
1	2	3	4	5
I. March 6, 2009				
a. Amount	996.33	4,136.61	322.79	998.00
b. YTM *				
Min.	3.5000	4.0998	4.3000	4.2500
Max.	4.5089	4.6663	4.6162	4.5500
II. March 13, 2009				
a. Amount	350.40	3,107.53	85.00	695.00
b. YTM *				
Min.	3.6000	4.1503	4.3000	4.3962
Max.	4.0997	4.6000	4.3500	4.9000
III. March 20, 2009				
a. Amount	96.00	4,136.80	1,375.11	924.61
b. YTM *				
Min.	4.0000	4.2999	4.4001	4.7000
Max.	5.0012	4.9503	5.2937	5.0106
IV. March 27, 2009				
a. Amount	97.96	3,106.06	200.90	1,211.50
b. YTM *				
Min.	5.2590	4.4001	4.7999	4.7000
Max.	5.2590	5.2007	4.9526	5.3035

* : Minimum and maximum YTMs (% PA) indicative have been given excluding transactions of non-standard lot size (less than Rs.5 crore).

No. 27 C: Month-end Yield to Maturity of SGL Transactions in Central Government Dated Securities for Various Residual Maturities

(Per cent)

Term to Maturity (in years)	2008									2009		
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2	3	4	5	6	7	8	9	10	11	12	13
1	7.7279	7.8502	9.1340	9.4748	9.0966	8.7855	7.3525	6.6751	5.0196	4.7313	4.8830	5.1071
2	7.8050	7.9675	9.3297	9.3916	9.0076	8.7130	7.3839	6.8129	5.0690	4.9309	5.0359	5.5078
3	7.8901	7.9923	9.2864	9.3656	8.9396	8.6613	7.4717	6.8821	5.1735	5.4289	5.5459	6.0823
4	7.9165	8.0172	9.2257	9.4132	8.8716	8.6096	7.4991	6.9298	5.2876	5.7794	5.7366	6.4506
5	7.9151	8.0421	9.1651	9.4609	8.8036	8.5783	7.5285	6.9775	5.3499	5.9753	5.8351	6.6508
6	7.9217	8.0743	9.1045	9.5085	8.8432	8.6979	7.5343	7.0371	5.3238	6.0544	6.0582	6.7343
7	7.9326	8.1091	9.0439	9.5562	8.8840	8.6850	7.5962	7.2363	5.4210	6.3367	6.5500	6.9420
8	7.9595	8.1430	8.9727	9.5819	8.9212	8.6722	7.6254	7.3178	5.5435	6.3718	6.6358	7.1882
9	7.9691	8.1348	8.8334	9.3691	8.8074	8.6593	7.5558	7.2131	5.3842	6.2495	6.4542	7.1149
10	8.0181	8.1069	8.6518	9.3500	8.7121	8.7184	7.4808	7.1197	5.3028	6.0041	6.5711	7.0414
11	8.0914	8.2966	8.7884	9.3822	8.8126	8.8703	7.5441	7.1987	5.3868	6.2591	6.7800	7.2481
12	8.1647	8.3057	8.9250	9.4143	8.9132	9.0223	7.6074	7.2777	5.4708	6.5171	6.9889	7.4548
13	8.2380	8.3148	9.0559	9.4465	9.0137	9.1253	7.7548	7.5245	5.7983	6.7750	7.1978	7.6518
14	8.2975	8.3240	9.1168	9.4787	9.1142	9.1360	7.8462	7.6298	6.0418	6.7933	7.2728	7.6873
15	8.3047	8.3331	9.1776	9.5109	9.2147	9.1466	7.8706	7.6530	6.1420	6.8161	7.3114	7.7006
16	8.3119	8.3422	9.2384	9.5430	9.3153	9.1573	7.8950	7.6761	6.2423	6.8631	7.3500	7.7138
17	8.3191	8.3514	9.2992	9.5752	9.4158	9.1680	7.9194	7.6993	6.3426	6.9102	7.3886	7.7270
18	8.3263	8.3605	9.3601	9.6074	9.5163	9.1787	7.9438	7.7225	6.4428	6.9572	7.4272	7.7403
19	8.3334	8.3696	9.4027	9.6395	9.5659	9.1894	7.9571	7.7214	6.4318	7.0042	7.4658	7.7535
20	8.3406	8.3788	9.4140	9.6717	9.5720	9.2001	7.9659	7.7136	6.4053	7.0512	7.5044	7.7667
21	8.3478	8.3879	9.4252	9.7039	9.5780	9.2108	7.9747	7.7059	6.3788	7.0982	7.5430	7.7800
22	8.3550	8.3970	9.4365	9.7361	9.5841	9.2215	7.9834	7.6982	6.3522	7.1453	7.5815	7.7932
23	8.3622	8.4062	9.4477	9.7682	9.5901	9.2322	7.9922	7.6904	6.3257	7.1923	7.6201	7.8065
24	8.3694	8.4153	9.4590	9.8004	9.5961	9.2429	8.0002	7.6896	6.3287	7.2270	7.6459	7.8008
25	8.3766	8.4244	9.4702	–	–	–	8.0048	7.7097	6.3887	7.2448	7.6588	7.7822
26	8.3838	8.4336	–	–	–	–	8.0094	7.7296	6.4570	7.2546	7.6651	7.7780
27	8.3910	8.4427	–	–	–	–	8.0139	7.7624	6.4797	7.2554	7.6661	7.7840
28	8.3982	8.4518	–	–	–	–	8.0185	7.8415	6.3722	7.2208	7.6444	7.7915
29	8.4053	8.4610	–	–	–	–	–	–	–	7.1673	7.6140	7.7990
30	–	–	–	–	–	–	–	–	–	7.1138	7.5836	7.8065

No. 28: Redemption Yield on Government of India Securities Based on SGL Transactions*

(Per cent per annum)

Sr. No.	Nomenclature of the loan	2006-07	2007-08	2008-09	2008			2009		
					Feb.	Mar.	Dec.	Jan.	Feb.	Mar.
1	2	3	4	5	6	7	8	9	10	11
	Terminable under 5 years									
1	5.48% 2009	6.88	7.63	7.29	7.41	7.48	5.82	4.73	4.80	5.09
2	6.65% 2009	7.51	7.66	6.62	7.46	7.50	5.67	4.66	4.68	4.80
3	6.99% 2009	- -	- -	- -	- -	- -	- -	- -	- -	- -
4	7.00% 2009	7.50	8.09	7.75	8.00	8.62	- -	4.91	5.37	7.02
5	11.50% 2009	7.52	7.95	7.31	8.67	- -	6.15	7.14	- -	- -
6	11.99% 2009	7.25	7.65	7.40	7.70	7.51	5.57	4.63	4.85	5.83
7	5.87% 2010	- -	7.63	7.48	7.43	7.51	5.74	4.63	4.67	5.15
8	6.00% 2010	- -	- -	- -	- -	- -	- -	- -	- -	- -
9	6.20% 2010	- -	- -	- -	- -	- -	- -	- -	- -	- -
10	7.50% 2010	7.77	7.35	7.61	7.43	7.73	6.78	4.88	6.50	5.52
11	7.55% 2010	7.42	7.69	6.60	7.42	7.51	6.20	4.61	4.78	5.33
12	8.75% 2010	7.98	- -	7.52	- -	- -	- -	6.41	- -	6.65
13	11.30% 2010	7.39	7.70	7.65	7.49	7.54	6.04	4.84	4.75	5.06
14	11.50% 2010	7.43	7.70	6.32	7.62	7.58	6.26	4.71	5.37	- -
15	12.25% 2010	7.45	7.55	6.90	7.51	7.48	6.28	4.93	4.70	4.87
16	12.29% 2010	7.50	7.78	7.29	7.55	7.55	- -	- -	5.02	6.05
17	5.03% 2011	- -	- -	- -	- -	- -	- -	- -	- -	- -
18	6.57% 2011	- -	7.37	7.28	7.45	- -	6.01	4.71	4.90	5.41
19	8.00% 2011	7.86	7.93	7.11	- -	- -	5.53	5.27	6.62	7.00
20	9.39% 2011	7.52	7.78	7.11	7.60	7.53	6.28	5.11	5.14	5.38
21	10.95% 2011	7.33	7.94	6.86	7.68	- -	6.41	- -	- -	6.02
22	11.50% 2011	7.43	7.82	6.37	- -	7.71	5.67	4.84	5.81	6.74
23	12.00% 2011	7.97	7.95	6.92	- -	7.71	6.93	5.32	5.70	- -
24	12.32% 2011	7.59	7.85	7.09	7.61	- -	- -	5.15	5.12	5.94
25	6.72% 2012	6.93	7.87	7.75	8.52	- -	- -	- -	- -	- -
26	6.85% 2012	7.58	7.80	6.32	7.56	7.59	6.80	5.67	5.65	6.17
27	7.40% 2012	7.55	7.83	7.35	7.44	7.74	6.34	5.69	5.67	6.06
28	9.40% 2012	7.60	7.87	7.10	7.55	7.72	6.78	5.61	5.58	6.45
29	10.25 %2012	7.88	8.08	8.36	- -	7.60	- -	9.24	6.78	7.36
30	11.03 %2012	7.81	8.10	6.62	7.66	7.95	6.75	6.04	5.68	5.97
31	7.27% 2013	7.58	7.66	7.21	7.48	7.53	6.21	5.69	5.87	6.44
32	9.00 %2013	7.86	8.25	7.61	- -	- -	6.93	5.89	6.27	6.80
33	9.81% 2013	7.85	8.11	6.92	- -	- -	6.71	5.92	- -	- -
34	12.40 %2013	7.93	7.99	7.90	7.61	7.70	6.34	6.07	6.66	6.80
	Between 5 to 10 years									
35	6.72% 2014	8.05	7.89	6.63	- -	- -	- -	- -	- -	6.63
36	7.37% 2014	7.74	7.86	7.40	7.52	7.60	6.35	5.97	6.19	6.57
37	7.56% 2014	- -	- -	6.27	- -	- -	6.18	5.73	5.93	6.38
38	10.00 %2014	7.71	8.09	7.96	7.52	7.37	6.86	- -	- -	6.88
39	10.50 %2014	7.83	7.85	7.86	7.67	7.50	6.50	5.50	6.11	6.75
40	11.83 %2014	7.84	7.94	7.85	7.59	7.73	6.71	6.44	6.25	6.58
41	7.38 %2015	7.70	7.95	7.66	7.48	7.61	6.37	5.96	6.47	6.65
42	9.85% 2015	7.76	8.01	7.69	- -	7.40	6.85	- -	- -	6.95
43	10.47 %2015	7.59	8.06	7.49	- -	- -	6.74	6.51	7.16	7.00
44	10.79 %2015	7.65	8.02	8.37	- -	- -	- -	6.38	6.45	6.25
45	11.43 %2015	7.92	8.06	6.96	- -	- -	5.95	- -	6.45	6.85
46	11.50 %2015	7.91	8.12	7.46	7.80	7.72	6.56	6.53	6.41	6.61
47	5.59% 2016	7.66	8.18	7.13	- -	- -	6.13	5.92	- -	7.10
48	7.59% 2016	7.79	7.91	7.33	7.59	7.69	6.42	6.19	6.52	6.92

No. 28: Redemption Yield on Government of India Securities Based on SGL Transactions* *(Concld.)*

(Per cent per annum)

Sr. No.	Nomenclature of the loan	2006-07	2007-08	2008-09	2008			2009		
					Feb.	Mar.	Dec.	Jan.	Feb.	Mar.
1	2	3	4	5	6	7	8	9	10	11
49	10.71% 2016	7.95	7.89	6.44	7.43	- -	- -	6.44	- -	- -
50	12.30% 2016	8.21	8.41	8.04	8.20	8.05	6.99	6.46	6.59	6.93
51	7.46% 2017	7.81	7.88	7.00	7.54	7.58	6.53	6.13	6.61	6.91
52	7.49% 2017	7.82	7.87	7.57	7.53	7.61	6.51	6.18	6.71	6.99
53	7.99% 2017	- -	7.85	7.84	7.53	7.65	6.54	6.46	6.67	7.10
54	8.07% 2017	7.80	7.93	7.29	7.51	7.75	6.52	6.13	6.58	7.00
55	5.69% 2018	7.95	7.99	7.54	7.69	7.74	6.49	6.05	6.25	6.62
56	6.25% 2018	7.91	8.03	7.15	7.68	7.77	6.55	6.03	6.49	6.88
57	8.24% 2018	- -	- -	7.60	- -	- -	6.16	5.71	6.36	6.69
58	10.45% 2018	8.05	8.19	7.00	- -	- -	6.25	- -	- -	6.85
59	12.60% 2018	7.91	- -	7.74	- -	- -	7.16	- -	- -	7.30
	Between 10 to 15 years									
60	5.64% 2019	8.12	8.07	7.66	7.59	7.87	6.65	6.04	6.43	6.89
61	6.05% 2019	7.91	8.11	7.06	7.62	7.89	6.58	6.09	6.02	6.48
62	10.03% 2019	7.83	8.22	6.90	- -	- -	6.51	6.32	6.37	6.89
63	6.35% 2020	7.95	8.12	7.19	7.97	7.87	6.40	6.23	6.57	6.82
64	10.70% 2020	8.00	8.48	7.54	- -	- -	7.25	6.98	6.70	7.44
65	11.60%2020	7.73	8.00	7.91	7.62	- -	- -	6.61	- -	7.11
66	7.94% 2021	8.07	8.11	7.52	7.57	7.74	6.31	5.94	7.19	7.81
67	10.25% 2021	8.07	8.11	7.81	7.92	7.89	6.61	6.48	6.78	7.44
68	5.87% 2022	8.02	6.87	7.48	- -	- -	6.50	6.53	- -	- -
69	8.08% 2022	- -	7.90	- -	- -	7.90	- -	- -	- -	- -
70	8.13% 2022	- -	7.90	- -	- -	7.90	- -	- -	- -	- -
71	8.20% 2022	- -	7.95	7.84	7.71	7.90	6.76	6.56	6.97	7.39
72	8.35% 2022	8.02	7.99	7.90	7.72	7.86	6.72	6.53	7.12	7.47
73	6.17% 2023	8.01	8.18	7.44	7.94	7.91	6.70	6.28	6.88	7.38
74	6.30% 2023	8.01	8.08	6.85	8.15	7.92	6.72	6.48	6.95	7.09
	Over 15 years									
75	10.18% 2026	7.86	8.26	8.00	8.48	8.05	8.28	7.18	- -	7.88
76	8.24% 2027	8.19	8.06	8.32	- -	- -	7.07	6.83	7.26	7.74
77	8.26% 2027	- -	8.21	8.34	- -	8.21	7.64	6.96	- -	- -
78	6.01% 2028	8.02	8.28	7.82	7.90	8.03	7.09	6.54	6.97	7.48
79	6.13% 2028	8.02	8.31	7.58	7.92	8.01	6.97	6.63	7.11	7.51
80	7.95% 2032	8.07	8.19	8.19	7.84	8.02	6.98	6.82	7.45	7.62
81	8.28% 2032	- -	- -	8.27	- -	- -	7.03	7.01	7.40	7.67
82	8.32% 2032	- -	7.94	- -	7.94	- -	- -	- -	- -	- -
83	8.33% 2032	- -	- -	82.61	- -	- -	- -	- -	- -	- -
84	7.5% 2034	8.19	8.38	7.64	8.11	8.06	6.99	6.97	7.47	7.71
85	7.40% 2035	8.14	8.27	7.53	7.90	8.07	7.09	6.95	7.30	7.50
86	8.33% 2036	8.13	8.28	8.05	7.85	8.14	7.01	6.92	7.50	7.74
87	6.83% 2039	- -	- -	7.39	- -	- -	- -	6.93	7.30	7.69

* : Monthly redemption yield is computed from April 2000 as the mean of the daily weighted average yields of the transactions in each traded security. The weight is calculated as the share of the transaction in a given security in the aggregated value of transactions in the said security. Prior to April 2000, the redemption yield was not weighted and was computed as an average of daily prices of each security.

@ : GOI Securities issued with call and put options exercisable on or after 5 years from the date of issue.

.. : Indicates that the relevant security was not available for trading.

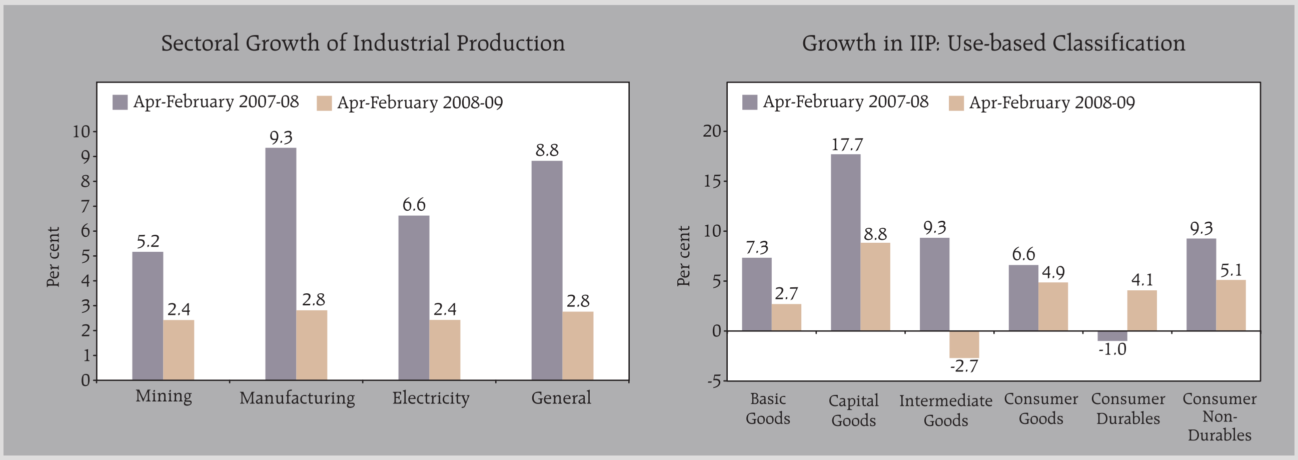
.. : Indicates that trading in the relevant security was nil/negligible during the month.

Production

No. 29: Group-wise Index Number of Industrial Production (Base: 1993-94=100)

Sr. No.	Industry	Weight	Annual			Cumulative		Monthly	
			2005-06	2006-07	2007-08 (P)	April - February		February	
						2007-08	2008-09 P	2008	2009 P
1	2	3	4	5	6	7	8	9	10
	General Index	**100.00**	221.5	247.1	268.0	264.7	272.0	276.2	272.8
I.	**Sectoral Classification**								
1	Mining and Quarrying	**10.47**	154.9	163.2	171.6	168.5	172.5	183.6	180.6
2	Manufacturing	**79.36**	234.2	263.5	287.2	283.5	291.5	296.8	292.7
3	Electricity	**10.17**	190.9	204.7	217.7	216.9	222.1	211.3	212.7
II.	**Use-Based Classification**								
1	Basic Goods	**35.57**	189.8	209.3	223.9	221.8	227.7	226.4	225.5
2	Capital Goods	**9.26**	265.8	314.2	370.8	355.2	386.5	356.8	393.8
3	Intermediate Goods	**26.51**	216.4	242.4	264.1	262.7	255.6	259.4	245.4
4	Consumer Goods	**28.66**	251.4	276.8	293.6	290.8	305.0	327.6	317.8
4(a)	Consumer Durables	**5.36**	349.9	382.0	378.0	375.2	390.5	389.6	411.8
4(b)	Consumer Non-Durables	**23.30**	228.8	252.6	274.2	271.4	285.3	313.3	296.2

Source : Central Statistical Organisation, Government of India.

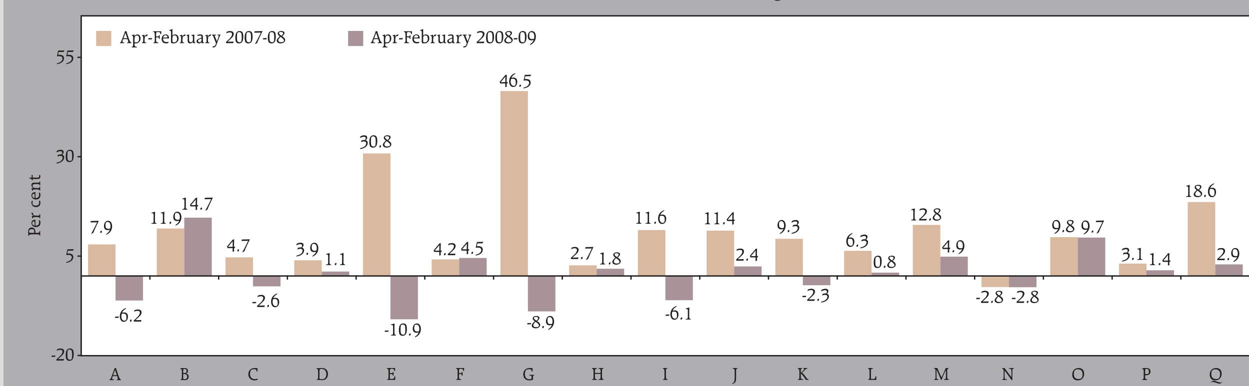


No. 30: IIP – Seventeen Major Industry Groups of Manufacturing Sector
(Base : 1993-94 = 100)

Industry Group	Industry	Weight	Annual 2005-06	Annual 2006-07	Annual 2007-08 (P)	Cumulative April-February 2007-08	Cumulative April-February 2008-09 P	Monthly February 2008	Monthly February 2009 P
1	2	3	4	5	6	7	8	9	10
	Manufacturing Index	**79.36**	**234.2**	**263.5**	**287.2**	**283.5**	**291.5**	**296.8**	**292.7**
20-21	Food Products	9.08	170.6	185.2	198.2	191.1	179.3	310.0	223.0
22	Beverages, Tobacco and Related Products	2.38	400.3	444.5	498.0	496.3	569.1	499.7	531.4
23	Cotton Textiles	5.52	137.0	157.3	164.0	163.9	159.7	161.6	142.1
24	Wool, Silk and Man-made Fibre Textiles	2.26	248.9	268.4	281.2	277.3	280.4	280.5	286.5
25	Jute and Other Vegetable Fibre Textiles (Except Cotton)	0.59	107.7	90.7	120.7	120.5	107.4	123.4	114.4
26	Textile Products (Including Wearing Apparel)	2.54	255.5	285.0	295.5	294.7	308.0	292.3	285.6
27	Wood and Wood Products, Furniture and Fixtures	2.70	70.5	91.0	127.9	126.2	115.0	122.8	102.5
28	Paper and Paper Products and Printing, Publishing and Allied Industries	2.65	228.6	248.6	255.3	254.3	258.9	244.4	238.6
29	Leather and Leather & Fur Products	1.14	149.3	150.2	167.8	168.2	158.0	161.5	137.6
30	Chemicals and Chemical Products (Except Products of Petroleum and Coal)	14.00	258.5	283.4	313.4	314.0	321.6	304.3	311.0
31	Rubber, Plastic, Petroleum and Coal Products	5.73	200.5	226.3	246.4	245.0	239.3	245.7	250.2
32	Non-metallic Mineral Products	4.40	271.1	305.8	323.2	320.4	323.1	315.7	323.2
33	Basic Metal and Alloy Industries	7.45	227.0	278.9	312.7	308.9	324.0	315.5	318.3
34	Metal Products and Parts, Except Machinery and Equipment	2.81	164.4	183.2	172.9	170.5	165.7	205.8	141.3
35-36	Machinery and Equipment Other Than Transport Equipment	9.57	312.8	357.1	394.4	382.1	419.0	385.5	445.8
37	Transport Equipment and Parts	3.98	319.7	367.7	378.4	373.4	378.7	390.3	373.1
38	Other Manufacturing Industries	2.56	276.9	298.4	357.4	348.3	358.5	318.8	358.9

Source : Central Statistical Organisation, Government of India.

Growth Performance of Manufacturing Industries



A Food products
B Beverages, tobacco and related products
C Cotton textiles
D Wool,silk and man-made fibre textiles
E Jute and other vegetable fibre textiles (except Cotton)
F Textile products (including wearing apparel)
G Wood and wood products, furniture & fixtures
H Paper and paper products and printing publishing and allied industries
I Leather and leather & fur products
J Basic Chemicals and chemical products (except products of petroleum & coal)
K Rubber, plastic, petroleum and coal products
L Non-metallic mineral products
M Basic metal and alloy industries
N Metal products and parts (except machinery and equipment)
O Machinery and equipment other than Transport equipment
P Transport equipment and parts
Q Other manufacturing industries

Capital Market

No. 31: New Capital Issues By Non-Government Public Limited Companies

(Amount in Rs. crore)

Security & Type of Issue	2006-07 (April-March)		2007-08 (April-March)		2007-08 (April-February)		2008-09 (April-February)	
	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount
1	2	3	4	5	6	7	8	9
1) Equity Shares (a+b)	114 (109)	29,753.0 (19,732.9)	111 (103)	56,848.3 (54,732.4)	103 (96)	55,116.9 (53,058.7)	41 (35)	14,030.7 (12,846.8)
a) Prospectus	81 (81)	27,172.0 (17,639.6)	85 (83)	47,477.5 (46,138.8)	81 (79)	47,001.7 (45,695.8)	21 (20)	2,033.4 (1,791.4)
b) Rights	33 (28)	2,581.0 (2,093.3)	26 (20)	9,370.8 (8,593.6)	22 (17)	8,115.2 (7,362.9)	20 (15)	11,997.3 (11,055.5)
2) Preference Shares (a+b)	–	–	1	5,480.8	1	5,480.8	–	–
a) Prospectus	–	–	–	–	–	–	–	–
b) Rights	–	–	1	5,480.8	1	5,480.8	–	–
3) Debentures (a+b)	3	850.0	2	808.8	–	–	–	–
a) Prospectus	–	–	–	–	–	–	–	–
b) Rights	3	850.0	2	808.8	–	–	–	–
of which:								
I) Convertible (a+b)	–	–	1	205.9	–	–	–	–
a) Prospectus	–	–	–	–	–	–	–	–
b) Rights	–	–	1	205.9	–	–	–	–
II) Non-Convertible (a+b)	3	850.0	1	602.9	–	–	–	–
a) Prospectus	–	–	–	–	–	–	–	–
b) Rights	3	850.0	1	602.9	–	–	–	–
4) Bonds (a+b)	–	–	1	500.0	1	500.0	–	–
a) Prospectus	–	–	1	500.0	1	500.0	–	–
b) Rights	–	–	–	–	–	–	–	–
5) TOTAL (1+2+3+4)	**117**	**30,606.0**	**115**	**63,637.9**	**105**	**61,097.7**	**41**	**14,030.7**
a) Prospectus	81	27,172.0	86	47,977.5	82	47,501.7	21	2,033.4
b) Rights	36	3,434.0	29	15,660.4	23	13,596.0	20	11,997.3

Note : Figures in brackets indicate data in respect of premium on capital issues which are included in respective totals.
Source : Data are compiled from prospectus/circulars/advertisements issued by companies, replies given by the companies to the Reserve Bank's questionnaire, information received from SEBI, stock exchanges, press reports, *etc.*
Also see 'Notes on Tables'.

No. 32: Index Numbers of Ordinary Share Prices

Year / Month	BSE Sensitive Index (Base : 1978 - 79 = 100)			BSE - 100 (Base : 1983 - 84 = 100)			S & P CNX Nifty * (Base : November 3, 1995 = 1000)		
	Average	High	Low	Average	High	Low	Average	High	Low
1	2	3	4	5	6	7	8	9	10
2005-06	8280.08	11307.04	6134.86	4393.54	5904.17	3310.14	2513.44	3418.95	1902.50
2006-07	12277.33	14652.09	8929.44	6242.73	7413.22	4535.00	3572.44	4224.25	2632.80
2007-08	16568.89	20873.33	12455.37	8691.47	11509.96	6287.69	4896.60	6287.85	3633.60
2008-09	12365.55	17600.12	8160.40	6433.13	9348.64	4160.43	3731.03	5228.20	2524.20
March 2008	15838.38	16677.88	14809.49	8363.58	8907.23	7828.01	4769.50	4953.00	4503.10
April 2008	16290.99	17378.46	15343.12	8627.59	9240.57	8095.02	4901.91	5195.50	4647.00
May 2008	16945.65	17600.12	16275.59	8982.20	9348.64	8621.84	5028.66	5228.20	4835.30
June 2008	14997.28	16063.18	13461.60	7909.28	8488.62	7029.74	4463.79	4739.60	4040.55
July 2008	13716.18	14942.28	12575.80	7143.71	7760.32	6580.67	4124.60	4476.80	3816.70
August 2008	14722.13	15503.92	14048.34	7704.75	8101.48	7362.49	4417.12	4620.40	4214.00
September 2008	13942.81	15049.86	12595.75	7276.35	7860.87	6564.06	4206.69	4504.00	3850.05
October 2008	10549.65	13055.67	8509.56	5432.92	6776.87	4343.21	3210.22	3950.75	2524.20
November 2008	9453.96	10631.12	8451.01	4823.36	5396.09	4332.17	2834.79	3148.25	2553.15
December 2008	9513.58	10099.91	8739.24	4864.55	5181.94	4443.50	2895.80	3077.50	2656.45
January 2009	9350.42	10335.93	8674.35	4802.01	5328.95	4441.84	2854.36	3121.45	2678.55
February 2009	9188.03	9647.47	8822.06	4668.37	4900.74	4484.30	2819.21	2948.35	2733.90
March 2009	8995.45	10048.49	8160.40	4569.09	5091.61	4160.43	2802.27	3108.65	2573.15

* : NSE - 50, *i.e.*, Nifty has been rechristened as 'S & P CNX Nifty', with effect from July 28, 1998.

Sources : 1. Bombay Stock Exchange Ltd.
2. National Stock Exchange of India Ltd.

No. 33: Volume in Corporate Debt Traded at NSE*

(Rs. crore)

Week / Month / Year (April-March)			Volume
1			2
2005 - 06			**10,619.36**
2006 - 07			**6,639.78**
2007 - 08			**8,576.11**
2008 - 09			**11,934.44**
2007 - 2008			
April		2007	5,50.52
May		2007	7,16.98
June		2007	7,69.88
July		2007	13,44.21
August		2007	6,16.47
September		2007	6,06.03
October		2007	6,01.11
November		2007	2,59.64
December		2007	2,77.94
January		2008	19,87.67
February		2008	3,52.68
March		2008	4,92.98
2008 - 2009			
April		2008	4,43.76
May		2008	5,30.84
June		2008	10,53.75
July		2008	12,25.27
August		2008	2,37.06
September		2008	7,56.89
October		2008	3,84.25
November		2008	6,33.13
December		2008	19,01.88
January		2009	12,08.92
February		2009	20,67.15
March		2009	14,91.54
Week ended			
February	6,	2009	2,94.67
February	13,	2009	6,60.02
February	20,	2009	6,49.61
February	27,	2009	4,62.85
March	06,	2009	5,76.02
March	13,	2009	2,79.92
March	20,	2009	3,00.82
March	27,	2009	3,34.78

* : Excluding trade in commercial papers.

Source : National Stock Exchange of India Ltd.

No. 34: Assistance Sanctioned and Disbursed by All - India Financial Institutions

(Rs. crore)

	April-September		April-March	
	2003-04	2004-05	2002-03	2003-04
1	2	3	4	5
Sanctions				
All-India Development Banks	**9,831.9**	**12,860.0**	**22,318.1**	**23,444.3**
1. IDBI	2,860.2	6,314.4	5,898.2	5,630.8
2. IFCI	132.1	—	2,005.8	1,451.9
3. SIDBI	2,607.9	2,991.8	10,903.7	8,223.7
4. IIBI	1,392.8	0.9	1,206.4	2,411.9
5. IDFC	2,838.9	3,552.9	2,304.0	5,726.0
Investment Institutions	13,025.1	7,805.5	5,666.5	29,479.2
6. LIC	12,291.1	7,135.3	4,341.5	27,748.0
7. GIC	324.3	93.0	369.3	674.0
8. National Ins. Co. Ltd.	115.6	87.3	200.0	373.0
9. New India Ass. Co Ltd.	84.1	179.3	138.0	199.1
10. Oriental Ins. Co. Ltd.	93.3	28.2	123.9	134.8
11. United India Ins. Co. Ltd.	116.7	282.4	493.8	350.3
Total	**22,857.0**	**20,665.5**	**27,984.6**	**52,923.5**
Disbursements				
All India Development Banks	5,750.2	5,027.1	17,225.2	14,056.6
1. IDBI	637.2	2,085.1	6,614.9	4,409.1
2. IFCI	176.3	43.8	1,779.9	279.0
3. SIDBI	1,742.2	1,358.3	6,789.5	4,412.7
4. IIBI	1,216.5	7.6	1,091.9	2,251.8
5. IDFC	978.0	1,532.3	949.0	2,704.0
Investment Institutions	4,615.6	5,421.3	7,487.6	17,400.2
6. LIC	3,829.2	4,871.0	6,205.7	15,781.6
7. GIC	328.4	108.0	328.4	657.7
8. National Ins. Co. Ltd.	118.4	17.3	177.6	224.4
9. New India Ass. Co Ltd.	85.6	115.2	78.0	195.6
10. Oriental Ins. Co. Ltd.	135.0	27.4	241.5	187.1
11. United India Ins. Co. Ltd.	119.0	282.4	456.4	353.8
Total	**10,365.8**	**10,448.4**	**24,712.8**	**31,456.8**

Note : Data are provisional. Monthly data are not adjusted for inter-institutional flows.
Source : Industrial Development Bank of India.

Prices

No. 35: Monthly Average price of Gold and Silver in Mumbai

Month / Year		Standard Gold (Rs. per 10 grams)	Silver (Rs. per kilogram)
1		2	3
2000-01		4,474	7,868
2001-02		4,579	7,447
2002-03		5,332	7,991
2003-04		5,719	8,722
2004-05		6,145	10,681
2005-06		6,901	11,829
2006-07		9,240	19,057
2007-08		9,996	19,427
2008-09		12,905	21,272
April	2007	9,321	19,677
May	2007	8,878	18,537
June	2007	8,707	18,287
July	2007	8,741	17,815
August	2007	8,836	17,407
September	2007	9,311	17,651
October	2007	9,691	18,385
November	2007	10,340	19,573
December	2007	10,311	19,056
January	2008	11,291	20,405
February	2008	11,888	21,979
March	2008	12,632	24,357
April	2008	11,810	23,474
May	2008	12,143	23,796
June	2008	12,369	24,213
July	2008	13,055	25,269
August	2008	11,855	22,265
September	2008	12,214	20,191
October	2008	12,766	18,687
November	2008	12,207	17,174
December	2008	12,897	17,327
January	2009	13,508	19,115
February	2009	14,781	21,442
March	2009	15,255	22,311
April	2009	14,501	21,336

Source : Bombay Bullion Association Ltd.

Also see 'Notes on Tables'.

No. 36: Consumer Price Index Numbers for Industrial Workers – All-India and Selected Centres

(Base : 2001 = 100)

Centre	New Linking Factor (1)	1990-91 @	2006-07	2007-08	2008					2009	
					Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.
1	2	3	4	5	6	7	8	9	10	11	12
All India (2)	**4.63**	**193**	**125**	**133**	**145**	**146**	**148**	**148**	**147**	**148**	**148**
Ahmedabad	4.62	196	123	131	142	143	145	144	142	142	141
Alwaye (Ernakulam)	4.52	176	127	133	144	144	145	148	148	150	148
Asansol	4.37	189	128	141	155	155	158	156	156	158	161
Bangalore	4.51	183	128	138	152	156	158	160	158	160	160
Bhavnagar	4.76	198	122	131	138	138	139	137	135	137	137
Bhopal	4.83	196	130	136	150	149	151	150	147	149	148
Chandigarh	5.26	189	127	132	143	145	146	146	145	145	145
Chennai	4.95	189	119	126	138	140	142	144	144	146	144
Coimbatore	4.49	178	121	129	139	140	142	144	143	144	143
Delhi	5.60	201	124	130	139	141	145	144	141	141	140
Faridabad	4.79	187	124	133	150	151	153	153	151	151	151
Guwahati	4.80	195	117	120	132	134	135	136	136	135	135
Howrah	5.42	212	124	132	142	143	146	144	143	144	143
Hyderabad	4.79	182	118	125	138	140	144	145	141	144	145
Jaipur	4.25	190	130	136	147	150	152	152	152	151	150
Jamshedpur	4.23	187	128	134	147	147	148	148	145	147	145
Kolkata	5.12	203	123	134	145	146	148	147	147	147	146
Ludhiana	4.12	193	131	136	149	153	153	154	151	150	151
Madurai	4.51	192	117	123	135	136	140	145	141	141	140
Monghyr-Jamalpur	4.30	189	128	136	151	151	155	154	150	149	149
Mumbai	5.18	201	128	136	146	147	152	151	151	153	152
Mundakayam	4.37	184	126	132	148	149	151	153	154	156	153
Nagpur	4.68	201	134	142	156	158	158	157	155	159	159
Pondicherry	4.88	204	125	133	150	152	153	155	155	156	158
Rourkela	4.03	179	127	140	154	154	155	155	154	156	155
Kanpur	4.50	195	127	133	145	145	146	145	143	145	147
Solapur	4.73	197	127	141	152	152	153	154	152	151	152
Srinagar	5.62	184	120	126	138	139	139	141	140	140	139

@ Base 1982=100.

Note : New series of Consumer Price Index for Industrial Workers with base 2001 = 100 was released in January 2006 by Labour Bureau, Shimla. Linking Factors between old and new series as published by the Labour Bureau are reproduced in column 2.

For (1) and (2) See 'Notes on Tables'.

Source : Labour Bureau, Ministry of Labour, Government of India.

No. 37: Consumer Price Index Numbers for Urban Non-manual Employees – All-India and Selected Centres

(Base : 1984 - 85 = 100)

Centre	1990-91	2006-07	2007-08	2007					2008		
				Mar.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2	3	4	5	6	7	8	9	10	11	12
All India (1)	**161**	**486**	**515**	**498**	**516**	**520**	**519**	**518**	**520**	**523**	**528**
Mumbai	154	478	504	490	502	506	508	510	509	510	513
Delhi	156	499	521	508	522	528	523	523	525	529	532
Kolkata	164	439	476	449	481	486	480	479	479	482	484
Chennai	168	569	605	585	606	607	609	607	610	611	618
Hyderabad	164	526	560	541	558	561	565	564	564	568	574
Bangalore	161	513	546	527	545	544	547	551	559	563	566
Lucknow	158	465	484	471	488	487	482	480	480	486	492
Ahmedabad	153	426	449	435	450	454	453	454	452	453	459
Jaipur	165	477	515	491	517	519	521	519	527	532	545
Patna	167	451	484	466	490	494	495	492	496	496	501
Srinagar	150	475	513	496	511	517	515	513	524	528	538
Thiruvananthapuram	152	507	535	512	528	530	535	542	548	552	555
Cuttack	154	479	507	492	507	511	512	510	510	509	510
Bhopal	166	458	482	461	481	488	490	488	490	493	502
Chandigarh	176	637	665	649	672	672	669	666	668	671	678
Shillong	179	499	565	528	566	571	572	571	580	582	584
Shimla	163	490	511	506	517	519	511	508	507	508	513
Jammu	161	480	511	492	512	514	512	507	515	523	533
Amritsar	152	402	423	412	431	433	425	422	423	427	431
Kozhikode (Calicut)	150	447	465	452	462	464	469	469	473	475	483
Kanpur	165	450	481	462	490	489	483	479	478	483	489
Indore	170	485	507	490	513	515	510	507	510	516	526
Pune	162	509	547	517	546	549	555	555	554	560	563
Jabalpur	164	437	467	452	473	476	473	471	467	471	478
Jodhpur	168	465	487	476	490	492	489	490	489	492	501

Linked All-India Consumer Price Index Number for Urban Non-Manual Employees (UNME)

(Base : 1984 - 85 = 100)

	2008			2009	
	Feb.	Nov.	Dec.	Jan.	Feb.
1	2	3	4	5	6
General Index	523	575	569	574	575

Note : The CPI (UNME) for base 1984-85 = 100 has been discontinued due to outdated base year with effect from April 2008 onwards. Linked all-India CPI (UNME) number are available for meeting the requirement of users.

See 'Notes on Tables'.

Source : Central Statistical Organisation, Government of India.

No. 38: Consumer Price Index Numbers for Agricultural / Rural Labourers

A : Consumer Price Index Numbers for Agricultural Labourers
(Base : July 1986 - June 1987 = 100)

State	1990-91(1)	Linking Factor (2)	2006-07	2007-08	2008					2009	
					Feb.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.
1	2	3	4	5	6	7	8	9	10	11	12
All India	**830**	**5.89**	**388**	**417**	**417**	**455**	**459**	**460**	**459**	**461**	**462**
Andhra Pradesh	657	4.84	401	430	430	478	486	486	484	486	486
Assam	854	(3)	388	417	412	444	449	450	449	450	448
Bihar	858	6.22	384	411	413	443	446	444	440	442	447
Gujarat	742	5.34	403	424	422	450	454	457	454	458	460
Haryana		(5)	403	447	448	489	492	495	494	495	501
Himachal Pradesh		(5)	367	376	370	407	410	411	404	408	405
Jammu & Kashmir	843	5.98	392	413	414	440	444	450	452	455	458
Karnataka	807	5.81	367	406	405	446	454	461	460	465	463
Kerala	939	6.56	374	403	405	442	450	456	459	463	460
Madhya Pradesh	862	6.04	388	412	409	450	451	451	452	455	459
Maharashtra	801	5.85	402	432	431	469	476	474	471	474	474
Manipur		(5)	337	367	366	396	399	404	405	409	411
Meghalaya		(5)	410	439	435	475	476	479	480	483	483
Orissa	830	6.05	365	400	397	435	439	435	433	431	430
Punjab	930	(4)	417	448	445	497	497	500	496	496	499
Rajasthan	885	6.15	413	439	440	477	483	483	482	488	492
Tamil Nadu	784	5.67	371	403	406	446	449	454	458	461	462
Tripura		(5)	383	407	399	425	429	435	434	433	432
Uttar Pradesh	960	6.60	408	433	431	467	465	465	459	463	464
West Bengal	842	5.73	365	395	394	428	432	433	431	429	430

See 'Notes on Tables'.

No. 38: Consumer Price Index Numbers for Agricultural / Rural Labourers

B : Consumer Price Index Numbers for Rural Labourers
(Base : July 1986 - June 1987 = 100)

State	1995-96 (7)	2006-07	2007-08	2008						2009	
				Feb.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.
1	2	3	4	5	6	7	8	9	10	11	12
All India	**240**	**389**	**418**	**417**	**450**	**455**	**459**	**460**	**459**	**461**	**462**
Andhra Pradesh	244	401	429	429	466	475	483	483	482	484	484
Assam	243	390	419	415	445	446	452	453	452	452	450
Bihar	223	384	412	413	440	444	446	444	441	443	447
Gujarat	241	403	425	422	447	450	454	458	455	460	462
Haryana	237	404	445	446	481	487	490	492	491	492	498
Himachal Pradesh	221	377	388	381	412	419	424	424	416	417	416
Jammu & Kashmir	225	393	413	415	431	440	443	448	448	452	454
Karnataka	250	367	407	405	437	446	454	462	460	466	464
Kerala	260	378	404	407	437	444	451	458	461	464	462
Madhya Pradesh	239	392	415	413	449	453	455	455	457	460	464
Maharashtra	247	400	428	427	463	465	471	469	467	469	469
Manipur	245	338	368	367	390	397	400	405	405	409	411
Meghalaya	250	408	436	433	467	472	473	476	477	480	480
Orissa	236	366	400	398	433	435	439	435	433	431	430
Punjab	247	419	449	446	489	495	496	499	496	497	501
Rajasthan	239	412	438	438	470	474	478	478	477	483	487
Tamil Nadu	244	370	402	405	435	444	447	452	456	459	459
Tripura	219	373	399	393	418	420	424	431	430	429	428
Uttar Pradesh	231	409	434	432	465	468	467	466	460	464	464
West Bengal	232	368	398	397	426	431	435	436	434	432	434

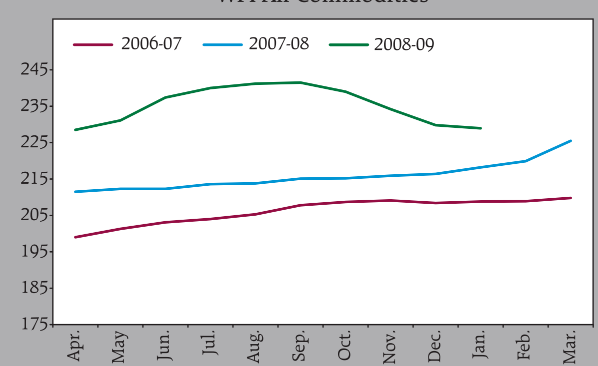
Source: Labour Bureau, Ministry of Labour, Government of India.

No. 39: Index Numbers of Wholesale Prices in India – by Groups and Sub-Groups (Averages)

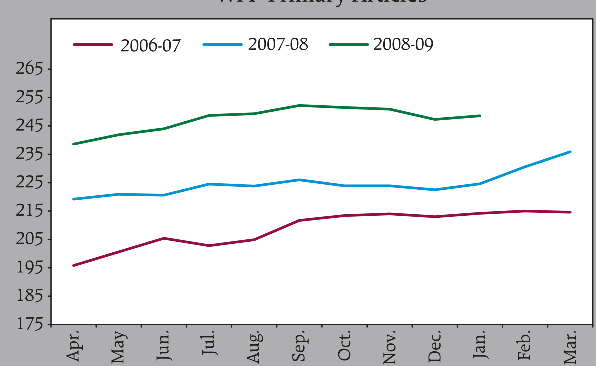
(Base : 1993-94 = 100)

Average of months/Average of weeks ended Saturday	Weight	1994-95	2006-07	2007-08	2008						2009
		April-March			Jan.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.
1	2	3	4	5	6	7	8	9	10	11	12
ALL COMMODITIES	**100.000**	**112.6**	**206.1**	**215.9**	**218.2**	**241.2**	**241.5**	**239.0**	**234.2**	**229.8**	**228.9**
I. PRIMARY ARTICLES	**22.025**	**115.8**	**208.6**	**224.8**	**224.6**	**249.3**	**252.2**	**251.5**	**250.9**	**247.3**	**248.6**
(A) Food Articles	**15.402**	**112.8**	**210.3**	**222.1**	**219.7**	**237.9**	**242.9**	**245.5**	**246.0**	**242.0**	**243.9**
a. Foodgrains (Cereals+Pulses)	5.009	114.7	205.9	215.6	217.7	229.7	229.9	235.3	237.5	239.6	242.2
a1. Cereals	4.406	113.6	199.3	211.8	215.7	224.8	225.0	231.3	233.6	236.2	239.2
a2. Pulses	0.603	122.2	253.8	243.2	232.1	264.9	265.2	264.8	265.5	264.8	263.6
b. Fruits & Vegetables	2.917	108.0	227.9	236.5	218.5	255.1	276.0	277.0	278.4	249.4	256.2
b1. Vegetables	1.459	110.4	197.9	224.4	186.8	245.8	252.1	260.8	271.2	213.9	215.5
b2. Fruits	1.458	105.7	258.0	248.6	250.2	264.5	299.9	293.3	285.7	284.8	296.8
c. Milk	4.367	110.3	195.8	212.6	216.1	226.0	227.4	229.4	230.7	232.1	233.7
d. Eggs, Meat & Fish	2.208	116.1	226.9	238.7	233.1	247.8	251.2	250.8	248.1	252.9	249.3
e. Condiments & Spices	0.662	126.2	227.9	239.3	243.0	280.8	277.9	276.5	274.3	269.7	267.5
f. Other Food Articles	0.239	111.6	154.3	155.4	154.6	207.9	221.0	229.7	215.2	206.7	205.2
(B) Non-Food Articles	**6.138**	**124.2**	**188.2**	**212.2**	**217.3**	**246.1**	**247.4**	**238.2**	**235.7**	**231.6**	**231.8**
a. Fibres	1.523	150.0	155.9	179.1	185.0	237.6	240.8	224.4	217.6	215.7	213.2
b. Oil seeds	2.666	118.5	175.7	218.3	225.6	254.3	250.4	245.5	246.0	240.4	241.8
c. Other Non-Food Articles	1.949	112.0	230.6	229.7	231.2	241.4	248.5	239.2	235.5	232.1	232.7
(C) Minerals	**0.485**	**104.9**	**413.2**	**469.5**	**471.1**	**651.0**	**609.1**	**609.3**	**600.6**	**615.4**	**609.0**
a. Metallic Minerals	0.297	103.8	598.7	687.7	691.6	971.0	897.5	896.1	892.0	916.7	917.0
b. Other Minerals	0.188	106.7	120.4	124.8	122.9	145.6	153.6	156.3	140.3	139.6	122.5
II. Fuel, Power, Light & Lubricants	**14.226**	**108.9**	**324.9**	**327.2**	**334.5**	**377.9**	**375.3**	**369.2**	**348.0**	**331.0**	**328.8**
a. Coal Mining	1.753	105.1	231.6	238.0	251.9	254.4	254.4	254.4	254.4	251.8	251.8
b. Minerals Oils	6.990	106.1	388.1	392.0	403.5	488.6	483.2	470.7	427.6	393.7	389.3
c. Electricity	5.484	113.6	271.7	273.1	272.9	276.5	276.5	276.5	276.5	276.5	276.5

Monthly Movement of the Index of WPI-All Commodities



Monthly Movement in the Index of WPI- Primary Articles

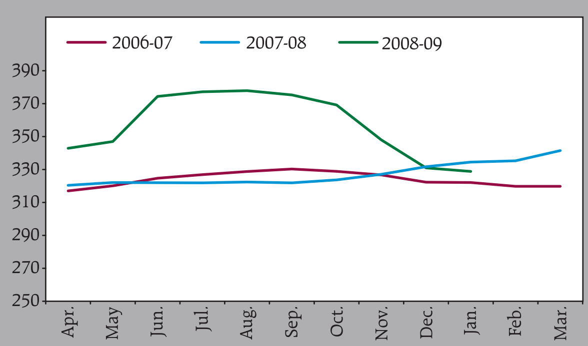


No. 39: Index Numbers of Wholesale Prices in India – by Groups and Sub-Groups (Averages) *(Contd.)*

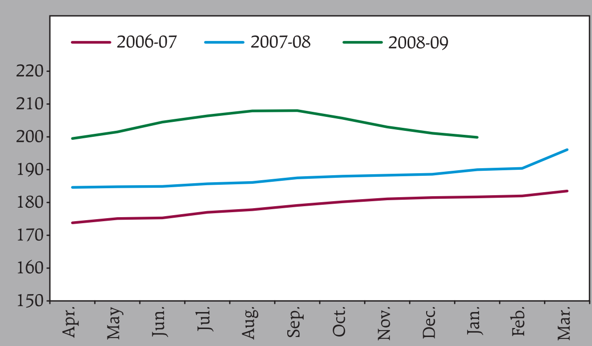
(Base : 1993-94 = 100)

Average of months/Average of weeks ended Saturday	Weight	1994-95	2006-07	2007-08	2008						2009
		April-March			Jan.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.
1	2	3	4	5	6	7	8	9	10	11	12
III. MANUFACTURED PRODUCTS	**63.749**	**112.3**	**179.0**	**188.0**	**190.0**	**207.9**	**208.0**	**205.7**	**203.0**	**201.1**	**199.9**
(A) Food Products	**11.538**	**114.1**	**182.5**	**190.4**	**196.5**	**214.1**	**214.5**	**206.0**	**201.6**	**200.4**	**210.0**
a. Dairy Products	0.687	117.0	217.3	232.6	241.0	248.9	249.0	249.7	250.3	250.5	248.0
b. Canning, Preserving & Processing of Fish	0.047	100.0	283.7	293.8	293.8	293.8	293.8	293.8	324.5	293.8	419.4
c. Grain Mill Products	1.033	103.7	219.6	230.4	238.3	237.8	237.8	240.9	242.3	243.4	243.4
d. Bakery Products	0.441	107.7	184.3	195.5	201.0	201.3	201.3	201.3	201.3	201.3	201.3
e. Sugar, Khandsari & Gur	3.929	119.1	179.8	155.2	151.6	166.2	168.6	168.9	169.4	169.4	175.8
f. Manufacture of common Salts	0.021	104.8	223.0	222.4	233.2	242.3	273.8	276.7	266.6	271.4	260.7
g. Cocoa, Chocolate, Sugar & Confectionery	0.087	118.3	183.1	188.1	188.1	188.1	188.1	188.1	188.1	188.1	188.1
h. Edible Oils	2.775	110.9	154.6	175.4	182.5	196.2	192.5	187.9	183.1	184.0	182.2
i. Oil Cakes	1.416	121.6	196.6	256.6	288.1	359.8	363.2	298.5	269.1	256.9	311.4
j. Tea & Coffee Proccessing	0.967	104.4	178.9	193.8	195.4	195.8	196.1	196.7	196.6	196.3	206.5
k. Other Food Products n.e.c.	0.154	111.6	198.1	218.9	233.1	239.5	239.5	240.6	241.0	241.0	243.1
(B) Beverages, Tobacco & Tobacco Products	**1.339**	**118.3**	**243.5**	**268.5**	**274.0**	**293.7**	**296.6**	**296.6**	**297.4**	**295.1**	**298.3**
a. Wine Industries	0.269	150.2	288.7	309.3	310.9	310.9	310.9	310.9	311.3	295.8	311.7
b. Malt liquor	0.043	109.1	204.1	198.0	197.0	215.7	215.7	215.7	237.6	270.5	270.5
c. Soft drinks & Carbonated Water	0.053	109.1	176.3	187.6	188.1	188.1	188.1	188.1	188.1	188.1	188.4
d. Manufacture of Bidi, Cigarettes, Tobacco & Zarda	0.975	110.4	236.4	264.8	271.8	298.1	302.1	302.1	302.1	301.8	301.8

Monthly Movement of the Index of
WPI-Fuel,Power,Light and Lubricants



Monthly Movement in the Index of
WPI-Manufactured Products



No. 39: Index Numbers of Wholesale Prices in India – by Groups and Sub-Groups (Averages) *(Contd.)*

(Base : 1993-94 = 100)

Average of months/Average of weeks ended Saturday	Weight	1994-95	2006-07	2007-08	2008						2009
		April-March			Jan.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.
1	2	3	4	5	6	7	8	9	10	11	12
(C) Textiles	**9.800**	**118.2**	**132.3**	**130.9**	**127.9**	**144.6**	**142.2**	**140.4**	**141.6**	**141.6**	**140.6**
a. Cotton Textiles	4.215	132.7	159.1	156.3	149.9	178.4	172.9	169.5	173.8	174.6	173.2
a1. Cotton Yarn	3.312	136.2	156.4	153.0	145.0	180.0	172.7	168.2	173.0	174.0	172.1
a2. Cotton Cloth (Mills)	0.903	119.9	169.4	168.4	168.0	172.5	173.7	174.3	176.6	177.0	177.4
b. Man Made Textiles	4.719	105.9	96.2	97.4	97.2	104.1	103.2	102.3	100.8	99.5	97.8
b1. Man Made Fibre	4.406	105.6	93.4	94.8	94.6	101.8	100.7	99.7	98.1	96.7	94.9
b2. Man Made Cloth	0.313	109.9	136.2	134.4	133.0	136.8	139.4	139.4	139.4	139.4	139.4
c. Woolen Textiles	0.190	132.6	174.1	170.6	170.9	179.2	179.5	175.0	180.2	180.2	178.6
d. Jute, Hemp & Mesta Textiles	0.376	110.3	217.3	205.6	201.4	218.9	229.0	234.6	233.4	238.2	248.5
e. Other Misc. Textiles	0.300	109.0	189.8	182.7	181.6	191.1	191.8	191.8	191.8	195.0	196.1
(D) Wood & Wood Products	**0.173**	**110.9**	**206.4**	**215.9**	**215.9**	**237.0**	**237.0**	**237.0**	**237.0**	**237.0**	**237.6**
(E) Paper & Paper Products	**2.044**	**106.1**	**190.7**	**194.2**	**194.9**	**202.6**	**203.8**	**205.6**	**205.9**	**207.1**	**205.4**
a. Paper & pulp	1.229	108.7	170.2	175.5	176.6	189.3	191.2	193.9	194.1	195.7	192.7
b. Manufacture of boards	0.237	110.9	165.6	164.3	164.8	166.6	166.8	167.0	167.0	166.4	164.7
c. Printing & publishing of newspapers,periodicals *etc.*	0.578	98.5	244.6	246.2	246.0	245.6	245.6	246.3	246.9	248.0	249.1
(F) Leather & Leather Products	**1.019**	**109.7**	**159.4**	**166.1**	**166.6**	**168.3**	**168.3**	**168.3**	**168.3**	**168.3**	**169.5**
(G) Rubber & Plastic Products	**2.388**	**106.4**	**148.2**	**159.0**	**163.6**	**166.1**	**168.7**	**168.5**	**167.4**	**167.0**	**167.4**
a. Tyres & Tubes	1.286	104.1	141.5	156.8	162.8	163.5	169.1	170.4	170.1	170.1	170.1
a1. Tyres	1.144	103.4	130.4	143.5	148.8	149.3	150.6	151.0	151.0	151.0	151.0
a2. Tubes	0.142	110.0	231.4	264.2	275.7	278.7	318.3	326.7	324.4	324.4	324.4
b. Plastic Products	0.937	106.8	146.7	154.2	157.7	163.1	162.1	159.9	157.4	156.5	157.3
c. Other Rubber & Plastic Products	0.165	121.0	209.8	203.0	202.8	202.8	202.8	202.8	202.8	202.8	202.8
(H) Chemicals & Chemical Products	**11.931**	**116.6**	**193.9**	**204.8**	**208.3**	**224.1**	**224.8**	**224.6**	**221.1**	**219.2**	**213.4**
a. Basic heavy Inorganic Chemicals	1.446	112.2	171.0	190.3	213.5	247.7	251.6	252.5	234.4	210.0	191.9
b. Basic Heavy Organic Chemicals	0.455	118.7	180.2	176.4	172.3	215.4	208.1	202.9	174.1	139.3	135.4
c. Fertilisers & Pesticides	4.164	117.7	171.6	173.7	174.2	189.6	189.8	189.1	188.7	188.2	188.5
c1. Fertilisers	3.689	115.8	177.2	180.8	181.4	197.7	197.9	197.1	196.6	196.1	196.6
c2. Pesticides	0.475	132.5	127.9	118.5	118.5	126.6	126.6	126.6	126.6	126.6	125.9
d. Paints, Varnishes & Lacquers	0.496	101.3	128.1	143.0	146.1	155.3	155.3	155.3	155.3	163.6	166.3
e. Dyestuffs & Indigo	0.175	108.4	105.8	111.2	112.7	120.4	120.4	120.4	120.4	120.4	118.9
f. Drugs & Medicines	2.532	129.4	293.1	314.9	315.4	321.1	321.4	321.5	321.5	321.5	322.4
g. Perfumes, Cosmetics, Toiletries *etc.*	0.978	118.0	223.6	239.7	242.2	258.6	259.2	259.2	259.2	259.2	259.1
h. Turpentine, Synthetic Resins, Plastic Materials *etc.*	0.746	107.6	133.4	143.4	142.6	158.7	157.9	156.0	154.8	191.1	131.7
i. Matches, Explosives & Other Chemicals n.e.c.	0.940	98.3	136.0	144.3	148.0	154.5	160.0	163.0	163.0	161.8	160.8

No. 39: Index Numbers of Wholesale Prices in India – by Groups and Sub-Groups (Averages) *(Concld.)*

(Base : 1993-94 = 100)

Average of months/Average of weeks ended Saturday	Weight	1994-95	2006-07	2007-08	2008						2009
		April-March			Jan.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.
1	2	3	4	5	6	7	8	9	10	11	12
(I) Non-Metallic Mineral Products	**2.516**	**110.9**	**191.8**	**208.8**	**211.6**	**216.2**	**218.0**	**218.1**	**218.2**	**216.3**	**215.7**
a. Structural Clay Products	0.230	100.0	195.2	212.8	217.3	219.4	220.2	222.0	223.1	223.1	223.8
b. Glass, Earthernware, Chinaware & their Products	0.237	113.3	160.7	167.9	166.4	166.4	166.4	166.4	166.4	166.4	166.4
c. Cement	1.731	112.4	197.3	217.5	221.1	223.3	225.3	225.2	225.2	222.5	221.4
d. Cement, Slate & Graphite Products	0.319	108.8	182.9	189.1	189.7	212.2	215.1	215.1	215.1	215.1	215.1
(J) Basic Metals Alloys & Metals Products	**8.342**	**108.4**	**233.3**	**249.8**	**248.3**	**300.3**	**298.9**	**295.4**	**283.7**	**278.5**	**266.6**
a. Basic Metals & Alloys	6.206	107.0	236.3	256.3	256.2	326.7	324.8	320.4	305.1	298.3	285.0
a1. Iron & Steel	3.637	106.0	254.4	280.0	279.9	362.8	360.4	355.1	329.2	321.3	303.1
a2. Foundries for Casting, Forging & Structurals	0.896	106.7	228.5	245.2	242.5	301.9	301.9	301.9	306.6	309.8	302.2
a3. Pipes, Wires Drawing & Others	1.589	109.5	204.1	213.5	214.9	266.0	264.6	260.4	257.2	247.7	241.6
a4. Ferro Alloys	0.085	104.5	148.5	155.5	156.2	175.3	164.1	152.9	153.5	142.2	142.2
b. Non-Ferrous Metals	1.466	115.9	258.3	265.1	256.8	253.7	253.9	252.5	250.5	248.9	237.9
b1. Aluminium	0.853	114.7	253.6	248.7	241.4	250.8	250.8	250.8	250.8	250.8	235.1
b2. Other Non-Ferrous Metals	0.613	117.7	264.8	288.0	278.2	257.6	258.1	254.9	250.0	246.3	241.7
c. Metal Products	0.669	105.0	149.8	155.9	156.8	157.4	157.4	157.4	158.0	158.8	159.2
(K) Machinery & Machine Tools	**8.363**	**106.0**	**155.6**	**166.6**	**167.7**	**176.3**	**176.4**	**176.5**	**177.0**	**174.0**	**172.2**
a. Non-Electrical Machinery & Parts	3.379	108.6	194.8	199.5	200.9	210.3	211.1	211.2	211.6	210.7	209.7
a1. Heavy Machinery & Parts	1.822	111.0	201.8	207.3	208.9	222.6	223.5	223.9	224.6	223.0	222.1
a2. Industrial Machinery for Textiles, *etc.*	0.568	108.5	255.2	260.5	261.1	259.0	258.9	258.8	258.8	259.8	257.4
a3. Refrigeration & Other Non-electrical Machinery	0.989	104.3	147.3	150.2	151.5	159.8	160.6	160.6	160.7	159.8	159.5
b. Electrical Machinery	4.985	104.2	129.0	144.3	145.2	153.2	153.0	152.9	153.4	149.1	146.7
b1. Electrical Industrial Machinery	1.811	105.2	150.4	160.9	163.3	168.4	168.4	168.4	170.0	175.3	174.8
b2. Wires & Cables	1.076	109.0	179.0	230.3	231.0	251.3	249.5	249.3	249.3	221.7	212.5
b3. Dry & Wet Batteries	0.275	105.8	148.5	163.3	165.0	177.4	177.4	177.4	177.4	177.9	175.5
b4. Electrical Apparatus & Appliances	1.823	100.1	75.3	74.2	73.7	76.6	77.0	76.9	76.7	75.8	75.7
(L) Transport Equipment & Parts	**4.295**	**107.4**	**162.4**	**166.9**	**170.9**	**176.1**	**176.7**	**177.3**	**177.3**	**175.5**	**175.5**
a. Locomotives, Railway Wagons & Parts	0.318	105.3	125.2	131.6	135.3	141.8	141.8	141.8	141.8	141.0	144.1
b. Motor Vehicles, Motorcycles, Scooters, Bicycles & Parts	3.977	107.6	165.4	169.7	173.7	178.8	179.5	180.1	180.1	178.3	178.1

Source : Office of the Economic Adviser, Ministry of Commerce & Industry, Government of India.

No. 40: Index Numbers of Wholesale Prices in India – by Groups and Sub-groups (Month-end/Year-end)

(Base : 1993-94 = 100)

Last Week of month / year ended Saturday	Weight	1994-95	2006-07	2007-08	2008				2009		
		April-March			Mar.	Oct.	Nov.	Dec.	Jan.	Feb.(P)	Mar.(P)
1	2	3	4	5	6	7	8	9	10	11	12
ALL COMMODITIES	**100.000**	**117.1**	**206.6**	**216.2**	**226.7**	**238.5**	**233.3**	**229.4**	**227.5**	**227.7**	**227.3**
I. PRIMARY ARTICLES	**22.025**	**120.8**	**209.6**	**225.5**	**236.8**	**250.6**	**249.7**	**246.7**	**246.4**	**248.1**	**245.0**
(A) Food Articles	**15.402**	**114.9**	**211.1**	**222.5**	**228.2**	**244.9**	**244.6**	**240.9**	**243.6**	**244.2**	**242.6**
a. Foodgrains (Cereals+Pulses)	5.009	118.9	206.5	216.1	224.0	237.9	239.6	239.8	246.5	245.4	245.1
a1. Cereals	4.406	118.2	199.8	212.3	220.6	234.0	236.6	236.6	243.7	241.8	241.8
a2. Pulses	0.603	123.9	255.2	243.2	248.5	266.1	261.7	263.2	267.0	272.1	269.1
b. Fruits & Vegetables	2.917	103.1	228.6	237.3	239.8	273.3	266.3	240.7	247.5	252.2	246.7
b1. Vegetables	1.459	95.0	199.1	226.3	205.5	257.5	250.4	194.4	199.7	216.1	197.2
b2. Fruits	1.458	111.2	258.2	248.4	274.2	289.2	282.3	287.0	295.3	288.4	296.3
c. Milk	4.367	111.3	196.5	213.1	220.3	229.4	231.5	233.7	233.7	233.7	233.7
d. Eggs, Meat & Fish	2.208	122.1	227.6	238.5	242.0	246.9	248.5	253.4	249.0	250.3	249.4
e. Condiments & Spices	0.662	131.6	230.0	239.2	239.0	275.2	273.8	267.8	265.2	263.8	259.8
f. Other Food Articles	0.239	127.4	154.8	155.8	162.0	228.3	209.5	206.1	203.4	200.6	193.5
(B) Non-Food Articles	**6.138**	**136.9**	**189.6**	**212.6**	**227.2**	**236.9**	**235.7**	**231.6**	**229.6**	**228.3**	**227.0**
a. Fibres	1.523	168.7	157.0	179.3	194.3	222.2	215.0	215.6	210.5	204.3	198.9
b. Oil seeds	2.666	127.8	178.0	219.2	242.9	244.5	250.0	239.3	239.2	238.0	237.4
c. Other Non-Food Articles	1.949	124.4	231.0	229.9	231.3	238.0	232.2	233.6	231.4	233.8	234.7
(C) Minerals	**0.485**	**104.2**	**416.9**	**481.7**	**630.1**	**606.9**	**591.1**	**623.9**	**549.2**	**622.6**	**549.2**
a. Metallic Minerals	0.297	102.5	604.7	707.9	941.2	892.0	892.0	941.4	819.3	941.4	819.3
b. Other Minerals	0.188	107.0	120.4	124.6	138.8	156.7	115.8	122.5	122.7	119.2	122.7
II. Fuel, Power, Light & Lubricants	**14.226**	**109.1**	**324.0**	**327.4**	**341.8**	**367.7**	**344.8**	**330.2**	**321.8**	**323.5**	**320.9**
a. Coal Mining	1.753	106.2	231.6	238.6	254.4	254.4	254.4	251.8	251.8	251.8	251.8
b. Minerals Oils	6.990	106.2	388.3	392.3	415.0	467.7	421.1	392.0	374.9	378.4	378.7
c. Electricity	5.484	113.6	271.6	273.0	276.5	276.5	276.5	276.5	276.5	276.5	269.2
III. Manufactured Products	**63.749**	**117.6**	**179.3**	**188.1**	**197.5**	**205.5**	**202.8**	**200.9**	**200.0**	**199.2**	**200.3**
(A) Food Products	**11.538**	**113.2**	**182.9**	**190.8**	**203.6**	**204.6**	**200.5**	**201.3**	**216.2**	**212.8**	**218.9**
a. Dairy Products	0.687	129.0	217.7	233.4	240.3	250.2	250.6	250.6	253.5	249.1	249.1
b. Canning, Preserving & Processing of Fish	0.047	100.0	284.0	293.8	293.8	293.8	344.9	293.8	419.4	419.4	419.4

See 'Notes on Tables'.

No. 40: Index Numbers of Wholesale Prices in India – by Groups and Sub-groups (Month-end/Year-end) *(Contd.)*

(Base : 1993-94 = 100)

Last Week of month / year ended Saturday	Weight	1994-95	2006-07	2007-08	2008				2009		
		April-March			Mar.	Oct.	Nov.	Dec.	Jan.	Feb.(P)	Mar.(P)
1	2	3	4	5	6	7	8	9	10	11	12
c. Grain Mill Products	1.033	109.0	219.6	230.5	240.7	240.9	243.4	243.4	243.4	243.8	244.0
d. Bakery Products	0.441	111.0	184.8	195.6	201.3	201.3	201.3	201.3	201.3	201.3	201.3
e. Sugar, Khandsari & Gur	3.929	109.5	179.2	155.4	158.3	169.0	169.2	171.8	180.0	187.1	185.2
f. Manufacture of Common Salts	0.021	114.1	222.8	222.4	234.7	276.7	266.6	271.4	260.7	260.7	259.4
g. Cocoa, Chocolate, Sugar & Confectionery	0.087	124.1	183.1	188.1	188.1	188.1	188.1	188.1	188.1	188.1	188.1
h. Edible Oils	2.775	118.4	155.1	175.8	196.2	186.3	184.2	183.8	180.6	177.2	176.2
i. Oil Cakes	1.416	118.3	199.8	257.9	300.0	290.0	256.6	258.2	340.2	318.9	358.1
j. Tea & Coffee Processing	0.967	99.5	179.6	194.4	193.9	196.7	196.3	196.3	221.9	196.3	221.9
k. Other Food Products n.e.c.	0.154	117.3	198.4	219.0	236.6	241.0	241.0	241.0	243.1	241.0	243.1
(B) Beverages, Tobacco & Tobacco Products	**1.339**	**124.3**	**243.9**	**269.2**	**276.7**	**296.6**	**298.5**	**298.3**	**298.3**	**301.5**	**302.0**
a. Wine Industries	0.269	163.5	289.8	309.4	310.9	310.9	311.6	311.7	311.7	311.7	311.7
b. Malt Liquor	0.043	125.5	204.0	198.1	197.0	215.7	270.5	270.5	270.5	270.5	270.5
c. Soft Drinks & Carbonated Water	0.053	109.1	176.2	187.6	188.1	188.1	188.1	188.1	188.6	188.6	202.3
d. Manufacture of Bidi, Cigarettes, Tobacco & Zarda	0.975	114.2	236.6	265.6	275.5	302.1	302.1	301.8	301.8	306.1	306.1
(C) Textiles	**9.800**	**128.1**	**132.3**	**130.6**	**127.8**	**140.9**	**141.8**	**141.4**	**138.7**	**140.4**	**140.6**
a. Cotton Textiles	4.215	148.3	159.1	155.6	149.1	171.2	174.5	174.3	170.2	173.5	174.0
a1. Cotton Yarn	3.312	152.1	156.3	152.1	144.0	169.9	173.8	173.6	167.8	172.0	172.7
a2. Cotton Cloth (Mills)	0.903	134.4	169.4	168.4	167.9	176.0	177.0	177.0	178.8	178.8	178.9
b. Man Made Textiles	4.719	110.9	96.2	97.4	98.3	101.7	100.4	98.9	96.7	97.5	96.9
b1. Man Made Fibre	4.406	110.6	93.3	94.8	95.8	99.0	97.6	96.0	93.7	94.5	93.9
b2. Man Made Cloth	0.313	114.7	136.2	134.4	133.0	139.4	139.4	139.4	139.4	139.4	139.4
c. Woolen Textiles	0.190	139.9	173.4	170.7	170.9	180.2	180.2	180.2	178.2	178.2	172.0
d. Jute, Hemp & Mesta Textiles	0.376	120.5	218.4	204.0	195.6	234.0	234.8	242.2	247.6	245.2	253.7
e. Other Misc. Textiles	0.300	117.9	189.3	182.8	181.6	191.8	191.8	196.1	196.1	196.1	196.1
(D) Wood & Wood Products	**0.173**	**113.3**	**205.9**	**215.9**	**215.9**	**237.0**	**237.0**	**237.0**	**237.6**	**237.6**	**237.6**
(E) Paper & Paper Products	**2.044**	**117.0**	**190.9**	**194.3**	**194.5**	**205.7**	**205.9**	**207.3**	**204.9**	**204.9**	**204.0**
a. Paper & pulp	1.229	122.9	170.4	175.7	177.0	193.8	194.1	195.6	191.9	191.9	190.4
b. Manufacture of Boards	0.237	113.0	165.6	164.3	160.9	167.0	167.0	166.2	164.3	164.3	164.3
c. Printing & Publishing of Newspapers, Periodicals *etc.*	0.578	106.2	244.7	246.2	245.6	246.9	246.9	249.1	249.1	249.1	249.1

No. 40: Index Numbers of Wholesale Prices in India – by Groups and Sub-groups (Month-end/Year-end) *(Contd.)*

(Base : 1993-94 = 100)

Last Week of month / year ended Saturday	Weight	1994-95	2006-07	2007-08	2008				2009		
		April-March			Mar.	Oct.	Nov.	Dec.	Jan.	Feb.(P)	Mar.(P)
1	2	3	4	5	6	7	8	9	10	11	12
(F) Leather & Leather Products	**1.019**	**117.8**	**159.7**	**166.1**	**164.4**	**168.3**	**168.3**	**168.3**	**169.5**	**167.4**	**167.4**
(G) Rubber & Plastic Products	**2.388**	**117.0**	**148.8**	**159.1**	**163.6**	**168.2**	**166.8**	**167.0**	**167.4**	**167.4**	**167.6**
a. Tyres & Tubes	1.286	119.6	142.3	156.9	162.8	170.1	170.1	170.1	170.1	170.1	170.1
a1. Tyres	1.144	120.3	131.0	143.6	148.8	151.0	151.0	151.0	151.0	151.0	151.0
a2. Tubes	0.142	114.1	233.6	256.2	275.7	324.4	324.4	324.4	324.4	324.4	324.4
b. Plastic Products	0.937	108.8	147.0	154.3	157.7	159.5	155.8	156.5	157.4	157.4	157.9
c. Other Rubber & Plastic Products	0.165	143.9	209.5	203.0	202.8	202.8	202.8	202.8	202.8	202.8	202.8
(H) Chemicals & Chemical Products	**11.931**	**121.6**	**194.1**	**205.0**	**210.9**	**224.6**	**220.7**	**219.0**	**214.0**	**214.7**	**214.0**
a. Basic Heavy Inorganic Chemicals	1.446	125.6	170.8	191.7	221.3	252.8	230.0	209.4	192.8	196.1	190.9
b. Basic Heavy Organic Chemicals	0.455	131.4	180.1	176.4	178.6	202.9	178.6	138.9	134.6	141.7	145.9
c. Fertilisers & Pesticides	4.164	123.0	171.5	173.8	179.3	189.1	188.4	188.2	188.2	188.2	188.5
c1. Fertilisers	3.689	121.8	177.3	180.9	187.1	197.1	196.3	196.1	196.6	196.6	196.9
c2. Pesticides	0.475	132.5	126.2	118.5	118.5	126.6	126.6	126.6	122.9	122.9	122.9
d. Paints, Varnishes & Lacquers	0.496	101.4	128.3	143.1	146.1	155.3	155.3	166.3	166.3	166.3	166.3
e. Dyestuffs & Indigo	0.175	115.0	105.6	111.2	116.6	120.4	120.4	120.4	112.9	112.9	112.4
f. Drugs & Medicines	2.532	132.9	294.1	314.9	312.3	321.5	321.5	321.5	326.2	326.2	326.2
g. Perfumes, Cosmetics, Toiletries, *etc.*	0.978	119.0	224.0	239.7	242.3	259.2	259.2	259.2	259.0	259.2	259.0
h. Turpentine, Synthetic Resins, Plastic Materials etc.	0.746	111.9	132.9	143.7	144.2	155.8	155.9	188.1	130.3	131.1	131.1
i. Matches, Explosives & Other Chemicals n.e.c.	0.940	96.3	136.1	144.2	149.0	163.0	163.0	161.5	160.6	160.6	155.9
(I) Non-Metallic Mineral Products	**2.516**	**122.4**	**192.0**	**209.0**	**214.7**	**218.1**	**218.2**	**215.6**	**215.7**	**217.1**	**218.8**
a. Structural Clay Products	0.230	101.4	195.3	213.5	219.4	222.6	223.1	223.1	224.0	224.0	224.0
b. Glass, Earthernware, Chinaware & Their Products	0.237	126.3	160.6	167.9	166.4	166.4	166.4	166.4	166.4	166.4	166.4
c. Cement	1.731	126.9	197.6	217.6	221.2	225.1	225.2	221.4	221.5	223.5	226.0
d. Cement, Slate & Graphite Products	0.319	110.3	183.0	189.7	211.9	215.1	215.1	215.1	215.1	215.1	215.1

No. 40: Index Numbers of Wholesale Prices in India – by Groups and Sub-groups (Month-end/Year-end) *(Concld.)*

(Base : 1993-94 = 100)

Last Week of month / year ended Saturday	Weight	1994-95	2006-07	2007-08	2008				2009		
		April-March			Mar.	Oct.	Nov.	Dec.	Jan.	Feb.(P)	Mar.(P)
1	2	3	4	5	6	7	8	9	10	11	12
(J) Basic Metals Alloys & Metals Products	**8.342**	**115.6**	**233.8**	**250.0**	**291.6**	**294.6**	**283.7**	**277.5**	**260.2**	**255.7**	**255.9**
a. Basic Metals & Alloys	6.206	112.7	236.8	256.7	314.9	319.6	305.1	297.1	277.0	272.5	272.3
a1. Iron & Steel	3.637	112.6	255.0	280.6	352.8	353.7	328.1	319.9	292.4	286.8	287.8
a2. Foundries for Casting, Forging & Structurals	0.896	113.5	228.6	245.6	298.7	301.9	311.0	309.8	297.1	296.5	296.5
a3. Pipes, Wires Drawing & Others	1.589	112.9	204.3	213.8	245.6	260.3	257.3	246.0	237.7	233.2	230.0
a4. Ferro Alloys	0.085	102.9	148.5	155.5	156.2	152.9	153.7	142.2	142.2	142.2	142.2
b. Non-Ferrous Metals	1.466	130.8	259.5	264.5	254.0	251.5	250.4	248.5	235.3	228.7	230.8
b1. Aluminium	0.853	132.4	254.3	248.2	244.3	250.8	250.8	250.8	231.0	225.8	225.8
b2. Other Non-Ferrous Metals	0.613	128.6	266.7	287.2	267.6	252.5	249.8	245.3	241.4	232.8	237.7
c. Metal Products	0.669	108.7	150.0	155.9	157.4	157.4	158.4	159.2	159.2	159.1	159.1
(K) Machinery & Machine Tools	**8.363**	**109.0**	**155.9**	**166.7**	**167.9**	**176.6**	**177.5**	**172.7**	**172.2**	**172.2**	**172.5**
a. Non-Electrical Machinery & Parts	3.379	111.1	195.1	199.6	201.0	211.3	212.7	210.2	209.7	209.7	209.6
a1. Heavy Machinery & Parts	1.822	114.8	202.0	207.3	209.6	224.0	226.5	222.1	222.1	222.1	222.1
a2. Industrial Machinery for Textiles, *etc.*	0.568	108.4	255.3	260.6	259.1	258.8	258.8	260.1	257.4	257.4	257.4
a3. Refrigeration & Other Non-Electrical Machinery	0.989	106.0	147.6	150.4	151.9	160.6	160.9	159.7	159.5	159.5	159.1
b. Electrical Machinery	4.985	107.5	129.4	144.5	145.5	153.0	153.6	147.2	146.7	146.8	147.3
b1. Electrical Industrial Machinery	1.811	108.8	150.5	161.1	162.8	168.5	171.0	175.6	174.8	175.1	174.1
b2. Wires & Cables	1.076	119.0	180.8	230.6	233.2	249.3	249.3	212.5	212.5	212.5	214.9
b3. Dry & Wet Batteries	0.275	109.7	148.9	163.5	165.0	177.4	177.4	178.1	175.5	175.5	175.5
b4. Electrical Apparatus & Appliances & Parts	1.823	99.2	75.3	74.2	73.7	77.1	76.1	75.7	75.7	75.7	76.6
(L) Transport Equipment & Parts	**4.295**	**110.6**	**162.5**	**166.8**	**169.7**	**177.3**	**177.3**	**175.2**	**175.6**	**175.6**	**175.5**
a. Locomotives, Railway Wagons & Parts	0.318	105.4	125.0	131.9	135.3	141.8	141.8	140.7	144.9	144.9	144.9
b. Motor Vehicles, Motorcycles, Scooters, Bicycles & Parts	3.977	111.0	165.5	169.6	172.4	180.1	180.1	178.0	178.1	178.1	177.9

Source : Office of the Economic Adviser, Ministry of Commerce & Industry, Government of India.

Trade and Balance of Payments

No. 41: Foreign Trade (Annual and Monthly)

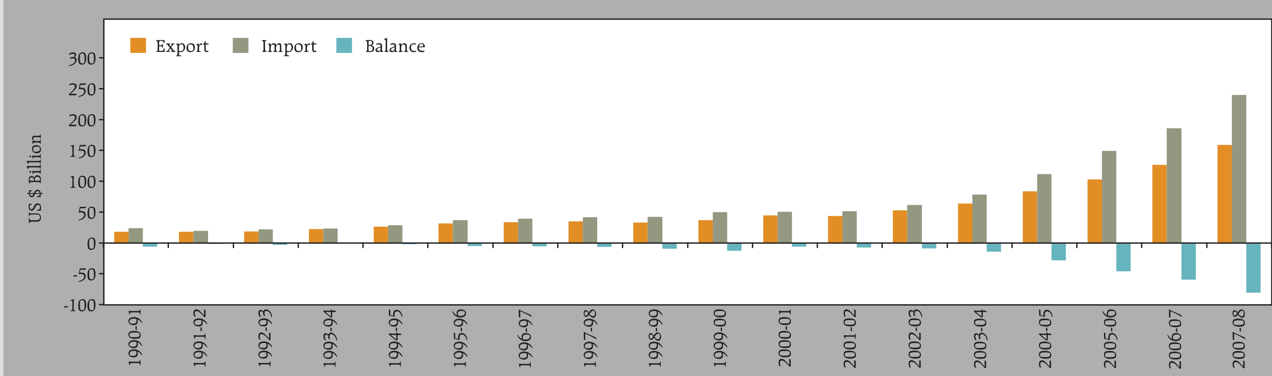
Year/ Month	Rupees crore			US dollar million			SDR million		
	Export	Import	Balance	Export	Import	Balance	Export	Import	Balance
1	2	3	4	5	6	7	8	9	10
2003-04	2,93,367	3,59,108	-65,741	63,843	78,149	-14,307	44,663	54,672	-10,009
2004-05	3,75,340	5,01,065	-125,725	83,536	111,517	-27,981	56,081	74,866	-18,785
2005-06	4,56,418	6,60,409	-203,991	103,091	149,166	-46,075	70,774	102,405	-31,632
2006-07	5,71,779	8,40,506	-268,727	126,361	185,749	-59,388	85,018	124,975	-39,957
2007-08	6,55,864	10,12,312	-356,448	162,904	251,439	-88,535	104,686	161,581	-56,895
2007-08 R									
April	46,164	74,895	-28,731	10,953	17,769	-6,817	7,196	11,675	-4,479
May	49,794	78,760	-28,966	12,210	19,313	-7,103	8,046	12,726	-4,680
June	48,400	79,200	-30,800	11,870	19,424	-7,554	7,855	12,853	-4,999
July	50,331	74,091	-23,759	12,454	18,333	-5,879	8,144	11,989	-3,844
August	51,491	80,845	-29,354	12,614	19,805	-7,191	8,245	12,945	-4,700
September	50,243	68,616	-18,373	12,455	17,010	-4,555	8,069	11,019	-2,951
October	57,641	83,472	-25,832	14,588	21,126	-6,538	9,360	13,554	-4,195
November	50,353	80,171	-29,819	12,768	20,329	-7,561	8,048	12,814	-4,766
December	50,580	73,395	-22,815	12,825	18,609	-5,785	8,131	11,799	-3,668
January	57,948	88,852	-30,904	14,717	22,566	-7,849	9,292	14,247	-4,955
February	60,476	87,151	-26,675	15,221	21,934	-6,713	9,600	13,835	-4,234
March	69,630	95,134	-25,504	17,254	23,574	-6,320	10,563	14,432	-3,869
2008-09 P									
April	63,880	99,347	-35,468	15,961	24,823	-8,862	9,755	15,172	-5,416
May	65,506	1,12,405	-46,900	15,550	26,684	-11,134	9,576	16,433	-6,856
June	70,747	1,10,195	-39,448	16,522	25,734	-9,213	10,205	15,895	-5,690
July	73,132	1,24,462	-51,330	17,072	29,054	-11,982	10,468	17,816	-7,347
August	68,270	1,24,692	-56,422	15,900	29,040	-13,140	10,023	18,307	-8,283
September	64,387	1,20,364	-55,977	14,131	26,417	-12,285	9,083	16,979	-7,896
October	62,349	1,10,564	-48,216	12,814	22,724	-9,910	8,459	15,001	-6,542
November	50,011	98,213	-48,202	10,206	20,044	-9,837	6,890	13,531	-6,641
December	59,098	89,579	-30,480	12,151	18,419	-6,267	7,982	12,098	-4,117
January	60,460	90,125	-29,665	12,381	18,455	-6,075	8,200	12,223	-4,023
February	58,685	82,872	-24,187	11,913	16,823	-4,910	8,022	11,328	-3,306

R: Revised. P: Provisional. **Source :** DGCI & S and Ministry of Commerce & Industry.

Notes: 1. Data conversion has been done using period average exchange rates.
2. Monthly data may not add up to the annual data on account of revision in monthly figures.

Also see 'Notes on Tables'

Foreign Trade



No. 42: India's Overall Balance of Payments

(Rs. crore)

Items	2004-05			2005-06		
	Credit	Debit	Net	Credit	Debit	Net
1	2	3	4	5	6	7
A. CURRENT ACCOUNT						
I. Merchandise	**3,81,785**	**5,33,550**	**-1,51,765**	**4,65,748**	**6,95,412**	**-2,29,664**
II. Invisibles (a+b+c)	**3,11,550**	**1,71,959**	**1,39,591**	**3,97,660**	**2,11,733**	**1,85,927**
a) Services	1,93,711	1,24,880	68,831	2,55,668	1,53,057	1,02,611
i) Travel	29,858	23,571	6,287	34,871	29,432	5,439
ii) Transportation	21,021	20,363	658	28,023	36,928	-8,905
iii) Insurance	3,913	3,249	664	4,694	4,965	-271
iv) G.n.i.e.	1,797	1,843	-46	1,396	2,343	-947
v) Miscellaneous	1,37,122	75,854	61,268	1,86,684	79,389	1,07,295
of which						
Software Services	79,404	3,579	75,825	1,04,632	5,954	98,678
Business Services	23,067	32,807	-9,740	41,356	34,428	6,928
Financial Services	2,279	3,735	-1,456	5,355	4,265	1,090
Communication Services	6,191	3,298	2,893	7,000	1,285	5,715
b) Transfers	97,201	4,066	93,135	1,13,566	4,134	1,09,432
i) Official	2,762	1,598	1,164	2,970	2,103	867
ii) Private	94,439	2,468	91,971	1,10,596	2,031	1,08,565
c) Income	20,638	43,013	-22,375	28,426	54,542	-26,116
i) Investment Income	18,538	36,947	-18,409	27,633	51,112	-23,479
ii) Compensation of Employees	2,100	6,066	-3,966	793	3,430	-2,637
Total Current Account (I+II)	**6,93,335**	**7,05,509**	**-12,174**	**8,63,408**	**9,07,145**	**-43,737**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**2,10,205**	**1,52,148**	**58,057**	**3,42,778**	**2,73,996**	**68,782**
a) Foreign Direct Investment (i+ii)	27,392	10,647	16,745	40,690	27,265	13,425
i) In India	27,234	287	26,947	39,730	273	39,457
Equity	17,028	287	16,741	26,512	273	26,239
Reinvested Earnings	8,555	–	8,555	12,220	–	12,220
Other Capital	1,651	–	1,651	998	–	998
ii) Abroad	158	10,360	-10,202	960	26,992	-26,032
Equity	158	7,517	-7,359	960	17,678	-16,718
Reinvested Earnings	–	1,114	-1,114	–	4,834	-4,834
Other Capital	–	1,729	-1,729	–	4,480	-4,480
b) Portfolio Investment	1,82,813	1,41,501	41,312	3,02,088	2,46,731	55,357
i) In India	1,82,813	1,41,394	41,419	3,02,088	2,46,731	55,357
of which						
FIIs	1,80,900	1,42,270	38,630	2,90,648	2,46,736	43,912
GDRs/ADRs	2,728	–	2,728	11,438	–	11,438
ii) Abroad	–	107	-107	–	–	–
2. Loans (a+b+c)	**1,35,685**	**87,090**	**48,595**	**1,74,729**	**1,40,332**	**34,397**
a) External Assistance	16,988	8,463	8,525	16,133	8,541	7,592
i) By India	108	576	-468	106	390	-284
ii) To India	16,880	7,887	8,993	16,027	8,151	7,876
b) Commercial Borrowings	40,679	17,566	23,113	63,476	52,971	10,505
i) By India	–	1,036	-1,036	–	1,105	-1,105
ii) To India	40,679	16,530	24,149	63,476	51,866	11,610
c) Short Term To India	78,018	61,061	16,957	95,120	78,820	16,300
i) Suppliers' Credit >180 days & Buyers' Credit	78,018	61,061	16,957	85,766	78,114	7,652
ii) Suppliers' Credit up to 180 days	–	–	–	9,354	706	8,648
3. Banking Capital (a+b)	**65,278**	**48,238**	**17,040**	**95,988**	**90,193**	**5,795**
a) Commercial Banks	64,038	46,532	17,506	91,200	89,569	1,631
i) Assets	2,276	2,481	-205	3,369	17,711	-14,342
ii) Liabilities	61,762	44,051	17,711	87,831	71,858	15,973
of which: Non-Resident Deposits	36,225	40,664	-4,439	79,190	66,733	12,457
b) Others	1,240	1,706	-466	4,788	624	4,164
4. Rupee Debt Service	**—**	**1,858**	**-1,858**	**–**	**2,557**	**-2,557**
5. Other Capital	**30,507**	**26,974**	**3,533**	**26,451**	**20,903**	**5,548**
Total Capital Account (1 to 5)	**4,41,675**	**3,16,308**	**1,25,367**	**6,39,946**	**5,27,981**	**1,11,965**
C. ERRORS & OMISSIONS	**2,714**	**–**	**2,714**	**–**	**2,332**	**-2,332**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**11,37,724**	**10,21,817**	**1,15,907**	**15,03,354**	**14,37,458**	**65,896**
E. MONETARY MOVEMENTS (i+ii)	**–**	**1,15,907**	**-1,15,907**	**–**	**65,896**	**-65,896**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	1,15,907	-1,15,907	–	65,896	-65,896

P : Preliminary. PR : Partially Revised.

No. 42: India's Overall Balance of Payments *(Contd.)*

(Rs. crore)

Items	2006-07			2007-08 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	8	9	10	11	12	13
A. CURRENT ACCOUNT						
I. Merchandise	**5,82,871**	**8,62,833**	**-2,79,962**	**6,67,757**	**10,36,289**	**-3,68,532**
II. Invisibles (a+b+c)	**5,17,146**	**2,81,567**	**2,35,579**	**5,96,954**	**2,97,336**	**2,99,618**
a) Services	3,33,093	2,00,029	1,33,064	3,61,932	2,10,873	1,51,059
i) Travel	41,127	30,249	10,878	45,524	37,173	8,351
ii) Transportation	36,049	36,504	-455	40,200	46,277	-6,077
iii) Insurance	5,403	2,903	2,500	6,587	4,194	2,393
iv) G.n.i.e.	1,143	1,825	-682	1,330	1,520	-190
v) Miscellaneous	2,49,371	1,28,548	1,20,823	2,68,291	1,21,709	1,46,582
of which						
Software Services	1,41,356	10,212	1,31,144	1,62,020	12,299	1,49,721
Business Services	65,738	71,500	-5,762	67,424	67,105	319
Financial Services	14,010	13,460	550	12,918	12,581	337
Communication Services	10,227	3,589	6,638	9,683	3,459	6,224
b) Transfers	1,42,037	6,288	1,35,749	1,77,737	9,290	1,68,447
i) Official	2,864	1,723	1,141	3,025	2,073	952
ii) Private	1,39,173	4,565	1,34,608	1,74,712	7,217	1,67,495
c) Income	42,016	75,250	-33,234	57,285	77,173	-19,888
i) Investment Income	40,297	70,955	-30,658	55,438	72,769	-17,331
ii) Compensation of Employees	1,719	4,295	-2,576	1,847	4,404	-2,557
Total Current Account (I+II)	**11,00,017**	**11,44,400**	**-44,383**	**12,64,711**	**13,33,625**	**-68,914**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**6,00,951**	**5,34,160**	**66,791**	**10,92,961**	**9,12,173**	**1,80,788**
a) Foreign Direct Investment (i+ii)	1,06,464	71,554	34,910	1,47,951	86,158	61,793
i) In India	1,03,037	385	1,02,652	1,37,935	501	1,37,434
Equity	74,354	385	73,969	1,07,753	433	1,07,320
Reinvested Earnings	26,371	–	26,371	28,859	–	28,859
Other Capital	2,312	–	2,312	1,323	68	1,255
ii) Abroad	3,427	71,169	-67,742	10,016	85,657	-75,641
Equity	3,427	60,138	-56,711	10,016	67,952	-57,936
Reinvested Earnings	–	4,868	-4,868	–	4,363	-4,363
Other Capital	–	6,163	-6,163	–	13,342	-13,342
b) Portfolio Investment	4,94,487	4,62,606	31,881	9,45,010	8,26,015	1,18,995
i) In India	4,94,102	4,62,472	31,630	9,44,066	8,25,718	1,18,348
of which						
FIIs	4,77,132	4,62,472	14,660	9,07,934	8,25,718	82,216
GDRs/ADRs	16,961	–	16,961	34,937	-	34,937
ii) Abroad	385	134	251	944	297	647
2. Loans (a+b+c)	**2,46,525**	**1,36,091**	**1,10,434**	**3,35,600**	**1,67,077**	**1,68,523**
a) External Assistance	16,978	9,005	7,973	17,022	8,557	8,465
i) By India	90	144	-54	97	113	-16
ii) To India	16,888	8,861	8,027	16,925	8,444	8,481
b) Commercial Borrowings	93,932	21,567	72,365	1,22,270	31,090	91,180
i) By India	2,837	4,361	-1,524	6,407	6,537	-130
ii) To India	91,095	17,206	73,889	1,15,863	24,553	91,310
c) Short Term To India	1,35,615	1,05,519	30,096	1,96,308	1,27,430	68,878
i) Suppliers' Credit >180 days & Buyers' Credit	1,15,125	1,00,196	14,929	1,71,182	1,27,430	43,752
ii) Suppliers' Credit up to 180 days	20,490	5,323	15,167	25,126	–	25,126
3. Banking Capital (a+b)	**1,67,494**	**1,59,017**	**8,477**	**2,23,977**	**1,76,829**	**47,148**
a) Commercial Banks	1,65,656	1,58,660	6,996	2,23,661	1,75,115	48,546
i) Assets	64,972	80,726	-15,754	78,365	50,733	27,632
ii) Liabilities	1,00,684	77,934	22,750	1,45,296	1,24,382	20,914
of which: Non-Resident Deposits	89,950	70,376	19,574	1,18,079	1,17,373	706
b) Others	1,838	357	1,481	316	1,714	-1,398
4. Rupee Debt Service	**–**	**725**	**-725**	**–**	**488**	**-488**
5. Other Capital	**36,797**	**18,101**	**18,696**	**83,687**	**45,885**	**37,802**
Total Capital Account (1 to 5)	**10,51,767**	**8,48,094**	**2,03,673**	**17,36,225**	**13,02,452**	**4,33,773**
C. ERRORS & OMISSIONS	**4,344**	**–**	**4,344**	**4,830**	**–**	**4,830**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**21,56,128**	**19,92,494**	**1,63,634**	**30,05,766**	**26,36,077**	**3,69,689**
E. MONETARY MOVEMENTS (i+ii)	**–**	**1,63,634**	**-1,63,634**	**–**	**3,69,689**	**-3,69,689**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	1,63,634	-1,63,634	–	3,69,689	-3,69,689

No. 42: India's Overall Balance of Payments *(Contd.)*

(Rs. crore)

Items	Apr-Jun 2006 PR			Jul-Sep 2006 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	14	15	16	17	18	19
A. CURRENT ACCOUNT						
I. Merchandise	**1,34,880**	**2,11,953**	**-77,073**	**1,51,636**	**2,25,903**	**-74,267**
II. Invisibles (a+b+c)	**1,13,377**	**56,479**	**56,898**	**1,15,305**	**67,687**	**47,618**
a) Services	72,944	38,537	34,407	76,122	46,213	29,909
i) Travel	7,766	6,766	1,000	8,328	8,398	-70
ii) Transportation	7,798	9,081	-1,283	9,149	9,172	-23
iii) Insurance	1,082	587	495	1,461	714	747
iv) G.n.i.e.	182	359	-177	283	566	-283
v) Miscellaneous	56,116	21,744	34,372	56,901	27,363	29,538
of which						
Software Services	32,007	1,887	30,120	33,020	1,878	31,142
Business Services	15,396	12,032	3,364	15,933	15,302	631
Financial Services	2,314	1,446	868	3,320	3,260	60
Communication Services	2,160	491	1,669	2,638	835	1,803
b) Transfers	32,603	1,314	31,289	28,833	1,674	27,159
i) Official	314	373	-59	552	464	88
ii) Private	32,289	941	31,348	28,281	1,210	27,071
c) Income	7,830	16,628	-8,798	10,350	19,800	-9,450
i) Investment Income	7,544	15,737	-8,193	10,016	18,743	-8,727
ii) Compensation of Employees	286	891	-605	334	1,057	-723
Total Current Account (I+II)	**2,48,257**	**2,68,432**	**-20,175**	**2,66,941**	**2,93,590**	**-26,649**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**1,55,960**	**150,357**	**5,603**	**1,04,262**	**84,482**	**19,780**
a) Foreign Direct Investment (i+ii)	15,810	7,906	7,904	21,074	11,263	9,811
i) In India	15,519	36	15,483	20,402	9	20,393
Equity	8,849	36	8,813	13,382	9	13,373
Reinvested Earnings	6,625	–	6,625	6,756	–	6,756
Other Capital	45	–	45	264	–	264
ii) Abroad	291	7,870	-7,579	672	11,254	-10,582
Equity	291	5,406	-5,115	672	8,662	-7,990
Reinvested Earnings	–	1,223	-1,223	–	1,247	-1,247
Other Capital	–	1,241	-1,241	–	1,345	-1,345
b) Portfolio Investment	1,40,150	1,42,451	-2,301	83,188	73,219	9,969
i) In India	1,40,055	1,42,446	-2,391	83,137	73,214	9,923
of which						
FIIs	1,34,321	1,42,446	-8,125	81,004	73,214	7,790
GDRs/ADRs	5,734	–	5,734	2,133	–	2,133
ii) Abroad	95	5	90	51	5	46
2. Loans (a+b+c)	**52,288**	**28,591**	**23697**	**52,065**	**29,890**	**22,175**
a) External Assistance	2,624	2,391	233	3,654	2,082	1,572
i) By India	23	36	-13	23	37	-14
ii) To India	2,601	2,355	246	3631	2,045	1,586
b) Commercial Borrowings	22,968	4,879	18,089	12,428	4,266	8,162
i) By India	396	1,014	-618	529	788	-259
ii) To India	22,572	3,865	18,707	11,899	3,478	8,421
c) Short Term To India	26,696	21,321	5,375	35,983	23,542	12,441
i) Suppliers' Credit >180 days & Buyers' Credit	23,108	21,321	1,787	30,507	23,542	6,965
ii) Suppliers' Credit up to 180 days	3,588	–	3,588	5,476	–	5,476
3. Banking Capital (a+b)	**45,057**	**22,044**	**23,013**	**26,682**	**34,648**	**-7,966**
a) Commercial Banks	44,730	22,044	22,686	26,682	34,444	-7,762
i) Assets	23,904	8,535	15,369	7,271	16,475	-9,204
ii) Liabilities	20,826	13,509	7,317	19,411	17,969	1,442
of which: Non-Resident Deposits	19,307	13,387	5,920	19,406	15,196	4,210
b) Others	327	–	327	–	204	-204
4. Rupee Debt Service	–	**305**	**-305**	–	–	–
5. Other Capital	**1,555**	**4,793**	**-3,238**	**5,027**	**2,569**	**2,458**
Total Capital Account (1 to 5)	**2,54,860**	**2,06,090**	**48,770**	**1,88,036**	**1,51,589**	**36,447**
C. ERRORS & OMISSIONS	**411**	–	**411**	**728**	–	**728**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**5,03,528**	**4,74,522**	**29,006**	**4,55,705**	**4,45,179**	**10,526**
E. MONETARY MOVEMENTS (i+ii)	–	**29,006**	**-29,006**	–	**10,526**	**-10,526**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	29,006	-29,006	–	10,526	-10,526

No. 42: India's Overall Balance of Payments *(Contd.)*

(Rs. crore)

Items	Oct-Dec 2006 PR			Jan-Mar 2007 P		
	Credit	Debit	Net	Credit	Debit	Net
1	20	21	22	23	24	25
A. CURRENT ACCOUNT						
I. Merchandise	**1,38,660**	**2,12,583**	**-73,923**	**1,57,695**	**2,12,394**	**-54,699**
II. Invisibles (a+b+c)	**1,33,622**	**75,911**	**57,711**	**1,54,842**	**81,490**	**73,352**
a) Services	83,001	55,650	27,351	1,01,026	59,629	41,397
i) Travel	11,790	7,368	4,422	13,243	7,717	5,526
ii) Transportation	9,411	9,456	-45	9,691	8,795	896
iii) Insurance	1,296	904	392	1,564	698	866
iv) G.n.i.e.	391	436	-45	287	464	-177
v) Miscellaneous	60,113	37,486	22,627	76,241	41,955	34,286
of which						
Software Services	34,197	3,077	31,120	42,132	3,370	38,762
Business Services	16,599	19,195	-2,596	17,810	24,971	-7,161
Financial Services	3,725	2,910	815	4,651	5,844	-1,193
Communication Services	2,686	1,075	1,611	2,743	1,188	1,555
b) Transfers	40,311	1,498	38,813	40,290	1,802	38,488
i) Official	1,291	400	891	707	486	221
ii) Private	39,020	1,098	37,922	39,583	1,316	38,267
c) Income	10,310	18,763	-8,453	13,526	20,059	-6,533
i) Investment Income	9865	17,706	-7,841	12,872	18,769	-5,897
ii) Compensation of Employees	445	1,057	-612	654	1,290	-636
Total Current Account (I+II)	**2,72,282**	**2,88,494**	**-16,212**	**3,12,537**	**2,93,884**	**18,653**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**1,73,846**	**1,44,755**	**29,091**	**1,66,883**	**1,54,566**	**12,317**
a) Foreign Direct Investment (i+ii)	45,020	31,983	13,037	24,560	20,402	4,158
i) In India	44,332	31	44,301	22,784	309	22,475
Equity	36,901	31	36,870	15,222	309	14,913
Reinvested Earnings	6554	–	6,554	6,436	–	6,436
Other Capital	877	–	877	1,126	–	1,126
ii) Abroad	688	31952	-31,264	1,776	20,093	-18,317
Equity	688	29,033	-28,345	1,776	17,037	-15,261
Reinvested Earnings	–	1,210	-1,210	–	1,188	-1,188
Other Capital	–	1,709	-1,709	–	1,868	-1,868
b) Portfolio Investment	1,28,826	1,12,772	16,054	1,42,323	1,34,164	8,159
i) In India	1,28,768	1,12,745	16,023	1,42,142	1,34,067	8,075
of which						
FIIs	1,27,837	1,12,745	15,092	1,33,970	1,34,067	-97
GDRs/ADRs	931	–	931	8,163	–	8,163
ii) Abroad	58	27	31	181	97	84
2. Loans (a+b+c)	**66,266**	**37,112**	**29,154**	**75,906**	**40,498**	**35,408**
a) External Assistance	5,006	2,222	2,784	5,694	2,310	3,384
i) By India	22	36	-14	22	35	-13
ii) To India	4,984	2,186	2,798	5,672	2,275	3,397
b) Commercial Borrowings	24,373	6,158	18,215	34,163	6,264	27,899
i) By India	1,912	1,552	360	–	1,007	-1,007
ii) To India	22,461	4,606	17,855	34,163	5,257	28,906
c) Short Term To India	36,887	28,732	8,155	36,049	31,924	4,125
i) Suppliers' Credit >180 days & Buyers' Credit	25,461	28,732	-3,271	36,049	26,601	9,448
ii) Suppliers' Credit up to 180 days	11,426	–	11,426	–	5,323	-5,323
3. Banking Capital (a+b)	**32,209**	**46,213**	**-14,004**	**63,546**	**56,112**	**7,434**
a) Commercial Banks	31,237	46,060	-14,823	63,007	56,112	6,895
i) Assets	2,501	20,378	-17,877	31,296	35,338	-4,042
ii) Liabilities	28,736	25,682	3,054	31,711	20,774	10,937
of which: Non-Resident Deposits	28,453	21,871	6,582	22,784	19,922	2,862
b) Others	972	153	819	539	–	539
4. Rupee Debt Service	**–**	**9**	**-9**	**–**	**411**	**-411**
5. Other Capital	**8,889**	**4,471**	**4,418**	**21,326**	**6,268**	**15,058**
Total Capital Account (1 to 5)	**2,81,210**	**2,32,560**	**48,650**	**3,27,661**	**2,57,855**	**69,806**
C. ERRORS & OMISSIONS	**1,323**	**–**	**1,323**	**1,882**	**–**	**1,882**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**5,54,815**	**5,21,054**	**33,761**	**6,42,080**	**5,51,739**	**90,341**
E. MONETARY MOVEMENTS (i+ii)	**–**	**33,761**	**-33,761**	**–**	**90,341**	**-90,341**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	33,761	-33,761	–	90,341	-90,341

No. 42: India's Overall Balance of Payments *(Contd.)*

(Rs. crore)

Items	Apr-Jun 2007 PR			Jul-Sep 2007 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	26	27	28	29	30	31
A. CURRENT ACCOUNT						
I. Merchandise	**1,41,665**	**2,32,339**	**-90,674**	**1,55,101**	**2,41,164**	**-86,063**
II. Invisibles (a+b+c)	**1,23,208**	**60,079**	**63,129**	**1,37,838**	**69,189**	**68,649**
a) Services	77,892	40,889	37,003	83,430	46,964	36,466
i) Travel	8,610	7,859	751	9,110	8,295	815
ii) Transportation	8,053	10,416	-2,363	8,474	10,370	-1,896
iii) Insurance	1,538	763	775	1,382	1,151	231
iv) G.n.i.e.	388	454	-66	276	519	-243
v) Miscellaneous	59,303	21,397	37,906	64,188	26,629	37,559
of which						
Software Services	36,435	2,800	33,635	36,675	3,246	33,429
Business Services	15,496	13,042	2,454	15,780	14,334	1,446
Financial Services	2,177	1,851	326	3,712	2,845	867
Communication Services	2,115	953	1,162	2,484	729	1,755
b) Transfers	35,577	1,781	33,796	39,341	1,654	37,687
i) Official	631	680	-49	640	454	186
ii) Private	34,946	1,101	33,845	38,701	1,200	37,501
c) Income	9,739	17,409	-7,670	15,067	20,571	-5,504
i) Investment Income	9,397	16,593	-7,196	14,621	19,363	-4,742
ii) Compensation of Employees	342	816	-474	446	1,208	-762
Total Current Account (I+II)	**2,64,873**	**2,92,418**	**-27,545**	**2,92,939**	**3,10,353**	**-17,414**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**1,77,448**	**1,35,067**	**42,381**	**2,19,666**	**1,66,874**	**52,792**
a) Foreign Direct Investment (i+ii)	34,101	22,818	11,283	22,297	13,673	8,624
i) In India	30,831	82	30,749	19,160	77	19,083
Equity	22,984	82	22,902	11,436	77	11,359
Reinvested Earnings	7,389	–	7,389	7,262	–	7,262
Other Capital	458	–	458	462	–	462
ii) Abroad	3,270	22,736	-19,466	3,137	13,596	-10,459
Equity	3,270	19,619	-16,349	3,137	10,192	-7,055
Reinvested Earnings	–	1,117	-1,117	–	1,098	-1,098
Other Capital	–	2,000	-2,000	–	2,306	-2,306
b) Portfolio Investment	1,43,347	1,12,249	31,098	1,97,369	1,53,201	44,168
i) In India	1,43,108	1,12,224	30,884	1,97,349	1,53,108	44,241
of which						
FIIs	1,41,455	1,12,224	29,231	1,87,221	1,53,108	34,113
GDRs/ADRs	1,303	–	1,303	10,038	–	10,038
ii) Abroad	239	25	214	20	93	-73
2. Loans (a+b+c)	**69,064**	**31,311**	**37,753**	**80,003**	**42,296**	**37,707**
a) External Assistance	3,019	2,025	994	3,983	2,087	1,896
i) By India	25	29	-4	24	28	-4
ii) To India	2,994	1,996	998	3,959	2,059	1,900
b) Commercial Borrowings	34,187	5,518	28,669	25,490	8,429	17,061
i) By India	1,480	1,423	57	1,795	2,038	-243
ii) To India	32,707	4,095	28,612	23,695	6,391	17,304
c) Short Term To India	31,858	23,768	8,090	50,530	31,780	18,750
i) Suppliers' Credit >180 days & Buyers' Credit	28,382	23,768	4,614	44,626	31,780	12,846
ii) Suppliers' Credit up to 180 days	3,476	–	3,476	5,904	–	5,904
3. Banking Capital (a+b)	**35,297**	**39,086**	**-3,789**	**55,576**	**28,656**	**26,920**
a) Commercial Banks	35,297	39,061	-3,764	55,479	28,368	27,111
i) Assets	10,486	11,797	-1,311	17,847	1,451	16,396
ii) Liabilities	24,811	27,264	-2,453	37,632	26,917	10,715
of which: Non-Resident Deposits	21,656	23,499	-1,843	28,266	26,771	1,495
b) Others	–	25	-25	97	288	-191
4. Rupee Debt Service	**–**	**177**	**-177**	**–**	**8**	**-8**
5. Other Capital	**4,746**	**7,550**	**-2,804**	**29,899**	**12,952**	**16,947**
Total Capital Account (1 to 5)	**2,86,555**	**2,13,191**	**73,364**	**3,85,144**	**2,50,786**	**1,34,358**
C. ERRORS & OMISSIONS	**364**	**–**	**364**	**1,535**	**–**	**1,535**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**5,51,792**	**5,05,609**	**46,183**	**6,79,618**	**5,61,139**	**1,18,479**
E. MONETARY MOVEMENTS (i+ii)	**–**	**46,183**	**-46,183**	**–**	**1,18,479**	**-1,18,479**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	46,183	-46,183	–	1,18,479	-1,18,479

No. 42: India's Overall Balance of Payments *(Contd.)*

(Rs. crore)

Items	Oct-Dec 2007 PR			Jan-Mar 2008 P		
	Credit	Debit	Net	Credit	Debit	Net
1	32	33	34	35	36	37
A. CURRENT ACCOUNT						
I. Merchandise	**1,61,737**	**2,64,548**	**-1,02,811**	**2,09,254**	**2,98,238**	**-88,984**
II. Invisibles (a+b+c)	**1,56,086**	**71,154**	**84,932**	**1,79,823**	**96,914**	**82,909**
a) Services	97,149	49,691	47,458	1,03,462	73,329	30,133
i) Travel	13,397	9,941	3,456	14,407	11,078	3,329
ii) Transportation	11,046	12,008	-962	12,627	13,483	-856
iii) Insurance	1,728	1,030	698	1,939	1,250	689
iv) G.n.i.e.	355	296	59	311	251	60
v) Miscellaneous	70,622	26,416	44,206	74,178	47,267	26,911
of which						
Software Services	37,915	3,362	34,553	50,995	2,891	48,104
Business Services	18,105	16,752	1,353	18,043	22,977	-4,934
Financial Services	3,481	3,011	470	3,548	4,874	-1,326
Communication Services	2,372	722	1,650	2,712	1,055	1,657
b) Transfers	45,098	1,945	43,153	57,721	3,910	53,811
i) Official	770	477	293	984	462	522
ii) Private	44,328	1,468	42,860	56,737	3,448	53,289
c) Income	13,839	19,518	-5,679	18,640	19,675	-1,035
i) Investment Income	13,421	18,464	-5,043	17,999	18,349	-350
ii) Compensation of Employees	418	1,054	-636	641	1,326	-685
Total Current Account (I+II)	**3,17,823**	**3,35,702**	**-17,879**	**3,89,077**	**3,95,152**	**-6,075**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**3,41,473**	**2,74,812**	**66,661**	**3,54,374**	**3,35,420**	**18,954**
a) Foreign Direct Investment (i+ii)	32,817	24,762	8,055	58,736	24,905	33,831
i) In India	31,239	170	31,069	56,705	172	56,533
Equity	23,764	170	23,594	49,569	104	49,465
Reinvested Earnings	7,072	–	7,072	7,136	–	7,136
Other Capital	403	–	403	–	68	-68
ii) Abroad	1,578	24,592	-23,014	2,031	24,733	-22,702
Equity	1,578	20,544	-18,966	2,031	17,597	-15,566
Reinvested Earnings	–	1,069	-1,069	–	1,079	-1,079
Other Capital	–	2,979	-2,979	–	6,057	-6,057
b) Portfolio Investment	3,08,656	2,50,050	58,606	2,95,638	3,10,515	-14,877
i) In India	3,08,186	2,49,975	58,211	2,95,423	3,10,411	-14,988
of which						
FIIs	2,85,349	2,49,975	35,374	2,93,909	3,10,411	-16,502
GDRs/ADRs	22,087	–	22,087	1,509	–	1,509
ii) Abroad	470	75	395	215	104	111
2. Loans (a+b+c)	**85,014**	**41,834**	**43,180**	**1,01,519**	**51,636**	**49,883**
a) External Assistance	4,377	2,147	2,230	5,643	2,298	3,345
i) By India	24	28	-4	24	28	-4
ii) To India	4,353	2,119	2,234	5,619	2,270	3,349
b) Commercial Borrowings	33,341	8,689	24,652	29,252	8,454	20,798
i) By India	1,432	1,515	-83	1,700	1,561	139
ii) To India	31,909	7,174	24,735	27,552	6,893	20,659
c) Short Term To India	47,296	30,998	16,298	66,624	40,884	25,740
i) Suppliers' Credit >180 days & Buyers' Credit	40,374	30,998	9,376	57,800	40,884	16,916
ii) Suppliers' Credit up to 180 days	6,922	–	6,922	8,824	–	8,824
3. Banking Capital (a+b)	**49,675**	**48,858**	**817**	**83,429**	**60,229**	**23,200**
a) Commercial Banks	49,663	47,469	2,194	83,222	60,217	23,005
i) Assets	22,241	15,544	6,697	27,791	21,941	5,850
ii) Liabilities	27,422	31,925	-4,503	55,431	38,276	17,155
of which: Non-Resident Deposits	25,477	28,843	-3,366	42,680	38,260	4,420
b) Others	12	1,389	-1,377	207	12	195
4. Rupee Debt Service	–	–	–	–	**303**	**-303**
5. Other Capital	**26,093**	**14,349**	**11,744**	**22,949**	**11,034**	**11,915**
Total Capital Account (1 to 5)	**5,02,255**	**3,79,853**	**1,22,402**	**5,62,271**	**4,58,622**	**1,03,649**
C. ERRORS & OMISSIONS	**992**	–	**992**	**1,938**	–	**1,938**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**8,21,070**	**7,15,555**	**1,05,515**	**9,53,286**	**8,53,774**	**99,512**
E. MONETARY MOVEMENTS (i+ii)	–	**1,05,515**	**-1,05,515**	–	**99,512**	**-99,512**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	1,05,515	-1,05,515	–	99,512	-99,512

No. 42: India's Overall Balance of Payments *(Contd.)*

(Rs. crore)

Items	Apr-Jun 2008 PR			Jul-Sep 2008 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	38	39	40	41	42	43
A. CURRENT ACCOUNT						
I. Merchandise	**2,04,614**	**3,31,735**	**-1,27,121**	2,08,829	3,77,437	**-1,68,608**
II. Invisibles (a+b+c)	**1,59,768**	**70,120**	**89,648**	**1,97,850**	**85,406**	**1,12,444**
a) Services	93,618	48,854	44,764	1,19,642	60,145	59,497
i) Travel	10,431	9,014	1,417	12,197	11,838	359
ii) Transportation	10,539	13,863	-3,324	12,696	16,391	-3,695
iii) Insurance	1,458	950	508	1,594	1,340	254
iv) G.n.i.e.	542	458	84	355	416	-61
v) Miscellaneous	70,648	24,569	46,079	92,800	30,160	62,640
of which						
Software Services	48,554	3,570	44,984	53,499	4,045	49,454
Business Services	14,788	13,026	1,762	21,189	15,459	5,730
Financial Services	2,537	2,616	-79	7,311	4,225	3,086
Communication Services	2,124	941	1,183	3,240	1,296	1,944
b) Transfers	51,266	2,741	48,525	60,061	3,643	56,418
i) Official	617	462	155	223	438	-215
ii) Private	50,649	2,279	48,370	59,838	3,205	56,633
c) Income	14,884	18,525	-3,641	18,147	21,618	-3,471
i) Investment Income	14,238	17,150	-2,912	16,877	20,165	-3,288
ii) Compensation of Employees	646	1,375	-729	1,270	1,453	-183
Total Current Account (I+II)	**3,64,382**	**4,01,855**	**-37,473**	**4,06,679**	**4,62,843**	**-56,164**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**2,20,427**	**2,00,524**	**19,903**	**2,27,143**	**2,08,518**	**18,625**
a) Foreign Direct Investment (i+ii)	50,621	13,176	37,445	40,506	16,146	24,360
i) In India	49,625	92	49,533	38,676	228	38,448
Equity	42,656	92	42,564	31,977	228	31,749
Reinvested Earnings	6,257	–	6,257	6,576	–	6,576
Other Capital	712	–	712	123	–	123
ii) Abroad	996	13,084	-12,088	1,830	15,918	-14,088
Equity	996	9,743	-8,747	1,830	12,495	-10,665
Reinvested Earnings	–	1,129	-1,129	–	1186	-1,186
Other Capital	–	2,212	-2,212	–	2,237	-2,237
b) Portfolio Investment	1,69,806	1,87,348	-17,542	1,86,637	1,92,372	-5,735
i) In India	1,69,727	1,87,131	-17,404	1,86,580	1,92,276	-5,696
of which						
FIIs	1,65,566	1,87,131	-21,565	1,85,984	1,92,276	-6,292
GDRs/ADRs	4,161	–	4,161	595	–	595
ii) Abroad	79	217	-138	57	96	-39
2. Loans (a+b+c)	**57,706**	**40,093**	**17,613**	**71,541**	**55,950**	**15,591**
a) External Assistance	3,787	2,324	1,463	4,794	2,526	2,268
i) By India	25	33	-8	26	35	-9
ii) To India	3,762	2,291	1,471	4,768	2,491	2,277
b) Commercial Borrowings	11,530	5,365	6,165	15,923	8,257	7,666
i) By India	1,683	804	879	2,329	604	1,725
ii) To India	9,847	4,561	5,286	13,594	7,653	5,941
c) Short Term To India	42,389	32,404	9,985	50,824	45,167	5,657
i) Suppliers' Credit >180 days & Buyers' Credit	38,557	32,404	6,153	50,824	42,755	8,069
ii) Suppliers' Credit up to 180 days	3,832	–	3,832	–	2,412	-2,412
3. Banking Capital (a+b)	**91,443**	**80,212**	**11,231**	**70,988**	**61,659**	**9,329**
a) Commercial Banks	91,443	79,583	11,860	70,988	61,646	9,342
i) Assets	47,725	43,876	3,849	28,220	22,564	5,656
ii) Liabilities	43,718	35,707	8,011	42,768	39,082	3,686
of which: Non-Resident Deposits	37,753	34,362	3,391	40,163	39,030	1,133
b) Others	–	629	-629	–	13	-13
4. Rupee Debt Service	–	125	**-125**	–	13	**-13**
5. Other Capital	9,889	12,176	**-2,287**	3,861	13,016	**-9,155**
Total Capital Account (1 to 5)	**3,79,465**	**3,33,130**	**46,335**	**3,73,533**	**3,39,156**	**34,377**
C. ERRORS & OMISSIONS	**448**	–	**448**	**1,062**	–	**1,062**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**7,44,295**	**7,34,985**	**9,310**	**7,81,274**	**8,01,999**	**-20,725**
E. MONETARY MOVEMENTS (i+ii)	–	**9,310**	**-9,310**	**20,725**	–	**20,725**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	9,310	-9,310	20,725	–	20,725

No. 42: India's Overall Balance of Payments *(Contd.)*

(Rs. crore)

Items	Oct-Dec 2008 P			Oct-Dec 2007 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	44	45	46	47	48	49
A. CURRENT ACCOUNT						
I. Merchandise	1,78,995	3,56,039	**-1,77,044**	**1,61,737**	**2,64,548**	**-1,02,811**
II. Invisibles (a+b+c)	**1,91,677**	**86,043**	**1,05,634**	**1,56,086**	**71,154**	**84,932**
a) Services	1,20,590	58,189	62,401	97,149	49,691	47,458
i) Travel	14,258	9,699	4,559	13,397	9,941	3,456
ii) Transportation	12,342	15,653	-3,311	11,046	12,008	-962
iii) Insurance	1,677	1,312	365	1,728	1,030	698
iv) G.n.i.e.	473	1,136	-663	355	296	59
v) Miscellaneous	91,840	30,389	61,451	70,622	26,416	44,206
of which						
Software Services	52,391	2,828	49,563	37,915	3,362	34,553
Business Services	21,129	15,936	5,193	18,105	16,752	1,353
Financial Services	5,418	3,584	1,834	3,481	3,011	470
Communication Services	2,667	1,058	1,609	2,372	722	1650
b) Transfers	55,527	4,131	51,396	45,098	1,945	43,153
i) Official	1,390	493	897	770	477	293
ii) Private	54,137	3,638	50,499	44,328	1,468	42,860
c) Income	15,560	23,723	-8,163	13,839	19,518	-5,679
i) Investment Income	14,629	22,114	-7,485	13,421	18,464	-5,043
ii) Compensation of Employees	931	1,609	-678	418	1,054	-636
Total Current Account (I+II)	**3,70,672**	**4,42,082**	**-71,410**	**3,17,823**	**3,35,702**	**-17,879**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**1,63,469**	**1,87,849**	**-24,380**	**3,41,473**	**2,74,812**	**66,661**
a) Foreign Direct Investment (i+ii)	33,769	29,769	4,000	32,817	24,762	8,055
i) In India	32,735	141	32,594	31,239	170	31,069
Equity	20,037	141	19,896	23,764	170	23,594
Reinvested Earnings	8,392	–	8,392	7,072	–	7,072
Other Capital	4,306	–	4,306	403	–	403
ii) Abroad	1,034	29,628	-28,594	1,578	24,592	-23,014
Equity	1,034	21,900	-20,866	1,578	20,544	-18,966
Reinvested Earnings	–	1,321	-1,321	–	1,069	-1,069
Other Capital	–	6,407	-6,407	–	2,979	-2,979
b) Portfolio Investment	1,29,700	1,58,080	-28,380	3,08,656	2,50,050	58,606
i) In India	1,29,554	1,57,773	-28,219	3,08,186	2,49,975	58,211
of which						
FIIs	1,29,520	1,57,773	-28,253	2,85,349	2,49,975	35,374
GDRs/ADRs	34	–	34	22,087	–	22,087
ii) Abroad	146	307	-161	470	75	395
2. Loans (a+b+c)	**82,156**	**73,706**	**8,450**	**85,014**	**41,834**	**43,180**
a) External Assistance	8,070	3,233	4,837	4,377	2,147	2,230
i) By India	29	39	-10	24	28	-4
ii) To India	8,041	3,194	4,847	4,353	2,119	2,234
b) Commercial Borrowings	27,444	8,510	18,934	33,341	8,689	24,652
i) By India	3,262	727	2,535	1,432	1,515	-83
ii) To India	24,182	7,783	16,399	31,909	7,174	24,735
c) Short Term To India	46,642	61,963	-15,321	47,296	30,998	16,298
i) Suppliers' Credit >180 days & Buyers' Credit	46,642	50,504	-3,862	40,374	30,998	9,376
ii) Suppliers' Credit up to 180 days	–	11,459	-11,459	6,922	–	6,922
3. Banking Capital (a+b)	**72,224**	**96,390**	**-24,166**	**49,675**	**48,858**	**817**
a) Commercial Banks	72,209	94,288	-22,079	49,663	47,469	2,194
i) Assets	25,318	36,777	-11,459	22,241	15,544	6,697
ii) Liabilities	46,891	57,511	-10,620	27,422	31,925	-4,503
of which: Non-Resident Deposits	46,437	41,356	5,081	25,477	28,843	-3,366
b) Others	15	2,102	-2,087	12	1,389	-1,377
4. Rupee Debt Service	–	–	–	–	–	–
5. Other Capital	23,294	1,156	**22,138**	**26,093**	**14,349**	**11,744**
Total Capital Account (1 to 5)	**3,41,143**	**3,59,101**	**-17,958**	**5,02,255**	**3,79,853**	**1,22,402**
C. ERRORS & OMISSIONS	**2,175**	–	**2,175**	**992**	–	**992**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**7,13,990**	**8,01,183**	**-87,193**	**8,21,070**	**7,15,555**	**1,05,515**
E. MONETARY MOVEMENTS (i+ii)	**87,193**	–	**87,193**	–	**1,05,515**	**-1,05,515**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	87,193	–	87,193	–	1,05,515	-1,05,515

No. 42: India's Overall Balance of Payments *(Concld.)*

(Rs. crore)

Items	Apr-Dec 2007 P			Apr-Dec 2008 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	50	51	52	53	54	55
A. CURRENT ACCOUNT						
I. Merchandise	**4,58,503**	**7,38,051**	**-2,79,548**	**5,92,438**	**10,65,211**	**-4,72,773**
II. Invisibles (a+b+c)	**4,17,131**	**2,00,422**	**2,16,709**	**5,49,295**	**2,41,569**	**3,07,726**
a) Services	2,58,470	1,37,544	1,20,926	3,33,850	1,67,188	1,66,662
i) Travel	31,117	26,095	5,022	36,886	30,551	6,335
ii) Transportation	27,573	32,794	-5,221	35,577	45,907	-10,330
iii) Insurance	4,648	2,944	1,704	4,729	3,602	1,127
iv) G.n.i.e.	1,019	1,269	-250	1,370	2,010	-640
v) Miscellaneous	1,94,113	74,442	1,19,671	2,55,288	85,118	1,70,170
of which						
Software Services	1,11,025	9,408	1,01,617	1,54,444	10,443	1,44,001
Business Services	49,381	44,128	5,253	57,106	44,421	12,685
Financial Services	9,370	7,707	1,663	15,266	10,425	4,841
Communication Services	6,971	2,404	4,567	8,031	3,295	4,736
b) Transfers	1,20,016	5,380	1,14,636	1,66,854	10,515	1,56,339
i) Official	2,041	1611	430	2,230	1,393	837
ii) Private	1,17,975	3,769	1,14,206	1,64,624	9,122	1,55,502
c) Income	38,645	57,498	-18,853	48,591	63,866	-15,275
i) Investment Income	37,439	54,420	-16,981	45,744	59,429	-13,685
ii) Compensation of Employees	1,206	3,078	-1,872	2,847	4,437	-1,590
Total Current Account (I+II)	**8,75,634**	**9,38,473**	**-62,839**	**11,41,733**	**13,06,780**	**-1,65,047**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**7,38,587**	**5,76,753**	**1,61,834**	**6,11,039**	**5,96,891**	**14,148**
a) Foreign Direct Investment (i+ii)	89,215	61,253	27,962	1,24,896	59,091	65,805
i) In India	81,230	329	80,901	1,21,036	461	1,20,575
Equity	58,184	329	57,855	94,670	461	94,209
Reinvested Earnings	21,723	–	21,723	21,225	–	21,225
Other Capital	1,323	–	1,323	5,141	–	5,141
ii) Abroad	7,985	60,924	-52,939	3,860	58,630	-54,770
Equity	7,985	50,355	-42,370	3,860	44,138	-40,278
Reinvested Earnings	–	3,284	-3,284	–	3,636	-3,636
Other Capital	–	7,285	-7,285	–	10,856	-10,856
b) Portfolio Investment	6,49,372	5,15,500	1,33,872	4,86,143	5,37,800	-51,657
i) In India	6,48,643	5,15,307	1,33,336	4,85,861	5,37,180	-51,319
of which						
FIIs	6,14,025	5,15,307	98,718	4,81,070	5,37,180	-56,110
GDRs/ADRs	33,428	–	33,428	4,790	–	4,790
ii) Abroad	729	193	536	282	620	-338
2. Loans (a+b+c)	**2,34,081**	**1,15,441**	**1,18,640**	**2,11,403**	**1,69,749**	**41,654**
a) External Assistance	11,379	6,259	5,120	16,651	8,083	8,568
i) By India	73	85	-12	80	107	-27
ii) To India	11,306	6,174	5,132	16,571	7,976	8,595
b) Commercial Borrowings	93,018	22,636	70,382	54,897	22,132	32,765
i) By India	4,707	4,976	-269	7,274	2,135	5,139
ii) To India	88,311	17,660	70,651	47,623	19,997	27,626
c) Short Term To India	1,29,684	86,546	43,138	1,39,855	1,39,534	321
i) Suppliers' Credit >180 days & Buyers' Credit	1,13,382	86,546	26,836	1,36,023	1,25,663	10,360
ii) Suppliers' Credit up to 180 days	16,302	–	16,302	3,832	13,871	-10,039
3. Banking Capital (a+b)	**1,40,548**	**1,16,600**	**23,948**	**2,34,655**	**2,38,261**	**-3,606**
a) Commercial Banks	1,40,439	1,14,898	25,541	2,34,640	2,35,517	-877
i) Assets	50,574	28,792	21,782	1,01,263	1,03,217	-1,954
ii) Liabilities	89,865	86,106	3,759	1,33,377	1,32,300	1,077
of which: Non-Resident Deposits	75,399	79,113	-3,714	1,24,353	1,14,748	9,605
b) Others	109	1,702	-1,593	15	2,744	-2,729
4. Rupee Debt Service	**–**	**185**	**-185**	**–**	**138**	**-138**
5. Other Capital	**60,738**	**34,851**	**25,887**	**37,044**	**26,348**	**10,696**
Total Capital Account (1 to 5)	**11,73,954**	**8,43,830**	**3,30,124**	**10,94,141**	**10,31,387**	**62,754**
C. ERRORS & OMISSIONS	**2,892**	**–**	**2,892**	**3,685**	**–**	**3,685**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**20,52,480**	**17,82,303**	**2,70,177**	**22,39,559**	**23,38,167**	**-98,608**
E. MONETARY MOVEMENTS (i+ii)	**–**	**2,70,177**	**-2,70,177**	**98,608**	**–**	**98,608**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	2,70,177	-2,70,177	98,608	–	98,608

No. 43: India's Overall Balance of Payments

(US $ million)

Items	2004-05			2005-06		
	Credit	Debit	Net	Credit	Debit	Net
1	2	3	4	5	6	7
A. CURRENT ACCOUNT						
I. Merchandise	**85,206**	**118,908**	**-33,702**	**105,152**	**157,056**	**-51,904**
II. Invisibles (a+b+c)	**69,533**	**38,301**	**31,232**	**89,687**	**47,685**	**42,002**
a) Services	43,249	27,823	15,426	57,659	34,489	23,170
i) Travel	6,666	5,249	1,417	7,853	6,638	1,215
ii) Transportation	4,683	4,539	144	6,325	8,337	-2,012
iii) Insurance	870	722	148	1,062	1,116	-54
iv) G.n.i.e.	401	411	-10	314	529	-215
v) Miscellaneous	30,629	16,902	13,727	42,105	17,869	24,236
of which						
Software Services	17,700	800	16,900	23,600	1,338	22,262
Business Services	5,167	7,318	-2,151	9,307	7,748	1,559
Financial Services	512	832	-320	1,209	965	244
Communication Services	1,384	738	646	1,575	289	1,286
b) Transfers	21,691	906	20,785	25,620	933	24,687
i) Official	616	356	260	669	475	194
ii) Private	21,075	550	20,525	24,951	458	24,493
c) Income	4,593	9,572	-4,979	6,408	12,263	-5,855
i) Investment Income	4,124	8,219	-4,095	6,229	11,491	-5,262
ii) Compensation of Employees	469	1,353	-884	179	772	-593
Total Current Account (I+II)	**154,739**	**157,209**	**-2,470**	**194,839**	**204,741**	**-9,902**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**46,934**	**33,934**	**13,000**	**77,298**	**61,770**	**15,528**
a) Foreign Direct Investment (i+ii)	6,087	2,374	3,713	9,178	6,144	3,034
i) In India	6,052	65	5,987	8,962	61	8,901
Equity	3,779	65	3,714	5,976	61	5,915
Reinvested Earnings	1,904	–	1,904	2,760	–	2,760
Other Capital	369	–	369	226	–	226
ii) Abroad	35	2,309	-2,274	216	6,083	-5,867
Equity	35	1,672	-1,637	216	3,982	-3,766
Reinvested Earnings	–	248	-248	–	1,092	-1,092
Other Capital	–	389	-389	–	1,009	-1,009
b) Portfolio Investment	40,847	31,560	9,287	68,120	55,626	12,494
i) In India	40,847	31,536	9,311	68,120	55,626	12,494
of which						
FIIs	40,415	31,729	8,686	–	–	9,926
GDRs/ADRs	613	–	613	2,552	–	2,552
ii) Abroad	–	24	-24	–	–	–
2. Loans (a+b+c)	**30,287**	**19,378**	**10,909**	**39,479**	**31,570**	**7,909**
a) External Assistance	3,809	1,886	1,923	3,631	1,929	1,702
i) By India	24	128	-104	24	88	-64
ii) To India	3,785	1,758	2,027	3,607	1,841	1,766
b) Commercial Borrowings	9,084	3,890	5,194	14,343	11,835	2,508
i) By India	–	232	-232	–	251	-251
ii) To India	9,084	3,658	5,426	14,343	11,584	2,759
c) Short Term To India	17,394	13,602	3,792	21,505	17,806	3,699
i) Suppliers' Credit >180 days & Buyers' Credit	17,394	13,602	3,792	19,372	17,647	1,725
ii) Suppliers' Credit up to 180 days	–	–	–	2,133	159	1,974
3. Banking Capital (a+b)	**14,581**	**10,707**	**3,874**	**21,658**	**20,285**	**1,373**
a) Commercial Banks	14,304	10,325	3,979	20,586	20,144	442
i) Assets	505	552	-47	772	3,947	-3,175
ii) Liabilities	13,799	9,773	4,026	19,814	16,197	3,617
of which: Non-Resident Deposits	8,071	9,035	-964	17,835	15,046	2,789
b) Others	277	382	-105	1,072	141	931
4. Rupee Debt Service	**–**	**417**	**-417**	**–**	**572**	**-572**
5. Other Capital	**6,737**	**6,081**	**656**	**5,941**	**4,709**	**1,232**
Total Capital Account (1 to 5)	**98,539**	**70,517**	**28,022**	**144,376**	**118,906**	**25,470**
C. ERRORS & OMISSIONS	**607**	**–**	**607**	**–**	**516**	**-516**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**253,885**	**227,726**	**26,159**	**339,215**	**324,163**	**15,052**
E. MONETARY MOVEMENTS (i+ii)	**–**	**26,159**	**-26,159**	**–**	**15,052**	**-15,052**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	26,159	-26,159	–	15,052	-15,052

P : Preliminary. PR : Partially Revised.

No. 43: India's Overall Balance of Payments *(Contd.)*

(US $ million)

Items	2006-07			2007-08 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	8	9	10	11	12	13
A. CURRENT ACCOUNT						
I. Merchandise	**128,888**	**190,670**	**-61,782**	**166,163**	**257,789**	**-91,626**
II. Invisibles (a+b+c)	**114,558**	**62,341**	**52,217**	**148,604**	**74,012**	**74,592**
a) Services	73,780	44,311	29,469	90,077	52,512	37,565
i) Travel	9,123	6,684	2,439	11,349	9,254	2,095
ii) Transportation	7,974	8,068	-94	10,014	11,514	-1,500
iii) Insurance	1,195	642	553	1,639	1,044	595
iv) G.n.i.e.	253	403	-150	330	376	-46
v) Miscellaneous	55,235	28,514	26,721	66,745	30,324	36,421
of which						
Software Services	31,300	2,267	29,033	40,300	3,058	37,242
Business Services	14,544	15,866	-1,322	16,771	16,715	56
Financial Services	3,106	2,991	115	3,217	3,138	79
Communication Services	2,262	796	1,466	2,408	859	1,549
b) Transfers	31,470	1,391	30,079	44,259	2,315	41,944
i) Official	635	381	254	753	514	239
ii) Private	30,835	1,010	29,825	43,506	1,801	41,705
c) Income	9,308	16,639	-7,331	14,268	19,185	-4,917
i) Investment Income	8,926	15,688	-6,762	13,808	18,089	-4,281
ii) Compensation of Employees	382	951	-569	460	1,096	-636
Total Current Account (I+II)	**243,446**	**253,011**	**-9,565**	**314,767**	**331,801**	**-17,034**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**133,210**	**118,457**	**14,753**	**272,762**	**227,805**	**44,957**
a) Foreign Direct Investment (i+ii)	23,590	15,897	7,693	36,838	21,437	15,401
i) In India	22,826	87	22,739	34,361	125	34,236
Equity	16,481	87	16,394	26,866	108	26,758
Reinvested Earnings	5,828	–	5,828	7,168	-	7,168
Other Capital	517	–	517	327	17	310
ii) Abroad	764	15,810	-15,046	2,477	21,312	-18,835
Equity	764	13,368	-12,604	2,477	16,898	-14,421
Reinvested Earnings	–	1,076	-1,076	–	1,084	-1,084
Other Capital	–	1,366	-1,366	–	3,330	-3,330
b) Portfolio Investment	109,620	102,560	7,060	235,924	206,368	29,556
i) In India	109,534	102,530	7,004	235,688	206,294	29,394
of which						
FIIs	105,756	102,530	3,226	226,621	206,294	20,327
GDRs/ADRs	3,776	–	3,776	8,769	–	8,769
ii) Abroad	86	30	56	236	74	162
2. Loans (a+b+c)	**54,642**	**30,152**	**24,490**	**83,528**	**41,598**	**41,930**
a) External Assistance	3,767	1,992	1,775	4,241	2,127	2,114
i) By India	20	32	-12	24	28	-4
ii) To India	3,747	1,960	1,787	4,217	2,099	2,118
b) Commercial Borrowings	20,883	4,780	16,103	30,376	7,743	22,633
i) By India	626	966	-340	1,592	1,624	-32
ii) To India	20,257	3,814	16,443	28,784	6,119	22,665
c) Short Term To India	29,992	23,380	6,612	48,911	31,728	17,183
i) Suppliers' Credit >180 days & Buyers' Credit	25,482	22,175	3,307	42,641	31,728	10,913
ii) Suppliers' Credit up to 180 days	4,510	1,205	3,305	6,270	–	6,270
3. Banking Capital (a+b)	**37,209**	**35,296**	**1,913**	**55,813**	**44,056**	**11,757**
a) Commercial Banks	36,799	35,218	1,581	55,734	43,624	12,110
i) Assets	14,466	17,960	-3,494	19,562	12,668	6,894
ii) Liabilities	22,333	17,258	5,075	36,172	30,956	5,216
of which: Non-Resident Deposits	19,914	15,593	4,321	29,401	29,222	179
b) Others	410	78	332	79	432	-353
4. Rupee Debt Service	**–**	**162**	**-162**	**–**	**121**	**-121**
5. Other Capital	**8,230**	**4,021**	**4,209**	**20,904**	**11,434**	**9,470**
Total Capital Account (1 to 5)	**233,291**	**188,088**	**45,203**	**433,007**	**325,014**	**107,993**
C. ERRORS & OMISSIONS	**968**	**–**	**968**	**1,205**	**–**	**1,205**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**477,705**	**441,099**	**36,606**	**748,979**	**656,815**	**92,164**
E. MONETARY MOVEMENTS (i+ii)	**–**	**36,606**	**-36,606**	**–**	**92,164**	**-92,164**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	36,606	-36,606	–	92,164	-92,164

No. 43: India's Overall Balance of Payments *(Contd.)*

(US $ million)

Items	Apr-Jun 2006			Jul-Sep 2006		
	Credit	Debit	Net	Credit	Debit	Net
1	14	15	16	17	18	19
A. CURRENT ACCOUNT						
I. Merchandise	**29,663**	**46,613**	**-16,950**	**32,701**	**48,717**	**-16,016**
II. Invisibles (a+b+c)	**24,934**	**12,421**	**12,513**	**24,866**	**14,597**	**10,269**
a) Services	16,042	8,475	7,567	16,416	9,966	6,450
i) Travel	1,708	1,488	220	1,796	1,811	-15
ii) Transportation	1,715	1,997	-282	1,973	1,978	-5
iii) Insurance	238	129	109	315	154	161
iv) G.n.i.e.	40	79	-39	61	122	-61
v) Miscellaneous	12,341	4,782	7,559	12,271	5,901	6,370
of which						
Software Services	7,039	415	6,624	7,121	405	6,716
Business Services	3,386	2,646	740	3,436	3,300	136
Financial Services	509	318	191	716	703	13
Communication Services	475	108	367	569	180	389
b) Transfers	7,170	289	6,881	6,218	361	5,857
i) Official	69	82	-13	119	100	19
ii) Private	7,101	207	6,894	6,099	261	5,838
c) Income	1,722	3,657	-1,935	2,232	4,270	-2,038
i) Investment Income	1,659	3,461	-1,802	2,160	4,042	-1,882
ii) Compensation of Employees	63	196	-133	72	228	-156
Total Current Account (I+II)	**54,597**	**59,034**	**-4,437**	**57,567**	**63,314**	**-5,747**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**34,299**	**33,067**	**1,232**	**22,485**	**18,219**	**4,266**
a) Foreign Direct Investment (i+ii)	3,477	1,739	1,738	4,545	2,429	2,116
i) In India	3,413	8	3,405	4,400	2	4,398
Equity	1,946	8	1,938	2,886	2	2,884
Reinvested Earnings	1,457	–	1,457	1,457	–	1,457
Other Capital	10	–	10	57	–	57
ii) Abroad	64	1,731	-1,667	145	2,427	-2,282
Equity	64	1,189	-1,125	145	1,868	-1,723
Reinvested Earnings	–	269	-269	–	269	-269
Other Capital	–	273	-273	–	290	-290
b) Portfolio Investment	30,822	31,328	-506	17,940	15,790	2,150
i) In India	30,801	31,327	-526	17,929	15,789	2,140
of which						
FIIs	29,540	31,327	-1,787	17,469	15,789	1,680
GDRs/ADRs	1,261	–	1261	460	–	460
ii) Abroad	21	1	20	11	1	10
2. Loans (a+b+c)	**11,499**	**6,288**	**5,211**	**11,228**	**6,446**	**4,782**
a) External Assistance	577	526	51	788	449	339
i) By India	5	8	-3	5	8	-3
ii) To India	572	518	54	783	441	342
b) Commercial Borrowings	5,051	1,073	3,978	2,680	920	1,760
i) By India	87	223	-136	114	170	-56
ii) To India	4,964	850	4,114	2,566	750	1,816
c) Short Term To India	5,871	4,689	1,182	7,760	5,077	2,683
i) Suppliers' Credit >180 days & Buyers' Credit	5,082	4,689	393	6,579	5,077	1,502
ii) Suppliers' Credit up to 180 days	789	–	789	1,181	–	1,181
3. Banking Capital (a+b)	**9,909**	**4,848**	**5,061**	**5,754**	**7,472**	**-1,718**
a) Commercial Banks	9,837	4,848	4,989	5,754	7,428	-1,674
i) Assets	5,257	1,877	3,380	1,568	3,553	-1,985
ii) Liabilities	4,580	2,971	1,609	4,186	3,875	311
of which: Non-Resident Deposits	4,246	2,944	1,302	4,185	3,277	908
b) Others	72	–	72	–	44	-44
4. Rupee Debt Service	**–**	**67**	**-67**	**–**	**–**	**–**
5. Other Capital	**342**	**1,054**	**-712**	**1,084**	**554**	**530**
Total Capital Account (1 to 5)	**56,049**	**45,324**	**10,725**	**40,551**	**32,691**	**7,860**
C. ERRORS & OMISSIONS	**91**	**–**	**91**	**157**	**–**	**157**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**110,737**	**104,358**	**6,379**	**98,275**	**96,005**	**2,270**
E. MONETARY MOVEMENTS (i+ii)	**–**	**6,379**	**-6,379**	–	**2,270**	**-2,270**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	6,379	-6,379	–	2,270	-2,270

No. 43: India's Overall Balance of Payments *(Contd.)*

(US $ million)

Items	Oct-Dec 2006			Jan-Mar 2007		
	Credit	Debit	Net	Credit	Debit	Net
1	20	21	22	23	24	25
A. CURRENT ACCOUNT						
I. Merchandise	**30,824**	**47,257**	**-16,433**	**35,700**	**48,083**	**-12,383**
II. Invisibles (a+b+c)	**29,704**	**16,875**	**12,829**	**35,054**	**18,448**	**16,606**
a) Services	18,451	12,371	6,080	22,871	13,499	9,372
i) Travel	2,621	1,638	983	2,998	1,747	1,251
ii) Transportation	2,092	2,102	-10	2,194	1,991	203
iii) Insurance	288	201	87	354	158	196
iv) G.n.i.e.	87	97	-10	65	105	-40
v) Miscellaneous	13,363	8,333	5,030	17,260	9,498	7,762
of which						
Software Services	7,602	684	6,918	9,538	763	8,775
Business Services	3,690	4,267	-577	4,032	5,653	-1,621
Financial Services	828	647	181	1,053	1,323	-270
Communication Services	597	239	358	621	269	352
b) Transfers	8,961	333	8,628	9,121	408	8,713
i) Official	287	89	198	160	110	50
ii) Private	8,674	244	8,430	8,961	298	8,663
c) Income	2,292	4,171	-1,879	3,062	4,541	-1,479
i) Investment Income	2,193	3,936	-1,743	2,914	4,249	-1,335
ii) Compensation of Employees	99	235	-136	148	292	-144
Total Current Account (I+II)	**60,528**	**64,132**	**-3,604**	**70,754**	**66,531**	**4,223**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**38,646**	**32,179**	**6,467**	**37,780**	**34,992**	**2,788**
a) Foreign Direct Investment (i+ii)	10,008	7,110	2,898	5,560	4,619	941
i) In India	9,855	7	9,848	5,158	70	5,088
Equity	8,203	7	8,196	3,446	70	3,376
Reinvested Earnings	1,457	–	1,457	1,457	–	1,457
Other Capital	195	–	195	255	–	255
ii) Abroad	153	7,103	-6,950	402	4,549	-4,147
Equity	153	6,454	-6,301	402	3,857	-3,455
Reinvested Earnings	–	269	-269	–	269	-269
Other Capital	–	380	-380	–	423	-423
b) Portfolio Investment	28,638	25,069	3,569	32,220	30,373	1,847
i) In India	28,625	25,063	3,562	32,179	30,351	1,828
of which						
FIIs	28418	25063	3355	30329	30351	-22
GDRs/ADRs	207	–	207	1848	–	1848
ii) Abroad	13	6	7	41	22	19
2. Loans (a+b+c)	**14,731**	**8,250**	**6,481**	**17,184**	**9,168**	**8,016**
a) External Assistance	1,113	494	619	1,289	523	766
i) By India	5	8	-3	5	8	-3
ii) To India	1,108	486	622	1,284	515	769
b) Commercial Borrowings	5,418	1,369	4,049	7,734	1,418	6,316
i) By India	425	345	80	–	228	-228
ii) To India	4,993	1,024	3,969	7,734	1,190	6,544
c) Short Term To India	8,200	6,387	1,813	8,161	7,227	934
i) Suppliers' Credit >180 days & Buyers' Credit	5,660	6,387	-727	8,161	6,022	2,139
ii) Suppliers' Credit up to 180 days	2,540	–	2,540	–	1,205	-1,205
3. Banking Capital (a+b)	**7,160**	**10,273**	**-3,113**	**14,386**	**12,703**	**1,683**
a) Commercial Banks	6,944	10,239	-3,295	14,264	12,703	1,561
i) Assets	556	4,530	-3,974	7,085	8,000	-915
ii) Liabilities	6,388	5,709	679	7,179	4,703	2,476
of which: Non-Resident Deposits	6,325	4,862	1,463	5,158	4,510	648
b) Others	216	34	182	122	–	122
4. Rupee Debt Service	**–**	**2**	**-2**	**–**	**93**	**-93**
5. Other Capital	**1,976**	**994**	**982**	**4,828**	**1,419**	**3,409**
Total Capital Account (1 to 5)	**62,513**	**51,698**	**10,815**	**74,178**	**58,375**	**15,803**
C. ERRORS & OMISSIONS	**294**	**–**	**294**	**426**	**–**	**426**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**123,335**	**115,830**	**7,505**	**145,358**	**124,906**	**20,452**
E. MONETARY MOVEMENTS (i+ii)	**–**	**7,505**	**-7,505**	**–**	**20,452**	**-20,452**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	7,505	-7,505	–	20,452	-20,452

No. 43: India's Overall Balance of Payments *(Contd.)*

(US $ million)

Items	Apr-Jun 2007PR			Jul-Sep 2007 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	26	27	28	29	30	31
A. CURRENT ACCOUNT						
I. Merchandise	**34,356**	**56,346**	**-21,990**	**38,273**	**59,510**	**-21,237**
II. Invisibles (a+b+c)	**29,880**	**14,570**	**15,310**	**34,013**	**17,073**	**16,940**
a) Services	18,890	9,916	8,974	20,587	11,589	8,998
i) Travel	2,088	1,906	182	2,248	2,047	201
ii) Transportation	1,953	2,526	-573	2,091	2,559	-468
iii) Insurance	373	185	188	341	284	57
iv) G.n.i.e.	94	110	-16	68	128	-60
v) Miscellaneous	14,382	5,189	9,193	15,839	6,571	9,268
of which						
Software Services	8,836	679	8,157	9,050	801	8,249
Business Services	3,758	3,163	595	3,894	3,537	357
Financial Services	528	449	79	916	702	214
Communication Services	513	231	282	613	180	433
b) Transfers	8,628	432	8,196	9,708	408	9,300
i) Official	153	165	-12	158	112	46
ii) Private	8,475	267	8,208	9,550	296	9,254
c) Income	2,362	4,222	-1,860	3,718	5,076	-1,358
i) Investment Income	2,279	4,024	-1,745	3,608	4,778	-1,170
ii) Compensation of Employees	83	198	-115	110	298	-188
Total Current Account (I+II)	**64,236**	**70,916**	**-6,680**	**72,286**	**76,583**	**-4,297**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**43,034**	**32,756**	**10,278**	**54,205**	**41,178**	**13,027**
a) Foreign Direct Investment (i+ii)	8,270	5,534	2,736	5,502	3,374	2,128
i) In India	7,477	20	7,457	4,728	19	4,709
Equity	5,574	20	5,554	2,822	19	2,803
Reinvested Earnings	1,792	–	1,792	1,792	–	1,792
Other Capital	111	–	111	114	–	114
ii) Abroad	793	5,514	-4,721	774	3,355	-2,581
Equity	793	4,758	-3,965	774	2,515	-1,741
Reinvested Earnings	–	271	-271	–	271	-271
Other Capital	–	485	-485	–	569	-569
b) Portfolio Investment	34,764	27,222	7,542	48,703	37,804	10,899
i) In India	34,706	27,216	7,490	48,698	37,781	10,917
of which						
FIIs	34,305	27,216	7,089	46,199	37,781	8,418
GDRs/ADRs	316	–	316	2,477	–	2,477
ii) Abroad	58	6	52	5	23	-18
2. Loans (a+b+c)	**16,749**	**7,593**	**9,156**	**19,742**	**10,437**	**9,305**
a) External Assistance	732	491	241	983	515	468
i) By India	6	7	-1	6	7	-1
ii) To India	726	484	242	977	508	469
b) Commercial Borrowings	8,291	1,338	6,953	6,290	2,080	4,210
i) By India	359	345	14	443	503	-60
ii) To India	7,932	993	6,939	5,847	1,577	4,270
c) Short Term To India	7,726	5,764	1,962	12,469	7,842	4,627
i) Suppliers' Credit >180 days & Buyers' Credit	6,883	5,764	1,119	11,012	7,842	3,170
ii) Suppliers' Credit up to 180 days	843	–	843	1,457	–	1,457
3. Banking Capital (a+b)	**8,560**	**9,479**	**-919**	**13,714**	**7,071**	**6,643**
a) Commercial Banks	8,560	9,473	-913	13,690	7,000	6,690
i) Assets	2,543	2,861	-318	4,404	358	4,046
ii) Liabilities	6,017	6,612	-595	9,286	6,642	2,644
of which: Non-Resident Deposits	5,252	5,699	-447	6,975	6,606	369
b) Others	–	6	-6	24	71	-47
4. Rupee Debt Service	**–**	**43**	**-43**	**–**	**2**	**-2**
5. Other Capital	**1,151**	**1,831**	**-680**	**7,378**	**3,196**	**4,182**
Total Capital Account (1 to 5)	**69,494**	**51,702**	**17,792**	**95,039**	**61,884**	**33,155**
C. ERRORS & OMISSIONS	**88**	**–**	**88**	**378**	**–**	**378**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**133,818**	**122,618**	**11,200**	**167,703**	**138,467**	**29,236**
E. MONETARY MOVEMENTS (i+ii)	**–**	**11,200**	**-11,200**	**–**	**29,236**	**-29,236**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	11,200	-11,200	–	29,236	-29,236

No. 43: India's Overall Balance of Payments *(Contd.)*

(US $ million)

Items	Oct-Dec 2007PR			Jan-Mar 2008 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	32	33	34	35	36	37
A. CURRENT ACCOUNT						
I. Merchandise	**40,985**	**67,038**	**-26,053**	**52,549**	**74,895**	**-22,346**
II. Invisibles (a+b+c)	**39,553**	**18,031**	**21,522**	**45,158**	**24,338**	**20,820**
a) Services	24,618	12,592	12,026	25,982	18,415	7,567
i) Travel	3,395	2,519	876	3,618	2,782	836
ii) Transportation	2,799	3,043	-244	3,171	3,386	-215
iii) Insurance	438	261	177	487	314	173
iv) G.n.i.e.	90	75	15	78	63	15
v) Miscellaneous	17,896	6,694	11,202	18,628	11,870	6,758
of which						
Software Services	9,608	852	8,756	12,806	726	12,080
Business Services	4,588	4,245	343	4,531	5,770	-1,239
Financial Services	882	763	119	891	1,224	-333
Communication Services	601	183	418	681	265	416
b) Transfers	11,428	493	10,935	14,495	982	13,513
i) Official	195	121	74	247	116	131
ii) Private	11,233	372	10,861	14,248	866	13,382
c) Income	3,507	4,946	-1,439	4,681	4,941	-260
i) Investment Income	3,401	4,679	-1,278	4,520	4,608	-88
ii) Compensation of Employees	106	267	-161	161	333	-172
Total Current Account (I+II)	**80,538**	**85,069**	**-4,531**	**97,707**	**99,233**	**-1,526**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**86,531**	**69,639**	**16,892**	**88,992**	**84,232**	**4,760**
a) Foreign Direct Investment (i+ii)	8,316	6,275	2,041	14,750	6,254	8,496
i) In India	7,916	43	7,873	14,240	43	14,197
Equity	6,022	43	5,979	12,448	26	12,422
Reinvested Earnings	1,792	–	1,792	1,792	–	1,792
Other Capital	102	–	102	–	17	-17
ii) Abroad	400	6,232	-5,832	510	6,211	-5,701
Equity	400	5,206	-4,806	510	4,419	-3,909
Reinvested Earnings	–	271	-271	–	271	-271
Other Capital	–	755	-755	–	1,521	-1,521
b) Portfolio Investment	78,215	63,364	14,851	74,242	77,978	-3,736
i) In India	78,096	63,345	14,751	74,188	77,952	-3,764
of which						
FIIs	72,309	63,345	8,964	73,808	77,952	-4,144
GDRs/ADRs	5,597	–	5,597	379	–	379
ii) Abroad	119	19	100	54	26	28
2. Loans (a+b+c)	**21,543**	**10,601**	**10,942**	**25,494**	**12,967**	**12,527**
a) External Assistance	1,109	544	565	1,417	577	840
i) By India	6	7	-1	6	7	-1
ii) To India	1,103	537	566	1,411	570	841
b) Commercial Borrowings	8,449	2,202	6,247	7,346	2,123	5,223
i) By India	363	384	-21	427	392	35
ii) To India	8,086	1,818	6,268	6,919	1,731	5,188
c) Short Term To India	11,985	7,855	4,130	16,731	10,267	6,464
i) Suppliers' Credit >180 days & Buyers' Credit	10,231	7,855	2,376	14,515	10,267	4,248
ii) Suppliers' Credit up to 180 days	1,754	–	1,754	2,216	–	2,216
3. Banking Capital (a+b)	**12,588**	**12,381**	**207**	**20,951**	**15,125**	**5,826**
a) Commercial Banks	12,585	12,029	556	20,899	15,122	5,777
i) Assets	5,636	3,939	1,697	6,979	5,510	1,469
ii) Liabilities	6,949	8,090	-1,141	13,920	9,612	4,308
of which: Non-Resident Deposits	6,456	7,309	-853	10,718	9,608	1,110
b) Others	3	352	-349	52	3	49
4. Rupee Debt Service	**–**	**–**	**–**	**–**	**76**	**-76**
5. Other Capital	**6,612**	**3,636**	**2,976**	**5,763**	**2,771**	**2,992**
Total Capital Account (1 to 5)	**127,274**	**96,257**	**31,017**	**141,200**	**115,171**	**26,029**
C. ERRORS & OMISSIONS	**252**	**–**	**252**	**487**	**–**	**487**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**208,064**	**181,326**	**26,738**	**239,394**	**214,404**	**24,990**
E. MONETARY MOVEMENTS (i+ii)	**–**	**26,738**	**-26,738**	**–**	**24,990**	**-24,990**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	26,738	-26,738	–	24,990	-24,990

No. 43: India's Overall Balance of Payments *(Contd.)*

(US $ million)

Items	Apr-Jun 2008 PR			Jul-Sep 2008 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	38	39	40	41	42	43
A. CURRENT ACCOUNT						
I. Merchandise	**49,120**	**79,637**	**-30,517**	**47,700**	**86,213**	**-38,513**
II. Invisibles (a+b+c)	**38,354**	**16,833**	**21,521**	**45,192**	**19,508**	**25,684**
a) Services	22,474	11,728	10,746	27,328	13,738	13,590
i) Travel	2,504	2,164	340	2,786	2,704	82
ii) Transportation	2,530	3,328	-798	2,900	3,744	-844
iii) Insurance	350	228	122	364	306	58
iv) G.n.i.e.	130	110	20	81	95	-14
v) Miscellaneous	16,960	5,898	11,062	21,197	6,889	14,308
of which						
Software Services	11,656	857	10,799	12,220	924	11,296
Business Services	3,550	3,127	423	4,840	3,531	1,309
Financial Services	609	628	-19	1,670	965	705
Communication Services	510	226	284	740	296	444
b) Transfers	12,307	658	11649	13,719	832	12,887
i) Official	148	111	37	51	100	-49
ii) Private	12,159	547	11,612	13,668	732	12,936
c) Income	3,573	4,447	-874	4,145	4,938	-793
i) Investment Income	3,418	4,117	-699	3,855	4,606	-751
ii) Compensation of Employees	155	330	-175	290	332	-42
Total Current Account (I+II)	**87,474**	**96,470**	**-8,996**	**92,892**	**105,721**	**-12,829**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**52,916**	**48,138**	**4,778**	**51,883**	**47,629**	**4,254**
a) Foreign Direct Investment (i+ii)	12,152	3,163	8,989	9,252	3,688	5,564
i) In India	11,913	22	11,891	8,834	52	8,782
Equity	10,240	22	10,218	7,304	52	7,252
Reinvested Earnings	1,502	–	1,502	1,502	–	1,502
Other Capital	171	–	171	28	–	28
ii) Abroad	239	3,141	-2,902	418	3,636	-3,218
Equity	239	2,339	-2,100	418	2,854	-2,436
Reinvested Earnings	–	271	-271	–	271	-271
Other Capital	–	531	-531	–	511	-511
b) Portfolio Investment	40,764	44,975	-4,211	42,631	43,941	-1,310
i) In India	40,745	44,923	-4,178	42,618	43,919	-1,301
of which						
FIIs	39,746	44,923	-5,177	42,482	43,919	-1,438
GDRs/ADRs	999	–	999	136	–	136
ii) Abroad	19	52	-33	13	22	-9
2. Loans (a+b+c)	**13,853**	**9,625**	**4,228**	**16,341**	**12,780**	**3,561**
a) External Assistance	909	558	351	1,095	577	518
i) By India	6	8	-2	6	8	-2
ii) To India	903	550	353	1,089	569	520
b) Commercial Borrowings	2,768	1,288	1,480	3,637	1,886	1,751
i) By India	404	193	211	532	138	394
ii) To India	2,364	1,095	1,269	3,105	1,748	1,357
c) Short Term To India	10,176	7,779	2,397	11,609	10,317	1,292
i) Suppliers' Credit >180 days & Buyers' Credit	9,256	7,779	1,477	11,609	9,766	1,843
ii) Suppliers' Credit up to 180 days	920	–	920	–	551	-551
3. Banking Capital (a+b)	**21,952**	**19,256**	**2,696**	**16,215**	**14,084**	**2,131**
a) Commercial Banks	21,952	19,105	2,847	16,215	14,081	2,134
i) Assets	11,457	10,533	924	6,446	5,154	1,292
ii) Liabilities	10,495	8,572	1,923	9,769	8,927	842
of which: Non-Resident Deposits	9,063	8,249	814	9,174	8,915	259
b) Others	–	151	-151	–	3	-3
4. Rupee Debt Service	**–**	**30**	**-30**	**–**	**3**	**-3**
5. Other Capital	**2,374**	**2,923**	**-549**	**882**	**2,973**	**-2,091**
Total Capital Account (1 to 5)	**91,095**	**79,972**	**11,123**	**85,321**	**77,469**	**7,852**
C. ERRORS & OMISSIONS	**108**	**–**	**108**	**243**	**–**	**243**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**178,677**	**176,442**	**2,235**	**178,456**	**183,190**	**-4,734**
E. MONETARY MOVEMENTS (i+ii)	**–**	**2,235**	**-2,235**	**4,734**	**–**	**4,734**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	2,235	-2,235	4,734		4,734

No. 43: India's Overall Balance of Payments *(Concld.)*

(US $ million)

Items	Oct-Dec 2008 P			Oct-Dec 2007 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	44	45	46	47	48	49
A. CURRENT ACCOUNT						
I. Merchandise	**36,707**	**73,014**	**-36,307**	**40,985**	**67,038**	**-26,053**
II. Invisibles (a+b+c)	**39,308**	**17,645**	**21,663**	**39,553**	**18,031**	**21,522**
a) Services	24,730	11,933	12,797	24,618	12,592	12,026
i) Travel	2,924	1,989	935	3,395	2,519	876
ii) Transportation	2,531	3,210	-679	2,799	3,043	-244
iii) Insurance	344	269	75	438	261	177
iv) G.n.i.e.	97	233	-136	90	75	15
v) Miscellaneous	18,834	6,232	12,602	17,896	6,694	11,202
of which						
Software Services	10,744	580	10,164	9,608	852	8,756
Business Services	4,333	3,268	1,065	4,588	4,245	343
Financial Services	1,111	735	376	882	763	119
Communication Services	547	217	330	601	183	418
b) Transfers	11,387	847	10,540	11,428	493	10,935
i) Official	285	101	184	195	121	74
ii) Private	11,102	746	10,356	11,233	372	10,861
c) Income	3,191	4,865	-1,674	3,507	4,946	-1,439
i) Investment Income	3,000	4,535	-1,535	3,401	4,679	-1,278
ii) Compensation of Employees	191	330	-139	106	267	-161
Total Current Account (I+II)	**76,015**	**90,659**	**-14,644**	**80,538**	**85,069**	**-4,531**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**33,523**	**38,523**	**-5,000**	**86,531**	**69,639**	**16,892**
a) Foreign Direct Investment (i+ii)	6,925	6,105	820	8,316	6,275	2,041
i) In India	6,713	29	6,684	7,916	43	7,873
Equity	4,109	29	4,080	6,022	43	5,979
Reinvested Earnings	1,721	–	1,721	1,792	–	1,792
Other Capital	883	–	883	102	–	102
ii) Abroad	212	6,076	-5,864	400	6,232	-5,832
Equity	212	4,491	-4,279	400	5,206	-4,806
Reinvested Earnings	–	271	-271	–	271	-271
Other Capital	–	1,314	-1,314	–	755	-755
b) Portfolio Investment	26,598	32,418	-5,820	78,215	63,364	14,851
i) In India	26,568	32,355	-5,787	78,096	63,345	14,751
of which						
FIIs	26,561	32,355	-5,794	72,309	63,345	8,964
GDRs/ADRs	7	–	7	5,597	–	5,597
ii) Abroad	30	63	-33	119	19	100
2. Loans (a+b+c)	**16,848**	**15,115**	**1,733**	**21,543**	**10,601**	**10,942**
a) External Assistance	1,655	663	992	1,109	544	565
i) By India	6	8	-2	6	7	-1
ii) To India	1,649	655	994	1,103	537	566
b) Commercial Borrowings	5,628	1,745	3,883	8,449	2,202	6,247
i) By India	669	149	520	363	384	-21
ii) To India	4,959	1,596	3,363	8,086	1,818	6,268
c) Short Term To India	9,565	12,707	-3,142	11,985	7,855	4,130
i) Suppliers' Credit >180 days & Buyers' Credit	9,565	10,357	-792	10,231	7,855	2,376
ii) Suppliers' Credit up to 180 days	–	2,350	-2,350	1,754	–	1,754
3. Banking Capital (a+b)	**14,811**	**19,767**	**-4,956**	**12,588**	**12,381**	**207**
a) Commercial Banks	14,808	19,336	-4,528	12,585	12,029	556
i) Assets	5,192	7,542	-2,350	5,636	3,939	1,697
ii) Liabilities	9,616	11,794	-2,178	6,949	8,090	-1,141
of which: Non-Resident Deposits	9,523	8,481	1,042	6,456	7,309	-853
b) Others	3	431	-428	3	352	-349
4. Rupee Debt Service	**–**	**–**	**–**	**–**	**–**	**–**
5. Other Capital	**4,777**	**237**	**4,540**	**6,612**	**3,636**	**2,976**
Total Capital Account (1 to 5)	**69,959**	**73,642**	**-3,683**	**127,274**	**96,257**	**31,017**
C. ERRORS & OMISSIONS	**446**	**–**	**446**	**252**	**–**	**252**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**146,420**	**164,301**	**-17,881**	**208,064**	**181,326**	**26,738**
E. MONETARY MOVEMENTS (i+ii)	**17,881**	**–**	**17,881**	**–**	**26,738**	**-26,738**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	17,881	–	17,881	–	26,738	-26,738

No. 43: India's Overall Balance of Payments *(Concld.)*

(US $ million)

Items	Apr-Dec 2007PR			Apr-Dec 2008 P		
	Credit	Debit	Net	Credit	Debit	Net
1	50	51	52	53	54	55
A. CURRENT ACCOUNT						
I. Merchandise	**113,614**	**182,894**	**-69,280**	**133,527**	**238,864**	**-105,337**
II. Invisibles (a+b+c)	**103,446**	**49,674**	**53,772**	**122,854**	**53,986**	**68,868**
a) Services	64,095	34,097	29,998	74,532	37,399	37,133
i) Travel	7,731	6,472	1,259	8,214	6,857	1,357
ii) Transportation	6,843	8,128	-1,285	7,961	10,282	-2,321
iii) Insurance	1,152	730	422	1,058	803	255
iv) G.n.i.e.	252	313	-61	308	438	-130
v) Miscellaneous	48,117	18,454	29,663	56,991	19,019	37,972
of which						
Software Services	27,494	2,332	25,162	34,620	2,361	32,259
Business Services	12,240	10,945	1,295	12,723	9,926	2,797
Financial Services	2,326	1,914	412	3,390	2,328	1,062
Communication Services	1,727	594	1,133	1,797	739	1,058
b) Transfers	29,764	1,333	28,431	37,413	2,337	35,076
i) Official	506	398	108	484	312	172
ii) Private	29,258	935	28,323	36,929	2,025	34,904
c) Income	9,587	14,244	-4,657	10,909	14,250	-3,341
i) Investment Income	9,288	13,481	-4,193	10,273	13,258	-2,985
ii) Compensation of Employees	299	763	-464	636	992	-356
Total Current Account (I+II)	**217,060**	**232,568**	**-15,508**	**256,381**	**292,850**	**-36,469**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**183,770**	**143,573**	**40,197**	**138,322**	**134,290**	**4,032**
a) Foreign Direct Investment (i+ii)	22,088	15,183	6,905	28,329	12,956	15,373
i) In India	20,121	82	20,039	27,460	103	27,357
Equity	14,418	82	14,336	21,653	103	21,550
Reinvested Earnings	5,376	–	5,376	4,725	–	4,725
Other Capital	327	–	327	1,082	–	1,082
ii) Abroad	1,967	15,101	-13,134	869	12,853	-11,984
Equity	1,967	12,479	-10,512	869	9,684	-8,815
Reinvested Earnings	–	813	-813	–	813	-813
Other Capital	–	1,809	-1,809	–	2,356	-2,356
b) Portfolio Investment	161,682	128,390	33,292	109,993	121,334	-11,341
i) In India	161,500	128,342	33,158	109,931	121,197	-11,266
of which						
FIIs	152,813	128,342	24,471	108,789	121,197	-12,408
GDRs/ADRs	8,390	–	8,390	1,142	–	1,142
ii) Abroad	182	48	134	62	137	-75
2. Loans (a+b+c)	**58,034**	**28,631**	**29,403**	**47,042**	**37,520**	**9,522**
a) External Assistance	2,824	1,550	1,274	3,659	1,798	1,861
i) By India	18	21	-3	18	24	-6
ii) To India	2,806	1,529	1,277	3,641	1,774	1,867
b) Commercial Borrowings	23,030	5,620	17,410	12,033	4,919	7,114
i) By India	1,165	1,232	-67	1,605	480	1,125
ii) To India	21,865	4,388	17,477	10,428	4,439	5,989
c) Short Term To India	32,180	21,461	10,719	31,350	30,803	547
i) Suppliers' Credit >180 days & Buyers' Credit	28,126	21,461	6,665	30,430	27,902	2,528
ii) Suppliers' Credit up to 180 days	4,054	–	4,054	920	2,901	-1,981
3. Banking Capital (a+b)	**34,862**	**28,931**	**5,931**	**52,978**	**53,107**	**-129**
a) Commercial Banks	34,835	28,502	6,333	52,975	52,522	453
i) Assets	12,583	7,158	5,425	23,095	23,229	-134
ii) Liabilities	22,252	21,344	908	29,880	29,293	587
of which: Non-Resident Deposits	18,683	19,614	-931	27,760	25,645	2,115
b) Others	27	429	-402	3	585	-582
4. Rupee Debt Service	**–**	**45**	**-45**	–	**33**	**-33**
5. Other Capital	**15,141**	**8,663**	**6,478**	**8,033**	**6,133**	**1,900**
Total Capital Account (1 to 5)	**291,807**	**209,843**	**81,964**	**246,375**	**231,083**	**15,292**
C. ERRORS & OMISSIONS	**718**	**–**	**718**	**797**	**–**	**797**
D. OVERALL BALANCE (Total Current Account, Capital Account and Errors & Omissions (A+B+C))	**509,585**	**442,411**	**67,174**	**503,553**	**523,933**	**-20,380**
E. MONETARY MOVEMENTS (i+ii)	**–**	**67,174**	**-67,174**	**20,380**	**–**	**20,380**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	67,174	-67,174	20,380	–	20,380

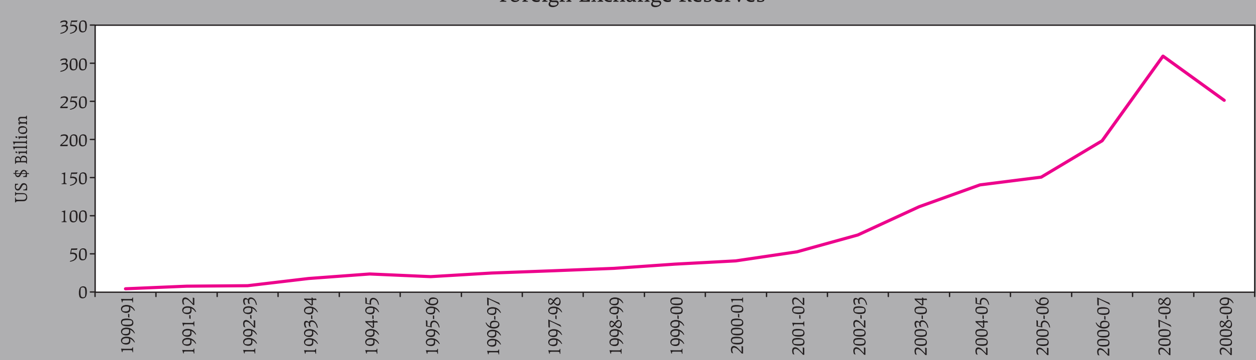
No. 44: Foreign Exchange Reserves

End of	Foreign Currency Assets*		Gold		SDRs			Reserve Tranche Position in IMF		**Total**	
	Rupees crore	In millions of US $	Rupees crore	In millions of US $	In millions of SDRs	Rupees crore	In millions of US $	Rupees crore	In millions of US $	**Rupees crore**	**In millions of US $**
1	2	3	4	5	6	7	8	9	10	**11=(2+4+7+9)**	**12=(3+5+8+10)**
2002-03	3,41,476	71,890	16,785	3,534	3	19	4	3,190	672	**3,61,470**	**76,100**
2003-04	4,66,215	107,448	18,216	4,198	2	10	2	5,688	1,311	**4,90,129**	**112,959**
2004-05	5,93,121	135,571	19,686	4,500	3	20	5	6,289	1,438	**6,19,116**	**141,514**
2005-06	6,47,327	145,108	25,674	5,755	2	12	3	3,374	756	**6,76,387**	**151,622**
2006-07	8,36,597	191,924	29,573	6,784	1	8	2	2,044	469	**8,68,222**	**199,179**
2007-08	11,96,023	299,230	40,124	10,039	11	74	18	1,744	436	**12,37,965**	**309,723**
2008-09	12,30,066	241,426	48,793	9,577	1	6	1	5,000	981	**12,83,865**	**251,985**
2007-08											
April	8,12,995	196,899	29,051	7,036	7	45	11	1,910	463	**8,44,001**	**204,409**
May	8,17,440	200,697	28,147	6,911	1	6	1	1,870	459	**8,47,463**	**208,068**
June	8,39,913	206,114	27,655	6,787	1	6	1	1,875	460	**8,69,449**	**213,362**
July	8,88,680	219,753	27,850	6,887	8	49	12	1,840	455	**9,18,419**	**227,107**
August	9,07,301	221,509	28,186	6,881	1	9	2	1,866	455	**9,37,362**	**228,847**
September	9,53,581	239,955	29,275	7,367	1	8	2	1,740	438	**9,84,604**	**247,762**
October	10,08,271	256,427	30,712	7,811	8	52	13	1,735	441	**10,40,770**	**264,692**
November	10,50,165	264,725	33,151	8,357	2	13	3	1,727	435	**10,85,056**	**273,520**
December	10,50,485	266,553	32,819	8,328	2	13	3	1,703	432	**10,85,020**	**275,316**
January	11,17,080	283,595	36,236	9,199	6	36	9	1,720	437	**11,55,072**	**293,240**
February	11,62,671	291,250	38,154	9,558	–	1	–	1,705	427	**12,02,531**	**301,235**
March	11,96,023	299,230	40,124	10,039	11	74	18	1,744	436	**12,37,965**	**309,723**
2008-09											
April	1,2,30,896	304,225	38,141	9,427	11	74	18	1,961	485	**12,71,072**	**314,155**
May	1,2,98,464	304,875	39,190	9,202	7	47	11	2,242	526	**13,39,943**	**314,614**
June	1,2,98,552	302,340	39,548	9,208	7	48	11	2,269	528	**13,40,417**	**312,087**
July	1,2,57,357	295,918	41,366	9,735	7	47	11	2,177	512	**13,00,947**	**306,176**
August	12,52,904	286,117	38,064	8,692	2	16	4	2,173	496	**12,93,157**	**295,309**
September	13,01,645	277,300	40,205	8,565	2	17	4	2,194	467	**13,44,061**	**286,336**
October	12,01,920	244,045	41,281	8,382	6	43	9	2,200	447	**12,45,444**	**252,883**
November	11,91,016	238,968	39,177	7,861	2	13	3	4,254	854	**12,34,460**	**247,686**
December	11,94,790	246,603	41,110	8,485	2	13	3	4,248	877	**12,40,161**	**255,968**
January	11,71,060	238,894	43,549	8,884	2	15	3	4,068	830	**12,18,692**	**248,611**
February	12,11,002	238,715	49,440	9,746	1	6	1	4,141	816	**12,64,589**	**249,278**
March	12,30,066	241,426	48,793	9,577	1	6	1	5,000	981	**12,83,865**	**251,985**
Mar. 6, 2009	12,19,383	236,727	49,440	9,746	1	6	1	4,212	818	**12,73,041**	**247,292**
Mar. 13, 2009	12,30,557	238,157	49,440	9,746	1	6	1	4,237	820	**12,84,240**	**248,724**
Mar. 20, 2009	12,19,596	243,238	49,440	9,746	1	6	1	4,215	841	**12,73,257**	**253,826**
Mar. 27, 2009	12,21,030	241,597	49,440	9,746	1	6	1	4,962	982	**12,75,438**	**252,326**
Apr. 3, 2009	12,30,323	244,597	48,793	9,577	1	6	1	4,953	985	**12,84,075**	**255,160**
Apr. 10, 2009	12,09,936	242,423	48,793	9,577	1	6	1	4,870	976	**12,63,605**	**252,977**

– : Negligible. See 'Notes on tables'.

* Excludes US $ 250.00 millon (as also its equivalent value in Indian Rupee) invested in foreign currency denominated bonds issued by IIFC (UK) since March 20, 2009.

Foreign Exchange Reserves



No. 45: NRI Deposits- Outstanding and Inflows (+) /Outflows (-) @

(As at End March) (US $ million)

Scheme	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 (P)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. FCNR(A) *	7,051	4,255	2,306	1	–	–	–	–	–	–	–	–	–	–	–
2. FCNR(B) **	3,063	5,720	7,496	8,467	7,835	8,172	9,076	9,673	10,199	10,961	11,452	13,064	15,129	14,168	13,271
3. NR(E)RA	4,556	3,916	4,983	5,637	6,045	6,758	7,147	8,449	14,923	20,559	21,291	22,070	24,495	26,716	23,524
4. NR(NR)RD +	2,486	3,542	5,604	6,262	6,618	6,754	6,849	7,052	3,407	1,746	232	–	–	–	–
5. NRO	–	–	–	–	–	–	–	–	–	–	–	1,148	1,616	2,788	4,464
Total	**17,156**	**17,433**	**20,389**	**20,367**	**20,498**	**21,684**	**23,072**	**25,174**	**28,529**	**33,266**	**32,975**	**36,282**	**41,240**	**43,672**	**41,259**

(US $ million)

Scheme	2007-08 (End Month)											
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2	3	4	5	6	7	8	9	10	11	12	13
1. FCNR(B) **	15,170	15,124	15,319	15,397	15,234	15,362	15,386	15,261	14,758	14,459	14,284	14,168
2. NR(E)RA	25,675	25,694	25,438	25,801	25,377	26,284	26,397	26,149	26,078	26,726	26,389	26,716
3. NRO	1,739	1,767	1,846	1,887	2,134	2,033	2,063	2,108	2,198	2,439	2,620	2,788
Total	**42,584**	**42,585**	**42,603**	**43,085**	**42,745**	**43,679**	**43,846**	**43,518**	**43,034**	**43,624**	**43,293**	**43,672**

(US $ million)

Scheme	2008-09 P (End Month)											
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2	3	4	5	6	7	8	9	10	11	12	13
1. FCNR(B) **	14,028	13,877	14,001	13,766	13,475	13,504	12,694	12,733	12,936	12,981	13,114	13,271
2. NR(E)RA	26,592	25,544	25,585	25,866	24,761	23,880	22,811	22,992	23,226	22,959	22,778	23,524
3. NRO	2,986	2,963	3,026	3,230	3,243	3,238	3,302	3,749	4,134	4,366	4,125	4,464
Total	**43,606**	**42,384**	**42,612**	**42,862**	**41,479**	**40,622**	**38,807**	**39,474**	**40,296**	**40,306**	**40,017**	**41,259**

Inflow (+) /Outflow (–) During the Month (US $ million)

Scheme	2007-08												
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.- Mar.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. FCNR(B)	41 (232)	-46 (181)	195 (83)	78 (120)	-163 (145)	128 (81)	24 (139)	-125 (200)	-503 (411)	-299 (89)	-174 (96)	-116 (288)	-960 (2,065)
2. NR(E)RA	-320 (21)	-265 (294)	-167 (420)	187 (139)	-122 (99)	126 (213)	-40 (-1)	-205 (375)	-154 (112)	587 (135)	45 (-36)	437 (59)	109 (1,830)
3. NRO	22 (49)	9 (23)	85 (-2)	29 (25)	269 (60)	-164 (26)	19 (17)	49 (32)	82 (179)	237 -(69)	216 (44)	177 (42)	1,030 (426)
Total	**-257 (302)**	**-302 (498)**	**113 (501)**	**294 (284)**	**-16 (304)**	**90 (320)**	**3 (155)**	**-281 (607)**	**-575 (702)**	**525 (155)**	**87 (104)**	**498 (389)**	**179 (4,321)**

Inflow (+) /Outflow (–) During the Month (US $ million)

Scheme	2008-09 (P)												
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.- Mar.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. FCNR(B)	-140 (41)	-151 (-46)	124 (195)	-235 (78)	-291 (-163)	29 (128)	-809 (24)	39 (-125)	202 (-503)	45 (-299)	133 (-174)	157 (-116)	-897 (-960)
2. NR(E)RA	-71 (-320)	462 (-265)	160 (-167)	-39 (187)	-205 (-122)	527 (126)	645 (-40)	124 (-205)	-220 (-154)	-192 (587)	607 (45)	665 (437)	2,463 (109)
3. NRO	204 (22)	148 (9)	77 (85)	163 (29)	128 (269)	182 (-164)	302 (19)	445 (49)	314 (82)	246 (237)	-98 (216)	322 (177)	2,433 (1,030)
Total	**-7 (-257)**	**459 (-302)**	**361 (113)**	**-111 (294)**	**-368 (-16)**	**738 (90)**	**138 (3)**	**608 (-281)**	**296 (-575)**	**99 (525)**	**642 (87)**	**1,144 (498)**	**3,999 (179)**

P : Provisional
@ : All figures are inclusive of accrued interest.
* : Withdrawn effective August 1994.
+ : Introduced in June 1992 and discontinued w.e.f April 2002.
** : Introduced in May 1993.
– : Not available.

Notes : 1. FCNR(A) : Foreign Currency Non-Resident (Accounts). 2. FCNR(B) : Foreign Currency Non-Resident (Banks).
3. NR(E)RA : Non-Resident (External) Rupee Accounts. 4. NR(NR)RD : Non-Resident (Non-Repatriable) Rupee Deposits.
5. NRO : Non-Resident Ordinary Rupee Account.
6. Figures in the brackets represent inflows (+)/outflows(–) during the corresponding month/period of the previous year.

No. 46: Foreign Investment Inflows

(US $ million)

Item	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(P)	2008-09(P)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A. Direct Investment (I+II+III)	**2,144**	**2,821**	**3,557**	**2,462**	**2,155**	**4,029**	**6,130**	**5,035**	**4,322**	**6,051**	**8,961**	**22,826**	**34,362**	**33,613**
I. Equity (a+b+c+d+e)	2,144	2,821	3,557	2,462	2,155	2,400	4,095	2,764	2,229	3,778	5,975	16,481	26,867	27,807
a. Government (SIA/FIPB)	1,249	1,922	2,754	1,821	1,410	1,456	2,221	919	928	1,062	1,126	2,156	2,298	4,677
b. RBI	169	135	202	179	171	454	767	739	534	1,258	2,233	7,151	17,129	17,998
c. NRI	715	639	241	62	84	67	35	–	–	–	–	–	–	–
d. Acquisition of shares *	11	125	360	400	490	362	881	916	735	930	2,181	6,278	5,148	4,632
e. Equity capital of unincorporated bodies #	..	..	..	..	..	61	191	190	32	528	435	896	2,292	500
II. Reinvested earnings +	..	..	..	..	..	1,350	1,645	1,833	1,460	1,904	2,760	5,828	7,168	4,725
III. Other capital ++	..	..	..	..	..	279	390	438	633	369	226	517	327	1,081
B. Portfolio Investment (a+b+c)	**2,748**	**3,312**	**1,828**	**-61**	**3,026**	**2,760**	**2,021**	**979**	**11,377**	**9,315**	**12,492**	**7,003**	**29,395**	**-13,855**
a. GDRs/ADRs # #	683	1,366	645	270	768	831	477	600	459	613	2,552	3,776	8,769	1,162
b. FIIs **	2,009	1,926	979	-390	2,135	1,847	1,505	377	10,918	8,686	9,926	3,225	20,328	-15,017
c. Offshore funds and others	56	20	204	59	123	82	39	2	–	16	14	2	298	–
Total (A+B)	**4,892**	**6,133**	**5,385**	**2,401**	**5,181**	**6,789**	**8,151**	**6,014**	**15,699**	**15,366**	**21,453**	**29,829**	**63,757**	**19,758**

(US $ million)

Item	2007-08 (P)												
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.-Mar.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
A. Direct Investment (I+II+III)	**1,643**	**2,120**	**1,238**	**705**	**831**	**713**	**2,027**	**1,864**	**1,558**	**1,767**	**5,670**	**4,438**	**34,362**
I. Equity (a+b+c+d)	1,643	2,120	1,238	705	831	713	2,027	1,864	1,558	1,767	5,670	4,438	26,867
a. Government (SIA/FIPB)	76	847	177	177	76	117	95	82	127	221	259	44	2,298
b. RBI	699	1,050	912	515	512	201	1,710	965	1,385	884	4,704	3,591	17,129
c. Acquisition of shares *	868	223	149	13	243	395	222	817	46	662	707	803	5,148
d. Equity capital of unincorporated bodies #	..	..	..	..	..	..	..	..	..	..	..	..	2,292
II. Reinvested earnings +	..	..	..	..	..	..	..	..	..	..	..	..	7,168
III. Other capital ++	..	..	..	..	..	..	..	..	..	..	..	..	327
B. Portfolio Investment (a+b+c)	**1,974**	**1,852**	**3,664**	**6,713**	**-2,875**	**7,081**	**9,564**	**-107**	**5,294**	**6,739**	**-8,904**	**-1,600**	**29,395**
a. GDRs/ADRs # #	11	5	300	2,028	448	1	2,731	158	2,708	249	87	43	8,769
b. FIIs **	1,963	1,847	3,279	4,685	-3,323	7,057	6,833	-265	2,396	6,490	-8,991	-1,643	20,328
c. Offshore funds and others	–	–	85	–	–	23	–	–	190	–	–	–	298
Total (A+B)	**3,617**	**3,972**	**4,902**	**7,418**	**-2,044**	**7,794**	**11,591**	**1,757**	**6,852**	**8,506**	**-3,234**	**2,838**	**63,757**

(US $ million)

Item	2008-09 (P)												
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.- Mar.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
A. Direct Investment (I+II+III)	**3,749**	**3,932**	**2,392**	**2,247**	**2,328**	**2,562**	**1,497**	**1,083**	**1,362**	**2,733**	**1,466**	**1,956**	**33,613**
I. Equity (a+b+c+d)	3,749	3,932	2,392	2,247	2,328	2,562	1,497	1,083	1,362	2,733	1,466	1,956	27,807
a. Government (SIA/FIPB)	851	65	806	321	255	28	178	90	91	1102	185	705	4,677
b. RBI	1,819	3,091	1,188	1,497	1,324	2,345	1,117	900	1,189	1471	981	1,076	17,998
c. Acquisition of shares *	1,079	776	398	429	749	189	202	93	82	160	300	175	4,632
d. Equity capital of unincorporated bodies #	..	..	..	..	..	..	..	..	..	..	..	..	500
II. Reinvested earnings +	..	..	..	..	..	..	..	..	..	..	..	..	4,725
III. Other capital ++	..	..	..	..	..	..	..	..	..	..	..	..	1,081
B. Portfolio Investment (a+b+c)	**-880**	**-288**	**-3,010**	**-492**	**593**	**-1,403**	**-5,243**	**-574**	**30**	**-614**	**-1,085**	**-889**	**-13,855**
a. GDRs/ADRs # #	552	446	1	7	129	–	7	–	–	–	–	20	1,162
b. FIIs **	-1,432	-734	-3,011	-499	464	-1,403	-5,250	-574	30	-614	-1,085	-909	-15,017
c. Offshore funds and others	–	–	–	–	–	–	–	–	–	–	–	–	–
Total (A+B)	**2,869**	**3,644**	**-618**	**1,755**	**2,921**	**1,159**	**-3,746**	**509**	**1,392**	**2,119**	**381**	**1,067**	**19,758**

* : Relates to acquisition of shares of Indian companies by non-residents under Section 6 of FEMA, 1999. Data on such acquisitions have been included as part of FDI since January 1996.

** : Represents inflow of funds (net) by Foreign Institutional Investors (FIIs).

\# : Figures for equity capital of unincorporated bodies for 2007-08 and 2008-09 are estimates.

\## : Represents the amount raised by Indian Corporates through Global Depository Receipts (GDRs) and American Depository Receipts (ADRs).

\+ : Data for 2007-08 and 2008-09 are estimated as average of previous two years.

++ : Data pertain to inter company debt transactions of FDI entities.

Notes : 1. Data on FDI have been revised since 2000-01 with expanded coverage to approach international best practices.

2. These data, therefore, are not comparable with FDI data for previous years.Also see 'Notes on Tables' of Table No 42&43.

3. Monthly data on components of FDI as per expanded coverage are not available.

No. 46A: Outward Remittances under the Liberalised Remittance Scheme for Resident Individuals

(US $ million)

Purpose	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5
1. Deposit	9.1	23.2	19.7	24.0
2. Purchase of immovable property	0.5	1.9	8.5	39.5
3. Investment in equity/debt	–	–	20.7	144.7
4. Gift	–	–	7.4	70.3
5. Donations	–	–	0.1	1.6
6. Others**	–	–	16.4	160.4
Total (1 to 6)	**9.6**	**25.0**	**72.8**	**440.5**

(US $ million)

Purpose	2008-09										
	April	May	June	July	August	September	October	November	December	January	February
1	2	3	4	5	6	7	8	9	10	11	12
1. Deposit	3.4	3.0	4.1	2.3	2.6	1.6	1.2	1.4	1.6	1.7	1.8
2. Purchase of immovable property	7.7	7.0	6.5	5.7	4.6	5.7	3.1	2.6	2.5	2.6	2.7
3. Investment in equity/debt	13.3	13.7	14.9	12.5	12.7	9.8	8.7	12.4	11.2	10.4	6.8
4. Gift	8.8	10.9	10.2	12.7	16.0	7.9	8.6	23.2	9.7	7.6	8.5
5. Donations	0.2	0.1	–	0.2	0.2	–	0.1	0.2	–	0.1	0.1
6. Others**	17.1	18.5	20.5	27.4	123.6	26.0	19.2	19.0	32.7	33.1	19.3
Total (1 to 6)	**50.5**	**53.2**	**56.2**	**60.8**	**159.7**	**51.0**	**40.9**	**58.8**	**57.7**	**55.5**	**39.2**

– : Not available.

** : Include items such as Education, Tours and Travels.

Notes : (i) The data from 2004 to 2007 are on calendar basis.

(ii) Under Liberalised Remittance Scheme (LRS), currently, the residents are permitted to remit up to an amount of US $ 2, 00,000 per financial year (April-March) for any permitted current or capital account transactions or a combination of both with effect from September 26, 2007. The LRS Scheme was introduced in February 2004 to facilitate resident individuals to freely remit up to US $ 25,000 per calendar year, which was enhanced to US $ 50,000 per financial year in December 2006; to US $ 1, 00,000 per financial year in May 2007; and to US $ 2, 00,000 per financial year in September 2007.

No. 47: Daily Foreign Exchange Spot Rates

(Rupees per Unit of Foreign Currency)

Date	RBI's Reference Rate Rs. Per Foreign Currency		FEDAI Indicative Rates							
	US Dollar	Euro	US Dollar		Pound Sterling		Euro		One Hundred Japanese Yen	
			Buying	Selling	Buying	Selling	Buying	Selling	Buying	Selling
1	2	3	4	5	6	7	8	9	10	11
March 2, 2009	51.7500	65.1900	51.7600	51.7700	73.7275	73.7725	65.1750	65.2100	53.1100	53.1350
March 3, 2009	51.6600	65.3800	51.6700	51.6800	72.9275	72.9675	65.3675	65.3850	52.9450	52.9725
March 4, 2009	51.9300	64.9200	51.9000	51.9100	72.7225	72.7675	64.8550	64.8775	52.6950	52.7225
March 5, 2009	52.0600	65.5300	52.0800	52.0900	73.6350	73.6750	65.5625	65.5975	52.4150	52.4300
March 6, 2009	51.5100	65.0400	51.5100	51.5200	73.2275	73.2625	65.1450	65.1775	52.6000	52.6350
March 9, 2009	51.8000	65.4200	51.7700	51.7800	72.9850	73.0200	65.3850	65.4250	52.6500	52.6800
March 10, 2009 +										
March 11, 2009 +										
March 12, 2009	51.7000	66.1900	51.6900	51.7000	71.5700	71.6050	66.1850	66.2175	53.6325	53.6575
March 13, 2009	51.6700	66.7300	51.6400	51.6500	71.8725	71.9075	66.6875	66.7275	52.7700	52.7900
March 16, 2009	51.5800	66.5900	51.5600	51.5700	72.3450	72.3725	66.5600	66.5925	52.4900	52.5150
March 17, 2009	51.2500	66.6400	51.2400	51.2500	72.2650	72.3075	66.6225	66.6550	51.9050	51.9250
March 18, 2009	51.3500	66.9900	51.3300	50.3400	72.1450	72.1800	66.9700	66.9925	52.0900	52.1175
March 19, 2009	50.7700	68.2800	50.7500	50.7600	72.1450	72.1850	68.2575	68.2775	53.1075	53.1300
March 20, 2009	50.1400	68.3900	50.1400	50.1500	72.4225	72.4575	68.3850	68.4100	52.9450	52.9675
March 23, 2009	50.5200	69.1100	50.5300	50.5400	73.6025	73.6375	69.1850	69.2100	52.5250	52.5625
March 24, 2009	50.3100	68.7300	50.2900	50.3000	74.0475	74.0875	68.7225	68.7500	51.1900	51.2075
March 25, 2009	50.8300	68.5100	50.8200	50.8300	74.5925	74.6275	68.5000	68.5350	52.0700	52.1075
March 26, 2009	50.5400	68.6400	50.5600	50.5700	73.8075	73.8375	68.6650	68.6950	51.7025	51.7225
March 27, 2009 +										
March 30, 2009	51.0800	67.5200	51.0700	51.0800	72.4475	72.4825	67.5300	67.5475	52.7975	52.8175
March 31, 2009	50.9500	67.4800	50.9400	50.9500	72.8400	72.8750	67.4550	67.4875	51.8800	51.9000

FEDAI : Foreign Exchange Dealers' Association of India. + : Market closed.

Note : Euro Reference rate was announced by RBI with effect from January 1, 2002.

Source : FEDAI for FEDAI rates.

No. 48: Sale/Purchase of U.S. Dollar by The Reserve Bank of India

Month		Foreign Currency (US $ million)			Rs. equivalent at contract rate (Rs. crore)	Cumulative (over end-April 2007)		Outstanding Net Forward Sales (-)/ Purchase (+) at the end of month (US $ million)
		Purchase (+)	Sale (-)	Net (+/-)		(US $ million)	(Rs. crore)	
1		2	3	4	5	6	7	8
2007-08								
April	2007	2,055.00	–	(+) 2,055.00	(+) 8,835.47	(+) 2,055.00	(+) 8,835.47	–
May	2007	4,426.00	–	(+) 4,426.00	(+) 17,959.97	(+) 6,481.00	(+) 26,795.44	–
June	2007	3,192.00	–	(+) 3,192.00	(+) 12,995.99	(+) 9,673.00	(+) 39,791.42	–
July	2007	11,428.00	–	(+) 11,428.00	(+) 46,143.00	(+) 21,101.00	(+) 85,934.81	–
August	2007	1,815.00	–	(+) 1,815.00	(+) 7,333.69	(+) 22,916.00	(+) 93,268.50	–
September	2007	11,867.00	–	(+) 11,867.00	(+) 47,418.00	(+) 34,783.00	(+) 1,40,686.87	–
October	2007	12,544.00	–	(+) 12,544.00	(+) 49,581.07	(+) 47,327.00	(+) 1,90,267.94	(+) 4,990.00
November	2007	7,827.00	–	(+) 7,827.00	(+) 30,796.87	(+) 55,154.00	(+) 2,21,064.81	(+) 7,553.00
December	2007	2,731.00	–	(+) 2,731.00	(+) 10,772.86	(+) 57,885.00	(+) 2,31,837.66	(+) 8,238.00
January	2008	13,625.00	–	(+) 13,625.00	(+) 53,612.82	(+) 71,510.00	(+) 2,85,450.48	(+) 16,629.00
February	2008	3,884.00	–	(+) 3,884.00	(+) 15,424.17	(+) 75,394.00	(+) 3,00,874.65	(+) 16,178.00
March	2008	4,302.00	1,493.00	(+) 2,809.00	(+) 11,178.90	(+) 78,203.00	(+) 3,12,053.55	(+) 14,735.00

Month		Foreign Currency (US $ million)			Rs. equivalent at contract rate (Rs. crore)	Cumulative (over end-April 2008)		Outstanding Net Forward Sales (-)/ Purchase (+) at the end of month (US $ million)
		Purchase (+)	Sale (-)	Net (+/-)		(US $ million)	(Rs. crore)	
1		2	3	4	5	6	7	8
2008-09								
April	2008	4,325.00	–	(+) 4,325.00	(+) 17,237.89	(+) 4,325.00	(+) 17,237.89	(+) 17,095.00
May	2008	1,625.00	1,477.00	(+) 148.00	(+) 118.51	(+) 4,473.00	(+) 17,356.40	(+) 15,470.00
June	2008	1,770.00	6,999.00	(-) 5,229.00	(-) 22,970.78	(-) 756.00	(-) 5,614.37	(+) 13,700.00
July	2008	3,580.00	9,900.00	(-) 6,320.00	(-) 27,829.05	(-) 7,076.00	(-) 33,443.43	(+) 11,910.00
August	2008	3,770.00	2,560.00	(+) 1,210.00	(+) 4,557.53	(-) 5,866.00	(-) 28,885.89	(+) 9,925.00
September	2008	2,695.00	6,479.00	(-) 3,784.00	(-) 18,396.49	(-) 9,650.00	(-) 47,282.38	(+) 2,300.00
October	2008	1,960.00	20,626.00	(-) 18,666.00	(-) 92,925.06	(-) 28,316.00	(-) 1,40,207.44	(+) 90.00
November	2008	2,355.00	5,456.00	(-) 3,101.00	(-) 16,252.20	(-) 31,417.00	(-) 1,56,459.64	(-) 487.00
December	2008	2,005.00	2,323.00	(-) 318.00	(-) 3,524.72	(-) 31,735.00	(-) 1,59,984.36	(-) 1,752.00
January	2009	1,055.00	1,084.00	(-) 29.00	(-) 1,116.19	(-) 31,764.00	(-) 1,61,100.55	(-) 1,723.00
February	2009	1,063.00	833.00	(+) 230.00	(+) 335.79	(-) 31,534.00	(-) 1,60,764.76	(-) 1,953.00
March	2009	360.00	3,748.00	(-) 3,388.00	(-) 17,826.91	(-) 34,922.00	(-) 1,78,591.67	(-) 2,042.00

(+) : Implies Purchase including purchase leg under swaps and outright forwards.
(-) : Implies Sales including sale leg under swaps and outright forwards.
Note : This table is based on value dates.

No. 49: Turnover in Foreign Exchange Market

(US $ million)

Position Date	Merchant						Inter-bank					
	FCY / INR			FCY / FCY			FCY/INR			FCY/FCY		
	Spot	Forward	Forward Cancellation	Spot	Forward	Forward Cancellation	Spot	Swap	Forward	Spot	Swap	Forward
1	2	3	4	5	6	7	8	9	10	11	12	13
Purchases												
Mar. 2, 2009	1,425	1,169	656	216	657	544	6,291	6,373	726	2,733	1,789	174
Mar. 3, 2009	1,420	1,123	662	368	510	475	5,511	7,083	1,271	2,403	1,779	76
Mar. 4, 2009	1,116	828	566	232	578	536	4,309	5,456	854	2,115	1,596	62
Mar. 5, 2009	1,248	839	515	263	452	486	4,028	5,683	909	2,117	1,094	97
Mar. 6, 2009	1,636	936	605	184	554	514	4,239	5,531	782	2,066	1,659	84
Mar. 9, 2009	1,608	904	586	363	796	828	4,489	5,548	886	3,675	1,798	108
Mar. 10, 2009	2	1	–	–	–	–	2	3	–	–	33	–
Mar. 11, 2009	75	2	14	–	28	23	151	243	50	127	57	–
Mar. 12, 2009	2,128	1,006	840	411	1,181	1,359	4,306	6,898	733	4,278	2,383	295
Mar. 13, 2009	1,686	951	447	279	1,074	936	3,977	5,943	757	3,605	1,615	79
Mar. 16, 2009	1,502	1,042	1,047	368	599	536	5,359	6,052	517	2,925	1,455	162
Mar. 17, 2009	1,569	841	718	188	586	550	4,497	6,679	727	2,428	1,204	98
Mar. 18, 2009	1,602	788	384	157	827	580	4,355	8,015	761	3,000	1,882	339
Mar. 19, 2009	1,357	1,504	834	577	1,038	966	8,337	7,787	1,822	4,172	2,735	857
Mar. 20, 2009	3,232	1,235	563	224	927	556	6,020	8,109	1,757	2,952	1,657	267
Mar. 23, 2009	1,436	1,234	599	237	762	760	3,975	7,629	1,102	3,287	2,257	155
Mar. 24, 2009	1,522	708	748	346	646	646	5,025	9,153	562	3,249	2,572	125
Mar. 25, 2009	1,873	1,186	992	555	620	540	5,312	9,161	1,146	3,198	1,818	91
Mar. 26, 2009	3,337	1,882	2,064	698	725	908	6,107	9,947	1,914	3,367	2,568	326
Mar. 27, 2009	59	61	5	15	41	42	76	116	–	386	197	4
Mar. 30, 2009	3,322	1,641	2,326	931	877	1,109	5,836	10,831	1,874	4,226	3,435	214
Mar. 31, 2009	2,850	1,772	1,489	272	623	1,021	6,068	9,038	2,036	3,015	2,949	171
Sales												
Mar. 2, 2009	1,753	1,871	522	183	662	601	5,221	6,884	1,063	2,713	1,848	194
Mar. 3, 2009	1,487	1,535	417	335	514	428	5,128	7,913	1,275	2,451	1,878	73
Mar. 4, 2009	1,264	1,093	369	213	578	537	4,126	5,845	779	1,917	1,694	98
Mar. 5, 2009	1,234	1,378	356	254	437	477	3,522	5,688	852	2,112	1,121	94
Mar. 6, 2009	1,746	885	748	180	534	480	3,901	5,911	779	2,059	1,832	466
Mar. 9, 2009	1,990	988	437	340	764	827	3,767	6,213	1,358	3,700	1,896	105
Mar. 10, 2009	2	1	–	–	–	–	2	–	–	–	33	–
Mar. 11, 2009	76	5	1	–	28	6	256	200	–	127	57	–
Mar. 12, 2009	2,074	1,174	641	403	1,168	1,396	4,055	7,278	893	4,269	2,522	298
Mar. 13, 2009	1,543	936	474	282	1,052	968	3,774	5,994	1,015	3,203	1,632	88
Mar. 16, 2009	1,434	1,420	921	360	595	527	5,005	6,048	757	2,944	1,618	149
Mar. 17, 2009	1,512	968	372	180	589	559	4,058	7,007	968	2,448	1,344	106
Mar. 18, 2009	1,236	843	272	152	817	583	3,949	8,006	881	2,966	1,757	359
Mar. 19, 2009	1,535	1,748	679	572	1,003	1,166	7,278	8,266	1,762	4,157	2,831	861
Mar. 20, 2009	1,677	2,601	659	223	909	575	5,680	7,932	2,045	2,958	1,807	284
Mar. 23, 2009	1,742	874	715	234	763	807	3,847	7,551	927	3,306	2,251	123
Mar. 24, 2009	1,923	707	314	327	642	715	4,831	7,756	673	3,278	2,674	122
Mar. 25, 2009	2,084	1,525	714	550	599	519	5,090	9,348	1,412	2,879	1,853	81
Mar. 26, 2009	3,500	2,014	1,553	698	707	1,005	5,880	9,350	1,482	3,339	2,745	324
Mar. 27, 2009	221	12	42	15	39	43	55	161	9	362	204	4
Mar. 30, 2009	2,973	1,949	1,528	909	869	1,138	5,228	11,097	1,958	4,227	3,424	215
Mar. 31 2009	2,464	1,807	1,349	265	609	1,005	5,845	10,324	1,979	3,057	3,005	175

FCY : Foreign Currency. INR : Indian Rupees. + : Market closed.

Note : Data relate to sales and purchases of foreign exchange on account of merchant and inter-bank transactions. Data are provisional.

No. 50: Indices of Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) of the Indian Rupee

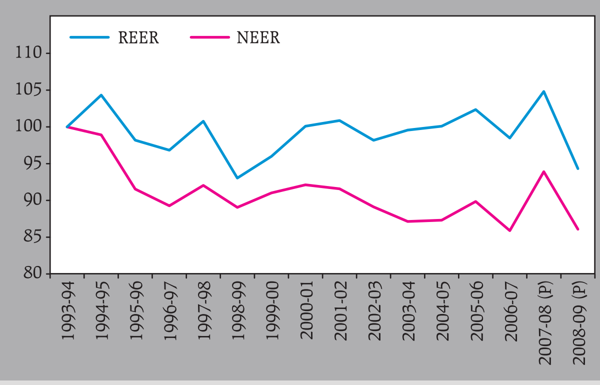
(36-Currency Export and Trade Based Weights)
(Base: 1993-94=100)*

Year	Trade Based Weights		Export Based Weights	
	REER	NEER	REER	NEER
1	2	3	4	5
1993-94	100.00	100.00	100.00	100.00
1994-95	104.32	98.91	104.88	98.18
1995-96	98.19	91.54	100.10	90.94
1996-97	96.83	89.27	98.95	89.03
1997-98	100.77	92.04	103.07	91.97
1998-99	93.04	89.05	94.34	90.34
1999-00	95.99	91.02	95.28	90.42
2000-01	100.09	92.12	98.67	90.12
2001-02	100.86	91.58	98.59	89.08
2002-03	98.18	89.12	95.99	87.01
2003-04	99.56	87.14	99.07	87.89
2004-05	100.09	87.31	98.30	88.41
2005-06	102.35	89.85	100.54	91.17
2006-07	98.48	85.89	97.42	87.46
2007-08 (P)	104.81	93.91	104.12	95.30
2008-09 (P)	94.32	86.08	93.90	85.92

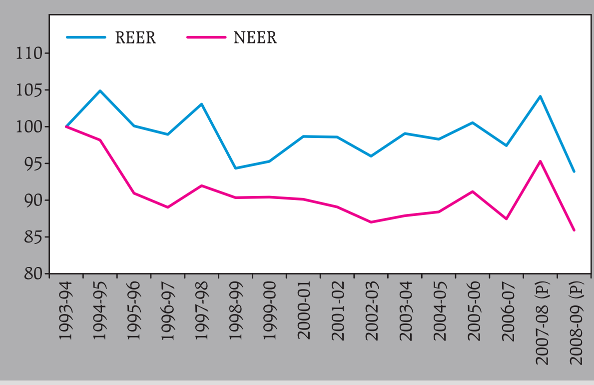
Year		Trade Based Weights		Export Based Weights	
		REER	NEER	REER	NEER
1		2	3	4	5
2006-07	April	98.16	87.73	97.11	89.18
	May	96.43	85.43	95.67	87.12
	June	96.60	85.11	95.61	86.61
	July	95.75	84.22	94.80	85.74
	August	95.64	83.61	94.66	85.13
	September	98.00	84.65	96.78	86.05
	October	99.96	86.18	98.64	87.53
	November	100.35	86.50	99.31	88.12
	December	99.14	85.89	98.25	87.68
	January	100.69	87.05	99.53	88.72
	February	100.55	87.21	99.39	88.87
	March	100.53	87.11	99.35	88.85
2007-08 (P)	April	102.60	91.80	101.88	92.89
	May	106.01	94.69	105.24	95.83
	June	105.92	94.97	105.03	96.07
	July	105.99	94.84	105.19	96.08
	August	105.34	94.38	104.47	95.52
	September	105.90	94.65	105.12	95.91
	October	106.09	95.29	105.35	96.73
	November	104.63	94.27	104.01	95.83
	December	104.94	94.68	104.19	96.11
	January	104.85	94.29	104.26	95.91
	February	103.51	93.11	103.04	94.82
	March	101.94	90.01	101.72	91.92
2008-09 (P)	April	101.71	93.26	101.82	93.54
	May	97.56	89.04	97.50	89.20
	June	97.60	87.65	97.63	87.85
	July	97.23	87.04	97.47	87.35
	August	99.45	88.60	99.47	88.68
	September	95.76	85.42	95.55	85.34
	October	92.13	83.23	91.61	82.91
	November	92.42	84.69	91.59	84.21
	December	90.29	83.91	89.57	83.47
	January	89.72	83.43	88.82	82.86
	February	90.61	84.98	89.52	84.45
	March	87.39	81.72	86.20	81.22

* : For "Note on Methodology" and time series data on the indices presented here, please see December 2005 issue of this Bulletin.

Indices of REER and NEER of the Indian Rupee
(Trade Based Weights)



Indices of REER and NEER of the Indian Rupee
(Export Based Weights)



No. 51: Indices of Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) of the Indian Rupee

(6-Currency Trade Based Weights)

Year/Month/Day		Base: 1993-94 (April-March) =100		Base: 2006-2007 (April-March) =100	
		NEER	REER	NEER	REER
1993-94		100.00	100.00	143.96	94.77
1994-95		96.96	105.82	139.52	100.24
1995-96		88.56	101.27	127.44	95.93
1996-97		86.85	101.11	124.97	95.78
1997-98		87.94	104.41	126.54	98.91
1998-99		77.49	96.14	111.50	91.08
1999-00		77.16	97.69	111.03	92.54
2000-01		77.43	102.82	111.42	97.40
2001-02		76.04	102.71	109.43	97.29
2002-03		71.27	97.68	102.56	92.53
2003-04		69.97	99.17	100.68	93.94
2004-05		69.58	101.78	100.12	96.42
2005-06		72.28	107.30	104.02	101.64
2006-07		69.49	105.57	100.00	100.00
2007-08		74.17	114.09	106.73	108.08
2008-09 (P)		64.54	104.62	92.88	99.10
2006-07	April	71.63	105.86	103.08	100.28
	May	69.39	103.70	99.85	98.23
	June	68.79	103.19	98.99	97.75
	July	68.14	102.31	98.06	96.92
	August	67.65	102.26	97.35	96.87
	September	68.40	104.88	98.43	99.35
	October	69.66	107.34	100.24	101.68
	November	69.90	107.92	100.59	102.23
	December	69.38	106.52	99.84	100.90
	January	70.32	107.69	101.20	102.01
	February	70.42	107.67	101.33	102.00
	March	70.23	107.46	101.07	101.80
2007-08	April	72.74	111.63	104.67	105.75
	May	75.19	115.73	108.20	109.63
	June	75.37	115.22	108.46	109.15
	July	75.15	115.10	108.15	109.04
	August	74.44	114.10	107.13	108.08
	September	74.64	115.03	107.41	108.97
	October	75.45	115.79	108.58	109.69
	November	74.34	113.90	106.97	107.89
	December	74.65	114.52	107.42	108.48
	January	74.31	114.23	106.93	108.21
	February	73.41	113.06	105.64	107.10
	March	70.38	110.87	101.28	105.02
2008-09 (P)	April	70.63	112.16	101.64	106.24
	May	67.48	108.23	97.11	102.53
	June	66.38	108.20	95.52	102.50
	July	65.83	107.94	94.73	102.25
	August	67.22	111.30	96.73	105.43
	September (P)	64.46	107.11	92.76	101.46
	October (P)	62.08	102.36	89.33	96.96
	November (P)	63.06	102.80	90.75	97.38
	December (P)	62.12	100.18	89.39	94.90
	January (P)	62.28	99.64	89.62	94.38
	February (P)	62.80	99.87	90.37	94.61
	March (P)	60.18	95.65	86.60	90.61
	As on				
	March 26, 2009 (P)	60.02	95.54	86.36	90.50
	April 2, 2009 (P)	60.86	96.90	87.58	91.79
	April 9, 2009 (P)	61.30	97.98	88.21	92.81
	April 17, 2009 (P)	61.77	98.73	88.89	93.53

Notes : 1. Rise in indices indicate appreciation of rupee and vice versa.
2. For "Note on Methodology" on the indices presented here, please see December 2005 issue of this Bulletin.
3. Base year 2006-07 is a moving one, which gets updated every year.

Notes on Tables

Table No. 1

(1) Annual data are averages of the months.
(2) Figures relate to last Friday of the month / year.
(3) Total of Rupee Securities held in Issue and Banking Departments.
(4) Relates to loans and advances only.
(5) Figures relate to the last Friday / last reporting Friday (in case of March).
(6) Total for Mumbai, Chennai, Kolkata and New Delhi only.
(7) Figures relate to last reporting Friday / March 31.
(8) Rates presented as low / high for the period indicated. The source of data prior to April 2000 issue of the Bulletin has been DFHI. The data from April 2000 issue of the Bulletin are not strictly comparable with that pertaining to earlier periods due to wider coverage of Call Market business.
(9) Relating to major banks.
(10) Relating to five major banks. PLR concept was introduced with effect from October 1994.
(11) Monthly data are averages of the weeks and annual data are averages of the months.
(12) Figures relate to the end of the month / year.
(13) Data relate to January – December.
(14) Cash Reserve Ratio of Scheduled Commercial Banks (excluding Regional Rural Banks).

Table No. 2

The gold reserves of Issue Department were valued at Rs.84.39 per 10 grams up to October 16, 1990 and from October 17, 1990 they are valued close to international market prices.

(1) Includes Government of India one rupee notes issued from July 1940.
(2) Includes (i) Paid-up Capital of Rs.5 crore (ii) Reserve Fund of Rs.6,500 crore (iii) National Industrial Credit (Long-Term Operations): Fund of Rs.16 crore and (iv) National Housing Credit (Long-Term Operations) Fund of Rs.190 crore from the week ended November 30, 2007.
(3) Includes cash, short-term securities and fixed deposits. This also includes investment in foreign currency denominated bonds issued by IIFC(UK) since March 20, 2009.
(4) Includes temporary overdrafts to State Governments.
(5) Figures in bracket indicate the value of gold held under other assets.

Table Nos. 3 & 4

The expression 'Banking System' or 'Banks' means (a) State Bank of India and its associates (b) Nationalised Banks (c) Banking companies as defined in clause 'C' of Section 5 of the Banking Regulation Act, 1949 (d) Co-operative banks (as far as scheduled co-operative banks are concerned) (e) Regional Rural Banks and (f) any other financial institution notified by the Central Government in this regard.

(1) Excludes borrowings of any scheduled state co-operative bank from the State Government and any Reserve Fund deposit required to be maintained with such bank by any co-operative society within the area of operation of such bank.
(2) Deposits of co-operative banks with scheduled state co-operative banks are excluded from this item but are included under 'Aggregate deposits'.
(3) Excludes borrowings of regional rural banks from their sponsor banks.

(4) Wherever it has not been possible to provide the data against the item 'Other demand and time liabilities' under 'Liabilities to the Banking System' separately, the same has been included in the item 'Other demand and time liabilities' under 'Liabilities to others'.

(5) Data reflect redemption of India Millennium Deposits (IMDs) on December 29, 2005.

(6) Other than from the Reserve Bank of India, NABARD and Export-Import Bank of India.

(7) Figures relating to scheduled banks' borrowings in India are those shown in the statement of affairs of the Reserve Bank of India. Borrowings against usance bills and/or promissory notes are under section 17(4) of the Reserve Bank of India Act, 1934.

(8) Includes borrowings by scheduled state co-operative banks under Section 17(4AA) of the Reserve Bank of India Act, 1934.

(9) As per the Statement of Affairs of the Reserve Bank of India.

(10) Advances granted by scheduled state co-operative banks to co-operative banks are excluded from this item but included under 'Loans, cash-credits and overdrafts'.

(11) At book value; it includes treasury bills and treasury receipts, treasury savings certificates and postal obligations.

(12) Includes participation certificates (PCs) issued by scheduled commercial banks to other banks and financial institutions.

(13) Includes participation certificates (PCs) issued by scheduled commercial banks to others.

(14) Figures in brackets relate to advances of scheduled commercial banks for financing food procurement operations.

Table No. 6

(1) Total of demand and time deposits from 'Others'.

(2) Includes borrowings from the Industrial Development Bank of India and National Bank for Agriculture and Rural Development.

(3) At book value; includes treasury bills and treasury receipts, treasury savings certificates and postal obligations.

(4) Total of 'Loans, cash credits and overdrafts' and 'Bills purchased and discounted'.

(5) Includes advances of scheduled state co-operative banks to central co-operative banks and primary co-operative banks.

Table No. 7

With a view to enable the banks to meet any unanticipated additional demand for liquidity in the context of the century date change, a 'Special Liquidity Support' (SLS) facility was made available to all scheduled commercial banks (excluding RRBs) for a temporary period from December 1, 1999 to January 31, 2000.

(1) With effect from April 13,1996, banks are provided export credit refinance against their rupee export credit and post-shipment export credit denominated in U.S. Dollars taken together.

(2) General Refinance Facility was replaced by Collateralised Lending Facility (CLF)/Additional Collateralised Facility (ACLF) effective April 21, 1999. ACLF was withdrawn with the introduction of Liquidity Adjustment Facility (LAF), effective June 5, 2000. CLF was withdrawn completely effective October 5, 2002.

(3) Special Liquidity Support Facility which was introduced effective September 17, 1998 was available upto March 31, 1999.

(4) Post-shipment credit denominated in US dollars (PSCFC) scheme was withdrawn effective February 8, 1996 and the refinance facility thereagainst was withdrawn effective April 13, 1996. The scheme of government securities refinance was terminated effective July 6, 1996.

Table No. 8

a) The data includes cheque clearing for both *i.e.* clearing houses managed by Reserve Bank of India and clearing houses managed by other banks. Paper based inter-bank clearing has been discontinueed at all the centres, from last June, 2005.

The other MICR Centres are Agra, Allahabad, Amritsar, Aurangabad, Baroda, Bhilwara, Coimbatore, Cuttak, Dehradun, Ernakulam, Erode,Gorakhpur, Gwalior, Hubli, Indore, Jabalpur, Jalandhar, Jameshedpur, Jammu, Jodhpur, Kolhapur, Kozhikode, Lucknow, Ludhiana, Madurai, Mangalore, Mysore, Nasik, Panaji, Pondicherry, Pune, Raipur, Rajkot, Ranchi, Salem, Solapur, Surat, Thiruchirapalli, Tirupur, Thrissur, Udaipur, Varansi, Vijaywada and Vishakhapatnam.

b) Graphs: The graphs 3 and 4 on Paper and Electronic payments - the Electronic Payment System data include Retail Electronic Payment Systems, RTGS (customer and inter-bank) and CCIL operated systems.

c) Non MICR Data pertains to the Clearing Houses managed by 10 banks namely SBI (688), SBBJ (50), SB Indore (27), PNB (3), SBT (81), SBP (52), SBH (51), SBS (28), SBM (46) and United Bank of India (4). (Figures in bracket indicate Non MICR Cheque Clearing Houses managed by the bank).

d) The other MICR Centres includes 44 centres managed by 13 PSBs namely Andhra Bank, Bank of Baroda, Bank of India, Canara Bank, Central Bank of India, Corporation Bank, Oriental Bank of Commerce, Punjab National Bank, State Bank of India, State Bank of Indore, State Bank of Travancore, State Bank of Hyderabad and Union Bank of India.

Table No. 9A

The data pertains to retail electronic payment.

Table No. 9B

The data pertains to Large Value Payment Systems. The figures for CCIL, the operations pertains to selected services, are taken from the CCIL published data.

Table No. 10

(a) For details of money stock measures according to the revised series, reference may be made to January 1977 issue of this Bulletin (pages 70-134).

(b) Banks include commercial and co-operative banks.

(c) Financial year data relate to March 31, except scheduled commercial banks' data which relate to the last reporting Friday of March. For details, see the note on page S 963 of October 1991 issue of this Bulletin.

(d) Scheduled commercial banks' time deposits reflect redemption of Resurgent India Bonds (RIBs), since October 1, 2003 and of India Millennium Deposits (IMDs) since December 29, 2005.

(e) Data are provisional.

(1) Net of return of about Rs.43 crore of Indian notes from Pakistan upto April 1985.

(2) Estimated : ten-rupee commemorative coins issued since October 1969, two-rupee coins issued since November 1982 and five-rupee coins issued since November 1985 are included under rupee coins.

(3) Exclude balances held in IMF Account No.1, Reserve Bank of India Employees' Provident Fund, Pension Fund, Gratuity and Superannuation Fund and Co-operative Guarantee Fund, the amount collected under the Additional Emoluments (Compulsory Deposit) Act, 1974 and the Compulsory Deposit Scheme (Income-Tax Payers') Act.

(f) Revised in line with the new accounting standards and consistent with the Methodology of Compilation (June 1998). The revision is in respect of pension and provident funds with commercial banks which are classified as other demand and time liabilities and includes those banks which have reported such changes so far.

Table Nos. 11 & 13

(a) On the establishment of National Bank for Agriculture and Rural Development (NABARD), on July 12, 1982, certain assets and liabilities of the Reserve Bank were transferred to NABARD, necessitating some reclassification of aggregates in the sources of money stock from that date.

(b) Please see item (c) of notes to Table 10.

(c) Data are provisional.

(1) Includes special securities and also includes Rs.751.64 crore (equivalent of SDRs 211.95 million) incurred on account of Reserve Assets subscription to the IMF towards the quota increase effective December 11, 1992.

(2) Represents investments in bonds/shares of financial institutions, loans to them and holdings of internal bills purchased and discounted. Excludes since the establishment of NABARD, its refinance to banks.

(3) Inclusive of appreciation in the value of gold following its revaluation close to international market price effective October 17, 1990. Such appreciation has a corresponding effect on Reserve Bank's net non-monetary liabilities.

Table No. 11A

The conceptual basis of the compilation of the Commercial Bank Survey are available in the report of the Working Group on Money Supply: Analytics and Methodology of Compilation (Chairman: Dr. Y.V. Reddy), RBI Bulletin, July 1998, which recommended changes in the reporting system of commercial banks and the article entitled "New Monetary Aggregates: An Introduction", RBI Bulletin, October 1999.

(1) Time Deposits of Residents : These do not reckon non-residents' foreign currency repatriable fixed deposits (such as FCNR(B) deposits, Resurgent India Bonds (RIBs) and India Millennium Deposits (IMDs)) based on the residency criterion and exclude banks' pension and provident funds because they are in the nature of other liabilities and are included under 'other demand and time liabilities'.

(2) Short-term Time Deposits : Refers to contractual maturity of time deposits of up to and including one year. This is presently estimated at 45.0 per cent of total domestic time deposits.

(3) Domestic Credit : It includes investments of banks in non-SLR securities, comprising commercial paper, shares and bonds issued by the public sector undertakings, private sector and public financial institutions and net lending to primary dealers in the call/term money market, apart from investment in government and other approved securities and conventional bank credit (by way of loans, cash credit, overdrafts and bills purchased and discounted).

(4) Net Foreign Currency Assets of Commercial Banks : Represent their gross foreign currency assets netted for foreign currency liabilities to non-residents.

(5) Capital Account : It consists of paid-up capital and reserves.

(6) Other Items (net) : It is the residual balancing the components and sources of the Commercial Banking Survey and includes scheduled commercial banks' other demand and time liabilities, net branch adjustments, net inter-bank liabilities *etc.*

Table No. 11B

The conceptual basis of the compilation of new monetary aggregates are available in the report of the Working Group on Money Supply: Analytics and Methodology of Compilation (Chairman: Dr. Y.V. Reddy), RBI Bulletin, July 1998. A link series between the old and present monetary series has been published in the article entitled "New Monetary Aggregates: An Introduction", RBI Bulletin, October 1999.

(1) NM_2 and NM_3 : Based on the residency concept and hence does not directly reckon non-resident foreign currency repatriable fixed deposits in the form of FCNR(B) deposits, Resurgent India Bonds (RIBs) and India Millennium Deposits (IMDs).

(2) NM_2 : This includes M_1 and residents' short-term time deposits (including and up to the contractual maturity of one year) with commercial banks.

(3) Domestic Credit : Consistent with the new definition of bank credit which includes investments of banks in non-SLR securities, comprising of commercial paper, shares and bonds issued by the public sector undertakings, private sector and public financial institutions and net lending to primary dealers in the call/term money market. The RBI's loans and advances to NABARD would be included in the RBI credit to commercial sector. Other components such as credit to Government, investments in other approved securities and conventional bank credit remain unchanged.

(4) Net Foreign Assets of The Banking Sector : It comprises the RBI's net foreign assets and scheduled commercial banks' net foreign currency assets (refer to note 4 of Table 11A).

(5) Capital Account : It consists of paid-up capital and reserves.

(6) Other Items (net) of the Banking System : It is the residual balancing the components and sources of money stock, representing other demand and time liabilities *etc.* of the banking system.

Table No. 11C

The conceptual basis of the compilation of the Reserve Bank Survey is given in the report of the Working Group on Money Supply: Analytics and Methodology of Compilation (Chairman: Dr. Y.V. Reddy), RBI Bulletin, July 1998 and the article "New Monetary Aggregates: An Introduction", RBI Bulletin, October 1999. The components of reserve money (to be referred as M_0) remain unchanged. On the sources side, the RBI's refinance to the National Bank for Agriculture and Rural Development (NABARD), which was hitherto part of RBI's claims on banks has been classified as part of RBI credit to commercial sector. The Reserve Bank's net non-monetary liabilities are classified into capital account (comprising capital and reserves) and other items (net).

Table No. 12

Please see item (c) of notes to Table 10.

Table No. 27C

(a) Month-end yields for different integer valued residual maturities are estimated using interpolation technique on weighted average yields of select indicative securities derived from SGL transactions data on government securities observed during a select month-end day. Yield corresponding to each transaction in a security is calculated from the following Yield to Maturity (YTM) and price relationship.

$$P + bpi = \sum_{i=1}^{n} \frac{c/v}{(1+ y/v)^{vt_i}} + \frac{F}{(1+ y/v)^{vt_n}}$$

Where,

P = price of the bond

bpi = broken period interest

c = annual coupon payment

y = yield to maturity

v = number of coupon payments in a year

n = number of coupon payments till maturity

F = Redemption payment of the bond

t_i = time period in year till i^{th} coupon payment

(b) The weighted average yield corresponding to each traded security on that particular day is calculated from the yields of all transactions on that security using amount (Face Value) traded as the weights.

(c) Broken period (number of days) is based on day count convention of 30 days a month and 360 days a year.

Table Nos. 29 & 30

Table 29 presents Index Numbers of Industrial Production (Sectoral and Use-based Classification). Due to revision of the indices of the mining sector and also the deletion of four items, *viz.*, radio receivers, photosensitised paper, chassis (assembly) for HCVs (bus, truck) and engines from the item–basket of the manufacturing sector, the IIP data have been revised from 1994-95 onwards. This has also resulted in the change in redistribution of weights in use-based classification of IIP. Table 30 contains data on manufacturing sector at two digit level of 17 groups along with general index and sectoral indices, *viz.*, Mining and Quarrying, Manufacturing and Electricity.

Table No. 31

(a) Figures exclude data on private placement and offer for sale but include amounts raised by private financial institutions.

(b) Equity shares exclude bonus shares.

(c) Preference shares include cumulative convertible preference shares and equi-preference shares.

(d) Debentures include bonds.

(e) Convertible debentures include partly convertible debentures.

(f) Non-convertible debentures include secured premium notes and secured deep discount bonds.

(g) Figures in brackets indicate data in respect of premium on capital issues which are included in respective totals.

Table No. 35

The ban on forward trading in gold and silver, effective November 14, 1962 and January 10, 1963, has been lifted with effect from April 1, 2003.

(1) In case Friday is a holiday, prices relate to the preceding working day.

Table No. 36

Annual data relate to average of the months April to March.

(1) The new series of index numbers with base 2001=100 was introduced from January 2006 and with that the compilation of the index numbers with the base year 1982 was discontinued. The linking factor can be used to work out the index numbers with the base year 2001 for data from January 2006 onwards.

(2) Based on indices relating to 78 centres.

Table No. 37

Annual data relate to average of the months April to March. The new series of index numbers with base 1984-85=100 was introduced from November 1987.

(1) Based on indices relating to 59 centres.

Table No. 38

Annual data relate to the average of the months July to June.

(1) With respect to base: July 1960-June 1961=100.

(2) The new series of index numbers with base : July 1986 to June 1987 = 100 was introduced from November 1995 and with that the compilation of index numbers with base : July 1960 to June 1961 was discontinued. The linking factor given in this column can be used to work out the index numbers with old base (i.e., 1960-61 = 100) for November 1995 and subsequent months.

(3) In the case of Assam, the old series (i.e., with base 1960-61 = 100) was being compiled for the composite region viz. Assam, Manipur, Meghalaya and Tripura while the index of the new series (i.e., with base 1986-87 = 100) has been compiled for each of the constituent States separately. The index for Assam region on old base can be estimated from the corresponding indices of the new series as under :

$$I^{A}_{O} = 5.89\ [\ (0.8126 \text{ X } I^{A}_{N}) + (0.0491 \text{ X } I^{Ma}_{N}) + (0.0645 \text{ X } I^{Me}_{N}) + (0.0738 \text{ X } I^{T}_{N})]$$

where I_O and I_N represent the index numbers for old and new series, respectively, and superscripts A, Ma, Me and T indicate Assam, Manipur, Meghalaya and Tripura, respectively.

(4) Similarly, in the case of Punjab, where the old series (i.e., with base 1960-61 = 100) was being compiled for the composite region, viz., Punjab, Haryana and Himachal Pradesh, the index for the Punjab region on old base can be estimated as under :

$$I^{P}_{O} = 6.36\ [(0.6123 \text{ X } I^{P}_{N}) + (0.3677 \text{ X } I^{Ha}_{N}) + (0.0200 \text{ X } I^{Hi}_{N})]$$

where I_O and I_N represent the index numbers for old and new series, respectively, and superscripts P, Ha and Hi indicate Punjab, Haryana and Himachal Pradesh, respectively.

(5) Indices for the State compiled for the first time from November, 1995.

(6) Consumer Price Index for Rural Labourers (including agricultural labourers) are compiled from November 1995 only.

(7) Average of 8 months (November 1995 - June 1996).

Table Nos. 39 & 40

The new series of index numbers with base 1993-94=100 was introduced in April 2000. Details regarding the scope and coverage of new series are published in June 2000 issue of the Bulletin.

Table No. 41

(a) The foreign trade data relate to total sea, air and land trade, on private and government accounts. Exports are on f.o.b. basis and imports are on c.i.f. basis. Exports include re-exports of foreign merchandise previously imported to India and imports relate to foreign merchandise whether intended for home consumption, bonding or re-exportation. Direct transit trade, transshipment trade, passengers baggage, ship's stores, defence goods and transactions in treasure i.e. gold and current coins and notes, diplomatic goods, "proscribed substances" under Atomic Energy Act, 1962, are excluded from the trade data, while indirect transit trade, transactions in silver (other than current coins) and in notes and coins not yet in circulation or withdrawn from circulation are included.

Table Nos. 42 & 43

(1) Data up to 1980-81 are final, subsequent data are preliminary actuals.

(2) Interest accrued during the year and credited to NRI deposits has been treated as notional outflow under invisible payments and added as reinvestment in NRI deposits under Banking Capital – NRD.

(3) The item "Non-monetary Gold Movement" has been deleted from Invisibles in conformity with the IMF Manual on BOP (5th edition) from May 1993 onwards; these entries have been included under merchandise.

(4) Since 1990-91 the value of defence related imports are recorded under imports (merchandise debit) with credits financing such imports shown under "Loans (External commercial Borrowings to India)" in the capital account. Interest payments on defence debt owed to the General Currency Area (GCA) are recorded under Investment Income debit and principal repayments under debit to "Loans (External commercial Borrowings to India)". In the case of the Rupee Payment Area (RPA), interest payment on and principal repayment of debt is clubbed together and shown separately under the item "Rupee Debt Service" in the capital account. This is in line with the recommendations of the High Level Committee on Balance of Payments (Chairman : Dr. C. Rangarajan).

(5) In accordance with the provisions of IMF's Balance of Payments Manual (5th Edition), gold purchased from the Government of India by the RBI has been excluded from the BOP statistics. Data from the earlier years have, therefore, been amended by making suitable adjustments in "Other Capital Receipts" and "Foreign Exchange Reserves". Similarly, item "SDR Allocation" has been deleted from the table.

(6) In accordance with the recommendations of the Report of the Technical Group on Reconciling of Balance of Payments and DGCI & S Data on Merchandise Trade, data on gold and silver brought in by the Indians returning from abroad have been included under import payments with contra entry under Private Transfer Receipts since 1992-93.

(7) In accordance with the IMF's Balance of Payments Manual (5th edition), 'compensation of employees' has been shown under head, "income" with effect from 1997-98; earlier, 'compensation of employees' was recorded under the head "Services – miscellaneous".

(8) Since April 1998, the sales and purchases of foreign currency by the Full Fledged Money Changers (FFMC) are included under "travel" in services.

(9) Exchange Rates : Foreign currency transactions have been converted into rupees at the par/central rates up to June 1972 and on the basis of average of the Bank's spot buying and selling rates for sterling and the monthly averages of cross rates of non-sterling currencies based on London market thereafter. Effective March 1993, conversion is made by crossing average spot buying and selling rate for US dollar in the forex market and the monthly averages of cross rates of non-dollar currencies based on the London market.

Explanatory Notes

Balance of payments is a statistical statement that systematically summarises, for a specific time period, the economic transactions of an economy with the rest of the world.

Merchandise credit relate to export of goods while ***merchandise debit*** represent import of goods.

Travel covers expenditure incurred by non-resident travellers during their stay in the country and expenditure incurred by resident travellers abroad.

Transportation covers receipts and payments on account of international transportation services.

Insurance comprises receipts and payments relating to all types of insurance services as well as reinsurance.

Government not included elsewhere (G.n.i.e.) relates to receipts and payments on government account not included elsewhere as well as receipts and payments on account of maintenance of embassies and diplomatic missions and offices of international institutions.

Miscellaneous covers receipts and payments in respect of all other services such as communication services, construction services, software services, technical know-how, royalties etc.

Transfers (official, private) represent receipts and payments without a quid pro quo.

Investment Income transactions are in the form of interest, dividend, profit and others for servicing of capital transactions. Investment income receipts comprise interest received on loans to non-residents, dividend/profit received by Indians on foreign investment, reinvested earnings of Indian FDI companies abroad, interest received on debentures, floating rate notes (FRNs), Commercial Papers (CPs), fixed deposits and funds held abroad by ADs out of foreign currency loans/export proceeds, payment of taxes by non-residents/refunds of taxes by foreign governments, interest/discount earnings on RBI investment etc. Investment income payments comprise payment of interest on non-resident deposits, payment of interest on loans from non-residents, payment of dividend/profit to non-resident share holders, reinvested earnings of the FDI companies, payment of interest on debentures, FRNs, CPs, fixed deposits, Government securities, charges on Special Drawing Rights (SDRs) etc.

Foreign investment has two components, namely, foreign direct investment and portfolio investment.

Foreign direct investment (FDI) to and by India up to 1999-2000 comprise mainly equity capital. In line with international best practices, the coverage of FDI has been expanded since 2000-01 to include, besides equity capital reinvested earnings (retained earnings of FDI companies) and 'other direct capital' (inter-corporate debt transactions between related entities). Data on equity capital include equity of unincorporated entities (mainly foreign bank branches in India and Indian bank branches operating abroad) besides equity of incorporated bodies. Data on reinvested earnings for the latest year are estimated as average of the previous two years as these data are available with a time lag of one year. In view of the above revision, FDI data are not comparable with similar data for the previous years. In terms of standard practice of BoP compilation, the above revision of FDI data would not affect India's overall BoP position as the accretion to the foreign exchange reserves would not undergo any change. The composition of BoP, however, would undergo changes. These changes relate to investment income, external commercial borrowings and errors and omissions. In case of reinvested earnings, there would be a contra entry (debit) of equal magnitude under investment income in the current account. 'Other Capital' reported as part of FDI inflow has been carved out from the figure reported under external commercial borrowings by the same amount. 'Other Capital' by Indian companies abroad and equity capital of unincorporated entities have been adjusted against the errors and omissions for 2000-01 and 2001-02.

Portfolio investment mainly includes FIIs' investment, funds raised through ADRs/GDRs by Indian companies and through offshore funds. Data on investment abroad, hitherto reported, have been split into equity capital and portfolio investment since 2000-01.

External assistance by India denotes aid extended by India to other foreign Governments under various agreements and repayment of such loans. External Assistance to India denotes multilateral and bilateral loans received under the agreements between Government of India and other Governments/International institutions and repayments of such loans by India, except loan repayment to erstwhile "Rupee area" countries that are covered under the Rupee Debt Service.

Commercial borrowings covers all medium/long term loans. Commercial Borrowings by India denote loans extended by the Export Import Bank of India (EXIM bank) to various countries and repayment of such loans. Commercial Borrowings to India denote drawals/repayment of loans including buyers' credit, suppliers' credit, floating rate notes (FRNs), commercial paper (CP), bonds, foreign currency convertible bonds (FCCBs) issued abroad by the Indian corporate etc. It also includes India Development Bonds (IDBs), Resurgent India Bonds (RIBs), India Millennium Deposits (IMDs).

Short term loans denotes drawals in respect of loans, utilized and repayments with a maturity of less than one year.

Banking capital comprises of three components : a) foreign assets of commercial banks (ADs), b) foreign liabilities of commercial banks (ADs), and c) others. 'Foreign assets' of commercial banks consist of (i) foreign currency holdings, and (ii) rupee overdrafts to non-resident banks. 'Foreign liabilities' of commercial banks consists of (i) Non-resident deposits, which comprises receipt and redemption of various non-resident deposit schemes, and (ii) liabilities other than non-resident deposits which comprises rupee and foreign currency liabilities to non-resident banks and official and semi-official institutions. 'Others' under banking capital include movement in balances of foreign central banks and international institutions like IBRD, IDA, ADB, IFC, IFAD etc. maintained with RBI as well as movement in balances held abroad by the embassies of India in London and Tokyo.

Rupee debt service includes principal repayments on account of civilian and non-civilian debt in respect of Rupee Payment Area (RPA) and interest payment thereof.

Other capital comprises mainly the leads and lags in export receipts (difference between the custom data and the banking channel data). Besides this, other items included are funds held abroad, India's subscription to international institutions, quota payments to IMF, remittances towards recouping the losses of branches/subsidiaries and residual item of other capital transactions not included elsewhere.

Movement in reserves comprises changes in the foreign currency assets held by the RBI and SDR balances held by the Government of India. These are recorded after excluding changes on account of valuation. Valuation changes arise because foreign currency assets are expressed in US dollar terms and they include the effect of appreciation/depreciation of non-US currencies (such as Euro, Sterling, Yen) held in reserves.

Table No. 44

1. Gold is valued at average London market price during the month.
2. Conversion of SDRs into US dollars is done at exchange rates released by the International Monetary Fund (IMF).
3. Conversion of foreign currency assets into US dollars is done at week-end (for week-end figures) and month-end (for month-end figures) New York closing exchange rates.
4. Foreign exchange holdings are converted into rupees at rupee-US dollar RBI Holding rates.
5. Reserve Tranche Position (RTP) in IMF has been included in foreign exchange reserves from April 2, 2004 to match the international best practices. Foreign exchange reserves figures have accordingly been revised for 2002-03 and 2003-04 to include RTP position in the IMF.

Table No. 51

The 5-country indices of REER/NEER were replaced with new 6-currency indices in December 2005. The RBI Bulletin December 2005 carried a detailed article on the rationale and methodology for the replacement. A revision has now been undertaken in the construction of the 6-currency REER indices. This revision was necessitated by a sudden spurt in Chinese inflation indices during April-May, 2006. It may be mentioned that Chinese inflation indices are not readily available in the public domain. The National Bureau of Statistics provides only point-to-point inflation rates on a monthly basis in the public domain. In view of this, inflation indices were constructed taking into account the inflation rates with 1993-94 as the base year. It may be further mentioned that the period from January 1993 to December 1995 was marked by continuous double digit inflation rates in China. This lent an upward bias to the Chinese inflation indices (base: 1993-94=100) leading to a sharp fall in the value of 6-currency REER in April 2006. In order to remove the distortion in REER on account of sudden spurt in Chinese inflation numbers, a new series of Chinese inflation indices has been constructed taking 1990 as the base year (a year with much less volatility in inflation rates). Subsequently, the base year of the new series of Chinese inflation indices has been changed from 1990 to 1993-94 through splicing to facilitate the construction of the 6-currency REER (base 1993-94=100).

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3. i) Form A-1 (Revised)	do	1996	2 £		13
ii) Form A-2 (Revised)		1996	3 £		38
iii) BSR-1 A forms (1 pad contains 25 sheets)		1996	14 £		200 19
iv) BSR-1 B forms (1 pad contains 25 sheets) (Revised)		1996	14 £		
v) BSR-2 forms (1 pad contains 25 Sheets) (Revised)		1996	14		200 19
(The Regional Rural Banks from Western region may please contact DESACS, RBI, B.K. Complex, Bandra (E), Mumbai 400 051 for BSR-1A, BSR-1B & BSR-2 forms.)					
4. Banking Statistics Basic Statistical Returns 1 & 2	do	2004	420	59 □	
Vol. 1 to 31, 1972 to 2002 DISC 1 & 2			475 *	27 *	

Reserve Bank of India Publications

	Title of the Publication	Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.
	1	2	3	4	5	6
5.	Banking Statistics-Summary Tables,	DSIM				
	i) March 1995		1997	25 *		
	ii) March 1996		1998	25 *		
	iii) March 1997		1999	25 *		
	iv) March 1998		1999	25 *		
	v) March 1999		2000	25 *		
	vi) March 2000		2001	25 *		
6.	Banking Statistics - Quarterly Handout #	do				
	i) 1990 (4 Issues)		1990	40 * £		
	ii) March 1991		1991	10 * £		
	iii) June 1991		1991	12 * £		
	iv) September 1991		1991	15 * £		
	v) December 1991		1991	12 * £		
	vi) 1992 (3 Issues)		1992	75 *		
	vii) 1993 (4 Issues)		1993	120 *		
	viii) 1994 (4 Issues)		1994	120 *		
	ix) 1995 (4 Issues)		1995	120 *		
	x) 1996 (4 Issues)		1996	120 *		
	xi) 1997 (4 Issues)		1997	100 *		
	xii) 1998 (4 Issues)		1998	100 *		
	xiii) 1999 (4 Issues)		1999	100 *		
	xiv) 2000 (4 Issues)		2000	100 *		
	xv) 2001 (4 Issues)		2001	100 *		
	xvi) 2002 (4 Issues)		2002	100 *		
	xvii) 2003 (4 Issues)		2003	100 *		
	xviii) 2004 (4 Issues)		2004	140 *		
	xix) 2005 (4 Issues)		2005	140 *		
	xx) 2006 (4 Issues)		2006	140 *		
	xxi) 2007 (4 Issues)		2007	140 *		
	Name changed w.e.f. Sept. 2003 issue as Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks.					
7.	Banking Statistics - Bank Credit	do				
	i) June 1987		1989	20 * £		
	ii) December 1987 - June 1988		1989	40 * £		
	iii) December 1988		1989	20 * £		
	iv) June 1989		1989	25 * £		
8.	Banking Statistics 1972-95	do	1998	120 *		
9.	Branch Banking Statistics - Vol. 1 March 1999	do	1999	130 *	40	
10.	Branch Banking Statistics - Vol. 2 March 2001	do	2001	130 * 50 **	40	
11.	Branch Banking Statistics - Vol. 3 March 2002 (On CD-ROM)	do	2003	300 *	40	
12.	Branch Banking Statistics - Vol. 3 March 2002	do	2003	185 *	40	
13.	Statistical Tables Relating to Banks in India	do				
	i) 1988-89		1993	106 £ 123 *	12	
	ii) 1990-91		1999	130 180 *	 50	
	iii) 1992-93		1998	135 £ 200 *	50	

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Title of the Publication		Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.
1		2	3	4	5	6
iv) 1994-95		DSIM	1997	125 185 *	45	
v) 1995-96			1998	125 185 *	45	
vi) 1996-97			1999	130 180 *	50	
vii) 1997-98			1999	130 180 *	50	
viii) 1998-99			1999	130 180 *	50	
ix) 1999-00			2000	175 225 *	50	
x) 2000-01	(a) Print version		2001	150 200 *	50	
	(b) CD-ROM		2001	150 225 *	50	
xi) 2001-02	(a) Print version		2002	150 200 *	50	
	(b) CD-ROM		2002	100 150 *	 50	
xii) 2002-03	(a) Print version		2003	200 250 *	50 *	
	(b) CD-ROM		2003	200 250 *	50 *	
xiii) 2003-04	(a) Print version		2004	230 280 *	25 □ 15 *	
	(b) CD-ROM		2004	175 225 *	25 □ 15 *	
xiv) 2004-05	(a) Print version		2005	190 240 *	55 □ 20*	
	(b) CD-ROM			200 250 *	55 □ 20*	
xv) 2005-06	(a) Print version		2006	250 300 *	55 □ 20*	
	(b) CD-ROM			200 250 *	55 □ 20*	
xvi) 2006-07	(a) Print version		2007	180 230 *	55 □ 20*	
	(b) CD-ROM			150 200 *	55 □ 20*	
14. Selected Banking Indicators, 1947-1997 (Print Version)		do	1998	45	15 105 *	
(a) CD -ROM			1998	50		
15. Selected Banking Indicators 1981 to 2002		do	2003	320 460 *	75	
16. Selected Banking Indicators 1981 to 2002 (On CD-ROM)		do	2003	250 300 *	75	
17. Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks 1981-2003 (on CD-ROM)		do	2004	185 240 *	55 □ 20 *	
18. Annual Accounts of Scheduled Commercial Banks (Including Regional Rural Banks) 1989-90 to 2000-01 (on CD-ROM)		do	2002	200 250 *	50	

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	Title of the Publication	Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.
	1	2	3	4	5	6
19.	Annual Accounts of Scheduled Commercial Bank (Including Regional Rural Banks 1979-2004) CD-Rom	DSIM	2004	85 £ 135	25	
20.	Directory of Commercial Bank Offices in India Vol. 1-0 December 2000 (on CD-ROM)	do	2000	500 * £	100	
21.	Directory of Commercial Bank offices in India Vol. 2 September 2003 (On CD-ROM)	do	2003	200 * £	40 *	
22.	All-India Debt and Investment Survey 1981-82	do				
	i) Assets and liabilities of households as on 30th June 1981		1987	75 85 * 60 **	15	
	ii) Statistical tables relating to capital expenditure and capital formation of households during the year ended 30th June 1982		1987	125 £ 135 * 100 **	25	
	iii) Statistical tables relating to cash borrowings and repayments of households during July 1981 to June 1982 and cash dues outstanding as on 30th June 1982		1990	100 £ 110 * 80 **	32	
23.	A Profile of Banks					
	i) 2004-05	do	2005	100 130 *	20 *	
	ii) 2005-06		2006	90 120 *	55 □ 20 *	
	iii) 2006-07		2007	90 120 *	55 □ 20 *	
C.	**Public/Private Limited Companies**					
1.	Selected Financial Statistics Public Ltd. Companies 1974-75 to 1999-2000 (Selected Industries) on CD-ROM	do	2001	350 *	70	
2.	Selected Financial Statistics Public Ltd. Companies 1974-75 to 1999-2000 (Selected Industries)	do				
	1974-75 To 1982-1983 Vol.I		2001			1700
	1982-83 To 1990-1991 Vol.II		2001	700 *	140	1500
	1990-91 To 1999-2000 Vol.III		2001			2000
3.	Selected financial and other ratios-public limited companies	do				
	1980-81 to 1987-88 Vol.I		1990	45 £	15	
	Vol.II		1990	60 £	20	
	1988-89 to 1990-91 (Part I)		1996	90 £	50	
4.	Selected financial & other ratios-private limited companies 1988-89 to 1990-91 (Part II)	do	1996	80	45	
5.	Private Corporate Business Sector in India Selected Financial Statistics from 1950-51 to 1997-98 (All-Industries) (Print Version)	do	2000	300 *	60	
	(a) CD-ROM			500 *	100	
D.	**Reports of Committees/Working Groups**					
1.	Study group on deployment of resources by State and Central co-operative banks (Hate committee report)	UBD	1982	25 * £		
2.	Capital formation and savings in India 1950-51 to 1979-80 Report of the working group on savings (Raj committee report)	DEAP	1982	18 £		400 21
3.	Report of the working group to consider feasibility of introducing MICR/ OCR technology for cheque processing (Damle committee report)	DBOD	1983	7 £ (Amt. rounded off)		200 19
4.	Report of the committee to review the working of the monetary system (Sukhamoy Chakravarty committee report)	DEAP	1985	35 £ 25 **	10	

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	Title of the Publication	Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.	
	1	2	3	4	5		6
5.	Report of the committee to consider final accounts of banks (Ghosh committee report)	DBOD	1985	56 £		500	22
6.	Report of the committee on agricultural productivity in Eastern India	DEAP					
	(Sen Committee Report) Vol. I		1985	70 * £	15		
	(Hard Bound) Vol. II		1985	85 * £	20		
7.	Report of the working group on the money market (Vaghul committee report)	MPD	1987	15 *			
8.	Report of the committee to review the working of credit authorisation scheme (Marathe committee report)	IECD (Old)	1988	10 *	10		
9.	Co-ordination between term lending institutions and commercial banks (Bucher committee report)	do	1988	10 *	1		
10.	Report of the working group to review the system of cash credit (Chore committee report)	do	1988	12 * £			
11.	Report of the study group to frame guidelines for follow-up of bank credit (Tandon committee report)	do	1988	16 * £			
12.	Report of the study group for examining introduction of factoring services in India (Kalyansundaram committee report)	do	1989	30 *			
13.	Report of the committee on computerization in banks (Rangarajan committee report)	DSIM	1989	40 £		500	22
14.	Report of the Committee on Financial System (Narasimham Committee Report)	DBOD	1991 (Reprint)	60 £		170	19
15.	Report of the working group on financial companies (Shah committee report)	DFC	1992	30 £		300	20
16.	Report of the task force on money market mutual funds (Basu committee report)	MPD	1992	10 * £	5		
17.	Report of the committee on the licensing of new urban co-operative banks (Marathe committee report) (Hindi Edition)	UBD	1992	40		400	21
18.	Report of the committee to examine the legal and other difficulties faced by banks and financial institutions in rehabilitation of sick industrial undertakings and suggestremedial measures including changes in the law (Tiwari committee report)	IECD (Old)	1993 (Reprint)	90 £		500	22
19.	Report of the committee on structure of export credit (Sundaram committee report) (English & Hindi Edition)	do	1993	36	25	200	19
20.	Report of the committee to review the system of lending under consortium arrangement (Shetty committee report)	do	1993	50 £			
21.	Report of the committee to examine the adequacy of institutional credit to the SSI sector & related aspects (Nayak committee report)	RPCD	1993 (Reprint)	55	9	300	20
22.	Review of the agricultural credit system in India (Khusro committee report)	do	1993 (Reprint)	270 315 *	80		
23.	Report of the committee to enquire into securities transactions of banks and financial institutions (Jankiraman committee report)	DOC	1994	85 £ 100 *			
24.	Committee on technology issues relating to payments system, cheque clearing and securities settlement in the banking industry (Saraf committee report) (Hindi Edition)	DIT	1994	50 *£	20		
25.	Report of the committee to study the problems of sick/weak units in leather industry and to suggest measures to overcome them (Balsubramanian committee report)	IECD (Old)	1994	69 £			
26.	Report of the working group for examining the schemes and incentives available to NRIs for investment in India (Sodhani Committee Report)	FED	1995	50 *£	10		

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	Title of the Publication	Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.	
	1	2	3	4	5		6
27.	Report of the expert group for designing a supervisory framework for non-banking financial companies (Khanna Committee Report)	DBOD	1996	35		307	21
28.	Report of the committee for proposing legislation on electronic funds transfer and other electronic payments (Shere Committee Report)	DIT	1996	150	15	333	21
29.	Report of the Committee on Capital Account Convertibility (Tarapore Committee Report)	DEIO	1997	100 *	35		
30.	Money Supply : Analystics and Methodology of Compilation- Report of the working group (Reddy Committee Report)	DEAP	1998	35 £	20		
31.	Report of the high level Committee on agricultural credit through commercial banks(Gupta Committee Report)	RPCD	1998	30 £		200	19
32.	Report of the high level Committee on credit to SSI (Kapur Committee Report)	do	1998	50 £	10	277	20
33.	Report of the Technical Committee on external debt (Nair Committee Report)	DEAP	1998	20 *£	15		
34.	Report of the Committee on Banking Sector Reforms (Narasimham Committee Report)	DBOD	1998	32		244	20
35.	Report of the Working Group on Euro (Subramanyam Committee Report)	DEIO	1998	100 £	30		
36.	Report of the Committee on Hedging through International Commodity Exchange (Gupta Committee Report)	FED	1998	100 *	50		
37.	Report of the Committee on Tecnnology Upgradation in the Banking Sector (Vasudevan Committee Report)	DIT	1999	100 *	25		
38.	Report of the High Power Committee on Urban Co-operative Banks (Madhava Rao Committee Report)	UBD	1999	80		490	22
39.	Report of the Advisory Group on Payment and Settlement System Part (I) June 2000	MPD	2000	40 * 30 **	15		
40.	Report of the Advisory Group on Payment and Settlement System (Part II)	do	2000	20 * 15 **	10		
41.	Report of the Advisory Group on Payment and Settlement System (Part III)	do	2001	20 * 15 **	10		
42.	Report of the Advisory Group on "Transparency in Monetary and Financial Policies".	do	2001	45 * 35 **	20		
43.	Report of the Advisory Group on Corporate Governance	do	2001	40 * 30 **	15		
44.	Report of the Advisory Group on Fiscal Transperency	do	2001	30 * 20 **	 15		
45.	Report of the Advisory Group on Data Dissemination	do	2001	35 * 25 **	20		
46.	Report of the Advisory Group on Banking Supervision	do	2001	90 * 60 **	40		
47.	Report of the Advisory Group on Securities Market Regulation	do	2001	25 * 20 **	10		
48.	Report of the Advisory group on Bankruptcy Laws (Volume-I & II)	do	2001	90 * 75 **	45		
49 .	Report of the Advisory Group on Insurance Regulation	do	2001	35 * 25 **	20		
50	Report of the Advisory group on Accounting & Auditing	do	2001	40 *	20		
51.	Report of the Technical Group on Market Integrity	do	2002	65 * 50 **	20		

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	Title of the Publication	Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.	
	1	2	3	4	5	6	
52	Standing Committee on International Financial Standards and Codes on CD-ROM	MPD	2002	200 * 150 **	60		
53.	Report of the Standing Committee on International Financial Standards and Codes	do	2002	65 * 50 **	20		
54.	The Standing Advisory Committee for Urban Co-operative Banks	UBD					
	i) First meeting		1983	5		200	19
	ii) Second meeting		1984	6 £		200	19
	iii) Third meeting		1985	6		200	19
	iv) Fourth meeting		1985	9		300	20
	v) Fifth meeting		1986	9 £		200	19
	vi) Sixth meeting		1988	12 £		200	19
	vii) Seventh meeting		1989	12		200	19
	viii) Eighth meeting		1990	21		300	20
	ix) Ninth meeting (Bilingual edition)		1992	24		200	19
	x) Tenth meeting		1994	95		300	20
	xi) Eleventh meeting		1995	90		300	20
	xii) Twelfth meeting		1996	52		100	19
E.	**Manuals**						
1.	Manual for urban co-operative banks	do	1984	15 £		400	21
2.	Manual on costing exercise in commercial banks	MSD	1987	5 £		200	19
3.	Manual on costing exercises in private sector and urban banks (Reprint)	do	1989	27 £		200	19
4.	RBI-Exchange Control Manual- (Reprint of 1993 edition) (Vol.I & II) (updated upto July, 1998)	FED	1998	400 £		2200	39
	i) RBI - Exchange Control Manual on floppy Disc - size 3.5 (Upadated upto June, 1999)		1999	400 £			
	ii) RBI - Exchange Control Manual - on C.D. Rom (updated upto 31st May, 2000)		1999	400 £			
F.	**Compendium of Circulars**						
1.	i) Compendium of A.D. (M.A. Series) circulars No. 1	do	1997	75 £			
	ii) Compendium of A.D. (M.A. Series) circulars No. 2		1998	120 £			
	iii) Compendium of A.D. (M.A. Series) circulars No. 3		1999	200			
2.	A. D. (M.A. Series) Circular No. 11 Foreign Exchange Management Act 1999	do	2000	185		900	26
3.	MPD Circulars						
	i) August 1970 to December 1981 - Vol. I	MPD	1989	75 *			
	ii) January 1982 to March 1989 - Vol.II		1989	75 *			
	iii) April 1989 to April 1995 Vol.III		1996	200		1530	33
4.	i) Circulars on Monetary and Credit Policy Vol. 4 (From May 1995 to April 1997)		2002	165 * 130 **	50		
	ii) Circular on Monetary and Credit Policy Vol. No. 5 (From May 1997 to March 1999)		2002	235 422 * 372 ** 185 ***	70		
	iii) Circulars on Monetary and Credit Policy Vol. No. 6. Part I & II (from April 1999 to March 2003) (English & Hindi) A set of four books		2003	900 1300 * 1100 ** 700 ***	170		
	iv) Circulars on Monetary and Credit Policy Vol. No. 6 (from April 1999 to March 2003) On CD-Rom		2003	400 * 300 **	80		
	v) Circulars on Monetary and Credit Policy Vol. No. 7 (from April 2003 to March 2004) (English & Hindi)		2004	250 275 * 200 **	25 □ 20 *		

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	Title of the Publication	Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.	
	1	2	3	4	5	6	
	vi) Circulars on Monetary and Credit Policy Vol. No. 7 (from April 2003 to March 2004) (On CD-Rom)	MPD	2004	180 200 * 140 **	5 □ 12 *		
	vii) Circulars on Monetary and Credit Policy Vol. No. 8 (from April 2004 to March 2005)		2005				
	(a) Print Version (Billingual)			375 400 * 280 **	30 *		
	(b) CD-ROM			180 200 * 140 **	15 *		
	viii) Compendium of MPD Circulars - Vol. No. 9 (April 2005 - March 2006) (Billingual)		2006	480 500 * 375 **	35 *		
	ix) Circulars on Monetary Policy Vol. No. 10 (April 2006 to March 2007) Billingual		2007	600 620 * 450 **	40		
5.	IECD circulars	IECD (Old)					
	i) July 1978 to June 1986 bilingual (Vol.I & II)		1993	250	10	2114	39
	ii) 1986-89		1990	70		1325	31
	iii) 1989-94 (Vol. I&II)		1995	250 £		2295	40
	iv) 1994-95		1995	80		700	24
	v) 1995-96		1996	55		380	21
	vi) 1996-97		1997	65		445	22
6.	Rural Planning and Credit Department (RPCD) Circulars (Bilingual edition)	RPCD					
	i) July 1994 to June 1995 (Vol. X)		1998	180 200 *			
	ii) July 1995 to June 1996 (Vol. XI)			180 £ 200 *			
	iii) July 1996 to June 1997 (Vol. XII)		1999	180 200 *			
	iv) July 1997 to June 1998 (Vol. XIII)		1999	180 200 *			
	v) July 1998 to June 1999 (Vol. XIV)		2000	180 200 *			
	vii) July 1999 to June 2000 (Vo. XV)		2001	210 240 *			
7.	Compendium of Circulars on Small Scale Industries	do	2000	120 150 *	25		
8.	RPCD Circular (on CD-ROM) (1st July 1982 to 31 March 2004)	do	2004	120 150 *			
9.	RPCD Circulars on Small Scale Industries (upto 30-09-2004) on CD-ROM	do	2004	120 150 *			
10.	Compendium of Circulars on Small Scale Industries (January 2000 - March 2004)	do	2004	140 170 *			
11.	UBD circulars	UBD					
	i) June 1985		1986	115		274	20
	ii) 1985-1992 (Vol.I & II)		1995	250		3195	49
	iii) 1992-1994		1995	165		1792	35
	iv) 1995-96		1997	55		735	25

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	Title of the Publication	Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.	
	1	2	3	4	5		6
12.	i) Compendium of Instructions/Guidelines issued by RBI for Primary Co-operative Banks (July 1996-December 1997)	UBD	2000	85		742	25
	ii) Compendium of Instructions/Guidelines issued by RBI for Primary Co-operative Banks (January 1998-December 1999)		2003	100 £		1032	68
	iii) Compendium of Instructions/Guidelines issued by RBI for Primary Co-operative Banks (January 2000-December 2001)		2003	120 £		1300	68
G.	**Memorandum**						
1.	Memorandum of Exchange Control Manual, 1993 containing detailed procedural instructions	FED					
	a) Relating to general insurance in India (GIM)		1994	20		70	19
	b) Relating to channeling transactions through Asian Clearing Union (ACM)		1996	20		70	19
	c) Relating to co-operative/commercial banks (other than authorised dealers) authorised to maintain non-resident rupee accounts (ABM)		1994	20 £			
	d) Memorandum of Instructions to full-fledged money changers (FLM)		1999	30 £		110	19
	e) Memorandum of Instructions to restricted money changers (RLM)		1999	30 £		90	19
	f) Memorandum of Instruction on project & service exports (PEM)		1997	40 £		280	20
2.	Memorandum of Exchange Control Regulations Relating to general insurance in India (GIM)	do	2002	30			26
3.	Memorandum of instructions to Authorised Money Changers (AMC)	do	2002	30			
4.	Memorandum of Procedure for channelling transaction through Asian Clearing Union (ACU) Memorandum ACM	do	2003	30			21
5.	Memorandum of Instructions on Project and Service Exports (PEM)	do	2003	40			
H.	**Reserve Bank of India Occasional Papers (Quarterly)**	DEAP	–				
	i) 1987 to 1989 (Yearly four issues)			30 * @ £	10 @		
	ii) 1990 to 1995 (Yearly four issues)			35 * @ £	25 @		
	iii) 1996 (Yearly four issues)			35 * @	25 @		
	iv) 1997 (Three issues)			35 * @	25 @		
	v) (Combined issue June-September, 1997)			70 * @	50 @		
	vi) 1998 (Yearly four issues)			40 * @	25 @		
	vii) 1999 (Yearly 3 issues)			50 * @	30 @		
	viii) 2000 (Yearly 2 issues) Summer - Vol. 21 No. 1			80 * @	45 @		
	ix) (Monsoon & Winter Combined Issue) - Vol. 21 No. 2 & 3			80 * @	45 @		
	x) 2001 Vol. 22 Nos. 1, 2 & 3 (Combined Issue)			80 * @	45 @		
	xi) 2003 Vol. 24 Nos. 1 & 2 (Summer & Monsoon Combined Issue)			80 * @ £	45 * @		
	xii) 2003 Vol. 24 No. 3 (Winter)			80 * @	45 * @		
	xiii) 2004 Vol. 25 No. 1, 2 & 3 (Summer, Monsoon & Winter Combined Issue)			80 * @	45 * @		
	xiv) 2006 Vol. 27 No.1 and 2 (Summer and Monsoon Combined Issue)			80 * @	45 * @		
	xv) 2006 Vol. 27 No. 3 (Winter)			80 * @	45 * @		
	xvi) 2007 Vol. 28 No. 1 (Summer)			80 * @	45 * @		
	xvii) 2007 Vol. 28 No. 2 (Monsoon)			80 * @	45 * @		
	xviii) 2007 Vol 28 No. 3 (Winter)			80 * @	45 * @		
I.	**Others Important Publications**						
1.	Small Scale Industries-Policy & Guidelines	RPCD	1997	20		200	19
2.	Regulatory Framework for Non-Banking Financial Companies	DNBS	1998	40 £		365	21
3.	Question/Answer New NBFC Policy	do	1998	10		50	19
4.	Payment Systems in India	DIT	1998	60 * 150 *	10		
5.	Mechanised Cheque Processing Using MICR Technology Procedural Guidelines	do	1999	50 *£			
6.	Mechanised Cheque Processing using MICR Technology Procedural Guidelines. (Second Edition)	do	2002	50 *			

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	Title of the Publication	Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.	
	1	2	3	4	5	6	
7.	Indian Financial Network Banking Applications Message Formats (INFINET)	DIT	2000	100 *			
8.	Indian Financial Network (INFINET) Banking Applications Messages Formats Vol. II	do	2002	100 *			
9.	Balance of Payments compilation	DEAP	1987	45 *	30		
10.	New Series on Wholesale Price Index Numbers	do	1990	11 * £			
11.	India's Balance of Payments monograph – 1948-49 to 1988-89	do	1993	90 £	40		
12.	Centenary Commemorative Volume (C.D. Deshmukh Memorial Lecture series)	do	1996	100	25	400	21
13.	50 years of Central Banking : Governors Speak	do	1997	400		800	25
14.	Indian Economy – Basic Statistics – 1997	do	1997	4			
15.	External Debt-Management : Issues, Lessons and Preventive Measures	do	1999	250 *	20		
16.	Foreign Collaboration in Indian Industry - Sixth Survey Report	do	1999	60 *	20		
17.	Flow of Funds Accounts of the Indian Economy 1951-52 to 1995-96	do	2000	75 *	20		
18.	Exchange facilities for foreign travel	FED	1996	8 £		35	19
19.	Exchange facilities for resident Indians	do	1997	15		32	19
20.	A Handbook on foreign Collaboration	do	1997	50 £ 65 *	15 *		
21.	Indian Overseas Investment Handbook of Policies and Procedures	do	1998	100 £ 125 *			
22.	Facilities for Non-resident Indians	do	1999	35 £ 50 *	8		
23.	RBI Remittance Facilities Scheme - 1975	DGBA	1989	3 £		25	
24.	Karyalayeen Shabdavli (English-Hindi)	DAPM	1994	15		166	19
25.	Directory of Bank Offices 1993 (English)	DBOD	1996	485 568 *	 36		
26.	Computer Paribhasha Kosh (Hindi)	do	1999	100		528	23
27.	Your Guide to Money Matters	DCM	1999	5 £		44	
28.	The Paper & The Promise: A Brief History of Currency & Bank notes in India	do	2001	100 £	15		36
29.	Functions and Working of RBI (Hindi)	CO	1984	30 £		719	25
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– Editor

RBI provides Web based Access to its Database on Indian Economy

The Reserve Bank of India has released a number of long time series data on several aspects of Indian economy covering key macro economic aggregates to the public in user-friendly manner through dynamic web based application.

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Coverage : Data available on published time series, can be accessed through a completely browser based software include data on:

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- real sector,
- financial market,
- external sector,
- public finance and
- corporate finance

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- All the data series are accompanied with data definitions, i.e. metadata, which allow the user to view the definitions/concepts of the underlying variables;
- The data definitions provides search feature;
- Extract data through standard reports which allows the users to select and view the preformatted reports or
- Dynamic 'data query', which enables user to define list of data series and allows the user to choose the time period for data extraction.
- Data files can be downloaded in the form of CSV / pdf format.

Access : The data can be accessed from the home page of the RBI website (www.rbi.org.in) through the static headline "Database on Indian Economy" List of data series available on the site is available on the homepage of the site, i.e. Database on Indian Economy.

This list will be proggressively enlarged on the basis of feedback received and availability of relevant data series in the RBI data warehouse. Feedback may please be sent to dbiehelpdesk@rbi.org.in or through the feedback option on the home page of the website.

– Editor

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Readers' Views on the Monthly Bulletin

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Thank you very much for your cooperation.

Editor

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Supplement I

RESERVE BANK OF INDIA
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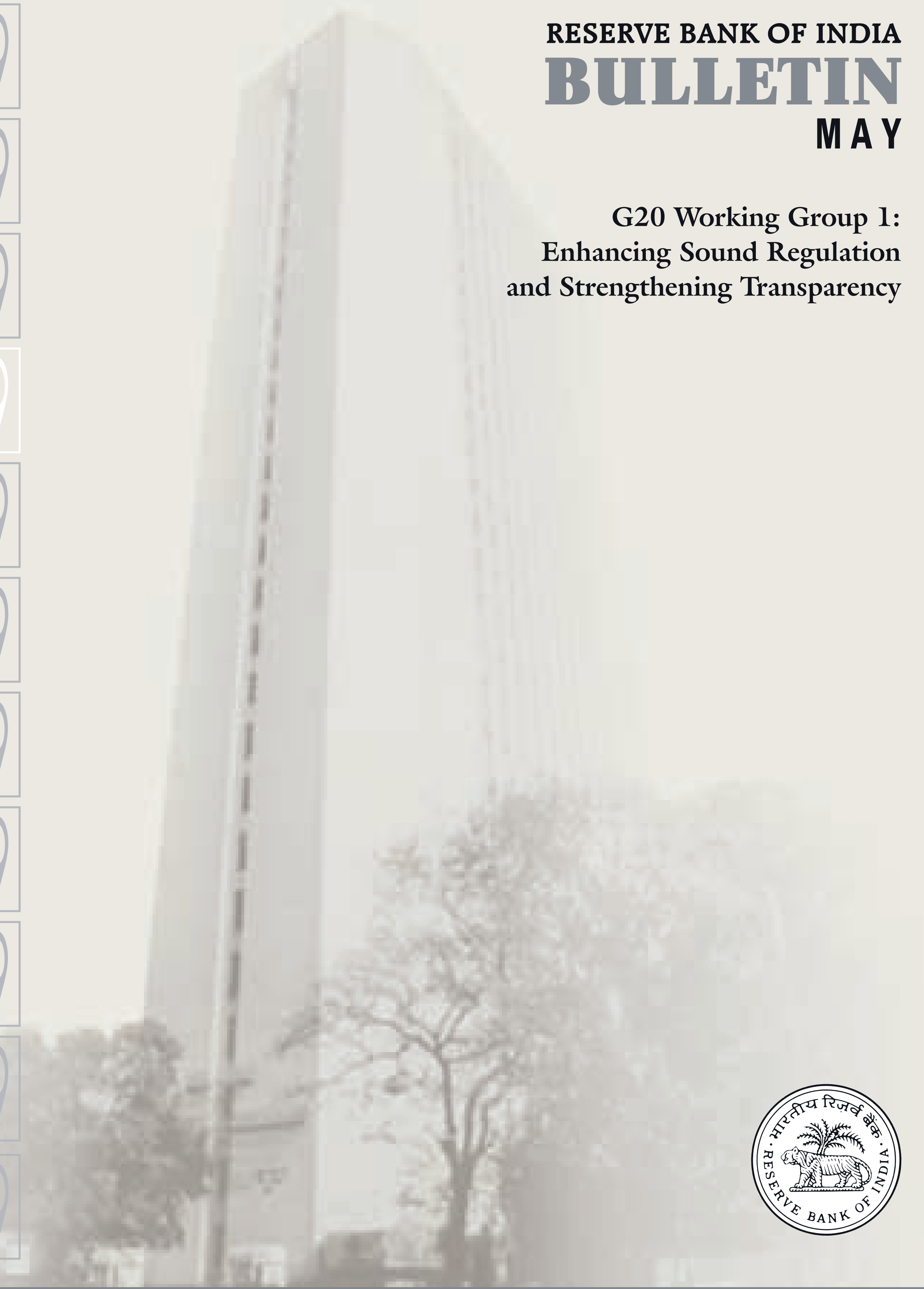
G20 Working Group 1: Enhancing Sound Regulation and Strengthening Transparency



G20 Working Group 1: Enhancing Sound Regulation and Strengthening Transparency

Final Report

March 25, 2009

Contents

1. Executive Summary and Recommendations

G20 Leaders tasked the Working Group on Enhancing Sound Regulation and Strengthening Transparency (Working Group 1) with reviewing work underway and making recommendations that will strengthen international regulatory standards, enhance transparency in global financial markets and ensure all financial markets, products and participants are appropriately regulated or subject to oversight, depending on their circumstances.

The recommendations contained in this Report are a response to the causes of the current crisis, and are intended to prevent future ones from occurring. They are consistent with the recognition that robust regulation in each country, based on effective global standards, is vital to future financial stability.

The first line of defense in preventing instability in the financial system is sound regulation and recent events have clearly demonstrated that regulatory failures in some jurisdictions fuelled the current crisis. The regulatory framework needs strengthening, and it is essential to get micro-prudential regulation right in order to promote financial institutions that are sound and that manage risks appropriately.

But what has also become clear most recently is that this is a systemic crisis which has at its root the build-up of systemic vulnerabilities arising from excess liquidity, leverage, risk-taking and systemic concentrations across the financial system. History shows that, while each financial crisis is different, a shared feature is that they are preceded by a period of excess risk-taking, strong credit growth and asset price increases in various markets. The current crisis highlights the extraordinary financial and social costs of failures in the financial system.

As directed by the Leaders Declaration and the G20 Troika, an important focus of Working Group 1 has been to strengthen microprudential policy while supplementing it with a greater emphasis on a system-wide approach to regulation in order to better mitigate the build-up of systemic risks.

To achieve these objectives, this report contains recommendations in the following areas:

- A System-wide Approach to Financial Regulation
- Scope of Regulation
- Oversight of Credit Rating Agencies
- Private Pools of Capital
- Transparent Assessment of Regulatory Regimes
- Procyclicality
- Capital
- Liquidity
- Infrastructure for OTC Derivatives
- Compensation Schemes and Risk Management
- Accounting Standards
- Transparency
- Enforcement
- Technical Assistance and Capacity Building in Emerging Market Economies

The Report sets out 25 recommendations for Leaders that the Working Group strongly believes will support the vital role of the financial system in promoting economic growth while, at the same time, reducing the likelihood of a similar crisis in the future and mitigating the consequences of future periods of financial stress.

The key overarching recommendations of Working Group 1 can be summarised in five broad points.

1. As a supplement to sound micro-prudential and market integrity regulation, national financial regulatory frameworks should be reinforced with a macro-prudential overlay that promotes a system-wide approach to financial regulation and oversight and mitigates the build-up of excess risks across the system. In most jurisdictions, this will require improved coordination mechanisms between various financial authorities, mandates for all financial authorities to take account of financial system stability, and effective tools to address systemic risks. It will also require an effective global table to bring together national financial authorities to jointly assess systemic risks across the global financial system and coordinate policy responses.

2. The scope of regulation and oversight should be expanded to include all systemically important institutions, markets and instruments. This will require enhanced information for financial authorities on all material financial institutions and markets,

including private pools of capital. Large complex financial institutions require particularly robust oversight given their size and global reach. The regulatory and oversight framework should strive to treat similar institutions and activities consistently, with greater emphasis on functions and activities and less emphasis on legal status.

3. Once conditions in the financial system have recovered, international standards for capital and liquidity buffers should be enhanced, and the build-up of capital buffers and provisions in good times should be encouraged so that capital can absorb losses and be drawn down in difficult times.

4. Through the expanded Financial Stability Forum, the International Monetary Fund and the international standard-setters, international standards, including those for macro-prudential regulation, the scope of regulation, capital adequacy and liquidity buffers, should be coordinated to ensure a common and coherent international framework, which national financial authorities should apply in their countries consistent with national circumstances. The financial regulatory and oversight frameworks and their implementation in all G-20 countries should be reviewed periodically, validated internationally and made public.

5. Sound micro-prudential and market-conduct regulation supplemented with an effective macro-prudential framework requires enhancements to a range of supporting policies and infrastructure, including: compensation practices that promote prudent risk-taking in line with principles developed by the FSF; the greater standardisation of derivatives contracts and the use of risk-proofed central counterparties; improved accounting standards that better recognise loan-loss provisions and dampen adverse dynamics associated with fair-value accounting; effective enforcement of regulation that is coordinated internationally including the enforcement of the adherence of credit rating agencies to the substance of the IOSCO code of conduct; and national authorities and international standard-setters working together and assisting each other in strengthening financial regulatory and oversight frameworks and their implementation across the G-20 and beyond.

Underlying Causes of the Market Turmoil

The turmoil which began to unfold during the Summer of 2007 was, in part, a consequence of an extended period of low real interest rates around the world, supported by an expansionary monetary policy, large current account imbalances, robust global growth and limited volatility in economic conditions. This benign environment caused investors to extend their search for yield further out the credit quality curve, leading to overly optimistic assessments and lack of due diligence in assessing credit risk.

In response to the increased demand for credit instruments offering higher yield, the financial system developed new structures and created new instruments, some with embedded leverage. Many of these instruments were opaque and masked the extent of leverage and interconnectedness of risk, which appeared to be globally dispersed across a wide range of institutions and markets. Much of the due diligence in examining these innovations was outsourced to credit rating agencies.

The trading of innovative over-the-counter financial products, particularly those aimed at transferring credit risk, notably credit default swaps and collateralized debt obligations, expanded very rapidly. Financial institutions failed to properly manage and monitor risks to liquidity in the event that these markets froze.

At the same time, regulated banks and financial institutions supported the acceleration of financial innovation and the push towards more unregulated pools of capital by establishing off-balance sheet and structured investment vehicles. These unregulated investment vehicles, created in response to features of the regulatory and accounting framework, often financed their operations without minimum capital buffers or adequate liquidity plans. In addition, the risks they were exposed to, including maturity mismatches, were often misunderstood.

Risk management within institutions and the expertise of regulators did not keep pace with these innovations. Financial sector compensation schemes based on short-term returns, without consideration of the attendant risks, reinforced the momentum for risk-taking.

Eventually the increase in asset prices could not be sustained. Delinquencies translated into price decreases on U.S. sub-prime mortgage-backed securities, which in turn produced losses for investors and led to margin calls for leveraged sub-prime asset holders. As the market turmoil spread across a wide range of markets for structured and securitized products, increased risk aversion, reduced liquidity, and concerns about the soundness of major financial institutions fed on each other. Many institutions experienced significant balance sheet pressures, which led to a tightening of lending standards with adverse effects on real economic growth.

In hindsight, policymakers, regulators and supervisors in some advanced countries did not act to stem excessive risk-taking or to take into account the interconnectedness of the activities of regulated and non-regulated institutions and markets. This was due in part to fragmented regulatory structures and legal constraints on information sharing. Further, uncertainties concerning exposures to, and the valuation of, structured products and the difficulty of valuing financial instruments when markets are under stress may have exacerbated the turmoil.

Identified Weaknesses

Some of the more salient weaknesses identified as drivers of the current turmoil include:

Weaknesses in Underwriting Standards: The credit quality of loans granted with the intention of transferring them to other entities through the securitization process was not adequately assessed.

Lack of Oversight of Systemic Risks: While the build-up of leverage and the underpricing of credit risk were recognized in advance of the turmoil, their extent was under-appreciated and there was no coordinated approach to assess the implications of these systemic risks and policy options to address them. There was also insufficient recognition of the interconnectedness of risks within both regulated and unregulated markets.

Lack of Oversight of Unregulated Pools of Capital: Unregulated and lightly regulated pools of capital, such as hedge funds, private equity funds, and a number of the banks' off-balance sheet securitization vehicles, grew rapidly in importance during the period preceding the crisis. Regulatory arbitrage pushed risks outside the regulatory framework and, in many jurisdictions, oversight of these markets and entities consisted to a large extent of indirect oversight through the supervision of counterparties and market discipline.

Weak performance by Credit Rating Agencies: There was an over-reliance on credit rating agencies and shortcomings in rating models and methodologies, as well as insufficient attention to conflicts of interest in the rating process.

Procyclical Tendencies Fed by Regulatory and Accounting Frameworks: Certain aspects of accounting frameworks and capital regulation tend to enhance the natural tendency of the financial system to amplify business cycles, affecting both the degree of credit expansion in benign conditions and the degree of credit contraction in the downturn.

Shortcomings in Risk Management Practices: A number of the standard risk management tools used by financial firms relied on samples of historical data from short periods and were not suited to estimating the likelihood and the scale of potential losses in the adverse tail of risk distributions for structured credit products. In addition, compensation arrangements often created incentives for excessive risk-taking through insufficient regard to longer-term risks.

Financial Innovation Outpacing Risk Management: There was a significant acceleration of financial innovation in years leading up to the crisis that far outpaced the ability of firms to manage risks and of regulators to effectively monitor them.

Weaknesses in Disclosure: Weaknesses in public disclosures by financial institutions damaged market confidence during the turmoil. Public disclosures by financial institutions did not always make clear the type and magnitude of risks associated with their on- and off-balance sheet exposures.

Weaknesses in Resolution Procedures: Existing procedures for resolving troubled institutions have been shown to be inadequate when an institution imposes substantial systemic risks. In addition, national resolution mechanisms have not been effective in some cross-border resolutions.

Lack of Transparency in Various OTC Markets: In many cases, investors and other market observers could obtain only minimal information about pricing, trading volume, and aggregate open interest in various products that trade in the OTC markets

A vision for the future financial system

The financial system will continue to play a vital role to intermediate savings and provide funding to the real sector, thereby supporting economic growth. The Working Group recognises that financial markets will remain global and interconnected, while financial innovation will continue to play an important role to foster economic efficiency. Protectionist moves must be strongly resisted. In order to address the underlying causes and weaknesses identified above, the Working Group envisages the need for a reform of the regulatory framework to avoid the emergence of similar crises and to mitigate the consequence of any future episode of financial stress.

The regulatory framework will need to keep pace with the associated risks in a more rapid and effective manner. Large complex financial institutions will continue to operate in multiple jurisdictions in order to meet the needs of their large global clients, and supervision will need to be better coordinated internationally with a robust global resolution framework. In order to avoid regulatory arbitrage, there is a need for greater consistency in the regulation of similar instruments and of institutions performing similar activities, both within and across borders.

In addition, capital markets will require greater emphasis on reducing counterparty risk and on ensuring that their infrastructure allows them to remain a source of funding during periods of stress.

The post-crisis period will likely be characterised by a financial system with lower levels of leverage, reduced funding mismatches (both in terms of maturity and currency), less exposure to counterparty risk, and greater transparency regarding financial instruments. After credit markets recover from the crisis, it will be important to mitigate the inevitable pressure to expand profits through increased risk-taking. A more developed macro-prudential approach will be an important element in this context.

The type, size, and cross-border exposures of institutions and markets that will emerge from this crisis will likely be considerably different than before. As banks and financial institutions consolidate, policy makers will have to adapt prudential regulation to varying degrees of size and concentration. Similarly, competition policy will play an important role in ensuring healthy competition.

Financial institutions, markets and instruments will therefore continue to evolve in ways which pose challenges for regulation, notwithstanding the retrenchment that is currently underway. Financial institutions, policymakers, supervisors and regulators will all need to become better equipped to manage the interconnectedness of markets, both domestically and globally, the effects of innovation, and the potential for incentives to become misaligned.

Transition to a new regulatory regime

It will be necessary to consider the appropriate timing for changes in the regulatory framework going forward. Recommendations should promote proportionate regulatory reaction when needed, acknowledging the possible limits of the self-regulation approach in some contexts. For example, while ultimately capital buffers for the system should be enhanced during the economic expansion in order to be drawn down as needed in downturns, changes in the current environment may have negative consequences on the real economy. A considered and comprehensive review of the consequences of reforms and harmonisation, coordinated across jurisdictions, is necessary to increase the effective transition to a more stable financial system.

Review of Progress of G20 Action Plan

This Report presents a high level overview of measures taken in response to each item of the Washington Action Plan. A very substantial amount of work has already been achieved and many additional initiatives are underway to enhance the regulatory framework in response to this Action Plan. Overall, this work is proceeding well and in a coordinated fashion.

Milestones of particular importance that are evidence of the exceptional amount of work by national authorities and international bodies include:

A. Measures to address the current crisis

On Transparency:

- Several accounting standard-setting bodies published guidance to clarify expectations for the valuation of financial instruments, including complex securities.
- Prudential supervisors in many jurisdictions strongly encouraged their internationally active financial institutions to enhance disclosure by adopting leading risk disclosure practices addressed in a report by the Senior Supervisors Group to the Financial Stability Forum (FSF), and larger financial institutions have responded by disclosing more meaningful qualitative and quantitative information about risk exposures involving complex instruments.
- The Basel Committee for Banking Supervision (BCBS) has published proposals for enhanced disclosures related to securitisations.

B. Measures for the medium/longer-term

On Regulatory Regimes

- The International Organisation of Securities Commissions (IOSCO), the International Association of Insurance Supervisors (IAIS) and the BCBS have undertaken initiatives to assess differences in regulation across sectors, identify regulatory gaps, and examine issues related to expanding the scope of regulation.
- IOSCO assessed the implementation by credit rating agencies of its code of conduct, and is currently developing a framework for coordination amongst regulators in monitoring and enforcing compliance. In addition, some jurisdictions are in the process of adopting legally binding rules to regulate and supervise credit rating agencies.

On Procyclicality

- Working groups formed by the FSF have prepared recommendations to mitigate procyclicality with respect to bank capital, provisioning practices, and valuation and leverage.

On Prudential Oversight

- The BCBS issued, for consultation, proposals to strengthen the risk capture of the Basel II framework, including enhancements to the capital treatment of securitisations, off-balance sheet exposures, and trading book activities. These measures form part of a comprehensive strategy to strengthen the regulation, supervision and risk management of internationally active banks in order to address weaknesses revealed by the crisis. This strategy also includes work in progress to enhance the consistency and quality of capital and to mitigate procyclicality.

- An international group of prudential supervisors and national authorities is working with the industry to strengthen the infrastructure for over-the-counter (OTC) credit derivatives, with the top priority being the implementation of central counterparty clearing for credit default swaps (CDS). One central counterparty was launched in late 2008 in the European Union, and more are expected to begin operating in 2009 in the United States and in the European Union.

On Compensation Schemes and Risk Management

- A Working Group of the FSF has developed sound practice principles for compensation schemes.

- The BCBS and national prudential supervisors issued guidance to enhance practices in a number of risk management areas, including stress-testing, risk concentrations, off-balance sheet exposures, valuation and liquidity risk.

On Transparency

The International Accounting Standards Board (IASB) and the U.S. Financial Accounting Standards Board (FASB) have established an advisory group comprised of senior leaders with broad international experience in financial markets to advise the Boards in considering accounting issues emerging from the global crisis. Furthermore, the Trustees of the International Accounting Standards Committee Foundation (IASCF) approved in mid-January the establishment of a formal link to a newly created external Monitoring Board composed of public authorities. They also approved the expansion of the IASB membership to 16 members and provided additional guidelines regarding their geographic diversity.

Recommendations to Leaders by the Working Group

The objective of the recommendations for further reform made by the Working Group is to build a financial system that will support growth and rising living standards across the globe, while reducing the risk of financial instability. Financial crises have very large social costs. At the same time, there are large social benefits to all from a dynamic and efficient financial system that transforms savings into productive investments, and helps households and businesses manage risk. The regulatory framework needs to maximise stability and efficiency while ensuring an appropriate balance where there are trade-offs.The following is a summary of the recommendations for further action put forward by the Working Group. By charting a clear direction and a timeline, this package of recommendations has the potential to provide the sense of clarity and the increased confidence the financial system requires in the short run, and increased efficiency and stability going forward.

The Report identifies bodies that could be tasked with implementing and monitoring progress against these recommendations as well as implementation timelines. In many cases, the responsibility for monitoring implementation has been placed on the International Monetary Fund (IMF) and the World Bank (WB), through the Financial Sector Assessment Program (FSAP) and Article IV. To support these new responsibilities, these institutions may need to modify their instruments and tools, including by adapting the scope of assessments to make them more targeted. They should also accord due priority to this monitoring in their assessment schedule, and the IMF and the World Bank could explore using other bilateral or multilateral instruments to support these objectives.

Summary of Recommendations

System-wide Approach to Financial Regulation

***Recommendation 1*: As a supplement to their core mandate, the mandates of all national financial regulators, central banks, and oversight authorities, and of all international financial bodies and standard-setters (IASB, BCBS, IAIS and IOSCO) should take account of financial system stability.**

- **Responsibility:** Finance Ministries, national financial regulators and oversight authorities, central banks, IOSCO, IAIS, BCBS, IASB and other accounting standards setters, expanded FSF, IMF.
- **Timeline**: To be completed within 2 years.
- **Monitoring:** Compliance by national authorities to be monitored by IMF-WB (through FSAP and Article IV), compliance by international bodies to be monitored by expanded FSF.

***Recommendation 2*: Within each country, there should be an effective mechanism for appropriate domestic financial sector authorities to jointly assess the systemic risks across the financial system and to co-ordinate the domestic policy response to limit the build-up in systemic risk. The structure of this coordinating mechanism should be transparent, with clear assignments of roles, responsibilities and accountability for each authority.**

- **Responsibility**: Finance Ministries, financial regulators and supervisors, central banks, in cooperation with other relevant bodies, including policy authorities for housing finance and accounting standard-setters, as appropriate.
- **Timeline**: To be completed within 2 years.
- **Monitoring:** IMF-WB (through FSAP and Article IV).

***Recommendation 3*: Financial sector authorities should have suitable macroprudential tools to address systemic vulnerabilities. Measures that are simple to understand and to implement would be preferable to more complex ones, and tools that rely on pre-specified limits or rules are attractive. However, rules need to be complemented with the informed judgement of financial sector authorities based on their joint assessment of the risks across the financial system.**

In order to achieve consistency globally, international bodies and standard-setters – such as the expanded FSF, IOSCO, the IAIS, the BCBS, the BIS and others (*e.g.*, IASB, CGFS) – will develop such tools and provide national authorities, which are responsible for their implementation, with options. Potential macroprudential tools that should be explored further could include:

a. **Complementing risk-based capital measures with simpler indicators aimed to measure the build-up of leverage, with enhanced sensitivity to off-balance sheet exposures;**

b. **Capital requirements that adjust over the financial cycle;**

c. **Loan-loss provisioning standards that incorporate all available credit information;**

d. **The use of longer historical samples to assess risk and margin requirements; and**

e. **Greater focus on loan-to-value ratios for mortgages.**

- **Responsibility**: National authorities, expanded FSF, IOSCO, IAIS, BCBS, BIS, IASB, CGFS.
- **Timeline for tool development**: Expanded FSF to provide an annual report on the suite of tools under development by its members, with an Interim Report in Fall 2009.
- **Timeline for tool implementation**: On an ongoing basis.
- **Monitoring**: Development of tools to be monitored by G20, as well as expanded FSF, and their implementation by the IMF-WB (through FSAP and Article IV) .

***Recommendation 4*: The expanded FSF, together with the IMF, should create an effective mechanism for key financial authorities in each country to regularly come together around an international table to jointly assess the systemic risks across the global financial system and to coordinate policy responses.**

- **Responsibility**: Expanded FSF, IMF, Finance Ministries, national financial regulators and oversight authorities, central banks.
- **Timeline**: Fully implemented within 2 years, with initial system in place by the Fall 2009 FSF meetings.
- **Monitoring**: G20.

Scope of Regulation

***Recommendation 5*: All systemically important financial institutions, markets and instruments should be subject to an appropriate degree of regulation and oversight, consistently applied and proportionate to their local and global systemic importance. Consideration has to be given to the potential systemic risk of**

a cluster of financial institutions which are not systemically important on their own. Non-systemically important financial institutions, markets and instruments could also be subject to some form of registration requirement or oversight, depending on the type and degree of risk posed, for example for the integrity or efficiency of markets.

In order to determine the appropriate degree of regulation or oversight, national authorities should determine appropriate mechanisms for gathering relevant information on all material financial institutions, markets and instruments. This information will allow national authorities to assess the potential for their failure or severe stress to contribute to systemic risk, either on their own, as part of a cluster, or through linkages with other segments of the financial system. Information on systemic risk should be monitored through a globally coordinated mechanism.

National authorities should have the authority to expand the perimeter of regulation in a timely way, recognising that it may vary across countries and through time. They should do so in close coordination with appropriate global fora and standard-setters in order to achieve as much consistency as possible across jurisdictions.

- **Responsibility:** National authorities, central banks, IOSCO, IAIS and BCBS, with recommendations from the expanded FSF and the IMF.
- **Timeline:** Two stages: process to obtain information underway in Fall 2009, with system in place within 2 years.
- **Monitoring:** Expanded FSF to ensure a consistent approach to the perimeter of regulation, and the information collection framework to be monitored by IMF-WB (through FSAP and Article IV).

***Recommendation 6*: The systemic importance of financial institutions, markets and instruments depends on a wide range of factors, including their size, leverage, interconnectedness, as well as funding mismatches. The IMF, in consultation with the BIS and the expanded FSF and other bodies, should jointly develop a common international framework and guidelines to help national authorities assess whether a financial institution, market or an instrument is systemically important as consistently as possible across jurisdictions. This framework should strive to treat similar activities more similarly for regulatory or oversight purposes regardless of the legal form of the institution, so as to avoid regulatory arbitrage.**

- **Responsibility:** IMF, BIS, expanded FSF.
- **Timeline:** Fall 2009.
- **Monitoring:** G20.

***Recommendation 7*: Large complex financial institutions require particularly robust oversight given their systemic importance, which arises in part from their size and interconnectedness (or correlation) with other institutions, and from their influence on markets.**

- **Responsibility:** Prudential supervisors, with recommendations from the expanded FSF.
- **Timeline:** Ongoing.
- **Monitoring:** Expanded FSF.

***Recommendation 8*: The boundaries of the regulatory framework should be reviewed periodically within national jurisdictions, in light of financial innovation and broader trends in the financial system. International bodies will promote good practice and consistent approaches in this area.**

- **Responsibility:** Prudential supervisors, central banks, and securities regulators, with guidance from the expanded FSF and the IMF.
- **Timeline:** Ongoing.
- **Monitoring:** Expanded FSF.

Oversight of Credit Rating Agencies

***Recommendation 9*: All credit rating agencies whose ratings are used for regulatory purposes should be subject to a regulatory oversight regime that includes registration and that requires compliance with the substance of the IOSCO Code of Conduct Fundamentals. National authorities should obtain the authority to enforce compliance and require changes to a rating agency's practices and procedures for managing conflicts of interest and for assuring the transparency and quality of the rating process. Given the global scope of some credit rating agencies, the oversight framework should be consistent across jurisdictions with appropriate sharing of information between national authorities responsible for the oversight of credit rating agencies.**

- **Responsibility**: National authorities.
- **Timeline**: To be completed within 2 years.
- **Monitoring:** IOSCO and IMF-WB (through FSAP and Article IV).

Private Pools of Capital

***Recommendation 10*: Private pools of capital, including hedge funds, can be a source of risk owing to their combined size in the market, their use of leverage and maturity mismatches, and their connectedness with other parts of the financial system. They or their managers should therefore be required to register with financial authorities and disclose appropriate information to assess the risks they pose.**

- **Responsibility**: National authorities.
- **Timeline**: To be implemented within 2 years.
- **Monitoring:** Expanded FSF.

Transparent Assessment of Regulatory Regimes

***Recommendation 11*: All G20 members should commit to undertake a Financial Sector Assessment Program (FSAP) report and to publish its conclusions. National authorities may also periodically undertake a self-assessment of their regulatory frameworks based on internationally agreed methodologies and tools.**

To improve the FSAP process, the basis upon which countries are assessed should be expanded to encompass macroprudential oversight, the scope of regulation, and supervisory oversight of the influence of the structure of compensation schemes at financial institutions on risk-taking.

- **Responsibility**: Finance Ministries, IMF/WB.
- **Timeline**: G20 countries that have not undertaken an FSAP should

immediately commit to do so, in consultation with the IMF/WB; Countries with systemically important financial systems should be subject to a self-assessment every 5 years, and FSAP Updates in consultation with IMF/WB.

- **Monitoring:** IMF/WB.

Procyclicality

***Recommendation 12*: The FSF and other bodies, particularly the BCBS, should develop and implement supervisory and regulatory approaches to mitigate procyclicality in the financial system by promoting the build-up of capital buffers during the economic expansion and by dampening the adverse interaction between fair valuation, leverage and maturity mismatches in times of stress.**

- **Responsibility**: FSF and member bodies, BCBS, CGFS.
- **Timeline for development**: Strategic plan by Fall 2009, with further progress reported by year end.
- **Timeline for implementation**: As appropriate, with discussion with sector and coordination by the expanded FSF.
- **Monitoring:** Expanded FSF.

***Recommendation 13*: Accounting standard-setters should strengthen accounting recognition of loan loss provisions by considering alternative approaches for recognising and measuring loan losses that incorporate a broader range of available credit information. They should also examine changes to relevant standards to dampen adverse dynamics associated with fair value accounting, including improvements to valuations when data or modelling is weak. Accounting standards setters and prudential supervisors should work together to identify solutions that are consistent with the complementary objectives of promoting the stability of the financial sector and of providing transparency of economic results in financial reports.**

- **Responsibility**: Accounting standards setters, BCBS.
- **Timeline for development**: Strategic plan by Fall 2009.
- **Timeline for implementation**: As appropriate, with discussion with sector and coordination by the expanded FSF.
- **Monitoring:** Expanded FSF.

Capital

***Recommendation 14*: Capital should serve as an effective buffer to absorb losses over the cycle, so as to protect both the solvency of financial institutions in the event of losses, and their ability to lend.**

In the near-term, capital buffers above required minimums should be allowed to decline in response to deteriorating economic conditions and credit quality, and urgent consideration should be given to measures that would facilitate access to additional private sector capital in the downturn.

Once conditions in the financial system have recovered, the adequacy of the international standard for the minimum level of capital for banks should be reviewed and the quality and global

consistency of capital should be enhanced. In addition, capital buffers above minimum requirements and loan-loss provisions should be built-up in good times in order to enhance the ability of regulated financial institutions to withstand large shocks.

In this context, the BCBS should develop standards to promote the build-up of capital buffers in good times that can be drawn down in periods of stress. The BCBS should also complement risk-based capital measures with simpler indicators to monitor the build-up of leverage.

The international standard for the minimum level of capital should remain unchanged until the financial system has recovered.

- **Responsibility**: BCBS.
- **Timeline**: The review of international standards related to capital buffers and the quality and consistency of capital will be discussed at periodic BCBS meetings and the transition will be completed as appropriate, in consultation with the industry and with coordination by the expanded FSF.
- **Monitoring**: Expanded FSF.

***Recommendation 15*: G20 Leaders should support the progressive adoption of the Basel II capital framework, which will continue to be improved on an ongoing basis, across the G20.**

- **Responsibility**: Prudential supervisors, BCBS.
- **Timeline**: The transition to Basel II is to be completed as appropriate, in consultation with the industry and with coordination by the expanded FSF.
- **Monitoring**: IMF-WB (through FSAP and Article IV), BCBS.

Liquidity

***Recommendation 16*: Prudential supervisors and central banks should deliver a global framework for promoting stronger liquidity buffers at banks, including cross-border institutions, to ensure that they can withstand prolonged periods of market and funding liquidity stress.**

In addition, the BCBS should enhance tools, metrics and benchmarks that supervisors can use to assess the resilience of banks' liquidity cushions and constrain any weakening in liquidity maturity profiles, diversity of funding sources, and stress-testing practices.

- **Responsibility**: Prudential supervisors, central banks, BCBS.
- **Timeline**: To be completed within 2 years.
- **Monitoring:** Expanded FSF.

Infrastructure for OTC Derivatives

***Recommendation 17*: Financial institutions should continue to strengthen the infrastructure supporting OTC derivatives markets. In the case of credit derivatives, this includes standardising contracts to facilitate their clearing through a central counterparty. National authorities should enhance incentives as needed for the use of central counterparties to clear OTC credit derivatives.**

- **Responsibility**: Financial institutions, prudential supervisors and other authorities, central banks.
- **Timeline**: To be completed within two years; Industry to prepare an action plan on standardisation in the Fall 2009.
- **Monitoring**: Prudential supervisors and expanded FSF.

***Recommendation 18*: Central counterparties should be subject to transparent and effective oversight by prudential supervisors and other relevant authorities, including central banks, and meet high standards in terms of risk management, operational arrangements, default procedures, fair access and transparency. The CPSS and IOSCO should review their experiences in applying their recommendations for central counterparties to derivatives.**

- **Responsibility**: Prudential supervisors, central banks, CPSS, IOSCO.
- **Timeline**: To be completed within 2 years.
- **Monitoring:** Expanded FSF.

Compensation Schemes and Risk Management

***Recommendation 19*: Large financial institutions should ensure that their compensation frameworks are consistent with their long-term goals and with prudent risk-taking. As such, the Boards of Directors of financial institutions should set clear lines of responsibility and accountability throughout their organisations to ensure that the design and operation of its remuneration system supports the firm's goals, including its overall risk tolerance. Shareholders may have a role in this process. Boards should also ensure there are appropriate mechanisms for monitoring remuneration schemes.**

- **Responsibility**: Boards of Directors of financial institutions.
- **Timeline**: Fall 2009.
- **Monitoring:** Prudential supervisors or other relevant national authorities.

***Recommendation 20*: In order to promote incentives for prudent risk-taking, each financial institution must review its compensation framework to ensure it follows sound practice principles developed by the FSF. These include the need for remuneration systems to provide incentives consistent with the firm's long-term goals, to be adjusted for the risk taken by employees, and for the variable components of compensation to vary symmetrically according to performance.**

- **Responsibility**: Financial institutions.
- **Timeline**: Fall 2009.
- **Monitoring:** Prudential supervisors or other relevant national authorities.

***Recommendation 21*: Prudential supervisors should enhance their oversight of compensation schemes by taking the design of remuneration systems into account when assessing risk management practices. The BCBS should more explicitly integrate this dimension in its guidance for the assessment of risk management practices by national prudential supervisors.**

- **Responsibility**: Prudential supervisors, BCBS.

- **Timeline**: Fall 2009.
- **Monitoring:** Expanded FSF.

Transparency

***Recommendation 22*: Accounting standard-setters should accelerate efforts to reduce the complexity of accounting standards for financial instruments and enhance presentation standards to allow the users of financial statements to better assess the uncertainty surrounding the valuation of financial instruments.**

- **Responsibility**: Accounting standard-setters.
- **Timeline**: Fall 2009.
- **Monitoring:** Expanded FSF.

***Recommendation 23*: The IASB should enhance its efforts to facilitate the global convergence towards a single set of high-quality accounting standards by sharing the experience of countries that have completed this process and by providing technical assistance.**

- **Responsibility**: IASB.
- **Timeline**: Fall 2009.
- **Monitoring**: Expanded FSF.

Enforcement

***Recommendation 24*: The effective enforcement of regulation should be a priority of all financial regulators. As such, national financial regulators and oversight authorities should ensure the effectiveness of their enforcement activities and that appropriate resources are available for monitoring the application of regulation and for prosecuting offenders. The enforcement function should be independent from other activities or from external influences.**

- **Responsibility**: Prudential supervisors and other authorities.
- **Timeline**: To be completed within 2 years.
- **Monitoring**: IMF-WB (through FSAP and Article IV).

Technical Assistance and Capacity Building in Emerging Market Economies

***Recommendation 25*: Recognizing that the degree of development of financial systems varies considerably across the G20, national authorities should commit to assist each other in enhancing their capacity to strengthen regulatory frameworks. In addition, IOSCO, the IAIS and the BCBS should have the appropriate capacity to provide technical assistance. The needs of emerging market economies deserve particular consideration.**

- **Responsibility**: Finance Ministries, prudential supervisors and other authorities, IOSCO, IAIS, BCBS.
- **Timeline**: Ongoing.
- **Monitoring**: IMF-WB (through FSAP and Article IV).

2. Introduction

The Working Group was tasked with reviewing work underway in member countries and in international bodies, and with making recommendations that will enhance transparency in global financial markets, strengthen international regulatory standards, and ensure that all financial markets, products and participants are regulated or subject to oversight, as appropriate to their circumstances.

The mandate of the Working Group was not to make detailed technical recommendations, but to provide direction for policy measures to be pursued further by appropriate authorities and to provide a set of recommendations for timely, coordinated policy action.

Given the breadth of its mandate, the Working Group has identified some priorities to focus on, which are reflected in the recommendations for further reform presented throughout this report. Members were surveyed to obtain their views on these priority areas and to gather information on measures taken to implement the Washington Action Plan. The Working Group worked through regular conference calls, combined with one face-to-face meeting.

As mandated in the Leaders' Declaration, the Working Group relies to a large extent on existing work streams underway. International bodies conducting this work – the Financial Stability Forum, the International Organisation of Securities Commissions, the Basel Committee for Banking Supervision, the International Association of Insurance Supervisors, the International Accounting

Standards Board, the International Monetary Fund and the World Bank – all were represented on the Working Group, and their participation has been of tremendous value.

This Report is structured around the areas for reform identified in the Washington G20 Leaders' Action Plan. It provides some context on the need for reform in these areas, summarises progress to date against items from the Washington Action Plan to address these shortcomings, and makes recommendations for further action and reform. The Working Group also makes some recommendations that go beyond the Washington Action Plan.

The report begins by developing an overarching theme that combines many of the specific action items included in the Washington Action Plan. This overarching theme is the need to supplement microprudential regulation with a more system-wide macroprudential approach which is designed to identify and mitigate the build-up of systemic vulnerabilities arising from excess liquidity, leverage, risk-taking and systemic concentrations across the financial system.

3. System-wide Approach to Financial Sector Regulation

It is fundamental that regulators and standard-setters strive to achieve a prudential regulatory framework that protects the stability of financial institutions. Regulatory and supervisory weaknesses, such as those with respect to underwriting standards in the U.S. mortgage market, helped exacerbate the current crisis. It is essential that prudential regulation at the firm level be strengthened and that competent national regulators provide a first line of defense in preventing instability in the financial system.

However, a fundamental lesson from the current crisis is that effective supervision at the individual firm level, while necessary, is not sufficient to safeguard the soundness of the financial system as a whole. This is also the lesson of a long history of systemic financial failures. While each financial crisis is different, the crises over history generally share some key common elements including excessive risk-taking, rapid credit growth and rising leverage. This points to the need for regulators, supervisors, and central bankers to supplement strong microprudential regulation with a macroprudential overlay to more effectively monitor and address the build-up of risks arising from excess liquidity, leverage, risk-taking and systemic concentrations that have the potential to cause financial instability.

Since the risk of distress to the financial system as a whole is not simply the sum of the risk to its individual components, the impact of the collective behaviour of economic agents on aggregate risk needs to be taken into account explicitly. To illustrate, take the example of a bank's leverage during an economic expansion. It may be individually appropriate for banks to take more risk during benign economic times, for example by increasing lending. However, when this behaviour is widespread, the overall leverage of the banking sector may create the potential for financial instability. Microprudential and macroprudential authorities may view this situation differently. The increased leverage may not be viewed as a concern from a microprudential perspective if it is supported by appropriate safeguards at the institution level, for example by sufficient capital buffers. However, even if these safeguards are considered appropriate for an individual institution, a macroprudential regulator may nonetheless be concerned by the potential for a systemic imbalance arising from a widespread increase in the overall leverage of the banking sector. As another example, the behaviour of individual institutions in markets as conditioned by capital requirements for their trading book, internal risk management practices, and rules and practices regarding margin requirements can lead to procyclicality in financial market prices.

A challenge for policymakers is to achieve the appropriate balance between the complementary microprudential and macroprudential approaches to financial sector oversight. Traditional microprudential objectives still need to be vigorously pursued in order to preserve financial stability, since incidents of financial stress are likely to be less frequent - and the associated costs reduced – if individual institutions are well managed, if markets function efficiently, and if the infrastructure supporting the financial system is strong.

The ability of authorities to address systemic risk needs to be considerably enhanced. A number of policy institutions, for example central banks, have enhanced their analysis of systemic risks in recent years - many of the systemic vulnerabilities that caused or enhanced the current turmoil had in fact been identified – but policy mechanisms to effectively translate these analyses into policy action are lacking.

The objective of enhancing the macroprudential orientation of the regulatory framework guides a broad range of issues addressed in this Report. This objective responds to the G20 Leaders' principle of making regulatory regimes more effective over the cycle and is related to many of the issues raised by Leaders in the Washington Action Plan, including certain aspects of compensation schemes at financial institutions, of margin requirements and risk management practices focused on Value-at-Risk calculations based on short historical samples, of the capital adequacy framework, and of valuation and loan-loss provisioning practices. In addition, there is a need to redefine the scope of the regulatory framework in order to establish appropriate oversight for the institutions and markets that may be the source of systemic risk. Risk management also needs to be enhanced to better evaluate vulnerabilities arising from low-frequency, system-wide risks, and to better mitigate these risks.

The Working Group views a commitment towards improving financial sector policy so that it can effectively mitigate the build-up of systemic risk to be of the highest priority. Resources must be committed to develop an overarching framework for addressing these issues. Building such a framework will involve reviewing the mandates of authorities, establishing national and international coordination mechanisms, and enhancing the tools of authorities to effectively address systemic concerns. There remains considerable uncertainty about how best to mitigate systemic risks, how to assess these risks as they arise, and how to respond. But it is essential that we move forward even if we do not yet have all the answers. Thirty years ago, when monetary policy began to focus on price stability, there was considerable uncertainty about how to implement this objective, and how to assess the determinants of inflation. Yet, the focus of monetary policy on price stability accelerated the development of effective inflation control frameworks, and has resulted in considerable success in keeping inflation low with important economic and social benefits.

The Working Group recommends that the mandate of all national financial regulators and oversight authorities and of all international financial bodies take account of financial system stability, as a complement to their core mandates. Financial sector authorities need to address systemic risks, and they need to consider the implications of their policies and standards for the stability of the financial system. In the case of accounting standard-setting bodies, this implies that they will work towards ensuring that accounting standards will not affect the economic cycle, while balancing this goal with the primary objective of financial statements to provide objective, timely and accurate information on the economic situation of an entity.

Policymakers will need to address issues of coordination and cooperation, both at the domestic and international level. In addition, the relevant authorities must ensure they have instruments at their disposal to limit the build-up of imbalances with the potential to contribute to financial instability. Such policy tools will be developed with assistance of the financial standard-setters, such as IOSCO, the IAIS and the BCBS. Global standards should be minimum best practices and national authorities would have the right to impose higher standards appropriate to their own circumstances.

The analysis of these instruments prior to their implementation should be conducted in a comprehensive fashion, taking into account the interaction between the various instruments considered. There may also be need for a review of governance of each authority, given the potential pressure for discretion in application of these tools at various points over the business cycle. The recommendations of the G20 Working Group on Reinforcing International Cooperation and Promoting Integrity in Financial Markers (Working Group 2), for example with respect to early warning exercises, and of the G20 Working Group on Reforming the IMF (Working Group 3), should support these expanded roles for the international bodies.

As an overarching framework to approach the Washington Action Plan, the Working Group recommends the following:

Recommendation 1: **As a supplement to their core mandate, the mandates of all national financial regulators, central banks, and oversight authorities, and of all**

international financial bodies and standard-setters (IASB, BCBS, IAIS and IOSCO) should take account of financial system stability.

- **Responsibility:** Finance Ministries, national financial regulators and oversight authorities, central banks, IOSCO, IAIS, BCBS, IASB and other accounting standards setters, expanded FSF, IMF.
- **Timeline**: To be completed within 2 years.
- **Monitoring:** Compliance by national authorities to be monitored by IMF-WB (through FSAP and Article IV), compliance by international bodies to be monitored by expanded FSF.

Recommendation 2: **Within each country, there should be an effective mechanism for appropriate domestic financial sector authorities to jointly assess the systemic risks across the financial system and to co-ordinate the domestic policy response to limit the build-up in systemic risk. The structure of this coordinating mechanism should be transparent, with clear assignments of roles, responsibilities and accountability for each authority.**

- **Responsibility**: Finance Ministries, financial regulators and supervisors, central banks, in cooperation with other relevant bodies, including policy authorities for housing finance and accounting standard setters, as appropriate.
- **Timeline**: To be completed within 2 years.
- **Monitoring:** IMF-WB (through FSAP and Article IV).

Recommendation 3: **Financial sector authorities should have suitable macroprudential tools to address systemic vulnerabilities. Measures that are simple to understand and to implement would be preferable to more complex ones, and tools that rely on pre-specified limits or rules are attractive. However, rules need to be complemented with the informed judgement of financial sector authorities based on their joint assessment of the risks across the financial system.**

In order to achieve consistency globally, international bodies and standard-setters - such as the expanded FSF, IOSCO, the IAIS, the BCBS, the BIS and others *(e.g.,* IASB, CGFS) - will develop such tools and provide national authorities, which are responsible for their implementation, with options. Potential macroprudential tools that should be explored further could include:

a. Complementing risk-based capital measures with simpler indicators aimed to measure the build-up of leverage, with enhanced sensitivity to off-balance sheet exposures;

b. Capital requirements that adjust over the financial cycle;

c. Loan-loss provisioning standards that incorporate all available credit information;

d. The use of longer historical samples to assess risk and margin requirements; and

e. Greater focus on loan-to-value ratios for mortgages.

- **Responsibility**: National authorities, expanded FSF, IOSCO, IAIS, BCBS, BIS, IASB, CGFS.

- **Timeline for tool development**: Expanded FSF to provide an annual report on the suite of tools under development by its members, with an Interim Report in Fall 2009.
- **Timeline for tool implementation**: On an ongoing basis.
- **Monitoring**: Development of tools to be monitored by G20, as well as expanded FSF, and their implementation by the IMF-WB (through FSAP and Article IV).

Recommendation 4: **The expanded FSF, together with the IMF, should create an effective mechanism for key financial authorities in each country to regularly come together around an international table to jointly assess the systemic risks across the global financial system and to coordinate policy responses.**

- **Responsibility**: Expanded FSF, IMF, Finance Ministries, national financial regulators and oversight authorities, central banks.
- **Timeline**: Fully implemented within 2 years, with initial system in place by the Fall 2009 FSF meetings.
- **Monitoring**: G20.

4. Washington Action Plan

The structure of the financial system has changed over time, with new types of institutions emerging and with distinctions between different types of players becoming more blurred as their activities converged. New types of complex financial instruments - sometimes with embedded leverage and a lack of transparency about their structure and the drivers of their performance - have also emerged. Although these developments may have come about as a result of innovations aimed at improving the efficiency of the financial system, they have also created opportunities for increasing leverage and for shifting risks among players in highly opaque ways.

In order to support innovation, and because the link to depositor protection was limited, policymakers have traditionally relied on market discipline to promote integrity in this segment of the financial system. Innovative institutions and markets were thus often lightly regulated or unregulated. One of the lessons of the current crisis is that market discipline did not adequately fulfill its intended role during the last economic cycle as risk exposures of regulated financial institutions and of the shadow banking system, as well as the complexity of the financial system and its opaqueness to both regulators and market participants ultimately proved destabilising.

4.1 Regulatory Regimes

4.1.1 The Scope of Regulation

The contribution to the current crisis of certain financial institutions, markets and innovative instruments that were either unregulated or lightly regulated has highlighted the need for financial sector policymakers to redefine the perimeter of the regulatory framework. Examples of such institutions and instruments include mortgage brokers/originators, investment banks, securitisation vehicles, credit rating agencies, as well as hedge funds and other private asset pools.

The need for enhancing prudential oversight stems in part from the realisation that products and vehicles removed from a bank's balance sheet may still pose risks for this financial institution. Further, systemic failures, once largely confined to large institutions, can result from the interconnectedness between institutions whose individual condition may not pose a systemic risk in itself.

The Working Group views the protection of market integrity and the promotion of efficient capital markets as objectives of great importance for financial sector policy. We note that market integrity is within the purview of Working Group 2 and welcome their efforts to enhance the effectiveness of the regulatory framework in this area. Given our mandate and our objective to achieve a regulatory framework that better addresses system-wide concerns, we will focus our attention on the need to better assess systemic risks and to enhance regulation and oversight for financial institutions, markets and instruments – or types of financial institutions, markets and instruments - with the potential to be systemically important, either on their own or as a group.

Action Item: The appropriate bodies should review the differentiated nature of regulation in the banking, securities, and insurance sectors and provide a report outlining the issue and making recommendations on needed improvements. A review of the scope of financial regulation, with a special emphasis on institutions, instruments, and markets that are currently unregulated, along with ensuring that all systemically-important institutions are appropriately regulated, should also be undertaken. (For action in the medium-term).

Process for Taking Forward the Leaders' Action Item

Since the Washington Summit, international bodies have undertaken a number of initiatives to assess differences in regulation across sectors, identify regulatory gaps and examine issues related to expanding the scope of regulation in response to this action item.

1. The Joint Forum, a Working Group of the BCBS, IOSCO and the IAIS, is undertaking a project that addresses the differentiated nature and scope of financial regulation. The main objective of this project is to identify areas where systemic risks may not be fully captured in the current regulatory framework. Special emphasis will be placed on institutions, instruments, and markets that are currently unregulated or lightly regulated. As appropriate, the Joint Forum will leverage off current work from other international bodies in its assessment.
2. An IOSCO Task Force is exploring whether and how to extend key regulatory principles applying to regulated products and markets, in the areas of transparency, market conduct,

and market infrastructure, to securitised products and CDS. An interim report will be published in mid-March.

3. An IOSCO Task Force is examining issues surrounding unregulated entities such as hedge funds, including the development of recommendations for mitigating risks associated with their trading and opacity through oversight. An interim report setting forth a range of options will be published in March.

4. The IAIS is elaborating its medium-to long-term strategic focus through examining issues related to the supervision of internationally active insurance groups, macro elements of prudential supervision including contagion effects and the issue of non-regulated entities and regulatory consistency across financial sectors. A report is expected in June 2009.

The FSF will draw from the above work to review regulatory objectives, the instruments of regulation, and to what entities and activities these instruments should apply. This will be discussed at the March FSF Meeting.

Working Group Assessment

Work underway in response to this action item is only a first step towards achieving the Leaders' vision of a financial system in which all systemically important institutions are appropriately overseen.

As a starting point for determining how to assign appropriate oversight, more work is urgently needed to define systemic importance. The IMF and the FSF would be well placed to conduct this work jointly. The recent "Geneva Report" and the G30 report "Financial Reform: A Framework for Financial Stability" are useful starting points. They note that assessments of systemic significance should take into account a wide range of factors, including size, leverage, interconnectedness, and funding mismatches.

The increased integration of markets globally should be taken into account when assessing the systemic importance of any given financial institution, market or instrument given the potential for contagion across borders. Achieving a robust framework for regulating cross-border institutions, including by addressing the roles and responsibilities of authorities in home and host countries, is therefore important. This issue is treated by Working Group 2.

In order to assess appropriate regulatory perimeter, a framework to gather information and assess risk that is pervasive in both its geographical and institutional coverage is necessary. Authorities need the ability to acquire sufficient relevant information on the activities and exposures of all financial institutions, participants and issuers, in order to periodically assess their contribution to systemic risk, either on their own or through linkages with other segments of the financial system. These include, for example, the shadow banking system and hedge funds.

Three key areas for additional data collection by regulators should be considered in order to analyse the potential risks posed and decide whether regulatory action is needed. First, data on the nature of a financial institution's or vehicles activities should be collected - including, in the example of a hedge fund manager, data on the size, investment style, and linkages to systemically important markets of the funds it manages. Second, regulators should develop and monitor common metrics to assess the significant exposures of counterparties on a group-wide basis, including prime brokers for hedge funds, to identify systemic effects. Third, data on the condition of markets such as measures on the volatility, liquidity and size of markets which are deemed to be systemically important and/or vulnerable, should also be collected. It is envisaged that regulators would use a combination of existing information sources, including data collected from key institutions and vehicles. Consideration of what regulatory, registration or oversight framework would best enable this information collection and subsequent action would be determined by financial regulators at the home and host country level.

After identifying financial institutions, markets or instruments presenting risks that regulators wish to address, this could then be achieved over time as appropriate, whether by direct or indirect regulation, depending on the nature of the risk and/or the intensity of oversight that is desired. While we focus on the need for appropriate regulation and oversight for systemically important institutions, markets and instruments, the Working Group also supports an appropriate oversight and regulation framework for those that are not systemically important, for example for addressing concerns related to the integrity or the efficiency of markets.

Attention should be given to limiting negative spillovers to other parts of the financial system in the event of severe stress or failure, for example by enhancing counterparty risk management and by developing effective resolution regimes. In order to cope with the changes in the structure of the financial system over time, and recognising that the determinants of systemic risk may vary over time and across countries, regulators need to have the ability to assign regulatory requirements within their jurisdictions, and they need to periodically review the perimeter of regulation to ensure that all parts of the system that could pose systemic risk have appropriate prudential requirements and resolution regimes.

Particular consideration should be given to the potential for the shadow banking system and for leveraged institutions such as hedge funds to contribute to systemic risk. We note that leverage may arise both directly through formal debt (*e.g.*, bonds, credit lines, IOUs) and indirectly through implicit borrowing due to certain derivatives transactions. Anecdotal evidence suggests that this indirect leverage is particularly important for hedge funds, and it should be taken into account when assessing their systemic importance. A clear implication of broadening information requirements is that hedge funds or their managers will need to register and provide authorities with the relevant information they require to assess the need for regulating them. Oversight and regulation will then be enhanced as appropriate, depending on risks revealed by the analysis of the information obtained. Oversight for hedge funds is discussed further in section 4.1.3.

In addition to traditional prudential tools such as capital buffers or risk management guidelines, prudential oversight for systemically important financial institutions could be enhanced either by restricting some of their activities that may present particularly high risks or conflicts of interest, or by assigning appropriate capital charges to reflect non-core activities. Examples of measures restricting activities for banking institutions are given in the G30 Report. They include disallowing the sponsorship or the management of private pools of capital in which the bank's own funds are commingled with that of clients, imposing strict capital and liquidity requirements for large proprietary trading, and retaining a meaningful part of credit risk when packaging and selling structured products. Another option includes increasing the costs of dealing in certain non-standard activities, perhaps through appropriate capital charges, so that financial institutions will be able to determine whether the cost of accommodating innovation merits the change.

Because of practical implementation issues, legal structures and jurisdictional limits will necessarily play an important role in the development of any supervisory model. However, given the convergence in the activities conducted by different types of financial institutions, achieving greater consistency in the regulatory principles that would apply to similar markets and institutions performing similar activities, both within and across borders, would be desirable in order to reduce the scope for regulatory arbitrage. The Working Group recommends that the expanded FSF conduct an analysis of the regulatory perimeter to examine practical issues related to putting greater emphasis on functions and activities and less emphasis on legal status.

The minimum degree of oversight applicable to the entire financial system has been an area of considerable discussion within the Working Group. The majority of Working Group members consider that some form of disclosure requirements for material entities or markets are an appropriate minimum standard, with authorities in each jurisdiction assessing risks posed by financial institutions, markets and instruments and increasing the degree of oversight and regulation according to their risk. However, some Working Group members would prefer a global standard for regulation and oversight applicable to all financial institutions, markets and instruments.

Recommendation 5 : **All systemically important financial institutions, markets and instruments should be subject to an appropriate degree of regulation and oversight, consistently applied and proportionate to their local and global systemic importance. Consideration has to be given to the potential systemic risk of a cluster of financial institutions which are not systemically important on their own. Non-systemically important financial institutions, markets and instruments could also be subject to some form of registration requirement or oversight, depending on the type and degree of risk posed, for example for the integrity or efficiency of markets.**

In order to determine the appropriate degree of regulation or oversight, national authorities should determine appropriate

mechanisms for gathering relevant information on all material financial institutions, markets and instruments. This information will allow national authorities to assess the potential for their failure or severe stress to contribute to systemic risk, either on their own, as part of a cluster, or through linkages with other segments of the financial system. Information on systemic risk should be monitored through a globally coordinated mechanism.

National authorities should have the authority to expand the perimeter of regulation in a timely way, recognising that it may vary across countries and through time. They should do so in close coordination with appropriate global fora and standard-setters in order to achieve as much consistency as possible across jurisdictions.

- **Responsibility:** National authorities, central banks, IOSCO, IAIS and BCBS, with recommendations from the expanded FSF and the IMF.
- **Timeline:** Two stages: process to obtain information underway in Fall 2009, with system in place within 2 years.
- **Monitoring:** Expanded FSF to ensure a consistent approach to the perimeter of regulation, and the information collection framework to be monitored by IMF-WB (through FSAP and Article IV).

Recommendation 6: **The systemic importance of financial institutions, markets and instruments depends on a wide range of factors, including their size, leverage, interconnectedness, as well as funding mismatches. The IMF, in consultation with the BIS and the expanded FSF and other bodies, should jointly develop a common international framework and guidelines to help national authorities assess whether a financial institution, market or an instrument is systemically important as consistently as possible across jurisdictions.**

This framework should strive to treat similar activities more similarly for regulatory or oversight purposes regardless of the legal form of the institution, so as to avoid regulatory arbitrage.

- **Responsibility:** IMF, BIS, expanded FSF.
- **Timeline:** Fall 2009.
- **Monitoring:** G20.

Recommendation 7: **Large complex financial institutions require particularly robust oversight given their systemic importance, which arises in part from their size and interconnectedness (or correlation) with other institutions, and from their influence on markets.**

- **Responsibility:** Prudential supervisors, with recommendations from the expanded FSF.
- **Timeline:** Ongoing.
- **Monitoring:** Expanded FSF.

Recommendation 8: **The boundaries of the regulatory framework should be reviewed periodically within national jurisdictions, in light of financial innovation and broader trends in the financial system. International bodies will promote good practice and consistent approaches in this area.**

- **Responsibility:** Prudential supervisors, central banks, and securities regulators, with guidance from the expanded FSF and the IMF.
- **Timeline:** Ongoing.
- **Monitoring:** Expanded FSF.

Two areas of particular concern have been raised by members of the Working Group, which are given attention below: the oversight of credit rating agencies and of hedge funds.

4.1.2 Oversight of Credit Rating Agencies

Investors in fixed income markets failed to probe deeply enough into the nature of the assets they bought, and instead relied too much on credit ratings. In addition, several issues related to credit rating agencies (CRAs) and their ratings have been cited as contributing factors to the current crisis, including:

- Concerns that they relied on flawed rating methodologies in determining ratings for structured products;
- Insufficient transparency concerning their assumptions, criteria and methodologies used for rating structured products; and
- Potential conflicts of interest.

In response to these concerns, IOSCO updated its Code of Conduct Fundamentals for CRAs in May 2008. The revised Code of Conduct incorporates changes designed to directly address conflicts of interest and transparency issues associated with ratings of structured financial instruments. The Code of Conduct requires CRAs to disclose their own codes of conduct and explain how these individual codes are consistent with the IOSCO standards.

As originally envisioned, enforcement of the Code was left to market participants (*e.g.*, investors, issuers) by virtue of their ability to assess for themselves the degree of compliance of any given CRA with the Code and to adjust their views of this particular CRA's rating opinions accordingly. While this approach offered the benefit of flexibility, the difficulty of confirming compliance remained a weakness which IOSCO and securities regulators in many jurisdictions have been working towards addressing.

Action Item: Regulators should take steps to ensure that credit rating agencies meet the highest standards of IOSCO and that they avoid conflicts of interest, provide greater disclosure to investors and to issuers, and differentiate ratings for complex products. This will help ensure that credit rating agencies have the right incentives and appropriate oversight to enable them to perform their important role in providing unbiased information and assessments to markets. (For immediate action by March 31, 2009).

Action Item: IOSCO should review credit rating agencies' adoption of the standards and mechanisms for monitoring compliance. (For immediate action by March 31, 2009).

Action Item: Credit Ratings Agencies that provide public ratings should be registered. (For action in the medium-term).

Process for Taking Forward the Leaders' Action Item

Following publication of the revised IOSCO *Code of Conduct Fundamentals for Credit Rating Agencies*, all of the major rating agencies adopted codes of conduct based on this enhanced set of guidelines. IOSCO is currently reviewing the extent to which these agencies' own codes satisfy its guidelines, and a report will be published in early March. The report indicates that the large global CRAs have largely adopted the changes to the Code or, in certain instances, such as in relation to considering a separate rating scale or subscript for structured products, have clearly explained why they have not adopted that part of the Code. Some smaller national agencies have not adopted the changes but appear likely to do so soon, and a few small agencies have yet to adopt codes based on the IOSCO Code.

Since the Code lacks legal authority, any enforcement of the Code rests with national regulators. Certain credit rating agencies whose ratings are used for regulatory purposes are registered in the U.S., and similar proposals are at various stages of the regulatory process in other jurisdictions, including in the European Union and Japan. The FSF is following these national and regional initiatives and is working to promote a globally consistent approach to oversight of credit rating agencies.

The IOSCO Task Force on Credit Rating Agencies has developed a model examination module for regulators undertaking inspections of CRAs in their jurisdictions. The module provides a model for monitoring compliance with the substance of the IOSCO Code. The Task Force is also in the process of drafting a paper outlining an approach that securities regulators can use to oversee globally active CRAs. This approach will include a permanent IOSCO committee for regular dialogue with the CRA industry and for information sharing among IOSCO members regarding the regulation of CRAs. This paper will also discuss a college of regulators approach and bilateral arrangements regarding ongoing supervision of globally active CRAs. The intention is for this paper to be available by mid March.

Working Group Assessment

The two action items for immediate action – taking steps towards ensuring compliance with the IOSCO code and developing mechanisms for monitoring compliance – are on track to be met by the April Leaders Summit, and the medium-term action of national registration is already underway in many jurisdictions.

The Working Group is of the opinion that the IOSCO Code of Conduct is a helpful common frame of reference and that it establishes appropriate standards with respect to incentives alignment, due diligence and transparency. However, a self-regulatory framework does not appear sufficient to ensure compliance with the IOSCO Code. A sound regulatory framework with robust supervision of CRAs by public authorities is necessary to ensure that professional standards are applied, that procedures and policies agreed upon by CRAs are adequately followed, that the integrity of the rating process is upheld, and that conflicts of interest are eliminated or adequately managed. Effective supervision requires surveillance of CRAs' activities and, where necessary, enforcement of rules applying to CRAs. Therefore, rigorous but proportionate rules should be enacted, consistent with international standards, concerning:

- The prevention of conflicts of interest, and the adequate management of those conflicts that arise;
- Transparency about the quality of ratings and of the ratings methodology; and
- Transparency regarding the rating process, both in general and with respect to a specific issuer or financial instrument, to the credit rating agencies' historical performance and to how credit rating agencies operate internally. Moreover, a dual rating scale or an identifier distinguishing between corporate and sovereign debt, on the one hand, and structured financial products, on the other, would be desirable.

The Working Group has focused on strengthening enforcement mechanisms in order to foster discipline in the credit rating industry. Specifically, the Working Group recommends that Leaders complement their commitment on the registration of credit rating agencies with one to enhance enforcement, by empowering regulators with the ability to require changes to a CRA's practices and procedures for managing conflicts of interest at credit rating agencies and assuring the transparency and quality of the rating process.

Given the global scope of some credit rating agencies, it is desirable for the oversight framework to be consistent across jurisdictions in order to avoid regulatory arbitrage, and to avoid unnecessary compliance costs for those CRAs conducting international activities. Conflicting national-based regulation could have unintended consequences for users of credit ratings and should be avoided where possible. The common monitoring module developed by IOSCO and the role of the IOSCO Task Force on Credit Rating Agencies in ensuring global consistency in the supervision of CRAs are welcome developments in this regard.

A small number of rating agencies have global operations, and others specialise within a national market. In order to avoid duplication, regulators should strengthen cooperation arrangements to effectively address supervisory issues of global nature. Enhanced international cooperation arrangements could be developed through IOSCO.

Recommendation 9: **All credit rating agencies whose ratings are used for regulatory purposes should be subject to a regulatory oversight regime that includes registration and that requires compliance with the substance of the IOSCO Code of Conduct Fundamentals. National authorities should obtain the authority to enforce compliance and require changes to a rating agency's practices and procedures for managing conflicts of interest and for assuring the transparency and quality of the rating process. Given the global scope of some credit rating agencies, the oversight framework should be consistent across jurisdictions with appropriate sharing of**

information between national authorities responsible for the oversight of credit rating agencies.

- **Responsibility**: National authorities.
- **Timeline**: To be completed within 2 years.
- **Monitoring:** by IOSCO and IMF-WB (through FSAP and Article IV).

4.1.3 Private Pools of Capital

While the benefits of hedge fund activity to the functioning of financial markets have been recognised, questions have been raised about the comparatively limited extent to which hedge fund managers and funds are subject to direct oversight. Concerns expressed relate, in particular, to the risks that their leverage and short-term funding represent for the stability of the financial system; and to a perceived lack of transparency of hedge funds *vis-à-vis* regulators and other financial market actors. Recently, there have also been concerns about the abusive use of short selling by hedge funds as well as some internal processes, in particular the manner in which hedge funds manage their risks, value their asset portfolios and avoid potential conflicts of interest.

Action Item: Private sector bodies that have already developed best practices for private pools of capital and/or hedge funds should bring forward proposals for a set of unified best practices. Finance Ministers should assess the adequacy of these proposals, drawing upon the analysis of regulators, the expanded FSF, and other relevant bodies. (For immediate action by March 31, 2009).

Process for Taking Forward the Leaders' Action Item

In 2007, the FSF called on the hedge fund industry to develop a code of best practices in the context of an update to its report on highly leveraged institutions. In response, two hedge fund associations, the Hedge Fund Standards Board in the U.K. and the Asset Managers' Committee in the U.S., have prepared separate codes of good practice for the industry. Additional standards have been developed by the Alternative Investment Management Association. Work is now underway amongst these private bodies to produce a single summary standards document. When this becomes available, the FSF and IOSCO will assess and comment on the adequacy of these proposals.

Working Group Assessment

Working Group members expressed concerns that some hedge funds – or groups of hedge funds – may generate systemic risk and impose externalities on the financial system.

There is some form of oversight over hedge funds in most G20 jurisdictions. First, the management companies, or advisors, of these funds may be required to register in order to do business in a jurisdiction. Second, regulators may be able to monitor the linkages between hedge funds and regulated institutions where there is a prime broker relationship, and thereby have some indirect oversight on the exposures and risk management practices with respect to the potential impact of hedge funds on systemically important institutions. Third, the activities of hedge funds on regulated markets are subject to the oversight of the market conduct authorities responsible for regulating these markets.

Given the global scope of activity by hedge funds from non-G20 jurisdictions, there are differing views on the extent to which these current arrangements need to be complemented by deepening of direct regulatory oversight of hedge funds, accompanied by some global or international capacity to aggregate information on financial system exposures to hedge funds.

There is a consensus within the Working Group that authorities need better information on the structure and activities of hedge funds, as well as on the risks they are exposed to, in order to assess whether hedge funds should be subject to a higher degree of oversight or regulation. There is also a consensus on the importance of achieving a coordinated policy response internationally.

Recommendations made by the Working Group to enhance the perimeter of the regulatory framework (see section 4.1.1, recommendations 5 through 8) address the need for national authorities to gather better information on all material financial institutions, including hedge funds, in order to determine the appropriate degree of regulation or oversight, commensurate with the risk posed. Recommendation 5 addresses the need to enhance the oversight and regulation of hedge funds as appropriate, depending on risks revealed by the analysis of the information obtained.

In order to help operationalise these recommendations for hedge funds, the Working Group is recommending they or their managers register with financial authorities and disclose appropriate information on the risks they pose. The data collected would likely include the size, investment style, leverage and performance of the fund along with its participation in certain systemically important markets. In addition, since one mechanism through which the failure of a systemically important hedge fund or cluster of hedge funds would be transmitted to the broader financial system – and potentially the real economy - is through its counterparties, it would be appropriate for regulators to develop and monitor common metrics to assess the significant exposures of counterparties, including prime brokers for hedge funds.

Global fora, such as IOSCO and the FSF, allow for global discussion of issues related to hedge funds and for coordinating possible policy responses.

While some Working Group members favoured a stronger recommendation on the regulation of hedge funds, there was common ground that authorities required information to assess the risks they pose and the need to regulate them if they are systemic. They recognised that systemic importance can change over time, and that hedge funds are at different stages of development across the G20.

Recommendation 10: **Private pools of capital, including hedge funds, can be a source of risk owing to their combined size in the market, their use of leverage and maturity mismatches, and their connectedness with other parts of the financial system. They or their managers should therefore be required to register with financial authorities and disclose**

appropriate information to assess the risks they pose.

- **Responsibility**: National Authorities.
- **Timeline**: To be implemented within 2 years.
- **Monitoring:** Expanded FSF.

4.1.4 Transparent Assessment of Regulatory Regimes

The Financial Sector Assessment Program aims to promote the soundness of financial systems through evaluations supported by experts from a range of national agencies and standard-setting bodies with the objectives of identifying the strengths and vulnerabilities of a country's financial system; determining how key sources of risk are being managed; ascertaining the sector's developmental and technical assistance needs; and helping prioritise policy responses. As such, this program represents a useful tool for enhancing the regulatory framework.

Action Item: To the extent countries or regions have not already done so, each country or region pledges to review and report on the structure and principles of its regulatory system to ensure it is compatible with a modern and increasingly globalised financial system. To this end, all G-20 members commit to undertake a Financial Sector Assessment Program (FSAP) report and support the transparent assessments of countries' national regulatory systems. (For action in the medium-term).

Process for Taking Forward the Leaders' Action Item

Fifteen member countries of the G20 have undertaken a FSAP assessment.

Working Group Assessment

The IMF and the World Bank are continuing to enhance the analytical framework for financial sector assessments. For instance, they are focusing more on systemic linkages and dynamics, and are taking a more systematic approach to stability and developmental assessments to enhance their comparability across countries.

Recent assessments for advanced economies have focused mainly on evaluating the risks of exposure to US subprime-related products. More broadly, they focused on the risk of external contagion, as well as cross-border crisis management.

Assessments in emerging market countries have focused on evaluating resilience to a range of possible shocks that could be triggered as a consequence of the unfolding crisis; for example, stress-testing scenarios where external sources of liquidity suddenly dry up. In addition, the assessment examines crisis management frameworks and, in countries where foreign banks predominate, cross-border cooperation arrangements among host and home country supervisors.

Outside the FSAP process, it is possible for jurisdictions to undertake self-assessments or assisted assessments to diagnose weaknesses in their systems and identify remedial actions. For example, India has recently undertaken such a self-assessment. IOSCO and the IAIS have developed self-assessment frameworks that can be used to identify areas for enhancement in preparing for the FSAP. To ensure objective and appropriate assessments, the appropriate self-assessment tools and sufficient methodology for assessments should be developed by international financial standard-setting bodies (IOSCO, IAIS, CPSS and BCBS) in cooperation with the IMF and the World Bank.

IOSCO and the IAIS encourage countries conducting self-assessments to obtain assistance from independent experts to develop action plans for addressing gaps in the implementation of global standards. They also facilitate this process. For instance, IOSCO recently conducted a workshop to train assessors to be able to undertake peer reviews of these self-assessments.

The Working Group recommends that Leaders reiterate their commitment made in Washington to undertake an FSAP and to make it public. The IMF and the WB should prepare a plan and timetable of completed and upcoming assessments by the Fall of 2009. Periodic self-assessments of regulatory frameworks should also be undertaken and these should be based on internationally agreed methodologies and tools. These actions would allow for a monitoring of progress on improvements to transparency and to compliance with international standards and regulations.

FSAPs should also be used to monitor consistency in regulatory frameworks and the perimeter of regulation. The basis upon which countries are assessed should be expanded to include macroprudential oversight and the regulatory oversight of the structure of compensation schemes at financial institutions.

Given the increasing globalisation of the financial system, G20 Leaders should also encourage non-G20 countries to take similar steps to assess the strength of their national financial systems.

Recommendation 11: **All G20 members should commit to undertake a Financial Sector Assessment Program (FSAP) report and to publish its conclusions. National authorities may also periodically undertake a self-assessment of their regulatory frameworks based on internationally agreed methodologies and tools.**

To improve the FSAP process, the basis upon which countries are assessed should be expanded to encompass macroprudential oversight, the scope of regulation, and supervisory oversight of the influence of the structure of compensation schemes at financial institutions on risk-taking.

- **Responsibility**: Finance Ministries, IMF/WB.
- **Timeline**: G20 countries that have not undertaken an FSAP should immediately commit to do so, in consultation with the IMF/WB; Countries with systemically important financial systems should be subject to a self-assessment every 5 years, and FSAP Updates in consultation with IMF/WB.
- **Monitoring:** IMF/WB.

4.2 Procyclicality

The crisis has raised questions whether certain aspects of accounting frameworks and capital regulation increase the natural tendency of the financial system to amplify business cycles. This tendency is particularly disruptive and apparent during an economic downturn or when the financial system is facing strains. There is a lack of incentives for the financial system to lean against rapid growth of credit and asset values during benign economic conditions. This would not only mitigate the build-up of imbalances that give rise to systemic risk but, by building up prudential buffers during the benign phase of an economic cycle, when it is easier and cheaper to do so, institutions would enter more challenging times from a stronger position.

Action Item: The IMF, expanded FSF, and other regulators and bodies should develop recommendations to mitigate pro-cyclicality, including the review of how valuation and leverage, bank capital, executive compensation, and provisioning practices may exacerbate cyclical trends. (For immediate action by March 31, 2009).

Process for Taking Forward the Leaders' Action Item

The FSF and its members have formed three workstreams to study the forces that contribute to procyclicality in the financial system and examine possible options for mitigating them, drawing on a framework paper prepared by the BIS. These workstreams have focused on (i) bank capital, (ii) loan loss provisioning, and (iii) the interaction of valuation and leverage practices. The FSF has also formed a workstream to develop sound practice principles for ensuring that compensation schemes do not provide incentives for excessive risk-taking. This work is discussed in section 4.4.1.

- *Bank capital*: A Joint FSF-BCBS workstream is examining the impact of Basel II on the cyclicality of capital requirements and developing ways to mitigate the risk of regulatory capital amplifying shocks to the financial sector and the real economy going forward. The workstream is developing recommendations on changes to the regulatory capital framework so that it raises over time the quality and level of capital in the banking system during strong economic conditions that can be drawn down during periods of economic and financial stress; revision to the market risk framework of Basel II to reduce the reliance on cyclical VaR-based capital estimates; supplementing the risk-based capital framework with a simple, transparent measure to help contain the build-up of leverage in the banking system; and recommending that supervisors use stress tests as part of the Pillar 2 supervisory review process to validate the adequacy of banks' capital buffers above the regulatory minimum during periods of rapid growth.

- *Loan loss provisioning*: A workstream is analysing the potential contribution of loan loss provisioning to procyclicality with a view to recommending that accounting standard-setters consider enhancements to loan loss provisioning practices and standards. Recommendations under consideration include that accounting standards-setters issue a statement that reiterates the required use of sound management judgement as part of existing loan loss provisioning standards; and that they reconsider their current loan loss provisioning requirements and related disclosures on an expedited basis to reflect a broader range of available credit information, including by analysing expected loss and through-the-cycle provisioning approaches. Other recommendations under consideration include reviewing and eliminating constraints in Basel II that may limit banks from maintaining robust loan loss provisions; and reviewing and enhancing the Pillar 3 disclosures about loan loss provisioning practices and related credit risk and credit losses in loan portfolios.

- *Valuation and Leverage*: A joint FSF-CGFS workstream is analysing the significance of the link between valuation and leverage as a source of procyclicality. It is considering the use of quantitative indicators and/or constraints on leverage and margins as macroprudential tools for supervisors; a research program to measure funding and liquidity risk attached to maturity transformation and based on its findings, which information should be made available to supervisors on leverage and on maturity mismatches on a system-wide basis; the use of valuation reserves or adjustments be considered for fair valued financial instruments when data or modelling needed to support their valuation is weak; and an examination of possible changes to relevant standards to dampen adverse dynamics potentially associated with fair value accounting.

The FSF will discuss reports from these workstreams in mid-March.

Working Group Assessment

This action item has been achieved. The Working Group now proposes that recommendations from the FSF workstreams be assessed by the BCBS, accounting standard-setters and other authorities, taking into consideration practical issues related to their use and implementation, and that regulation and standards be enhanced over time to mitigate procyclicality. The Working Group proposes that a roadmap be prepared for the Fall of 2009, and that annual updates be provided to the expanded FSF afterwards.

The assessment of these recommendations should include an analysis of the interaction between measures to mitigate procyclicality and the objective should be to attain a comprehensive strategy that achieves the best overall outcome. In the near-term, consideration could be given to options that do not require a major reworking of accounting standards for provisions and impairment. The roadmap to address pro-cyclicality should also take into account the need for training and for technical assistance at institutions and regulators, with particular attention to those in emerging market economies.

Measures that are simple to understand and to implement would be preferable to more complex ones, and policy tools that are based on rules are attractive. However, as the recent crisis made plain, rules-based tools can be arbitraged, so the informed judgment of regulators will also be an important part of efforts to dampen procyclicality.

Although there is consensus on objectives and willingness to collaborate going forward, it has proven difficult to fully develop recommendations on the implementation of provisioning techniques that are more forward-looking or less procyclical. Accounting standards for provisioning of loan losses through the income statement require evidence, coupled with management judgment, that there is a deterioration in the loan portfolio. Through-the-cycle or less procyclical provisioning, where provisions are increased in good times for the possibility that the environment may deteriorate in the future is not consistent with accounting standards which strive to be neutral through the cycle, unless these provisions represent credit losses that are truly inherent in and accumulating in loan portfolios at balance sheet date. While accounting standards-setters agree in principle that such through-the-cycle provisioning practices would be desirable from a financial stability perspective, they argue that provisions that do not reflect incurred credit losses would reduce the integrity of financial statements, whose function is to present an objective and accurate representation of the financial situation of an entity.

However, there is also a view that a key lesson from the current crisis is that accounting standards in fact have not succeeded in accurately representing the financial situation of entities, as they did not take into account available information on risks. While collaboration between supervisors and accountants is definitely important, this has been ongoing and in order for it to deliver, there must be a realisation that accounting standards need to be strengthened to better reflect risks through the cycle. Mitigating the procyclicality arising from provisioning practices requires that the BCBS and accounting standards-setters collaborate to identify solutions that are compatible with their complementary objectives of enhancing the stability of the financial sector and promoting transparency of economic results in financial reports, respectively.

Recommendation 12 : **The FSF and other bodies, particularly the BCBS, should develop and implement supervisory and regulatory approaches to mitigate procyclicality in the financial system by promoting the build-up of capital buffers during the economic expansion and by dampening the adverse interaction between fair valuation, leverage and maturity mismatches in times of stress.**

- **Responsibility**: FSF and member bodies, BCBS, CGFS.
- **Timeline for development**: Strategic plan by Fall 2009, with further progress reported by year end.
- **Timeline for implementation**: As appropriate, with discussion with sector and coordination by the expanded FSF.
- **Monitoring:** Expanded FSF.

Recommendation 13: **Accounting standard-setters should strengthen accounting recognition of loan loss provisions by considering alternative approaches for recognising and measuring loan losses that incorporate a broader range of available credit information. They should also examine changes to relevant standards to dampen adverse dynamics associated with fair value accounting, including improvements to valuations**

when data or modelling is weak. Accounting standards-setters and prudential supervisors should work together to identify solutions that are consistent with the complementary objectives of promoting the stability of the financial sector and of providing transparency of economic results in financial reports.

- **Responsibility**: Accounting standards setters, BCBS.
- **Timeline for development**: Strategic plan by Fall 2009.
- **Timeline for implementation**: As appropriate, with discussion with sector and coordination by the expanded FSF.
- **Monitoring:** Expanded FSF.

4.3 Prudential Oversight

This section addresses actions to enhance prudential oversight with respect to capital and liquidity, in addition to the need for a sound infrastructure for OTC derivatives that would reduce their potential systemic risk.

4.3.1 Capital

The crisis has shown that a strong capital base is critical to bank resilience, and broader financial stability, by underscoring a number of weaknesses in capital adequacy, primarily with respect to banking institutions. First, the Basel II framework did not properly capture the risk associated with certain assets, in particular complex credit products in the *trading book*. These products, to date, have produced the majority of the losses at banks, as well as complex securitisations and contingent exposures to off-balance sheet vehicles. Second, the minimum level of capital, as well as its quality, failed to support the banks' risk exposures going into the crisis. Third, the cyclicality of capital buffers has amplified the economic downturn (see section 4.2). Fourth, discrepancies across financial institutions in measures of capital make solvency ratios difficult to compare.

Action Item: Authorities should ensure that financial institutions maintain adequate capital in amounts necessary to sustain confidence. International standard-setters should set out strengthened capital requirements for banks' structured credit and securitisation activities. (For immediate action by March 31, 2009).

Action Item: Definitions of capital should be harmonised in order to achieve consistent measures of capital and capital adequacy. (For action in the medium-term).

Process for Taking Forward the Leaders' Action Item

The Basel Committee on Banking Supervision has announced a package of measures to strengthen the Basel II capital framework in order to address weaknesses revealed by the crisis in the banking sector, and additional measures are being developed. These measures form part of a comprehensive strategy to strengthen the regulation, supervision and risk management of internationally active banks.

In addition to mitigating the influence of the capital framework on risk-taking and the economic cycle (see section 4.2), two key building blocks of this strategy are:

- *Strengthening the risk capture of the Basel II framework*: In January 2009, the BCBS issued for consultation proposals to strengthen the risk capture of Basel II framework. These include enhancements to the capital treatment of securitisations, off-balance sheet exposures, and trading book activities.
- *Enhancing the consistency and quality of the Tier 1 capital base*: The BCBS is considering various measures to promote the quality of capital, in particular, ordinary shares and reserves in the Tier 1 capital base and enhancing the global consistency of minimum capital requirements. The definition of capital is being reviewed as part of this work in order to achieve global consistency. It will be a medium-term project, however, as many jurisdictions are currently using new types of capital instruments to inject public money and strengthen the capital base of their banking system. The BCBS will review recommendations to achieve this at its March 2009 meeting.

These two building blocks are being considered in conjunction with a third strategic priority, mitigating procyclicality, which is addressed in section 4.2. The BCBS will consider preliminary recommendations to mitigate procyclicality at its March 2009 meeting, along with recommendations for enhancing the consistency and quality of capital.

Further initiatives of the BCBS to enhance the capital framework that are less advanced include:

- Reviewing the treatment of external ratings under the framework and whether there are any adverse incentives that should be mitigated (at the July 2009 BCBS meeting);
- Strengthening the treatment of counterparty credit risk under the three pillars of Basel II (at the December 2009 BCBS meeting); and
- Evaluating concrete ways to supplement the Basel II risk-based capital framework with a simple, transparent measure, for example to help contain the build-up of leverage over the cycle.

The BCBS plans to develop recommendations in these areas by the end of 2009.

In the insurance sector, the IAIS is developing a comprehensive and cohesive set of supervisory papers which will take into account issues that have emerged from the financial crisis with respect to the assesment of the solvency of insurance companies. For instance, standards and guidance on the structure of regulatory capital requirements and on the use of internal models and enterprise risk management for solvency purposes which have been completed are undergoing review to address issues which have emerged from the financial crisis. Other solvency supervisory papers taking into account recent events are under development or review, including standards and guidance on capital resources, valuation for solvency purposes and investment and asset-liability management. The IAIS will continue to work with its members to facilitate proper implementation of these standards to enhance resilience of the solvency position of insurers.

Working Group Assessment

The capital adequacy framework for the banking sector has been enhanced in response to the action items above. For instance, enhancements to the risk capture of the Basel II framework have established stronger capital requirements for banks' structured credit and securitisation activities, and the medium-term action item of harmonising definitions of capital is being addressed in conjunction with work to improve the quality of capital. Further, the strategic plan of the BCBS includes enhancements to the capital adequacy framework not part of the Washington Action Plan.

A strong, high quality capital base is critical for banks to be able to absorb losses and maintain lending during periods of severe economic and financial stress. Based on lessons drawn from recent developments, authorities should ensure that financial institutions maintain strong prudential buffers while accommodating a need for flexibility to raise capital in difficult market conditions.

The Working Group was of the view that the financial system had entered the current crisis undercapitalised and the international standard for the minimum level of capital for banks should be reviewed. It recommends that higher buffers above a minimum level of capital are needed for the system once the current crisis has abated and that the quality and global consistency of capital should be enhanced.

It is important for G20 Leaders to send a clear message that supervisors will be extremely cautious about adding to the already severe tension in the marketplace, and therefore will not consider raising capital buffers above minimum capital ratios during the crisis. Any enhancements will be introduced in a manner that promotes the near-term resilience of the banking sector and its ability to provide credit to the economy, and would be communicated to markets at an appropriate time to mitigate the countercyclical effects of any proposed change in capital levels. Timelines for implementation may vary across the G20 depending on the technical capabilities of each country's institutions and regulators.

Recognising the need to also mitigate procyclicality (see section 4.2), high quality capital should serve as a buffer which would be built-up during periods of rapid earnings growth and be drawn down in a downturn.

The Working Group also recommends that G20 Leaders support the progressive adoption of the Basel II capital framework across the G20 once strains in markets have abated. The move to the Basel II framework improves risk capture and better handles periods of rapid innovation and the new products that such periods produce. Moreover, Basel II captures off-balance-sheet vehicles, ensuring they are subject to regulatory capital requirements. Timelines for implementation may vary across the G20 depending on the level of technical capabilities of each country's regulators and institutions (see section 5.2 for more on technical assistance).

Nonetheless, in the context of rapid financial innovation and risk-based regulatory capital requirements, a well constructed non-risk-based capital measure can at least partially address the problem of modelling deficiencies for the advanced approaches and ensure a minimum level of capital is retained in the banking system. The case for a complementary, non-risk-based capital measure as a regulatory "back-stop" to the Basel II risk-based capital requirement should be examined by the BCBS.

The Working Group welcomes efforts by the IAIS to address issues that have emerged from the crisis with respect to the solvency of insurance companies. This workplan should take into consideration the need for group-wide solvency requirements that take into account all the subsidiaries in internationally active insurance groups.

Recommendation 14: **Capital should serve as an effective buffer to absorb losses over the cycle, so as to protect both the solvency of financial institutions in the event of losses, and their ability to lend.**

In the near-term, capital buffers above required minimums should be allowed to decline in response to deteriorating economic conditions and credit quality, and urgent consideration should be given to measures that would facilitate access to additional private sector capital in the downturn.

Once conditions in the financial system have recovered, the adequacy of the international standard for the minimum level of capital for banks should be reviewed and the quality and global consistency of capital should be enhanced. In addition, capital buffers above minimum requirements and loan-loss provisions should be built-up in good times in order to enhance the ability of regulated financial institutions to withstand large shocks.

In this context, the BCBS should develop standards to promote the build-up of capital buffers in good times that can be drawn down in periods of stress. The BCBS should also complement risk-based capital measures with simpler indicators to monitor the build-up of leverage.

The international standard for the minimum level of capital should remain unchanged until the financial system has recovered.

- **Responsibility**: BCBS.
- **Timeline**: The review of international standards related to capital buffers and the quality and consistency of capital will be discussed at periodic BCBS meetings and the transition will be completed as appropriate, in consultation with the industry and with coordination by the expanded FSF.
- **Monitoring**: Expanded FSF.

Recommendation 15: **G20 Leaders should support the progressive adoption of the Basel II capital framework, which will continue to be improved on an ongoing basis, across the G20.**

- **Responsibility**: Prudential supervisors, BCBS.
- **Timeline**: The transition to Basel II is to be completed as appropriate, in consultation with the industry and with coordination by the expanded FSF.
- **Monitoring**: IMF-WB (through FSAP and Article IV), BCBS.

4.3.2 Liquidity

Recent events have highlighted a number of limitations in the lines of defense of financial institutions during a period of severe liquidity strain. Many of the actions by which financial institutions can address liquidity pressures, for example by selling illiquid assets for cash or by competing more aggressively for retail deposits, suffer when liquidity pressures are widespread and many institutions attempt to use the same funding strategies.

The increasing complexity of financial instruments also creates challenges for managing liquidity. The inclusion of options in financial instruments (*e.g.*, credit rating downgrade clauses) and the fact that some instruments have short track records or do not trade actively, increases the difficulty in assessing the behaviour of these instruments during periods of stress and consequently, for managing liquidity.

Another weakness revealed by the crisis is that liquidity, which some large global financial institutions are increasingly managing in a centralised manner across borders, may not be fully transferable across borders in times of stress, as national supervisors and domestic crisis management policies may require that sufficient liquidity be held for local operations.

Action Item: Regulators should develop and implement procedures to ensure that financial firms implement policies to better manage liquidity risk, including by creating strong liquidity cushions. (For immediate action by March 31, 2009).

Action Item: Supervisors and central banks should develop robust and internationally consistent approaches for liquidity supervision of, and central bank liquidity operations for, cross-border banks. (For action in the medium-term).

Process for Taking Forward the Leaders' Action Item

Standards for liquidity management in the banking sector will be materially raised by the BCBS' *Principles for Sound Liquidity Risk Management and Supervision*, published in September 2008. The foundation for this guidance is the fundamental principle that banks should establish a robust framework for managing liquidity risk, and that they maintain sufficient liquidity, including a cushion of unencumbered, high quality liquid assets, to withstand a range of stress events, including those involving the loss or impairment of both unsecured and secured funding sources. This guidance also clarifies expectations that supervisors should assess the adequacy of both a bank's liquidity risk management framework and its liquidity position, and should take prompt action if a bank is deficient in either area in order to protect depositors and limit potential damage to the financial system.

These guidelines include a principle calling for cooperation and information sharing among supervisors and other stakeholders, such as central banks, for the liquidity supervision of cross-border banks. This principle provides examples of firm-specific stress situations that should require closer and more frequent communication among stakeholders.

The BCBS Working Group on Liquidity has initiated work to promote greater consistency of liquidity regulation and supervision for cross-border banking groups, including by clarifying the roles of, and improving coordination between, supervisors in home and host countries. Regulatory cooperation in the oversight of cross-border institutions is addressed by G20 Working Group 2. Enhancing liquidity supervision includes an evaluation of tools, metrics and benchmarks that supervisors can use to assess the resilience of banks' liquidity cushions and constrain any weakening in liquidity maturity profiles, diversity of funding sources, and stress-testing practices. This will be discussed at the July 2009 BCBS meeting.

In addition, the Committee on the Global Financial System (CGFS) released a report in July 2008 to enhance the operational frameworks for the provision of liquidity by central banks, including cross-border banks. This report recommends that central banks enhance their capacity to address problems in the international distribution of liquidity by establishing or maintaining standing swap lines among themselves, and by accepting assets denominated in a foreign currency or obligations booked abroad as collateral. Moreover, the CPSS prepared a report on operational arrangements that central banks could make, on an individual or coordinated basis, to strengthen their operational readiness to cope with a wide range of scenarios under which they might seek to provide cross-border liquidity. Many central banks across the G20 have begun implementing these recommendations.

Although recent events did not reveal weaknesses with respect to the liquidity management in the insurance sector, the IAIS has expanded its planned review of solvency supervisory papers to take into account this issue. Insurance firms have not faced the same liquidity pressures as other types of financial institutions in part because they tend to have longer-term financial obligations.

Working Group Assessment

The BCBS guidance establishes guidelines for the management of liquidity risk, including the use of cushions of unencumbered, high quality assets to withstand a range of stress events. This adequately addresses the Washington action item to this effect, as the weaknesses that were revealed by the crisis with respect to liquidity pertained mainly to the banking sector. The BCBS will conduct a comprehensive review of whether its standards for liquidity have been effectively implemented in the second half of 2009.

The Working Group proposes that Leaders support the implementation of these principles. In order to improve liquidity resilience against future crises, financial institutions will need to hold increased levels of stable core funding that is more likely to be stable across the economic cycle.

An effective global liquidity framework for managing liquidity in large, cross-border financial institutions should include internationally agreed levels of liquidity buffers, and should encourage an increase in the quality of their composition. Such a framework needs to be comprehensive and take into account liquidity needs for the overall institution.

Recommendation 16: **Prudential supervisors and central banks should deliver a global framework for promoting stronger liquidity buffers at banks, including cross-border institutions, to ensure that they can withstand prolonged periods of market and funding liquidity stress.**

In addition, the BCBS should enhance tools, metrics and benchmarks that supervisors can use to assess the resilience of banks' liquidity cushions and constrain any weakening in liquidity maturity profiles, diversity of funding sources, and stress-testing practices.

- **Responsibility**: Prudential supervisors, central banks, BCBS.
- **Timeline**: To be completed within 2 years.
- **Monitoring:** Expanded FSF.

4.3.3 Infrastructure for OTC Derivatives

The market for credit default swaps (CDS) operates on a bilateral, over-the-counter (OTC) basis and has grown to many times the size of the market for the underlying credit instruments. In light of problems involving some large players in this market, attention has focused on the systemic risks posed by CDS. For instance, the inability of certain protection sellers to meet their CDS obligations has raised questions about the potentially destabilising effects of the CDS market on other markets. Also, the deterioration of credit markets generally has increased the likelihood of CDS payouts, thus prompting protection buyers to seek additional margin from protection sellers. These margin calls have strained the balance sheets of protection sellers, and may have forced asset sales that contributed to put downward pressure on cash securities markets.

Action Item: Supervisors and regulators, building on the imminent launch of central counterparty services for credit default swaps (CDS) in some countries, should: speed efforts to reduce the systemic risks of CDS and over-the-counter (OTC) derivatives transactions; insist that market participants support exchange traded or electronic trading platforms for CDS contracts; expand OTC derivatives market transparency; and ensure that the infrastructure for OTC derivatives can support growing volumes. (For immediate action by March 31, 2009).

Process for Taking Forward the Leaders' Action Item

A group of global prudential supervisors is working with the industry to strengthen the infrastructure for OTC credit derivatives. The top near-term priority is to oversee the implementation of central counterparties for CDS.

Representatives from regulatory agencies with direct authority over one or more of the existing or proposed CDS central counterparties (including those in the U.S., U.K., Germany and the European Union) and some central banks (including the ECB) have begun discussing possible information sharing arrangements and other methods of cooperation within the regulatory community. The primary objectives of this effort include the application of consistent standards and the promotion of consistent public policy objectives and oversight approaches for all

CDS central counterparties, as well as logistical support in carrying out oversight responsibilities.

In the U.S., the President's Working Group announced in November 2008 a broader set of policy objectives to guide efforts aimed at addressing the full range of challenges associated with OTC derivatives, with a primary focus on CDS. Policy objectives include:

- Public reporting of prices, trading volumes and aggregate open interest;
- The development by supervisors of consistent policy standards and risk management expectations;
- The registration of all transactions in credit default swaps not cleared through a CCP in central contract repositories;
- Support for trading on exchanges or other centralised trading platforms for standardised CDS contracts; and
- A review by regulatory agencies to determine if they have adequate enforcement authority to police against fraud and market manipulation (with proposals for changes in authority where warranted).

The creation of a central counterparty for OTC credit derivatives is also a priority in Europe, where the European Commission has established a Working Group composed of market participants, national regulators and the European Central Bank to deliver progress in this area. As a result of discussions within this EC Working Group, a group of derivatives dealers and the European Banking Federation have committed to the use of at least one central counterparty established, regulated and supervised in the EU to clear CCP-eligible CDS on European reference entities and indices based on these entities. These associations have also committed to work closely with infrastructure providers, regulators and the European authorities including the European Central Bank in resolving outstanding technical, regulatory, legal and practical issues. These efforts mirror the engagement the industry has made in other jurisdictions.

At the same time, following a request from EU Member States, the Committee of European Securities Regulators and the European System of Central Banks are in the process of revising their recommendations for CCPs in order to ensure that they are appropriate for derivatives markets, particularly CDS. Furthermore, the European Commission is also examining whether additional regulatory requirements might be necessary to enhance transparency and deal with any systemic risks in the area of derivatives.

Working Group Assessment

The launch of central counterparties (CCPs) for OTC credit derivatives is an important step towards reducing systemic risk. Clearing and settling CDS contracts through a central counterparty means that the two counterparties to a CDS are no longer exposed to each other's credit risk. Hence, well-managed, and properly regulated CCP help contain the failure of a major market participant. Central counterparties also contribute to enhancing market efficiency by helping ensure that eligible trades are cleared and settled in a timely manner, thereby reducing the operational risks associated with significant volumes of unconfirmed and failed trades. Furthermore, the development of a CCP facilitates greater market transparency, including the reporting of prices for CDS, trading volumes, and aggregate open interest. The availability of pricing information can improve the fairness, efficiency, and competitiveness of markets — all of which enhance investor protection and facilitate capital formation. The degree of transparency, of course, depends on the extent of participation in the CCP, which is not mandatory. The industry's commitment to clear CDS through central counterparties should ensure a substantial increase in the transparency and safety of the market for these contracts.

Prudential supervisors have been collaborating with market participants to increase market transparency. One major step in this initiative is the publication of weekly aggregate market data from a central repository. Regulators are working to identify a consistent set of data that central counterparties should make available to the public on a regular basis, including market prices, market depth and open interest.

The Working Group supports central counterparty clearing for other types of derivatives trading over-the-counter. As such, it recommends that the financial industry take the necessary steps to clear OTC transactions in derivatives, including for credit derivatives, through central counterparties in order to reduce systemic risk. If needed, some incentives may be provided by national authorities, for example, by taking a higher capital charge for transactions not cleared through central counterparties.

In order to foster transparency and to promote the use of CCP and of exchange trading for credit derivatives, public authorities should also encourage the financial industry to standardise contracts and to use data repository for the remaining non-standardised contracts and promote fair and open access to central counterparty services.

In addition, in order to ensure that the infrastructure for centralised clearing and settlements meets high prudential standards, the Working Group recommends that a review of the CPSS-IOSCO Recommendations for Central Counterparties and the accompanying guidance be undertaken, and that prudential supervisors apply these (possibly enhanced) standards.

In order to mitigate systemic risk resulting from counterparty credit risk, in the short run, it would be beneficial for there to be a competitive environment for central counterparties without imposing regulatory requirements that unduly fragment the market.

Recommendation 17: **Financial institutions should continue work to strengthen the infrastructure supporting OTC derivatives markets. In the case of credit derivatives, this includes standardising contracts to facilitate their clearing through a central counterparty. National authorities should enhance incentives as needed for the use of central counterparties to clear OTC credit derivatives.**

- **Responsibility**: Financial institutions, prudential supervisors and other authorities, central banks.

- **Timeline**: To be completed within two years; Industry to prepare an action plan on standardisation in the Fall 2009.
- **Monitoring**: Prudential supervisors and expanded FSF.

Recommendation 18: **Central counterparties should be subject to transparent and effective oversight by prudential supervisors and other relevant authorities, including central banks, and meet high standards in terms of risk management, operational arrangements, default procedures, fair access and transparency. The CPSS and IOSCO should review their experiences in applying their recommendations for central counterparties to derivatives.**

- **Responsibility**: Prudential supervisors, central banks, CPSS, IOSCO.
- **Timeline**: To be completed within 2 years.
- **Monitoring:** Expanded FSF.

4.4 Compensation Schemes and Risk Management

4.4.1 Compensation Schemes

General consensus has emerged that compensation practices at financial institutions are one factor, among many, that contributed to the financial crisis. For instance, bonus payments were tied to short-term profits without adequate regard to the longer-term risks they imposed on their firms, and this misalignment of incentives amplified the risk-taking that severely threatened the global financial system.

Action Item: Financial institutions should have clear internal incentives to promote stability, and action needs to be taken, through voluntary effort or regulatory action, to avoid compensation schemes which reward excessive short-term returns or risk-taking. (For immediate action by March 31, 2009).

Process for Taking Forward the Leaders' Action Item

To better understand the forces at play, an FSF Working Group reviewed relevant reports and analyses by other bodies and experts, engaged in discussions with experts from the financial industry, the public sector and academia, and investigated industry practice by conducting a global survey of practice at major financial firms. It also reviewed the results of a number of surveys commissioned by others.

In its assessment of compensation practices, the FSF has observed that too little attention was given to links between compensation and risks. In particular, the FSF observed that:

- Most financial institutions viewed compensation systems as being unrelated to risk management and risk governance; and
- Financial supervisory and regulatory authorities did not focus on the implications for risk of compensation systems.

In this context, it is clear that changes to existing practices are necessary on several fronts to ensure that perverse compensation incentives do not induce excessive risk-taking in financial institutions in the future. As such, the FSF developed Principles for Sound Compensation Practices for financial institutions to prevent incentives towards excessive risk-taking that may arise from compensation schemes. The FSF formulated nine principles to achieve more effective governance in setting and in monitoring compensation within financial institutions, to better align compensation practices with prudent risk-taking, and to ensure effective supervisory oversight and improve disclosure practices.

Additional initiatives undertaken to guide the adoption of improved compensation practices in the financial sector include the consultation guidance on Basel II Pillar 2 to enhance sound corporate governance and risk management, which will help reinforce adherence to sound compensation practices.

In addition, the OECD will explore, in the context of the OECD Principles of Corporate Governance, how compensation practices at both the management and operating levels should be amended to achieve sounder long-term strategies that better address the interests of the institution, its shareholders and other stakeholders.

Working Group Assessment

In order to build on the analysis of remuneration practices that was conducted and on the sound practice principles that were developed, the Working Group recommends that Boards of Directors and the management of financial institutions take appropriate actions to structure compensation in a manner consistent with the sound practice principles developed by the FSF.

A number of financial institutions have announced changes to their compensation structures. However, it is important that reforms in this regard be done on an industry-wide basis, so that improved risk management and compensation practices by some systemically important firms are not undermined by the unsound practices of others.

Since competitive pressures, a perceived first-mover disadvantage, or other factors could hinder the ability of financial institutions to effectively address deficiencies in compensation schemes, the Working Group views national authorities' supervisory and regulatory infrastructure as the appropriate vehicle for promoting compliance with sound compensation practices. In general, it is not intended, however, that national authorities or prudential supervisors would prescribe particular designs or levels of compensation. Since financial firms differ in goals, activities and culture, and since there is also a wide range of employees within a firm, any compensation system must work in concert with other management tools to promote prudent risk-taking.

Recommendation 19: **Large financial institutions should ensure that their compensation frameworks are consistent with their long-term goals and with prudent risk-taking. As such, the Boards of Directors of financial institutions should set clear lines of responsibility and accountability throughout their organisations to ensure that the design and operation of its remuneration system supports the firm's goals, including its overall risk tolerance. Shareholders may have a role in this process. Boards should also ensure there are appropriate**

mechanisms for monitoring remuneration schemes.

- **Responsibility**: Boards of Directors of financial institutions.
- **Timeline**: Fall 2009.
- **Monitoring:** Prudential supervisors or other relevant national authorities.

Recommendation 20: **In order to promote incentives for prudent risk-taking, each financial institution must review its compensation framework to ensure it follows sound practice principles developed by the FSF. These include the need for remuneration systems to provide incentives consistent with the firm's long-term goals, to be adjusted for the risk taken by employees, and for the variable components of compensation to vary symmetrically according to performance.**

- **Responsibility**: Financial institutions.
- **Timeline**: Fall 2009.
- **Monitoring:** Prudential supervisors or other relevant national authorities.

Recommendation 21: **Prudential supervisors should enhance their oversight of compensation schemes by taking the design of remuneration systems into account when assessing risk management practices. The BCBS should more explicitly integrate this dimension in its guidance for the assessment of risk management practices by national prudential supervisors.**

- **Responsibility**: Prudential supervisors, BCBS.
- **Timeline**: Fall 2009.
- **Monitoring:** Expanded FSF.

4.4.2 Risk Management Practices

Shortcomings in risk management practices revealed by the current crisis reflect a failure to implement effective firm-wide risk management systems as well as a number of more technical limitations associated with risk management tools, including their inability to model severe financial shocks and the fact that most quantitative tools are backward looking. The many weaknesses in risk management practices that were revealed include the inability of financial institutions to adequately monitor risk concentrations across products and geographical areas, shortcomings in stress-testing and inappropriate practices for managing risks arising from structured products.

Action Item: Regulators should develop enhanced guidance to strengthen banks' risk management practices, in line with international best practices, and should encourage financial firms to re-examine their internal controls and implement strengthened policies for sound risk management. (For immediate action by March 31, 2009).

Process for Taking Forward the Leaders' Action Item

In the banking sector, the BCBS is enhancing guidance for supervisory oversight in a number of important risk management areas, using Pillar 2 of Basel II as a foundation. The focus of this guidance is on:

- Enhancing firm-wide risk oversight, risk management and internal controls;
- Managing more effectively specific risk areas such as firm-wide risk

concentrations, off-balance sheet exposures and associated reputational risks, securitisation exposures, valuations and liquidity risk; and

- Improving banks' stress-testing practices.

These enhancements were included as part of the Basel II consultative document issued in January 2009.

In addition to the BCBS guidance, supervisors from most G20 countries have published, or are in the process of publishing, supplementary guidance on a wide variety of areas in response to the crisis, including securitisation, risk concentrations, contingency planning and stress-testing.

The Senior Supervisors Group (SSG), a group of prudential supervisors, is undertaking an assessment of major institutions' strengths, weaknesses and gaps in relation to the recommendations for strengthened risk management practices that have been made in public and private sector reports during 2008 (*e.g.*, Financial Stability Forum, Senior Supervisors Group, U.S. President's Working Group, International Institute of Finance, Counterparty Risk Management Group III). A summary of the findings is expected in the Spring of 2009.

In the insurance sector, the IAIS is reviewing all existing and new supervisory papers to incorporate lessons drawn from the financial crisis. More specifically, the standards and guidance on asset-liability management and investment risk management are being updated to reinforce coverage on issues such as the use of stress-testing in identifying risks, including concentration and liquidity risk. An issues paper on corporate governance is also being developed as foundation for future supervisory papers on corporate governance. In addition, an IAIS standard on reinsurance and other forms of risk transfer is addressing the assessment of the appropriateness of the reinsurance cover, the risk management strategy of direct insurers, as well as the appropriate supervision of reinsurance companies.

Working Group Assessment

The Working Group welcomes the BCBS consultative document to address a wide range of weaknesses in risk management practices that played a significant role in causing and accelerating the crisis.

In addition to shortcomings with risk management tools and with the supervision of risk management practices, the global financial crisis has highlighted the failure of the Boards of Directors of many financial institutions in fostering an effective risk management culture in their organisations. It should be recognised that, first and foremost, it remains the responsibility of the private sector to take the lead in strengthening firm-wide risk management frameworks. Both management and the Board of Directors are responsible for putting in place adequate risk management and control systems.

Action Item: Supervisors should ensure that financial firms develop processes that provide for timely and comprehensive measurement of risk concentrations and large counterparty risk positions across products and geographies. (For immediate action by March 31, 2009).

Process for Taking Forward the Leaders' Action Item

The BCBS's Basel II consultative document issued in January 2009 includes enhanced Pillar 2 guidance on the assessment by management and supervisors of risk concentrations. The Committee's enhanced guidance sets clear expectations for Boards of Directors and senior management to set incentives across the firm to control risk exposures and concentrations in accordance with the firm's stated risk appetite. The guidance also sets supervisory expectations for capturing firm-wide risk concentrations arising from both on- and off-balance sheet exposures and securitisation activities. Generally, banks are expected to have in place effective internal policies, systems and controls to identify, measure, monitor, manage, control and mitigate their risk concentrations in a timely manner, and under various conditions, including stressed market situations.

Working Group Assessment

The BCBS guidance establishes processes that provide comprehensive measurement of concentration risk, ensure that banks have credit risk mitigation strategies and internal limits to risk concentrations and ensure that these risks should be assessed under a supervisory review process. This addresses the Washington action item in holding supervisors responsible for the due diligence of risk concentrations held by their financial institutions. The BCBS will begin a review of its existing guidance on sound practices for managing risk concentrations and large exposures later in 2009.

Action Item: The Basel Committee should study the need for and help develop firms' new stress-testing models, as appropriate. (For immediate action by March 31, 2009) Action Item: Firms should reassess their risk management models to guard against stress and report to supervisors on their efforts. (For immediate action by March 31, 2009).

Process for Taking Forward the Leaders' Action Item

The BCBS issued a consultative paper on principles for sound stress-testing practices and supervision in January 2009. This paper presents sound principles for the governance, design and implementation of stress-testing programmes at banks and addresses weaknesses in stress-testing exposed by the financial crisis.

Many Working Group members have indicated that the guidance from the BCBS will be used to help refine stress-testing practices in their countries. A number of Working Group members have also indicated plans to extend stress-testing activities as part of their supervisory framework in their countries, and some recommendations will be issued, following consultations, in the near-term.

In addition, the October 2008 follow-up report of the FSF urged private sector organisations that have recommended improvements to industry risk management practices to establish frameworks for rigorously monitoring and reporting on the timely implementation of these improvements. Implementation will be monitored by prudential supervisors and, in the case of banks, reinforced through

Pillar 2 reviews under the Basel II framework. The Institute of International Finance has prepared and distributed an assessment framework for financial institutions to use.

Working Group Assessment

Stress-testing is an ongoing process and the Working Group urges financial institutions to continuously improve their practices. Sound stress-testing also involves selecting appropriate scenarios, and the Working Group encourages financial institutions to pay particular attention to this, including in reflecting the important system-wide interactions between the various institutions, markets and instruments in the financial system. This would facilitate the development of risk mitigation or contingency plans across a range of stressed conditions

Stress-testing is an important tool to alert management to adverse unexpected outcomes related to a variety of risks, and it should be used as such. It is especially important after long periods of benign economic and financial conditions, when fading memory of negative conditions can lead to complacency and the underpricing of risk.

Action Item: Banks should exercise effective risk management and due diligence over structured products and securitisation. (For immediate action by March 31, 2009).

Process for Taking Forward the Leaders' Action Item

The Basel II consultative document issued in January 2009 includes enhanced Pillar 2 guidance in this area. Standards for the risk management and due diligence of structured products and securitisation are being enhanced in most G20 countries where markets for these instruments are developed. Securitisation practices are being clarified, and some countries are setting stronger due diligence standards over structured products and securitisation.

Working Group Assessment

The Working Group welcomes the steps taken by the BCBS to address the risks of securitisation. The BCBS' guidance to include a bank's on- and off-balance sheet securitisation activities in risk management, including product approval, risk concentration limits and estimates of market, credit and operational risk largely addresses the previous deficiencies in risk-management of securitised products.

4.5 Transparency

In hindsight, weaknesses in public disclosures have played a significant role in the crisis. In addition, recent events in financial markets revealed some weaknesses and inconsistencies in the application of fair value accounting at financial institutions.

The type of information disclosed heading into the turmoil was often not sufficiently timely and useful to many investors and other market participants. Public disclosures by financial institutions did not always make clear the type and magnitude of their risk exposures, including those associated with their on- and off-balance sheet exposures. There were also shortcomings in the other information firms provided about market and credit risk exposures, particularly as these related to structured products. Where information was disclosed, it was often not done in an easily accessible or usable way.

Action Item: The key global accounting standards bodies should work to enhance guidance for valuation of securities, also taking into account the valuation of complex, illiquid products, especially during times of stress. (For immediate action by March 31, 2009).

Process for Taking Forward the Leaders' Action Item

Several accounting standard-setting bodies published guidance to clarify expectations for the valuation of complex securities and other financial instruments during the Fall of 2008. These notices were broadly consistent with one another. They emphasised the need for greater management judgment in estimating fair values when markets are inactive and provided advice for evaluating the reliability of valuation inputs.

In addition, at the end of November 2008, the BCBS released a consultation paper that provides guidance to banks and banking supervisors to strengthen valuation processes for financial instruments. This guidance reinforces the guidance published by accounting standard-setters.

The IASB is in the process of enhancing guidance for fair value measurement more generally, for both financial and non-financial assets and liabilities. This broad review of fair value measurement was initiated in November 2006 to simplify, clarify and harmonise the overall body of guidance that has been added piecemeal to a number of standards over the years. The objective of this project is to create a single source of guidance for fair value measurement and disclosure. An exposure draft is expected in the first half of 2009.

In February 2009, FASB indicated it would re-examine its guidance for fair value accounting and disclosures in 2009.

Working Group Assessment

Considerable work has been undertaken to enhance guidance for the valuation of financial instruments, including complex and illiquid instruments, and more work is underway. We consider that the action plan with respect to fair value guidance has been achieved.

In order to support transparency and allow the users of financial statements to assess the financial health of a company, fair value valuation needs to be complemented with sufficient disclosure standards on valuation techniques. When valuation models are used, notes to financial statements must include a description of assumptions taken and a discussion of the incidence of alternative inputs on valuation. The Working Group recommends that efforts to reduce the complexity of accounting standards for financial instruments and to enhance disclosure standards be accelerated in order to allow the users of financial statements to better evaluate the uncertainty surrounding valuation.

Some EMEs consider that accounting standard bodies should review accounting standards for currency conversion in the context of this work, with the objective of assessing whether the accounting treatment of fluctuations in the exchange rate introduces excessive fluctuations in financial results during periods of high volatility in foreign exchange markets. IASB has indicated that it will examine the issue.

***Recommendation 22:* Accounting standard-setters should accelerate efforts to reduce the complexity of accounting standards for financial instruments and enhance presentation standards to allow the users of financial statements to better assess the uncertainty surrounding the valuation of financial instruments.**

- **Responsibility**: Accounting standard-setters.
- **Timeline**: Fall 2009.
- **Monitoring:** Expanded FSF.

Action Item: Accounting standard-setters should significantly advance their work to address weaknesses in accounting and disclosure standards for off-balance sheet vehicles. *(For immediate action by March 31, 2009).*

Process for Taking Forward the Leaders' Action Item

The FASB issued, for public comment, proposed accounting changes for de-recognition of financial assets and consolidation of off-balance sheet entities. These revised standards are expected to be finalised in 2009 and effective in 2010. The FASB also issued enhanced disclosure standards for off-balance sheet entities that were effective beginning with 2008 year-end reporting. The IASB issued, for public comment, proposed accounting changes for consolidation of off-balance sheet entities. This revised standard is expected to be effective in 2011. The IASB also accelerated its de-recognition project and expects to publish an exposure draft in the first half of 2009, to be effective no earlier than 2011.

Given the complexity of the issues involved, the effective dates could change.

Working Group Assessment

This Action Item has been largely met. While initiatives by accounting standards setters to enhance consolidation requirements, including disclosure standards for off-balance sheet entities have been underway since before the crisis began, the standards have been further strengthened and revisions accelerated, and the two major accounting bodies plan to converge their standards.

Action Item: Regulators and accounting standard-setters should enhance the required disclosure of complex financial instruments by firms to market participants. (For immediate action by March 31, 2009).

Action Item: Financial institutions should provide enhanced risk disclosures in their reporting and disclose all losses on an ongoing basis, consistent with international best practice, as appropriate. Regulators should work to ensure that a financial institution's financial statements include a complete, accurate, and timely picture of the firm's activities (including off-balance sheet activities) and are reported on a consistent and regular basis. (For action in the medium-term).

Process for Taking Forward the Leaders' Action Item

To enhance transparency and market confidence, the FSF recommended in its

April 2008 report that financial institutions draw from leading practices to ensure that they provide robust meaningful disclosures about risk exposures, including those associated with complex financial instruments, in mid-year 2008 statements. Prudential supervisors of countries that are part of the FSF strongly encouraged their internationally active financial institutions to use these recommended practices in their mid-year reporting. The FSF also asked IOSCO to assess the adequacy of initiatives that private sector groups are taking forward to enhance issuer transparency for securitised products. This assessment was undertaken as part of IOSCO's work on securitised products, on which it will produce an interim report in March.

In January 2009 the BCBS issued for comment proposals to strengthen Pillar 3 disclosure standards for banks' securitisation activities, building on the recommended sound practice disclosures of the FSF.

In addition, the IASB has released several proposals in recent months to improve disclosure of financial instruments. These include enhancements to the disclosure of exposure to risk from off-balance sheet items, and an amendment to the standard for the presentation of financial statement (IFRS 7) to clarify and enhance disclosures about fair value measurements and the liquidity risk of financial instruments, including for complex financial instruments.

Working Group Assessment

Following the leading practice disclosure framework advanced by the FSF, large financial institutions have substantially expanded their disclosures about risk exposures, including those associated with complex financial instruments and other related policies.

Action Item: Regulators, supervisors, and accounting standard-setters, as appropriate, should work with each other and the private sector on an ongoing basis to ensure consistent application and enforcement of high-quality accounting standards. (For action in the medium-term).

Process for Taking Forward the Leaders' Action Item

The IASB has established an external monitoring body composed of representatives of public authorities and of international organisations that have requirements for accountability to public authorities. This monitoring body includes IOSCO, the European Commission, the US SEC, and the Japan FSA. The BCBS will also be participating as an observer.

In addition the IASB and the U.S. FASB have established an advisory group comprised of senior leaders with broad international experience in financial markets to advise the Boards in considering accounting issues emerging from the global crisis. The primary function of the Financial Crisis Advisory Group (FCAG) is to advise the Boards about standard-setting implications of (1) the global financial crisis and (2) potential changes to the global regulatory environment. The group will conclude its activities within approximately six months, and will conduct advisory meetings during that time.

The FCAG will consider how improvements in financial reporting could help enhance investor confidence in financial markets. The advisory group also will help identify significant accounting issues that require the urgent and immediate attention of the Boards, as well as issues for long-term consideration. In providing that advice, the advisory group will draw upon work already underway in a number of jurisdictions on accounting and the credit crisis, as well as information gathered from the public roundtables—one each in Asia, Europe, and North America—that the Boards hosted in November and December 2008.

Working Group Assessment

High level committees established by accounting standard-setters to obtain feedback from users of financial statements will help foster consistent application of accounting standards.

Action Item: The key global accounting standards bodies should work intensively toward the objective of creating a single high-quality global standard. (For action in the medium-term).

Process for Taking Forward the Leaders' Action Item

IFRS are in use in over 100 countries, and about 40 more are in the process of either adopting or converging with them. While some countries have adopted the IFRS without modifications, others have tailored the IFRS to their country-specific conditions during the process of convergence.

Working Group Assessment

The long-term benefits likely to result from the use of a harmonised set of international accounting standards are considerable, in particular from a market transparency and cost perspective. While adapting IFRS according to national circumstances rather than fully complying with them may be appropriate in some cases to take into account country-specific characteristics of markets, it also voids some of the benefits of a global set of accounting standards.

The Working Group recommends that the IASB facilitate the transition towards a single set of high-quality global standards globally by sharing the experience of countries that have completed this process and by providing global assistance.

Enhanced representation of EMEs within the IASB governance structure would also be desirable to allow for standards that better reflect the unique circumstances of these countries. We note that G20 Working Group 2 is addressing issues related to the governance of the IASB, including the level of involvement of individuals from EMEs within the IASCF and the various IASB working groups and committees.

Recommendation 23: **The IASB should enhance its efforts to facilitate the global convergence towards a single set of high-quality accounting standards by sharing the experience of countries that have completed this process and by providing technical assistance.**

- **Responsibility**: IASB.
- **Timeline**: Fall 2009.
- **Monitoring**: Expanded FSF.

5. Going beyond the Action Plan

In this section, we propose recommendations for addressing concerns not covered by the Washington Action Plan. They relate to ensuring that appropriate resources are available for effective enforcement and to providing assistance to countries that require it for enhancing their regulatory frameworks.

5.1 Enforcement

Achieving the objectives of the regulatory framework requires not only sound regulation but also effective enforcement. No matter how sound the rules are for regulating the conduct of market participants, if the system of enforcement is ineffective – or is perceived to be ineffective – the ability of the system to achieve the desired outcome is undermined.

It is thus essential that participants are appropriately monitored, that offenders are vigorously prosecuted and that adequate penalties are imposed when rules are broken. A regulatory framework with strong monitoring, prosecution, and application of penalties provides the incentives for firms to follow the rules. This, in the end, adds to the framework's credibility and enhances investor confidence in the financial system. Thus, a coordinated approach by securities regulators and self-regulatory organisations, law enforcement agencies and other actors in the legal system to monitor, investigate, and punish improper behaviour is necessary at a national and, in the context of globalisation of the financial system, at the international level.

In terms of international cooperation, IOSCO has developed a multilateral memorandum of understanding (MMOU) on cooperation and information sharing for securities regulation and enforcement purposes. The MMOU is specific about the information, including banking and brokering information, which must be made available on request of signatories for the specific purpose set out in the MMOU. It has raised the standard of international information sharing by requiring that banking secrecy laws do not prevent the exchange of information for securities enforcement purposes. Applicants to become a signatory are required to undergo an independent verification process. Over two thirds of IOSCO's eligible members have become signatories or undergone the verification process and committed to addressing the gaps identified by the process, including seeking legislative change if necessary.

The IAIS has also put in place a MMOU framework back in February 2007 to facilitate information exchange among insurance supervisors both under normal circumstances and in times of crisis. The IAIS regards the MMOU initiative as a high priority and efforts are underway to expedite the operation of the regime in the near future.

Supervisory colleges, which are within the remit of G20 Working Group 2 are an effective mechanism for enforcement in cross-border institutions.

We recommend that authorities review the effectiveness of their enforcement activities and ensure that appropriate resources, including both human and financial resources, are available to achieve this.

Recommendation 24: **The effective enforcement of regulation should be a priority of all financial regulators. As such, national financial regulators and oversight authorities should ensure the effectiveness of their enforcement activities and that appropriate resources are available for monitoring the application of regulation and for prosecuting offenders. The enforcement function should be independent from other activities or from external influences.**

- **Responsibility**: Prudential supervisors and other authorities.
- **Timeline**: To be completed within 2 years.
- **Monitoring**: IMF-WB (through FSAP and Article IV).

5.2 Technical Assistance and Capacity Building in Emerging Market Economies

For some countries, for example those with less-developed financial systems, transition towards the implementation of enhanced standards and regulations may present a greater challenge. The Working Group recommends that national authorities commit to assist each other in order to enhance the capacity of the G20 as a whole to strengthen the regulatory framework. Appropriate technical assistance should also be provided to these countries by international standard-setting bodies in order to allow for the effective implementation of more challenging new regulations that are consistent with international standards and codes. Examples include those for mitigating procyclicality, for adopting the Basel II capital framework and for converging towards a global set of high-quality accounting standards.

Recommendation 25: **Recognising that the degree of development of financial systems varies considerably across the G20, national authorities should commit to assist each other in enhancing their capacity to strengthen regulatory frameworks. In addition, IOSCO, the IAIS and the BCBS should have the appropriate capacity to provide technical assistance. The needs of emerging market economies deserve particular consideration.**

- **Responsibility:** Finance Ministries, prudential supervisors and other authorities, IOSCO, IAIS, BCBS.
- **Timeline:** Ongoing.
- **Monitoring:** IMF-WB (through FSAP and Article IV).

Annex 1 - Abbreviations

BCBS	Basle Committee of Banking Supervision
CDS	Credit default swaps
CGFS	Committee on the Global Financial System
CCP	Central counterparty
CPSS	Committee on Payment and Settlement Systems
CRA	Credit rating agency
EC	European Commission
EU	European Union
EME	Emerging market economy
FASB	Financial Accounting Standards Board
FCAG	Financial Crisis Advisory Group
FSA	Financial Services Agency (Japan)
FSAP	Financial Sector Assessment Program
FSF	Financial Stability Forum
IAIS	International Association of Insurance Supervisors
IASB	International Accounting Standards Board
IASCF	International Accounting Standards Committee Foundation
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commission
MMOU	Multilateral memorandum of understanding
OECD	Organization for Economic Cooperation and Development
OTC	Over-the-counter
SEC	Securities and Exchange Commission (US)
SSG	Senior Supervisors Group
WB	World Bank

Annex 2 - List of Members of the Working Group

Co-Chairs	Tiff Macklem (Canada)
	Rakesh Mohan (India)
Argentina	Jose Rutman
Australia	Kerstin Wijeyewardene
Brazil	Nelson Barbosa
Canada	David Longworth
China	Han Mingzhi
European Union	Pierre Delsaux
France	Hervé de Villeroché
Germany	Dietrich Lingenthal
India	Anand Sinha
Indonesia	Hekinus Manao
Italy	Andrea Enria
Japan	Takehiko Nakao
Mexico	Guillermo Zamarripa
Russia	Yana Pureskina
Saudi Arabia	Fahad Al Mufarrij
South Africa	Nkosana Mashiya
South Korea	Jong-Goo Yi
Turkey	Ihsan Delikanli
United Kingdom	David Strachan
United States of America	Patrick Parkinson
Basel Committee for Banking Supervision	Stefan Walter
Financial Stability Forum	Svein Andresen
International Accounting Standards Board	John Smith
International Association of Insurance Supervisors	Yoshihiro Kawai
International Monetary Fund	Jaime Caruana
International Organization of Securities Commissions	Greg Tanzer
World Bank	Michael U. Klein

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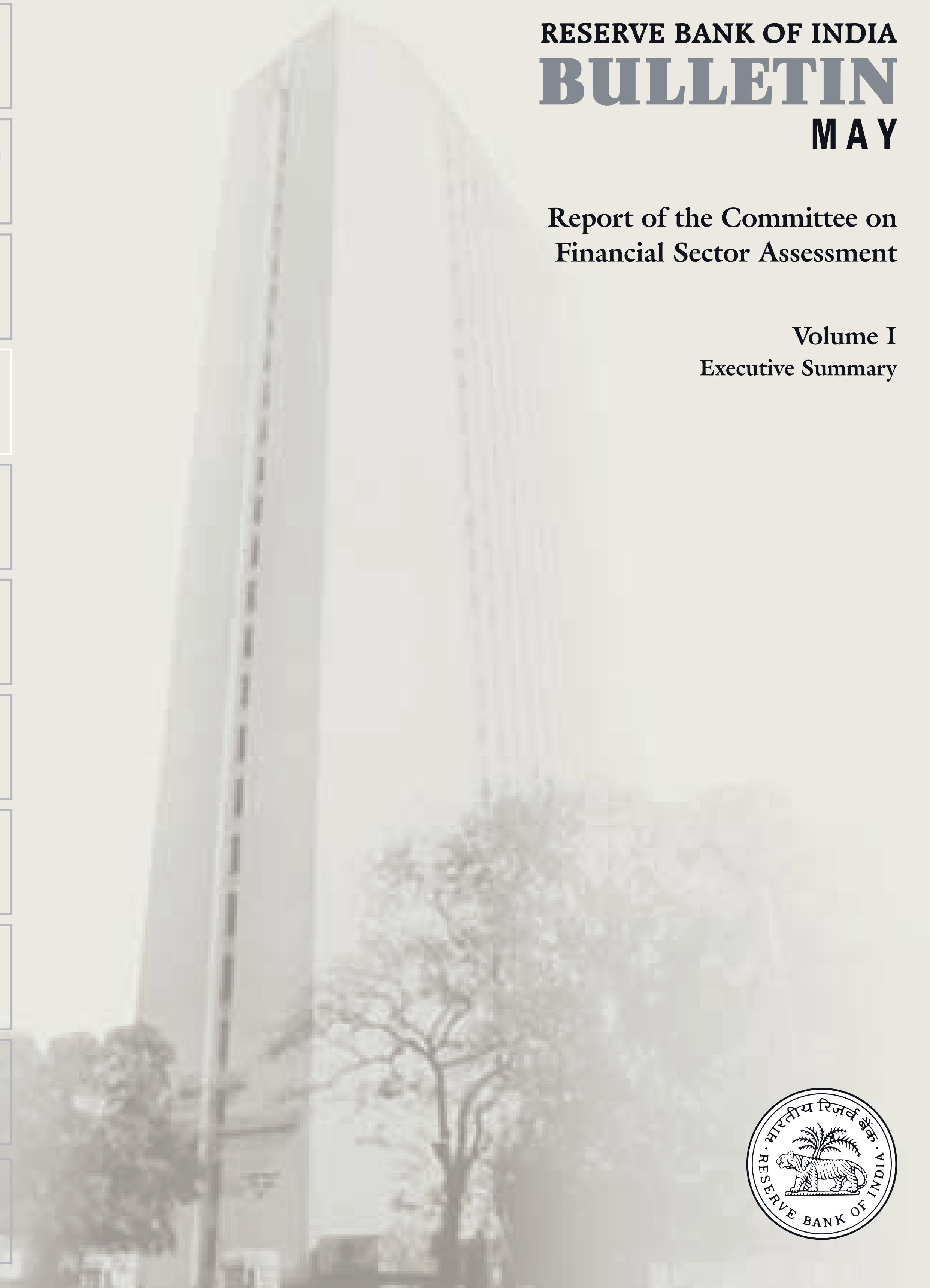

Report of the Committee on Financial Sector Assessment

Volume I
Executive Summary

INDIA'S FINANCIAL SECTOR
AN ASSESSMENT

Volume I

Executive Summary

Committee on Financial Sector Assessment

March 2009

भारत सरकार
GOVERNMENT OF INDIA

भारतीय रिज़र्व बैंक
RESERVE BANK OF INDIA

The findings, views and recommendations expressed in this Report are entirely those of the Committee on Financial Sector Assessment and should not be interpreted as the official views of the Reserve Bank of India or Government of India.

Composition of the Committee on Financial Sector Assessment

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Dr. Rakesh Mohan
Deputy Governor
Reserve Bank of India

Co-Chairman

Shri Ashok Chawla
Secretary
Department of Economic Affairs
Ministry of Finance
Government of India
(from September 6, 2008)

Dr. D. Subbarao
Former Finance Secretary
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(July 16, 2007 - September 5, 2008)

Shri Ashok Jha
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(September 13, 2006 - July 15, 2007)

Members

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List of Acronyms

AASB	Auditing and Assurance Standards Board
AML	Anti-money Laundering
ASB	Accounting Standards Board
BCM	Business Continuity Management
BCPs	Basel Core Principles
BPLR	Benchmark Prime Lending Rate
CBLO	Collateralised Borrowing and Lending Obligation
CCIL	Clearing Corporation of India Limited
CCP	Central Counterparty
CFSA	Committee on Financial Sector Assessment
CFT	Combating Financing of Terrorism
CPI	Consumers' Price Index
CRAR	Capital to Risk Weighted Assets Ratio
CRR	Cash Reserve Ratio
CRT	Credit Risk Transfer
CSO	Central Statistical Organisation
DICGC	Deposit Insurance and Credit Guarantee Corporation
DMO	Debt Management Office
DRT	Debt Recovery Tribunals
DvP	Delivery versus Payment
FC	Financial Conglomerates
FEDAI	Foreign Exchange Dealers' Association of India
FEMA	Foreign Exchange Management Act
FFMC	Full-fledged Money Changers
FRBM	Fiscal Responsibility and Budget Management
FSAP	Financial Sector Assessment Programme
HFC	Housing Finance Companies
HLCCFM	High-level Co-ordination Committee on Financial Markets
IAPC	International Auditing Practices Committee
IASB	International Accounting Standards Board
ICAI	Institute of Chartered Accountants of India
IFRS	International Financial Reporting Standards
IIP	Index of Industrial Production
IOSCO	International Organisation of Securities Commission
IRDA	Insurance Regulatory and Development Authority
ISA	International Auditing Standards
KYC	Know Your Customer
LAF	Liquidity Adjustment Facility
MSE	Micro and Small Enterprises
MSS	Market Stabilisation Scheme
NABARD	National Bank for Agriculture and Rural Development
NBFC	Non-banking Financial Companies
NCLT	National Company Law Tribunal
NEFT	National Electronic Funds Transfer
NHB	National Housing Bank
NPAs	Non-performing Assets

NSCCL	National Securities Clearing Corporation Limited
OMO	Open Market Operations
OTC	Over-the-Counter
PCA	Prompt Corrective Action
PMLA	Prevention of Money Laundering Act
PN	Participatory Note
PSB	Public Sector Banks
RAROC	Risk Adjusted Return on Capital
ROSC	Report on the Observance of Standards and Codes
RRB	Regional Rural Banks
RTGS	Real Time Gross Settlement
RWA	Risk Weighted Assets
SARFAESI	Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interests Act
SDDS	Special Data Dissemination Standards
SEBI	Securities and Exchange Board of India
SRO	Self-regulatory Organisation
STR	Suspicious Transactions Report
TACMP	Technical Advisory Committee on Monetary Policy
UCB	Urban Co-operative Banks
WoS	Wholly-owned Subsidiary
WPI	Wholesale Price Index

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I. INTRODUCTION

1.1 Background

The Financial Sector Assessment Programme (FSAP) is a joint initiative of the International Monetary Fund (the Fund) and the World Bank (the Bank) that began in 1999. It attempts to assess the stability and resilience of financial systems in member countries. The programme includes assessments of the status and implementation of various international financial standards and codes in the regulation and supervision of institutions and markets, financial infrastructure in terms of legal provisions, liquidity management, payments systems, corporate governance, accounting and auditing; transparency in monetary, financial and fiscal policies; and data dissemination. An FSAP enables identification of the scope for strengthening resilience and fostering financial stability in a country and is designed to promote smoother integration with global markets.

India first participated in an FSAP in 2001 and also associated with independent assessments of standards and codes by the Fund/Bank since then. It also conducted a self-assessment of compliance with international standards and codes in 2002 and another review in 2004. This assessment draws upon the earlier FSAP and the IMF's Report on the Observance of Standards and Codes (ROSCs) as needed and relevant. Since the last FSAP in 2001, India has undertaken a series of ongoing reforms in the financial sector aimed at improving its soundness, resilience and depth. The reforms have borne fruit: the country has reached a higher growth trajectory; savings have increased and investment in productive activities has expanded significantly; credit has expanded as a proportion of GDP; financial markets have gained in depth, vibrancy and efficiency; and capacity building overall is embedded in the system.

In September 2005, the IMF and the World Bank jointly brought out a Handbook on Financial Sector Assessment. This detailed the techniques and methodologies for FSAP that could, *inter alia,* serve as a reference point for countries themselves to undertake self-assessments.

Based on India's experience in the FSAP and self-assessments, the Government of India, in consultation with the Reserve Bank, decided in September 2006 to constitute the Committee on Financial Sector Assessment (CFSA) to undertake a comprehensive self-assessment of India's financial sector. The CFSA, in turn, decided to assess financial stability and also compliance with all financial standards and codes so that a compact roadmap could evolve with a medium-term perspective for the entire financial sector.

The CFSA has followed a comprehensive, constructive and transparent approach to self-assessment, especially since such a self-assessment needs to be seen as a rigorous and an impartial exercise to command credibility.

Overall, the assessment has found that the financial system is essentially sound and resilient, and that systemic stability is robust. Compliance with international standards and codes is generally satisfactory, and India is broadly compliant with most of the standards and codes. The assessment documents the areas of non-compliance, partial or otherwise.

Single-factor stress-tests for credit and market risks and liquidity ratio and scenario analysis carried out showed no significant vulnerabilities in the banking system. But, systemic multi-factor stress tests could not be carried out owing to the lack of data and appropriate models for carrying out such stress tests. The CFSA has recommended institutional arrangements to carry this work forward.

The CFSA has identified, based on some existing gaps, areas for further improvement. One of the serious gaps is in respect of adequate compliance with regard to timely implementation of bankruptcy proceedings. The average time taken in India for winding-up proceedings is one of the highest in the world. Improvements in effective enforcement of creditor rights and insolvency systems are critical for strengthening market efficiency and integration and for enhancing commercial confidence in contract enforcement. A quick resolution of stressed assets of financial intermediaries is essential for the efficient functioning of credit and financial markets.

1.2 Framework and Approach

The CFSA has followed a forward-looking and holistic approach to self-assessment. It is based on three, mutually reinforcing pillars: financial stability assessment and stress testing; legal, infrastructural and market development issues; and an assessment of the status of implementation of international financial standards and codes. The first pillar is essentially concerned with stability assessment. It utilises standard analytical tools for quantifying the risks and vulnerabilities in the financial sector. It also encompasses an assessment of the systemic risks at the macro and sectoral levels. The second pillar focuses on developmental issues in the financial sector. It concentrates on the legal and institutional infrastructure for prudential regulation and supervision of the institutions and markets, the payment and settlement system, liquidity management and the crisis-mitigating financial safety nets. The third pillar encompasses a comprehensive assessment of the status of implementation of various international financial standards and codes.

Taking into account the legal, regulatory and supervisory architecture in India, the CFSA felt the need for involving, and associating closely, all the major regulatory institutions in the financial sector, *viz.*, the Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI) and the Insurance Regulatory and Development Authority (IRDA). Depending upon the sectoral/functional distribution, several other regulatory and supervisory agencies in the financial system were also associated, besides the concerned departments in the Government of India. Direct official involvement at different levels brought about enormous responsibility for, ownership of and commitment to the assessment process, thus ensuring constructive pragmatism while addressing, in particular, the contentious issues.

Since the assessment required comprehensive technical domain knowledge in the various areas examined, the CFSA initially constituted Technical Groups comprising officials with first-hand experience in handling the respective areas from the regulatory agencies concerned as well as the Government to undertake the preliminary assessment and to prepare technical notes and background material in the concerned areas. This ensured that officials who are well-conversant with their own systems and are aware of the existing weaknesses could identify the best alternatives for finding solutions.

Thereafter, to ensure an impartial assessment, the CFSA constituted four external independent Advisory Panels, comprising non-official experts drawn from within the country. These Panels made their assessments after thorough debate and rigorous scrutiny of inputs provided by the Technical Groups. The Advisory Panels were:

- The Panel on Financial Stability Assessment and Stress Testing –covered macro-prudential analysis and stress testing of the financial sector;
- The Panel on Financial Regulation and Supervision – covered banking regulation and supervision, securities market regulation and insurance regulation standards;
- The Panel on Institutions and Market Structure – covered standards regarding bankruptcy laws, corporate governance, accounting and auditing, and payment and settlement systems; and
- The Panel on Transparency Standards – covered standards pertaining to monetary and financial policies, fiscal transparency and data dissemination issues.

For further strengthening the credibility of this assessment, the Advisory Panels' assessments were peer reviewed by eminent experts who were mostly drawn from other countries, and the comments and suggestions of the peer reviewers were discussed in two brainstorming sessions interfacing the peer reviewers with the Panel and CFSA members. The Advisory Panels considered the peer reviewers' comments and modified their assessments, as appropriate. The CFSA then drew up its own overview report at the final stage, drawing upon the assessments, findings and recommendations of the Advisory Panels and the comments of the peer reviewers. The assessments and recommendations comprise six volumes, consisting of the Executive Summary, the Overview Report of the CFSA and the reports of the four Advisory Panels mentioned above. These six volumes should be viewed as a package complementing one another.

Section I

Introduction

The unfolding of the ongoing global financial and economic crisis since mid-2007 made the task of the CFSA and its Advisory Panels more complex. The CFSA is aware that there is considerable international discussion and debate underway on the issue of financial regulatory architecture, and on the changes that are needed to make the global financial system more resilient.

Thus, it is with a sense of utmost humility that the CFSA presents the results of the assessment of the India's financial sector along with a set of recommendations meant for the medium term of about five years. The accent in this assessment is on transparency. Thus, where conflicting views have emerged among the Panels, the peer reviewers, and even among the members of the CFSA, they have been reported transparently. Regulation and development of the financial sector is a complex affair and there is room for constant debate and discussion, as shown particularly by the debate that is now being conducted in the wake of the ongoing global financial crisis. The approach taken in this assessment is to provide general directions and excessive specificity has been eschewed.

The key assessments and recommendations under major heads are summarised in the sections that follow.

II. MACRO-ECONOMIC ENVIRONMENT

Macroeconomic developments and shocks can have an enormous impact on the financial sector. Financial stability analysis, therefore, attaches great importance to ascertaining potential macro-economic vulnerabilities in the system.

India's financial sector, in terms of institutions, markets and infrastructure has expanded and acquired greater depth and vibrancy as a result of the ongoing reforms initiated in the early 1990s. In view of the current turmoil in global financial markets, the overall assessment of economic trends and the related issues arising for India have undergone a shift from a benign and optimistic outlook to a relatively more cautious and guarded one in the face of many downside risks. However, the overall assessments remain intact. Indicators of financial soundness, including the results of stress tests of credit and market risks, suggest that the banks are healthy and robust. The liquidity ratio analysis of the banking system has, however, shown a few concerns that need to be addressed.

India's financial markets have gained depth, liquidity and resilience over time. The performance of the Indian economy has been impressive over the past two decades, with high real GDP growth accompanied by a decline in population growth and associated with consistent trends of increasing domestic savings, investment and productivity. Since 2003-04, there has also been significant bank credit growth. Merchandise exports have become increasingly broad-based in terms of destinations and composition, reflecting India's growing integration into the global economy. Despite the widening trade deficit, the current account deficit has remained modest, due largely to high levels of private transfers and service sector exports. The low debt-to-equity ratio in the Indian corporate sector points to higher internal accrual and buoyancy in their revenues and profitability. Recent times have, however, seen a sharp correction in the valuations of listed firms as also in their profitability, as has happened globally. To that extent, there could be some reversal in the declining debt-to-equity ratio in the Indian corporate sector in the current context. While there would be some moderation in rates of growth in the immediate future due to uncertain global market conditions, it is felt that India would return to its trend of eight per cent plus growth rate over the medium term as economic normalcy returns in the global economy. This would, however, depend upon certain critical areas, such as agriculture, infrastructure and fiscal consolidation being addressed.

In tune with global trends, inflation rates in India were low for most of the current decade. Although there was a spurt in early 2008, there has been a sharp decline in recent months due to the cooling down of energy and commodity prices in particular. The pass-through of international oil prices to domestic prices has been partial due to the administered pricing policy in the oil sector. Given India's high exposure to oil imports, coupled with the widespread impact in times of higher oil prices on the economy, a more efficient use of oil products is warranted. Another major concern, both domestically and globally, has been the rise in food prices. However, the recent correction in global prices, along with the series of measures already taken by the Government on the supply side, have begun yielding results. There is a need to improve both the forward and backward linkages in agriculture through better credit delivery, investment in irrigation and rural infrastructure, improved cropping patterns and farming techniques, and development of the food processing industry and cold storage chains across the entire distribution system.

In the meantime, uncertainty in the global financial markets deepened further and entered a new turbulent phase from about the middle of September 2008. Consequently, global economic growth is expected to slow down significantly; indeed, most advanced economies are already in recession. This has severely affected confidence. As a consequence, there has been a reversal of capital flows and, based on the duration of the crisis, India could continue to face a lower level of net inflows, causing strains in domestic liquidity. The Reserve Bank's armoury of policy instruments for maintaining liquidity has, however, been effective in managing the current situation. Overall, during 2008-09, the rupee was volatile and the volatility was greatly accentuated from mid-September 2008 onwards. The Reserve Bank and the Government have been active in taking a range of measures to meet shortfalls in rupee as also foreign exchange liquidity. It may be noted that among the countries surveyed by the Bank for International Settlements (BIS), the Indian foreign exchange market volumes have shown the fastest growth during 2004 to 2007. The foreign exchange market in India has continued to function well even during this time of turmoil.

India has been a net recipient of FDI and FII inflows consistently from 1990 onwards. Though the global financial turmoil has led to a significant slowdown in net capital inflows in 2008-09 with net portfolio outflows, it is expected that, overall, India will still record net capital inflows, though modest, this year. India's approach in regard to the capital account has consistently made a distinction between debt and equity, with greater preference for liberalisation of equity markets *vis-à-vis* debt markets. There is a broad consensus that fuller capital account convertibility is desirable, but the migration should be gradual, well sequenced and undertaken concomitant with achieving a balance in the external and fiscal sectors along with low inflation.

The binding constraint on growth in recent years has been the infrastructure deficit. Sustained growth in private sector infrastructure investment can take place in only those sectors that are financially viable, and which exhibit adequate future returns. With a view to attracting private capital to bridge the gaps in the public funding of infrastructure, emphasis has shifted to public-private partnerships (PPPs). However, the development of an active corporate bond market is critical for the success of this shift. Along with other developments in the institutional infrastructure, this requires the active development of domestic institutional investors. Reforms in the pension and insurance sectors will help in such institutional development so that pension funds and insurance companies can progressively acquire adequate size to become substantial investors in the domestic corporate bond market. Development of the municipal bond market, mortgage backed securities and the like would also be needed.

The global crisis has not left the fisc untouched. The implementation of a rule-based fiscal correction process, based on the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 was commenced by the Central Government in July 2004. However, given the current pressures to maintain growth at a reasonably high level, it was not be possible to resume the fiscal correction path after the current financial turmoil. The Government has in fact, deviated from its fiscal reform path and the FRBM targets have been relaxed to allow for higher spending, as well as to absorb the impact of lower revenue growth in 2008-09 and 2009-10. The Government has announced that it will return to FRBM targets, once the economy is restored to its recent trend growth path.

Going forward, it is essential to continue with focused attention on achieving a balance between financial development and financial stability. Also, for the growth momentum to be sustained, it is necessary to return to the path of fiscal prudence at both the central and State Government levels. The key to maintaining high growth with reasonable price stability lies in rapid capacity additions through investments, productivity improvements, removal of infrastructure bottlenecks and amelioration of skill shortages.

III. ASPECTS OF STABILITY AND PERFORMANCE OF FINANCIAL INSTITUTIONS

The assessment of the institutions has been carried out both from the stability perspective, as also the perspective of their adherence to international standards and codes. The assessment of the regulatory and supervisory environment of financial institutions has been done with reference to the Basel Core Principles (BCPs). The assessment of regulation and supervision in the insurance sector has been done with reference to IAIS Core Principles. Though the BCPs are strictly applicable only to commercial banks, the Advisory Panel on Financial Regulation and Supervision decided to extend the assessment of BCPs to the Urban Co-operative Banks, Rural Co-operative Banks, Regional Rural Banks, Non-Banking Financial Companies and Housing Finance Companies. The assessment of the BCPs with reference to these entities has been done with the intention of identifying areas where improvements can be made. The assessment of BCPs would throw up developmental issues which, if implemented, could strengthen the regulation and supervision of these entities. The assessment becomes relevant in the current context because of the inherent linkages that such institutions have and their consequent impact on the stability of the financial system. Further, in light of the recent turmoil wherein some NBFCs, though not akin to banks, faced problems, this exercise has helped to identify gaps in the practices they follow.

3.1 Commercial Banks

The Indian commercial banking system has shown itself to be sound. This is important because commercial banks are the dominant institutions with linkages to other segments in the Indian financial system, accounting for around 60 per cent of its total assets and, hence, stability assessment of commercial banks is most important from the systemic point of view. In recent years, competition has increased across bank groups as also within the public sector.

The global financial turmoil has had repercussions on the Indian financial markets, particularly in the equity and foreign exchange segments. However, the banking sector has not been significantly impacted. This is evident from its comfortable capital adequacy, asset quality and profitability indicators even for the half-year ended September 2008 and the third quarter ended December 2008. Commercial banks continue to show a healthy growth rate and exhibit overall improvement in areas of capital adequacy, asset quality, earnings and efficiency indicators. With a slowing economy, however, asset quality can be expected to undergo some stress.

Banking Legislations

Apart from the BR Act which governs all the scheduled commercial banks, there are various other legislations governing different bank groups. The nationalised banks are governed by two Acts, *viz.*, the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970 and Banking Companies (Acquisition and Transfer of Undertakings) Act, 1980. The State Bank of India and the subsidiaries of State Bank of India are governed by two legislations, *viz.*, State Bank of India Act, 1955 and State Bank of India (Subsidiary banks) Act, 1959, respectively. IDBI Bank is governed by the Industrial Development Bank (Transfer of Undertaking and Repeal) Act, 2003. The private sector banks come under the purview of the Companies Act, 1956. The overall regulation of the banking sector is governed by the BR Act. The CFSA notes that since the origins of the banks have been historically different, they continue to be governed by different legislations. It also notes that the Government at various points in time has been considering the possibility of a single banking legislation to cover all public sector banks (PSBs). The CFSA feels that while a single legislation for all PSBs could be the first step forward, the Government could consider subjecting all commercial banks to a single banking legislation in a medium-term perspective.

There have been some developments that have taken place since the last assessment undertaken by the IMF and the World Bank. The Banking Regulation (Acquisition and Transfer of Undertakings) and Financial Institutions Laws (Amendment) Act, 2006 provides for (a) an increase in the number of whole-time directors of nationalised banks from two to four; (b) the director to be nominated by the Government on the recommendation of the Reserve Bank to be a person possessing the necessary experience and expertise in regulation or supervision of a commercial bank, (c) removal of the provision for nominee directors from amongst the officials of SEBI/NABARD/Public Financial Institutions; (d) nomination of up to three shareholder directors on the boards of nationalised banks on the basis of percentage of shareholding; (e) elected directors to be persons having 'fit and proper' status as per the criteria notified by the Reserve Bank from time to time; and (f) the Reserve Bank to appoint one or more additional directors, if necessary, in the interests of banking policy/public interest/interest of the bank or the depositors. In addition, the amendments empower such banks (a) to raise capital by public issue or private placement or preferential allotment of equity as well as preference shares, subject to the guidelines to be laid down by the Reserve Bank, as also (b) empower the Central Government to supersede the board of nationalised banks on the recommendation of the Reserve Bank and appointment of administrator.

In the area of dispute settlement, the Legal Services Authority Act, 1987 has conferred statutory basis on the *Lok Adalats* (people's courts).The Reserve Bank has consequently issued guidelines to commercial banks and financial institutions to make increasing use of the forum of Lok Adalats. As per the earlier guidelines, banks could settle disputes involving amounts up to Rs.5 lakh through the forum of Lok Adalats. This was enhanced to Rs.20 lakh in August 2004. Further, banks have also been advised by the Reserve Bank to participate in the Lok Adalats convened by various DRTs/DRATs for resolving cases involving Rs.10 lakh and above to reduce the stock of NPAs.

The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act), effective from the date of promulgation of the first Ordinance, *i.e.*, June 21, 2002, has been extended to cover co-operative banks by a notification dated January 28, 2003. The Enforcement of Security Interest and Recovery Debts Laws (Amendment) Act, 2004 has amended the SARFAESI Act, Recovery of Debts due to banks and financial institutions Act, 1993 and the Companies Act, 1956. By this amendment, the SARFAESI Act has been amended, *inter alia,* to (a) enable the borrower to make an application before the debt recovery tribunal against the measures taken by the secured creditor without depositing any portion of the money due; (b) provide that the debt recovery tribunal shall dispose of the application as expeditiously as possible within a period of 60 days from the date of application and (c) enable any person aggrieved by the order by the debt recovery tribunal to file an appeal before the debt recovery appellate tribunal after depositing with the appellate tribunal 50 per cent of the amount of debt due to him as claimed by the secured creditor or as determined by the debt recovery tribunal, whichever is less.

The Credit Information Companies (Regulation) Act, 2005 is aimed at providing for regulation of credit information companies and to facilitate efficient distribution of credit. The Act provides for establishment, supervision and regulation of credit information companies that can undertake the functions of collecting, processing and collating information on trade, credit and financial standing of the borrowers of credit institutions which are members of the credit information company. This enactment will now enable the introduction of credit information bureaus in India within a suitable regulatory framework.

Financial Soundness Indicators

It is a matter of some satisfaction that capital adequacy ratios across bank groups have remained significantly above the regulatory minimum and, even better. NPA ratios have shown a significant decline. But it should be noted that there has been an increase in the growth of off-balance sheet exposure in recent years, particularly in the case of foreign banks and new private sector banks. Questions are sometimes asked about how the PSBs are faring in relation to the new private sector banks, which are generally regarded as being more efficient and customer-friendly. Over the years there has been a marked convergence in key financial indicators across bank groups. Though efficiency as measured in terms of the business-per-employee ratio is lower for public sector banks (PSBs), the cost-income ratio shows a significant degree of convergence with other bank groups.

The Herfindahl-Hirschman Index for India indicates that the Indian banking sector is not highly concentrated. Despite the increase in competition, the PSBs continue to dominate the commercial banking arena. [In this context, one member of the CFSA held the view that the high percentage of government ownership of commercial banks could potentially affect competition.]

Ownership Issues

An important issue relates to the government ownership of banks. While the stridency of the debate on this issue has abated somewhat in recent months in the wake of the actions taken by the Governments in the UK and the US, the issue is important in the Indian context where governance issues have a different hue. The government ownership of banks augurs well for systemic stability and plays an important role in financial inclusion. If it leads to any specific regulatory forbearance, it can lead to higher fiscal costs in the medium term when such forbearance eventually leads to the need for recapitalising the banks as well. The cost of recapitalisation of Indian public sector banks has, however, been lower than most other countries.

There is no conflict of interest in Government's role as owner of banks and its relationship with the regulator. The Reserve Bank is an independent regulator and neither its powers to regulate PSBs decrease nor is any regulatory forbearance exhibited by it towards these banks because of government ownership. The same set of regulations are applicable to all banks, irrespective of their ownership, across the board. All banks are subject to annual financial inspections and the findings of the inspection are placed before the Board for Financial Supervision. However, there are some government sponsored schemes implemented by Public Sector Banks for which the amount of subvention, if any, is borne by the Government. The Government as the owner of the PSBs also conducts quarterly review of the performance of PSBs against the statement of intent submitted by these banks.

As mentioned, the cost of recapitalisation of PSBs has been relatively low as compared with other countries. Given that the Government has been the owner of PSBs, any suggestion advocating that the Government must exit its monitoring function and leave governance entirely to a duly-constituted board is unrealistic in the present environment and such a move might be undesirable as well.

Capital Augmentation by the Government

There is some apprehension that PSBs' growth could be potentially constrained relative to other players in the banking system, given that some PSBs are touching the statutory floor of 51 per cent of shareholding by the Government. The problem could get exacerbated in view of the impending need to implement Basel II guidelines, which could require more capital. The Government has, in the past, shown willingness to contribute capital and the growth of PSBs has so far not been constrained because of a lack of capital. However, given the medium-term projected growth rate of the economy at 8 per cent and assuming the consequent growth of Risk Weighted Assets (RWAs), the capital requirement to maintain the expected momentum of credit growth is likely to increase. This emergent problem needs to be addressed so that the capital required by public sector banks for supporting growth is assured. If the annual growth in RWAs is within 25 per cent, the additional capital requirement from the Government is assessed to be manageable.

If the Government is not able to contribute its share of capital needed for the growth of the public sector banking system, it will need to reduce its shareholding below 51 per cent. This requires legislative changes. However, pending enactment of enabling legislation to reduce majority ownership, and keeping in mind the synergies, one option for the Government could be to consider amalgamating banks that are on the borderline of 51 per cent shareholding with banks where government ownership is significantly higher than the stipulated minimum of 51 per cent. Amalgamation should only be done if there are positive synergies and complementaries in the regional spread of the banks proposed to be amalgamated.

Capacity Building

In order to give more flexibility in the functioning of PSBs, there could be a need for an enabling environment for the Government to reduce its majority shareholding. This would, among other things, not constrain the PSBs from attracting and retaining talent as their incentive structure would then not be limited by the government pay structure. This would also enable them to have lateral recruitment of experts with appropriate skill sets. It would also facilitate technology upgrading which is even more necessary given the implementation of Basel II guidelines and needs considerable investment in technology and capacity building. Associated with this issue is the structure of incentives, especially financial incentives in PSBs. There is an urgent need for an upward revision of the remuneration and incentive structure of PSBs, commensurate with responsibility and more in alignment with the changing times. The recent crisis has also highlighted the role of managerial remuneration structures in the financial sector that have led to excessive risk taking and adverse selection problems. At the same time therefore, there is a need to ensure that the incentives for top management and key executives are monitored and linked to their performance over a longer-term economic cycle, in private sector and foreign banks as well.

Corporate Governance

An important issue with regard to corporate governance in banks is the role of professionals on bank boards. Given the transformation that is taking place in the banking sector, there is a clear need for more professionals on bank boards. Though there are concerns about the composition and professionalism of the boards of PSBs regarding the attraction of board members with adequate talent, corporate governance principles should essentially be the same across bank groups. To improve governance in PSBs, therefore, there could be a requirement for ensuring proper quality of directors by adhering to the fit and proper criteria both in letter and spirit; and improving flexibility in decision making, unhindered by government interference.

The question of voting rights is also important. While there is merit in allowing voting rights to be proportionate to share holding, any shareholding in excess of the threshold 10 per cent should continue to need the prior approval of the Reserve Bank as proposed in the amendment to the BR Act in Parliament.

An aspect closely linked to voting rights is the issue of substantial interest. As per Section 10A (2) (b) of the BR Act, directors specified under Section 10A (2) should not have substantial interest in a company or a firm. The definition of substantial interest in the BR Act needs to be revised upwards to attract appropriate talent and professionalism in the banks' boards (Section 10 (A) (2) of the BR Act read with Section 5(ne)). The present quantitative ceiling of Rs.5 lakh could be removed and an appropriate per cent of paid-up capital can be stipulated.

Though the scope of influence of external agencies like the Central Vigilance Commission (CVC) over the years has also undergone a change and the existing arrangement has worked well, there is still a need for redefining the scope of work of these agencies. There may be a requirement to come out with a separate CVC manual in this regard.

Roadmap for Foreign Banks

Currently, foreign banks are permitted to establish their presence by setting up branches, setting up a wholly-owned subsidiary (WOS), or converting existing branches into WOS. During this phase, eligible foreign banks converting can be permitted to acquire shareholdings in Indian private sector banks, which would be limited to banks in need of restructuring.

Though there is a widely-held perception that the entry of foreign banks would enhance the overall efficiency of the banking sector through adoption of new technologies, products and management techniques, it needs to be noted that the new private sector banks currently operating in India have also adopted new technologies, offer varied products and have good management techniques in place which are comparable with the foreign banks.

The Reserve Bank's regulatory approach towards foreign banks has generally been liberal compared to global standards, which are characterised by a single class of banking licence, no restrictions in setting up non-banking financial subsidiaries in specified activities, uniform deposit insurance, uniform prudential norms and lower priority sector requirements. India has also been fairly liberal in according branch licences to foreign banks relative to its commitments to the World Trade Organisation. Generally, more than the committed 12 branch licences have been given per year.

The CFSA, therefore, feels that the entry of foreign banks needs to be gradual and consistent with the overall financial policy strategy and the transition should happen smoothly without causing serious imbalances. A detailed cost-benefit analysis of the impact of the entry of foreign banks on the Indian financial sector would be useful as decisions are taken on the matter. The Reserve Bank's approach on the roadmap for foreign banks is due for a review after March 2009 concerning the extension of national treatment to Wholly-Owned Subsidiaries (WoS), dilution of stake and permitting mergers/acquisitions of any private sector bank in India with foreign banks. The CFSA recommends that the following need to be taken into account while reviewing the roadmap for entry of foreign banks:

- They can operate in the country either through branches or the subsidiary route subject to reciprocity.
- Branch licensing policy could be broadly structured on the lines of that followed in new private sector banks, consistent with the country's WTO commitments, but licensing of branches would continue to be based on reciprocity.
- In case they adopt the subsidiary route, the foreign shareholding should not exceed 74 per cent. All regulatory guidelines and norms applicable to private sector banks could also be made applicable to them.
- The Indian subsidiaries of these banks should be listed in the Indian stock exchanges.

- There is a need to have independent members in the board of directors for Indian subsidiaries of foreign banks to protect the interests of all stakeholders.
- The expansion in operations of foreign banks should not affect the credit flow to agriculture and small and medium enterprises (SMEs). If there is a policy-mandated requirement of funding such entities, there should be no discrimination between foreign and domestic banks, as exists at present.
- Subsidiaries of foreign banks would be subject to all requirements that Indian banks are subject to.

Prompt Corrective Action (PCA)

Over the course of economic and business cycles, any financial entity is likely to undergo financial stress. The Reserve Bank has had in place a scheme of Prompt Corrective Action (PCA) since December 2002, which is applicable to scheduled commercial banks (except RRBs). The scheme is in place to undertake 'structured' and 'discretionary' actions against those banks that exhibit weaknesses in certain pre-determined financial and prudential parameters. Given the potential for systemic linkages between entities like co-operative banks, systemically important NBFCs, mutual funds and insurance companies, it is desirable in the interests of financial stability that such a scheme may also be evolved and implemented by the Reserve Bank for co-operative banks and systemically important NBFCs, as well as by SEBI for systemically important mutual funds and IRDA for insurance companies.

Off-balance Sheet Items

The hallmark of the past decade or so has been innovation in financial products. This brings to the fore issues related to product appropriateness and capacity building. Most banks do not strictly adhere to the suitability and appropriateness policy for derivatives products, despite the recent guidelines issued by the Reserve Bank. Though ICAI has issued AS 31 (disclosures and presentation of financial instruments) and AS 30 (recognition and measurement of financial instruments), which will be adopted for implementation effective on voluntary basis from April 1, 2009, there is a need for better understanding of off-balance sheet liabilities of banks and better systems of accounting and disclosures along with a centralised netting, collateral custody and clearing system.

Consolidation

Consolidation can take place through strategic alliances or partnerships. Besides helping banks to achieve economies of scale and augment the capital base, it could help market players in other ways to strengthen their competitiveness. Alternatively, strategic alliances and collaborative approaches could be attempted to reduce transaction costs through outsourcing, leveraging synergies in operations and strengthening the work culture. A holistic view needs to be taken in regard to consolidation keeping the respective pros and cons in mind. While the ability of Indian banks to fund large loan requirements hinges on their having a 'critical size', consolidation could lead to greater concentration, thereby posing systemic risks. The gains from consolidation and the synergies needed should be clearly quantified by the management and it is important for bank boards to track whether these gains are, in fact, being realised. It would prove useful provided suitable progress could be made on HR and, more importantly, issues of industrial relations.

The imperatives of consolidation in Indian banking exhibit certain country-specific considerations. Salient considerations include the need for a larger capital base to support, *inter-alia*, customer growth and larger needs, leveraging of information technology and communications networking and the blurring of the distinction between financial institutions. In this context, however, it should be noted that banks in India are heterogeneous in character and in their operations. This presents potent problems in the integration of infrastructure and business process/delivery mechanisms, which may lead to increases in post-merger costs. Also, the differences in approaches to human resource management and industrial relations between the entities proposed to be merged would need to be factored in at the time of merger/amalgamation and the process of consolidation needs to be primarily market-driven; this could be supported by creating a regulatory environment which would continue to be more conducive to such market-driven amalgamations. This could be particularly relevant for old private sector banks which need to be further strengthened. The Reserve Bank needs to create a conducive environment to enable primarily market-driven amalgamation of these entities.

Competition (Amendment) Act, 2007

India has been aware of the need for a competition policy for several years and the new Competition (Amendment) Act, 2007 has been legislated. While serving an important national purpose, it nevertheless has certain provisions that could adversely impact the financial sector. For example, every person or enterprise proposing to enter into a combination via a merger or an amalgamation is required to give notice to the Commission before entering into a combination. The applicant then has to wait for a maximum period of 210 days. While reasonable in several cases, this provision, when applied to the proposal for the voluntary amalgamation of banks under Section 44A of the BR Act, could become a problem as the wait of 210 days may defeat the purpose of the proposed combination. The Reserve Bank can give its sanction to the amalgamation only thereafter which would delay the whole process and is also likely to raise regulatory conflicts. Similar would be the case with amalgamations under the schemes made by the Central Government in the exercise of its powers under Section 9(2) of the Nationalisation Acts, 1970 and 1980. There is, therefore, a need to re-examine the whole issue and, if necessary, the Central Government may grant the necessary exemption under Section 54 of the Competition Act. The CFSA notes that the matter has already been taken up by the Government.

Stress Testing and Risk Management

The resilience of the financial system can be tested by subjecting the system to stress scenarios. It may be noted that the stress tests are generally carried out with reference to a sudden shock and its instantaneous impact; in practice, when such shocks take place, banks get time to adapt and mitigate the impact.

For the purpose of this assessment single-factor stress tests for the commercial banking sector covering credit risk, market/interest rate risk and liquidity risk were carried out. To test systemic resilience, the CFSA notes that stress testing needs to take into account co-related risks, i.e., the simultaneous occurrence of two to three problems. However, limitations on the availability of data and a model have precluded such an analysis. As a way forward, there is therefore a need to develop such an analysis over a period of time.

Going forward, it is necessary to develop a set of vulnerability indicators to facilitate model-building for providing early warning signals and linking the stress tests to appropriate macroeconomic scenarios/stress. An inter-disciplinary Financial Stability Unit, which could periodically monitor systemic vulnerabilities, should be set up in the Reserve Bank. Estimation of economic capital to help facilitate the adoption of Risk Adjusted Return on Capital (RAROC) methodology and dynamic provisioning could also be a way forward in prudential risk management.

A new source of risk to banks has arisen from the derivatives segment. Banks' exposures in the derivatives segment have raised issues relating to customer appropriateness and product suitability, as also the need for a better understanding of off-balance sheet liabilities and better systems of accounting and disclosures along with centralised netting, collateral custody and a clearing system. On-site examination of banks, as part of the supervisory process, should be supplemented by forensic 'follow the evolution of the product' approach, whereby the evolution of a derivative product is followed through its origination to final holder to check whether the financial institutions, infrastructure and trading, clearing and settlement, and risk management processes along the trading chain are adequate with sufficient due diligence and risk controls/audit trail.

The single-factor stress tests have revealed that the banking system can withstand significant shocks arising from large potential changes in credit quality, interest rate and liquidity conditions. These stress tests for credit, market and liquidity risk show that Indian banks are generally resilient.

Credit Risk

Stress testing for credit risk was carried out by increasing both the NPA levels and provisioning requirements for standard, substandard and doubtful assets. The analysis was carried out both at the aggregate level and individual bank level for end-March 2008 under three scenarios. The first scenario initially assumed a 25 per cent and 50 per cent increase in NPAs. It was subsequently felt that there is a possibility that the NPA levels could be impacted adversely due to the economic slowdown. Consequently, the shocks on NPA levels for Scenario I was increased from 50 per cent to 100 and 150 per cent. Accordingly, the first scenario assumed an increase of 25, 50, 100 and 150 per cent increase in NPAs. The shock imparted in the second scenario amounts to the maximum asset slippage experienced by banks since 2001. The third scenario assumes a 50 per cent increase in retail NPAs. The results obtained from each stress scenario were then related to regulatory capital to assess the resilience of commercial banks, both at the system level and for individual banks.

Under Scenario I, when NPA levels were assumed to increase by 25 per cent, the CRAR for the entire banking system would reduce to 12.3 per cent from the existing 13.0 per cent. If the NPA levels were stressed by a 50 per cent increase, the CRAR would reduce to 12.1 per cent. Before the stress test, all banks were found to be able to meet the regulatory stipulation of 9 per cent in March 2008. However, in the event of an increase in NPAs by 25 per cent, the CRAR of five banks would fall below 9 per cent and, if the increase in NPAs is 50 per cent, the CRAR of the same five banks would remain below the required 9 per cent. At 100 per cent increase, the CRAR would reduce to 11.6 per cent affecting eight banks. Similarly, at 150 per cent increase, CRAR would reduce further to 11 per cent, affecting 12 banks.

In order to simulate the effect of an economic slowdown on the banks' advances portfolio, the maximum asset slippage experienced by banks between 2001 and 2008 was applied to the stock of gross loans under Scenario II. The system-level CRAR declined to 11.6 per cent after application of the shock. A total of 15 banks would have a CRAR of below 9 per cent in the altered scenario.

There has been very sharp credit growth from 2004-05, but, by and large, it has been devoid of any concentration risk. In the recent past, the increase in banks' credit portfolio was largely driven by expansion in retail credit. In contrast to the declining NPA levels for the aggregate credit portfolios of banks, the asset quality of retail assets has seen some deterioration, albeit marginally. Keeping this in view, Scenario III stressed the retail segment by increasing the NPAs of retail loans by 50 per cent. The system-level CRAR in this case reduced to 12.6 per cent. A total of two banks would have a CRAR below 9 per cent.

Given the recent global financial developments and their likely impact on the Indian economy, the stress tests were further conducted for the end of September 2008. The stress assumptions regarding all the scenarios were the same as in the case of March 2008.

The findings revealed that the impact of credit risk on banks' capital position continues to be relatively muted. Under the worst-case scenario (at 150 per cent increase under Scenario I), the overall capital adequacy position of the banking sector declined to 10.6 percent in September 2008 as against 11.0 per cent in March 2008. Thus, it may be noted that even under the worst case scenario, CRAR remained comfortably above the regulatory minimum.

There has also been growth in sub-BPLR[1] (Benchmark Prime Lending Rate) loans. The BPLR should be the rate which is charged by the banks to the most credit-worthy customers. It is, therefore, expected that ideally all bank loans should be disbursed at a rate either equal to or higher than the BPLR. However, the experience of Indian banks reveals that the increased credit off-take was accompanied by higher growth in sub-BPLR loans which comprised 27.7 per cent of total loans in March 2002 and stood at 76.0 per cent as at end-March 2008. Despite the increase in sub-BPLR loans, there has been no perceptible decline in the interest margins of

[1] The Benchmark Prime Lending Rate (BPLR) should be the rate which is charged by the banks to the most credit-worthy customers. Banks are expected to take into account their (i) actual cost of funds, (ii) operating expenses, and (iii) a minimum margin to cover the regulatory requirement of provisioning/capital charge and profit margin, while arriving at the BPLR. All other lending rates can be determined with reference to the BPLR arrived at, as above, by taking into account term premia and/or risk premia.

banks, though, some decline is observed in 2007-08. Thus, if banks are able to lend at sub-BPLR and also maintain the same interest margins, it suggests that there are unresolved issues relating to computation of BPLR and, hence, of transparency in banking operations.

There has also been an increase in the dependence on bulk deposits to fund credit growth. This could have liquidity and profitability implications. An increase in growth in housing loans, real estate exposure as also infrastructure has resulted in elongation of the maturity profile of bank assets.

Overall, credit risk is low at present, but continuous monitoring is required to avoid any unforeseen and significant asset quality deterioration over the medium term. Keeping in view the overall threats to the system, the Reserve Bank had cautioned banks on the need for proper risk assessments and a honing of risk assessment skills. Risk weights for retail, real estate and capital market exposures were enhanced as countercyclical measures. Provisions for standard advances on exposures to these sectors were also increased, in order to help cushion the negative fallout of a cyclical downtrend. These measures have yielded results in that the impact of the sub-prime turmoil in India has been subdued. They have also enabled the Reserve Bank to reverse them to a significant extent as a countercyclical measure in the current situation in order to sustain credit growth.

Market Risk

To test the banking system's resilience to market risk, interest rate risk stress tests were undertaken using both earnings at risk (EaR), as also the economic value perspective. In the EaR perspective, the focus of analysis is the impact of changes in interest rates on accrual or reported earnings. Changes in interest rates impact a bank's earnings due to changes in interest income and the level of other interest-sensitive income and operating expenses. In the EaR approach, the impact of changes in earnings due to changes in interest rates is related to net interest income (NII). Applying the EaR approach, it was observed in March 2008 that for an increase in interest rates the NII increases for 45 banks, comprising 64 per cent of the banking assets. This is because, typically, the banks' balance sheets are asset sensitive, and an increase in interest rate raises the interest income relative to interest expenses.

The banks have been actively managing their interest rate risk by reducing the duration of their portfolios. The duration of equity reduced from 14 years in March 2006 to around 8 years in March 2008 – a pointer to better interest rate risk management. Taking the impact based on the yield volatility estimated at 244 basis points (bps) for a one-year holding period showed, *ceteris paribus*, erosion of 19.5 per cent of capital and reserves. The CRAR would reduce from 13.0 per cent to 10.9 per cent for a 244 bps shock. The CRAR of 29 banks that account for 36 per cent of total assets would fall below the regulatory CRAR of 9 per cent. These results remained broadly robust for different plausible stress scenarios and assumptions. Carrying out similar tests using the September data also had not shown any added vulnerability to the banking system[2].

Given the existing accounting norms as prescribed by the Reserve Bank, the impact of interest rate increase on the economic value of investment is expected to be significantly muted as a substantial portion of the banks' portfolio is immune to mark-to-market losses. The exposure of banks to the capital market remains low as a consequence of regulatory stipulations and direct equity exposure is small; hence, any adverse movement in this market has limited impact on banks, as has been seen in the recent period.

It may be noted that after the current financial turmoil, the International Accounting Standards Board (IASB) has changed the accounting rules. Against the practice of 100 per cent MTM, the IASB decided on October 13, 2008 that investments in the Trading category (other than derivatives) can be reclassified as Loans and Receivables to be carried at cost or amortised cost. Investments in the Available for Sale (AFS) category can also be classified as Loans and Receivables category.

Liquidity Risk

Liquidity risk originates from the potential inability of a bank to generate liquidity to cope with demands entailing a decline in liabilities or an increase in assets. The management of liquidity risk is critical for banks to sustain depositors' confidence. The importance of managing this risk came to the fore during the recent turmoil, when inter-bank money markets became illiquid.

Typically, banks can meet their liquidity needs by two methods: stored liquidity and purchased liquidity. Stored liquidity uses on-balance sheet liquid assets and a well-crafted deposit structure to provide all funding needs. Purchased liquidity uses non-core liabilities and borrowings to meet funding needs. While dependence on stored liquidity is considered to be safer from the liquidity risk perspective, it has cost implications. A balanced approach to liquidity strategy in terms of dependence on stored and purchased liquidity is the most cost-effective and optimal risk strategy. To assess the banking sector's funding strategy and the consequent liquidity risk, a set of liquidity ratios has been developed and analysed in detail. The analysis of this set of liquidity ratios reveals that there is growing dependence on purchased liquidity and also an increase in the illiquid component in banks' balance sheets with greater reliance on volatile liabilities, like bulk deposits to fund asset growth. Simultaneously, there has been a shortening of residual maturities, leading to a higher asset-liability mismatch. There is a need to strengthen liquidity management in this context as also to shore up the core deposit base and to keep an adequate cushion of liquid assets to meet unforeseen contingencies. It may also be worth considering a specific regulatory capital charge if the bank's dependence on purchased liquidity exceeded a defined threshold. There is also a need for the banks and the Reserve Bank to carry out periodic stress and scenario testing to assess the resilience to liquidity shocks in the case of some big banks, which have systemic linkages. This could then be extended to other banks.

[2] The Duration of Equity (DoE) of bank's portfolio which was eight years in March 2008 increased marginally to 8.1 years by September 2008. Given a DoE of 8.1 per cent, a 244 bps increase in yield as on September 2008 would result in a 20 per cent erosion in capital and reserves. From an economic value perspective, the system-level CRAR would reduce to 10.5 per cent.

Assessment of Basel Core Principles

The development of criteria against which supervisory systems can be assessed took shape in the late 1990s with the work commissioned by the Basel Committee on Banking Supervision (BCBS). As a result, the first *Core Principles for Effective Banking Supervision* were issued in September 1997. The Committee revised the *Core Principles* in October 1999 which were refined further in October 2006 by placing greater emphasis on risk management and disclosure.

The FSAP conducted in 2001 by the Fund/the Bank in respect of commercial banks revealed that, based on essential criteria, India was fully compliant with 15 BCPs, largely compliant with eight and materially non-compliant with two, thus leaving none of the BCPs entirely non-complied with. The adherence to BCPs was assessed by the IMF based on the core principles methodology issued in October 1999. Concurrently, in order to guide the process of implementation of international standards and codes in India and to position India's stance on such standards, the Reserve Bank in consultation with the Central Government constituted on December 8, 1999, a Standing Committee on International Financial Standards and Codes. One of the Advisory Groups constituted by this Committee looked into banking regulation and supervision which evaluated the adherence to BCPs in respect of regulation and supervision of commercial banks. A review committee to monitor progress on recommendations emanating from the above exercise provided, *inter alia*, an update in September 2004.

Key Developments Since Last FSAP

The Reserve Bank has been continually reviewing the prudential supervisory framework, duly taking into account recommendations from earlier assessments. Some of the key developments in this regard include: a fit and proper test to evaluate directors and senior management, monitoring of significant shareholding, introduction of a Prompt Corrective Action (PCA) framework, tightening of income recognition and asset classification norms and issue of detailed guidelines improving the level of disclosure.

The present assessment of BCPs is based on the revised core principles methodology issued in October 2006 and, hence, it is not strictly comparable with the earlier assessment. Table III.1 provides principle-wise compliance position for commercial banks[3].

This assessment reveals significant compliance in respect of regulation and supervision of commercial banks. Thus the responsibilities and objectives of the supervisory authority are clearly defined; the arrangements are in place for sharing information with domestic

[3] At the time of assessment the Reserve Bank had not issued any guidelines on interest rate risk in banking book. Consequently, the principle was assessed as non-compliant. The Reserve Bank has since issued guidelines on interest rate risk in the banking book as part of its Supervisory Review Process. Consequently the compliance position is expected to improve.

Table III.1: Assessment of Basel Core Principles – Commercial Banks		
Sr. No.	Principle	Status of compliance
	Objectives, autonomy and resources	
1.	Objectives independence, powers, transparency and co-operation	LC
	Licensing criteria	
2.	Permissible activities	C
3.	Licensing criteria	C
4.	Transfer of significant ownership	C
5.	Major acquisitions	C
	Prudential requirements and risk management	
6.	Capital adequacy	C
7.	Risk management process	MNC
8.	Credit risk	LC
9.	Problem assets, provisions and reserves	LC
10.	Large exposure limits	C
11.	Exposure to related parties	MNC
12.	Country and transfer risk	C
13.	Market risk	MNC
14.	Liquidity risk	MNC
15.	Operational risk	LC
16.	Interest rate risk in banking book	NC
17.	Internal control and audit	LC
18.	Abuse of financial services	LC
	Methods of ongoing supervision	
19.	Supervisory approach	MNC
20.	Supervisory techniques	LC
21.	Supervisory reporting	LC
	Accounting and disclosure	
22.	Accounting and disclosure	LC
	Corrective and remedial powers	
23.	Corrective and remedial powers of supervisors	LC
	Consolidated supervision and cross-border banking	
24.	Consolidated supervision	LC
25.	Home-host relationship	MNC

C – Compliant; LC – Largely Compliant; MNC – Materially Non-Compliant; NC – Non-Compliant; NA – Not Applicable.

regulators; the licensing criteria and permissible activities are clearly defined; detailed guidelines on capital adequacy covering both on- and off-balance sheet items have been issued to banks; detailed guidelines are in place for credit risk, market risk, country risk and operational risk; and there is an adequate range of supervisory tools to bring about timely corrective action.

Way Forward

The assessment has, however, revealed some gaps in the areas of risk management process, exposure to related parties, market risk, liquidity risk, supervisory approach and home-host country co-operation. Given the diverse risk management techniques across the banking sector, the implementation of contagion risk techniques as regards liquidity risk could be undertaken in a phased manner.

There is also a need to put in place a mechanism whereby banks can report developments affecting operational risk to the Reserve Bank which, in turn, needs to issue guidelines whereby banks would be required to notify it as soon as they have any material information that negatively affects the fitness and propriety of a board member or a member of senior management.

The assessment has also revealed shortcomings in the human resource capability in banks and there is thus an urgent need for capacity building in respect of both banks and the Reserve Bank before banks embark on advanced models of credit and operational risk. There is a need to expedite the passage of the Banking Regulation (BR) Act (Amendment) Bill, 2005 which deals with the insertion of Section 29(A)[4] and which will empower the Reserve Bank to conduct consolidated supervision.

Globalisation, in the meantime, means that risks can arise from actions taken in financial systems outside a country's borders. The current global financial crisis has highlighted the importance of cross-border co-operation. Therefore, until a global agreement is reached in this regard, there is a need to examine the pros and cons of entering into Memoranda of Understanding (MoU) with foreign regulators as regards home-host country supervisory co-operation. Going forward, the issue relating to inter-regulatory co-operation in domestic arena would assume further importance in order to effectively address regulatory arbitrage issues relating to derivative products like Collateralised Debt Obligations when they gain prominence in the Indian financial markets.

The current crisis has brought to the fore another issue that needs serious consideration, namely, fair value accounting which can introduce pro-cyclicality. However, doing away with fair value accounting and going back to historical accounting may not be the correct option. Instead, capital adequacy and provisioning requirements could be made to take into account the cyclical effects of the economy by introducing higher provisions and higher capital adequacy during good times so that it would act as a cushion during bad times. This would require an enhanced role for supervisors who need to look into the risk profile of individual banks and suggest increased provisioning or capital requirement. Another option would be to increase the frequency of disclosures along with fair value accounting, so that stakeholders are fully aware of the pro-cyclical element in the balance sheet of the banks. Further, carrying out stress tests based on fair values of the balance sheet and disclosing these results would help.

The CFSA feels that the present global financial crisis has highlighted the limitations of the present Basel Core Principles inasmuch as the assessment does not cover areas like SIVs/

[4] The power to call for information pertaining to any entity of the banking group is being sought through the introduction of a new Section 29A in the BR Act, 1949.

NBFCs or aspects like dynamic provisioning and countercyclical norms. Hence, the CFSA feels that the Basel Committee on Banking Supervision should revisit the Basel Core Principles to cover new areas.

3.2 Co-operative and Rural Banking

The co-operative banking structure in India comprises urban co-operative banks and rural co-operative credit institutions. The size of the co-operative and the rural financial sector in India remains small compared to commercial banks. As might be expected, the financial performance of the co-operative sector has been found to be less than satisfactory in certain aspects.

Urban Co-operative Banks

Urban co-operative banks (UCBs) form an important part of Indian banking. Urban co-operative banks have a single-tier structure. The performance of UCBs has, however, shown improvement, with the number of financially stronger UCBs increasing in recent years. The asset impairment ratios, though high compared to commercial banks, have improved but the high accumulated losses remain a cause for concern. There is a need to pursue consolidation in this sector in a non-disruptive manner.

There is dual control of UCBs, inasmuch as the regulatory and supervisory responsibilities are shared between state registrars of co-operative societies (the central registrar of co-operative societies in the case of multi-state co-operative banks) and the Reserve Bank. Though supervisory oversight of the Board for Financial Supervision (BFS) extends to UCBs, there is a multiplicity of command centres and an absence of clear-cut demarcation between the functions of State Governments, Central Registrar of Co-operative Societies (CRCS) and the Reserve Bank. The 'Vision Document for the UCB Sector' formulated in March 2005 to address the issue of dual control provides for a two-track regulatory framework and a Memorandum of Understanding (MoU) between the Reserve Bank and the other regulators, *viz.*, the State Governments and CRCS.

Rural Co-operatives[5]

Rural co-operative credit institutions have a two- or three-tier structure, with some states having a unitary structure for state-level banks operating through their own branches, and others presenting a mixed picture that incorporates both unitary and federal structures. The rural co-operatives are at district and state level, or at state level with branches. This sector comprises primary agricultural credit societies (PACS), district central co-operative banks (DCCBs) and the state co-operative banks (StCBs). Several concerns beset the rural co-operative banking segment. These institutions are fraught with low resource bases, inadequate business diversification and recoveries, high levels of accumulated losses, weak management information systems (MIS) and poor internal controls. As a result, this sector remains one of the weak links in the Indian financial landscape. The present assessment of rural co-operatives covers StCBs and DCCBs.

[5] The rural co-operatives have both short-term and long-term institutions. The long-term credit co-operatives which include State Co-operative Agriculture and Rural Development Banks and Primary Co-operative Agriculture and Rural Development Banks have not been covered in detail in the assessment.

Like the urban co-operative sector, this sector is also subject to dual regulatory control. Regulatory powers are vested with both the Reserve Bank and the Registrar of Co-operative Societies (RCS).The supervisory power is vested with NABARD and these institutions are not within the supervisory oversight of the Board for Financial Supervision (BFS) constituted by the Reserve Bank. There is, however, a Board of Supervision constituted independently by NABARD, which is kept abreast of the supervisory concerns that emanate from the functioning of rural co-operatives and other rural financial institutions. While the supervisory function is carried out by NABARD, its limitation of powers to enforce satisfactory compliance by inspected banks on inspection observations needs to be corrected.

Regional Rural Banks

Regional Rural Banks (RRBs) form the other important segment of the rural financial sector. They were conceived as institutions that combine the local feel and familiarity of the co-operatives with the business capabilities of commercial banks. They are a special category of banks formed under the Regional Rural Banks (RRBs) Act, 1976. The capital issued by an RRB is subscribed by the Central Government, the State Government and a sponsor bank which is generally a public sector commercial bank. The RRBs are also governed by the BR Act and RBI Act. The RRBs appear to present minimal systemic risk, owing to their small size (1.7 per cent of the assets of financial institutions as at end-March 2008). Efforts are on to improve the management information system by computerisation of branches of RRBs.

Licensing of Co-operatives

There is a need to draw up a roadmap for ensuring that only licensed banks operate in the co-operative space. A roadmap is also needed to ensure that banks which fail to obtain a licence by 2012 would not be allowed to operate. This will expedite the process of consolidation and weeding out of non-viable entities from the co-operative space.

Capital Adequacy

Urban co-operative banks, though compliant with the Basel I accord of 1988 in terms of risk-based capital requirements, have not implemented a capital charge for market risk in line with the amendment to the first capital accord in 1996. The Panel feels that as some of the scheduled UCBs are equivalent in size and systemic importance to medium-sized commercial banks, there is a need to assign duration-based capital charges for market risk for these entities.

Rural co-operative banks at present do not have any requirement of maintaining risk-based capital. The Panel is of the view that in respect of rural co-operatives, the migration to Basel I can be considered with the implementation of the revival package based on the Vaidyanathan Committee recommendations.

In 2005-06, the Government decided to amalgamate RRBs. Consequently, there has been a decline in the number of RRBs since 2005-06. There has also been an improvement in the performance of RRBs consequent to the amalgamation of various RRBs. There could be a phased introduction of CRAR in the case of RRBs, along with the recapitalisation of RRBs after consolidation of these entities.

Regulation and Supervision of Co-operatives

Dual control in the co-operative sectors affects the quality of supervision and regulation between the Reserve Bank/National Bank for Agriculture and Rural Development (NABARD) and the Government. This has been addressed to a certain extent in the case of UCBs through MoUs with almost all State Governments. However, there is a need to watch and further strengthen the MoUs on issues of regulatory co-operation, particularly in areas related to governance and management.

The role of NABARD as a Development Finance Institution (DFI) and regulator/ supervisor of rural financial institutions can be considered for segregation appropriately so that NABARD can function exclusively as a specialised DFI, while regulatory and supervisory powers are vested with a separate regulatory authority. Given the 'scheduled' status of RRBs, their supervisory responsibility should be entrusted to the Reserve Bank. As regards supervision of rural co-operatives, a separate regulatory and supervisory authority could be formed. [The Government, however, is of the view that the status quo may continue and that the present arrangement wherein NABARD and the Reserve Bank both have well-defined roles in terms of the RBI Act and RRBs Act, 1976, need not be disturbed].

Corporate Governance

The central issue is that borrowers have a significant say in the management of a co-operative bank. This makes governance difficult and there is a requirement to encourage the membership of depositors on par with borrowers. The best governance principles as enunciated by the World Council of Credit Unions could be considered for introducing greater professionalism and as a best practices guide for corporate governance in co-operative institutions. *Pari passu*, the powers regarding appointment of auditors, simplification of the tiered structures of rural co-operatives to reduce costs, and bringing aspects related to management of co-operative banks within the ambit of the BR Act could be considered.

Assessment of Basel Core Principles

The assessment of BCPs as regards UCBs has revealed that they are compliant/largely compliant as regards major acquisitions, problem assets, credit risk, related parties and methods of ongoing supervision (Table III.2).

The assessment of BCPs as regards StCBs/DCCBs reveals that they are compliant/largely compliant as regards major acquisitions, large exposures, related parties, credit risk, problem assets and methods of ongoing supervision (Table III.3).

The assessment of BCPs as regards RRBs has revealed that they are compliant/largely compliant as regards permissible activities, major acquisitions, credit risk, problem assets, large exposures, related parties and methods of ongoing supervision (Table III.4).

Table III.2: Assessment of Basel Core Principles – Urban Co-operative Banks		
Sr. No.	Principle	Status of compliance
	Objectives, autonomy and resources	
1.	Objectives independence, powers, transparency and co-operation	LC
	Licensing criteria	
2.	Permissible activities	LC
3.	Licensing criteria	LC
4.	Transfer of significant ownership	NA
5.	Major acquisitions	C
	Prudential requirements and risk management	
6.	Capital adequacy	C
7.	Risk management process	MNC
8.	Credit risk	LC
9.	Problem assets, provisions and reserves	C
10.	Large exposure limits	LC
11.	Exposure to related parties	C
12.	Country and transfer risk	NA
13.	Market risk	MNC
14.	Liquidity risk	MNC
15.	Operational risk	NC
16.	Interest rate risk in banking book	NC
17.	Internal control and audit	MNC
18.	Abuse of financial services	LC
	Methods of ongoing supervision	
19.	Supervisory approach	LC
20.	Supervisory techniques	LC
21.	Supervisory reporting	LC
	Accounting and disclosure	
22.	Accounting and disclosure	LC
	Corrective and remedial powers	
23.	Corrective and remedial powers of supervisors	LC
	Consolidated supervision and cross-border banking	
24.	Consolidated supervision	NA
25.	Home-host relationship	NA

C – Compliant; LC – Largely Compliant; MNC – Materially Non-Compliant; NC – Non-Compliant; NA-Not applicable.

However, the assessment of BCPs in respect of UCBs, rural co-operatives and RRBs reveals that there are several gaps in areas of risk management and internal control. The problems generated by dual control, in that these institutions come under the regulatory jurisdictions of different agencies, require urgent and serious attention.

Table III.3: Assessment of Basel Core Principles – State Co-operative Banks/ District Central Co-operative Banks		
Sr. No.	**Principle**	**Status of compliance**
	Objectives, autonomy and resources	
1.	Objectives independence, powers, transparency and co-operation	LC
	Licensing criteria	
2.	Permissible activities	LC
3.	Licensing criteria	LC
4.	Transfer of significant ownership	NA
5.	Major acquisitions	C
	Prudential requirements and risk management	
6.	Capital adequacy	MNC
7.	Risk management process	MNC
8.	Credit risk	LC
9.	Problem assets, provisions and reserves	LC
10.	Large exposure limits	C
11.	Exposure to related parties	C
12.	Country and transfer risk	NA
13.	Market risk	MNC
14.	Liquidity risk	MNC
15.	Operational risk	NC
16.	Interest rate risk in banking book	NC
17.	Internal control and audit	MNC
18.	Abuse of financial services	MNC
	Methods of ongoing supervision	
19.	Supervisory approach	LC
20.	Supervisory techniques	LC
21.	Supervisory reporting	LC
	Accounting and disclosure	
22.	Accounting and disclosure	LC
	Corrective and remedial powers	
23.	Corrective and remedial powers of supervisors	LC
	Consolidated supervision and cross-border banking	
24.	Consolidated supervision	NA
25.	Home-host relationship	NA

C – Compliant; LC – Largely Compliant; MNC – Materially Non-Compliant; NC – Non-Compliant; NA – Not applicable.

3.3 Non-banking Financial Companies

NBFCs have been competing with and complementing the services of commercial banks for a long time. Initially intended to cater to the needs of small savers and investors, NBFCs have developed into institutions that can provide services similar to those of banks. However, NBFCs are distinct from banks in that their regulation and supervision is much lighter as compared with banks. They are, for example, not subject to Cash Reserve

Table III.4: Assessment of Basel Core Principles – Regional Rural Banks		
Sr. No.	**Principle**	**Status of compliance**
	Objectives, autonomy and resources	
1.	Objectives independence, powers, transparency and co-operation	LC
	Licensing criteria	
2.	Permissible activities	C
3.	Licensing criteria	NA
4.	Transfer of significant ownership	NA
5.	Major acquisitions	C
	Prudential requirements and risk management	
6.	Capital adequacy	NC
7.	Risk management process	MNC
8.	Credit risk	C
9.	Problem assets, provisions and reserves	C
10.	Large exposure limits	LC
11.	Exposure to related parties	LC
12.	Country and transfer risk	NA
13.	Market risk	MNC
14.	Liquidity risk	MNC
15.	Operational risk	MNC
16.	Interest rate risk in banking book	NC
17.	Internal control and audit	MNC
18.	Abuse of financial services	MNC
	Methods of ongoing supervision	
19.	Supervisory approach	LC
20.	Supervisory techniques	LC
21.	Supervisory reporting	LC
	Accounting and disclosure	
22.	Accounting and disclosure	LC
	Corrective and remedial powers	
23.	Corrective and remedial powers of supervisors	LC
	Consolidated supervision and cross-border banking	
24.	Consolidated supervision	NA
25.	Home-host relationship	NA

C – Compliant; LC – Largely Compliant; MNC – Materially Non-Compliant; NC – Non-Compliant; NA – Not applicable.

requirements but unlike banks they also do not have deposit insurance coverage and refinance facilities from the Reserve Bank. These entities operate in the financial market and there are two broad categories of NBFCs, namely, NBFC-Deposit taking (NBFC-D) and NBFCs-Non-

Deposit Taking (NBFC-ND). The NBFCs as a whole constitute 9.1 per cent of assets of the total financial system.

While NBFCs-D have been regulated since 1963, an amendment to the RBI Act in 1997 gave powers to the Reserve Bank to regulate and supervise all NBFCs more comprehensively. NBFCs-ND, till recently, were subject to minimal regulation as they were non-deposit taking bodies. Recognising the growing importance of this segment, and their linkages to banks and other financial institutions, capital adequacy and exposure norms were made applicable to Systemically Important NBFCs (NBFCs-ND-SI) from April 1, 2007. The supervision of NBFCs falls within the ambit of the Board for Financial Supervision. NBFCs are regulated and supervised by the Reserve Bank under the provisions of Chapter IIIB of the RBI Act. They are also governed by the Companies Act, 1956 and action taken for violation of the Companies Act falls within the jurisdiction of the Ministry of Corporate Affairs.

There is a requirement of compulsory registration of NBFCs with the Reserve Bank. NBFCs-D need to maintain an SLR (investments in government and approved securities as a prudential liquidity requirement) which is 15 per cent of public deposits. All NBFCs are required to transfer at least 20 per cent of their net profits to a reserve fund. On the assets side, prudential norms in the form of income recognition, accounting standards, accounting for investments, asset classification, provisioning for bad and doubtful debts, capital adequacy and credit/investment concentration norms akin to those applicable to commercial banks have been prescribed. Guidelines on Asset Liability Management were issued to a cross-section of NBFCs in 2001. Both NBFC-D and NBFCs-ND have played a very important role in the financial markets and any weaknesses in them could pose problems for financial stability. Hence, there is need for an appropriate structure for regulation and supervision of systemically important NBFCs with appropriate legislative authority.

Compared to stand-alone NBFCs, NBFCs which are part of a banking group are subject to stricter prudential norms in their scope of activities. For example, stand-alone NBFCs could offer discretionary portfolio management schemes, which cannot be offered by NBFCs within a banking group. At the same time, it must be appreciated that, unlike stand-alone entities, NBFCs which are part of a banking group have recourse to cheaper funding sources because of the parent bank's ability to raise low-cost deposits. From a prudential standpoint, the regulatory structure should duly recognise both the advantages and disadvantages of the operational environment of the respective NBFCs. The potential regulatory arbitrage in respect of NBFCs which are subsidiaries/joint ventures/associates of bank holding companies has been addressed to a significant extent through the introduction of consolidated supervision and stipulation of capital requirements for the banking group as a whole. It should, however, be noted that sister concerns, i.e., banks and NBFCs, or two NBFCs under the same holding company, do not fall within the ambit of consolidated supervision. To address this gap, the regulatory authorities, *viz.*, the Reserve Bank, IRDA and SEBI are developing a process for regulation and supervision of financial conglomerates. This process of forming an appropriate structure for regulation and supervision with the apposite legislative authority, which is under progress, needs to be expedited.

With the tightening of the regulation of deposit taking NBFCs (NBFCs-D), there has been a decline in the number of NBFCs-D. NBFCs-D have a high CRAR, low NPAs and comfortable return on assets. However, recent times have seen the rapid growth of NBFCs-ND. Within this sector, NBFCs-ND-SI are growing at a rapid pace. They have a systemic linkage and in the light of experience with such institutions abroad in the recent crisis, it needs to be ensured that these entities do not pose any systemic risk to the financial sector.

Funding of NBFCs

The CFSA observes that there appears to be a significant convergence between deposit taking and non-deposit taking NBFCs as regards the source of funds. Both sectors are increasingly dependent on borrowings, which accounts for about two-thirds of their funding requirements. In addition to the lack of access to low-cost funds, deposit taking NBFCs also bear regulatory costs in the form of additional reporting requirements. The CFSA believes that a level playing field between banks and NBFCs may not be practical and that, over the medium term, it may in fact become increasingly difficult for deposit taking NBFCs to compete with banks, causing these entities to become unviable or be merged with banks. In this context, the Reserve Bank has given an option to the NBFCs to voluntarily move out of public deposits acceptance activity. Non-deposit taking NBFCs are growing rapidly and unsecured borrowings comprise their single largest source of funds (36.8 per cent), which includes a significant amount of borrowings from banks/FIs. Thus, they have a systemic linkage and need to be monitored closely to ensure that they do not pose any risk to the system. At the same time it should be ensured that excessive regulations do not stifle their growth. In this context, both the direct and indirect exposure to depositors needs to be taken into account. To the extent that they rely on bank financing, there is an indirect exposure for depositors. On the one hand, the concentration of funding has risks and, on the other, the caps on bank lending to NBFCs will constrain their growth. There is an urgent need for development of an active corporate bond market to address the funding requirement of NBFCs, which has begun to be addressed recently.

Assessment of Basel Core Principles

The NBFCs are compliant/largely compliant in areas relating to licensing criteria, permissible activities, capital adequacy, risk management process, credit risk, problem assets, large exposures, abuse of financial services, supervisory approach, supervisory techniques and supervisory reporting (Table III.5).

However, the assessment has revealed that there are several gaps in areas relating to home-host co-operation, transfer of significant ownership, major acquisitions, exposure to related parties, market, liquidity and operational risk, internal control and interest rate risk in the banking book.

The role of the owners of institutions can be critical in determining how the entity approaches corporate governance. In this context, it is worth noting that the Reserve Bank

Table III.5: Assessment of Basel Core Principles –Non-banking Financial Companies		
Sr. No.	**Principle**	**Status of compliance**
	Objectives, autonomy and resources	
1.	Objectives independence, powers, transparency and co-operation	LC
	Licensing criteria	
2.	Permissible activities	LC
3.	Licensing criteria	LC
4.	Transfer of significant ownership	NC
5.	Major acquisitions	NC
	Prudential requirements and risk management	
6.	Capital adequacy	C
7.	Risk management process	LC
8.	Credit risk	LC
9.	Problem assets, provisions and reserves	LC
10.	Large exposure limits	LC
11.	Exposure to related parties	NC
12.	Country and transfer risk	NA
13.	Market risk	NC
14.	Liquidity risk	MNC
15.	Operational risk	NC
16.	Interest rate risk in banking book	NC
17.	Internal control and audit	MNC
18.	Abuse of financial services	LC
	Methods of ongoing supervision	
19.	Supervisory approach	LC
20.	Supervisory techniques	LC
21.	Supervisory reporting	LC
	Accounting and disclosure	
22.	Accounting and disclosure	LC
	Corrective and remedial powers	
23.	Corrective and remedial powers of supervisors	LC
	Consolidated supervision and cross-border banking	
24.	Consolidated supervision	NC
25.	Home-host relationship	NC

C – Compliant; LC – Largely Compliant; MNC – Materially Non-Compliant; NC – Non-Compliant; NA – Not applicable.

does not obtain the names and holdings of all significant shareholders or those who exert a controlling influence on NBFCs, including the identities of beneficial owners of shares being held by nominees. However, details of 'substantial interest' of promoters, the chairman, managing directors and CEO are part of the Certificate of Registration application form obtained by the Reserve Bank. The application form should also obtain information on the names and holdings of significant shareholders of NBFCs who exert a controlling influence which could also be reported on an ongoing basis, through periodic off-site returns.

As a prudential measure, the Reserve Bank has defined 'group of connected counterparties' and set prudent limits on large exposures to a single counterparty or group of connected counterparties. However, it has not issued any instructions to NBFCs as regards the review and reporting of material concentration to the board. There is a need to issue guidelines for establishing thresholds depending on their respective scales of operation and reporting the exposures above this threshold to the board which can be verified by the Reserve Bank during on-site inspection. There can also be confirmation, through on-site inspection, that NBFCs have sufficient controls and systems in place for preventing, identifying and reporting potential abuses of financial services including money laundering.

In the interests of better market discipline, and in the context of the increasing complexities of holding structures and multi-layering, apart from the diversified activities of NBFCs, the Reserve Bank should consider increased disclosures in the case of NBFCs, such as ownership structure, significant holdings and nature and types of activities and products.

3.4 Housing Finance Companies (HFCs)

The emergence of organised housing finance has been a relatively late development in India. When the National Housing Bank was set up in 1988, nearly 80 per cent of the housing stock in the country was financed from informal sources. The organised sources of housing finance included, *inter alia*, the housing finance companies which then numbered about 400 and were essentially NBFCs that were regulated by the Reserve Bank. These included small companies with operations restricted to localised areas and companies engaged in construction/development, which also offered housing credit. Several of the companies relied on public deposits for their resources. A notable exception was the Housing Development Finance Corporation (HDFC).

The setting up of the National Housing Bank (NHB) in 1988, as a fully-owned subsidiary of the Reserve Bank, marked the beginning of the emergence of housing finance companies as significant financial intermediaries in the country. Since then, the sector has grown with many new HFCs being set up, including several sponsored by banks and financial institutions; some of these with equity support from the National Housing Bank as part of its developmental mandate. This provided aspiring potential home owners access to housing finance and facilitated home ownership. HFCs are regulated and supervised by the National Housing Bank (NHB) as per the provisions of the NHB Act, 1987 and Housing Finance Companies (NHB) Directions, 2001. They are also governed by the Companies Act, 1956, which falls within the jurisdiction of the Ministry of Corporate Affairs.

While the financials of HFCs have shown improvement over time, there are concerns that increases in interest rates could elongate loan maturity and lead to loan delinquency. Though there was some decline from 2006-07, the HFCs were comfortably placed in terms of liquidity as indicated by their current ratio[6] till end-March 2008. However, most HFCs have been experiencing some liquidity problems from October 2008. This has been caused

[6] This ratio indicates current assets to current liabilities.

primarily by the overall liquidity shortage at the beginning of the year as also the increased reliance on short-term market borrowings which dried up during the current year due to liquidity problems faced by major investors, such as mutual funds. Strengthening the financial position of NHB, which is designated as a refinancing institution for housing, would partly address the issue of liquidity of HFCs.

The CFSA observes that there has been a decline in the number of HFCs (to around 43, with 12 of them doing 90 per cent of the business) and that scheduled commercial banks are currently the dominant players in the housing loan market. Given that HFCs are akin to NBFCs, their regulation should be vested with the Reserve Bank, leaving the National Housing Bank with only its developmental function to avoid any conflict of interest. [The Government is, however, of the view that the status quo may continue as there is no conflict of interest in NHB combining a developmental and regulatory role as has been done by many other regulatory agencies. It is felt by the Government that since the housing market in India is in its infancy, combining regulatory and developmental functions in one single agency, namely, the NHB, would be beneficial for the market.]

Development of Housing Price Index

Internationally, most countries employ house prices as part of their assessment of the likely short-term evolution of the economy and also to assess the asset price channel of monetary policy. Given the lack of data on housing prices in India, assessing the extent of activity in this segment becomes a challenging task for policymakers. Non-availability of a national housing price index hinders the objective calculation of a loan-to-value ratio for the housing finance sector. Hence the construction of both a national housing price index and local housing price indices is a priority. Initiating the process of having a pricing index for the housing sector, the NHB has developed a housing price index in the pilot phase for five cities, *viz.*, Mumbai, Bhopal, Bangalore, Delhi and Kolkata. Over time, it is expected to cover 63 cities with populations of more than 10 lakh. This should be supplemented by a 'housing start-up index' to provide insights on the elasticity of property supply to property prices as well as the cost of housing credit. In addition, the Reserve Bank, on its own, undertook two different surveys/studies to identify real estate price movements in Mumbai which covered the prices of residential and commercial properties, including rent and sale/resale transactions of six zones in Greater Mumbai and seven adjacent municipalities. This study developed separate price indices for sale/resale prices and rent of commercial and residential buildings. Given the recent developments in the housing market the world over, which have underscored the need for better monitoring of real estate prices, it has been decided to establish an appropriate statistical data collection system within the Reserve Bank for which it has constituted an expert group. The proposed 'Asset Price Monitoring System' is expected to cover in a timely manner the key essence of real estate price movements, including the sale/resale/rent of residential/commercial property in representative locations. Keeping in mind the importance of such an indicator for the central bank, the Reserve Bank constituted a Technical Advisory Group (TAG) for the development of housing start up index. The CFSA notes that the TAG in its report submitted in January 2009, has formulated a feasible methodology for the construction of a housing start-up index in India on a regular basis and proposed an institutional structure that would be responsible for its operationalisation. The National Buildings Organisation (NBO) under the Ministry of Housing and Urban Poverty Alleviation would play an important role in the compilation of the housing start-up index.

Development of a Secondary Mortgage Market

Mr. Andrew Sheng, the peer reviewer of the report by the Advisory Panel on Financial Stability Assessment and Stress Testing, had suggested that consideration could be given to creating one or two government-sponsored secondary mortgage vehicles (with private management and ownership participation) to develop a healthy mortgage market. The Advisory Panel on Financial Stability Assessment and Stress Testing, however, thought that in view of the fiscal implications involved, a government-sponsored/guaranteed secondary mortgage vehicle was not appropriate at this juncture.

The CFSA noted that Fannie Mae and Freddie Mac, which enjoyed an implicit government guarantee, have recently been taken over by the US Treasury. In light of these developments, as also the observations of the Panel, it felt that this is not an opportune time to bring into being these kinds of vehicles. However, the idea needs to be studied carefully in the interests of developing the housing finance market in the medium and long term.

Assessment of Basel Core Principles

The assessment of BCPs has revealed that HFCs are compliant/largely compliant in areas relating to capital adequacy, problem assets, credit risk, large exposure limits, supervisory approach, supervisory techniques, supervisory reporting, accounting and disclosure (Table III.6).

There are gaps in areas relating to home-host co-operation, permissible activities, exposure to related parties, risk management and internal control.

There is a need to reckon FIIs' investments as a part of the foreign shareholding of HFCs. However, this should not result in reduction in FDI limits. Instead, there should be strong regulations in place to guard against any external contagion.

There are some legislative issues that also need to be addressed. For example, the NHB Act should clearly define a housing finance company or housing finance institution, clearly delineating their permissible activities. Builders/construction companies should not be permitted to use the term 'housing finance' in their names. The NHB should also issue appropriate guidelines for establishing the responsibilities of the board and senior management with respect to corporate governance to ensure that there is effective control over an HFC's entire business. It also needs to lay down norms for acquisition or investment by an HFC, taking into account the entity's financial and organisational resources and the risks that could emanate from such acquisitions. Furthermore, it needs to issue guidelines for HFCs in a phased manner on market risk and operational risk along the lines of commercial banks. There should be asset classification and provisioning norms specified for off-balance sheet items.

Table III.6: Assessment of Basel Core Principles – Housing Finance Companies		
Sr. No.	Principle	Status of compliance
	Objectives, autonomy and resources	
1.	Objectives independence, powers, transparency and co-operation	LC
	Licensing criteria	
2.	Permissible activities	MNC
3.	Licensing criteria	LC
4.	Transfer of significant ownership	NC
5.	Major acquisitions	NC
	Prudential requirements and risk management	
6.	Capital adequacy	C
7.	Risk management process	MNC
8.	Credit risk	LC
9.	Problem assets, provisions and reserves	C
10.	Large exposure limits	LC
11.	Exposure to related parties	MNC
12.	Country and transfer risk	NC
13.	Market risk	NC
14.	Liquidity risk	MNC
15.	Operational risk	NC
16.	Interest rate risk in banking book	NC
17.	Internal control and audit	MNC
18.	Abuse of financial services	LC
	Methods of ongoing supervision	
19.	Supervisory approach	LC
20.	Supervisory techniques	LC
21.	Supervisory reporting	LC
	Accounting and disclosure	
22.	Accounting and disclosure	LC
	Corrective and remedial powers	
23.	Corrective and remedial powers of supervisors	LC
	Consolidated supervision and cross-border banking	
24.	Consolidated supervision	NC
25.	Home-host relationship	NC

C – Compliant; LC – Largely Compliant; MNC – Materially Non-Compliant; NC – Non-Compliant; NA – Not applicable.

Summary position of compliance

The summary position of compliance to BCPs by Commercial Banks, Urban Co-operative Banks, State Co-operative Banks/District Central Co-operative Banks, Regional Rural Banks, Non-Banking Financial Companies and Housing Finance Companies is given in Table III.7.

3.5 Insurance Sector

The insurance sector, which was nationalised in 1956 (life) and 1973 (non-life), has been an important participant in the financial development of the country. In the late 1990s it was decided to allow private participation in this sector. The enactment of the Insurance Regulatory and Development Authority Act in 1999 led to the opening of the insurance sector for private players.

Table III.7: Compliance at a glance – Assessment of Basel Core Principles						
Institutions/ Assessment	**CB**	**UCB**	**SCB/ DCCB**	**RRB**	**NBFC**	**HFC**
Compliant	7	4	3	4	1	2
Largely Compliant	11	11	10	8	13	10
Materially Non-compliant	6	4	6	6	2	5
Non-compliant	1	2	2	2	8	8
Not applicable	–	4	4	5	1	–

CB-Commercial Banks; UCB-Urban Co-operative Banks; SCB-State Co-operative Banks; DCCB-District Central Co-operative Banks; RRB-Regional Rural Banks; NBFC-Non-banking Financial Companies; HFC-Housing Finance Companies.

During the past five years, the sector has grown in size and penetration. Deregulation has resulted in more diversified insurance product offerings, with a stress on marketing and distribution strategies. Though the concentration in the insurance sector is very high, it has shown a declining trend since the sector was opened to private participation. While the Government has been emphasising the need for enhancing FDI limits, owing to the global financial turmoil as also the absence of an enabling regulatory framework, the issue needs to be addressed in a medium-term perspective. The CSFA notes that the passage of the Insurance Laws Amendment Bill, 2008 and the Life Insurance Corporation (Amendment) Bill, 2008 are pending in Parliament.

The key indicators of the life insurance segment show a reasonably comfortable position as regards solvency and capital adequacy. However, the solvency ratio of the largest life insurance company is just at the stipulated regulatory minimum. However, there are no concerns as regards asset quality, profitability and liquidity. There is a general trend to increase link-based business in the life sector.

The non-life segment also displays comfortable solvency. But earnings and profitability as also liquidity are areas of some concern. The high ratio of net claims to net premiums point to the need for better quality control in respect of underwriting new business, better risk management and increasing reinsurance.

The main shock variables in the Indian context can be viewed as market-specific and insurance-specific. The former mainly includes interest rate risk and equity price risk. Mortality risk, expense risk and persistency risk may be included under insurance-specific risk variables, though market conditions impact persistency. In view of the environment in which the sector is working and the risks which are envisaged in this environment, only the life insurance companies have been subjected to the above shock variables. While the equity shock does not impact the solvency ratios of the companies significantly, increase in withdrawal experience results in improvement of solvency ratios as the release of reserves in these cases outweighs the reduction in assets associated with withdrawals. The solvency ratio is sensitive to interest rate and expense variation. Life insurance companies need to pay more attention to expense management and to develop appropriate and timely Management Information Systems (MIS) in this regard. The long-term nature of assets of the life insurance industry is a pointer to the need to have in place appropriate asset-liability management guidelines.

Assessment of Insurance Core Principles

The assessment of Insurance Core Principles reveals that 18 principles are observed/ largely observed and the remaining 10 principles are partially observed. The regulatory framework for insurance supervision is placed against the background of the statutory framework which encompasses the legislative, regulatory and institutional framework, both for the financial sector and the economy at large. It provides enough flexibility to keep the current practices up to date to meet the needs of the industry. The legislative framework for the insurance sector is contained in the various Acts. The IRDA interacts with other supervisors/supervisors of other jurisdictions. The assessment revealed that there are gaps in compliance in the areas of corporate governance, internal control, group-wide supervision, risk assessment and management of derivatives and similar commitments (Table III.8).

Some of the provisions of the Insurance Act, 1938 are outdated and need to be reviewed in the context of the changing economic environment. The proposals for amendments to the Insurance Act, 1938 and the LIC Act, 1956 have been made by the IRDA.

There is a need for an increase in the supervisory powers vested with IRDA as regards the constitution of a consultative committee, the enforcement of criminal penalties and winding up of an insurance company.

The regulatory position with respect to the exempted insurers is not clear. With a view to ensuring that all entities carrying on an insurance business are supervised by the IRDA, clarity of their reporting to the supervisor needs to be reinforced. A roadmap needs to be laid down by the Government/supervisor for the continuance or otherwise of these entities to address the concerns relating to protection of the interests of the policyholders covered by them.

IRDA should put in place systems to ensure effective group-wide supervision by formalising the relationship through an MoU with both home and foreign regulators. IRDA needs to address issues related to the policy framework that needs to be put in place for risks associated with dealing in derivatives by insurance companies. It also needs to make a beginning by introducing a risk-based capital requirement for the insurance sector in order to progress towards adopting a risk-based supervisory cycle for the insurance companies.

The Indian insurance industry faces an inadequate supply of specialised skilled professionals, particularly in the areas of treasury management and actuarial and underwriting skills in non-traditional areas. Adequate initiatives need to be taken in this regard. IRDA too needs to continue taking steps to enhance the skill sets as well as retain its skilled staff.

3.6 Concluding Remarks

The commercial banks have seen an all-round improvement in key financial indicators, particularly in areas of capital adequacy, asset quality and earnings. Even the financial position for the half-year ended September 2008 as also the quarter ended December 2008 reveals that

Table III.8: Assessment of Insurance Core Principles

Sr. No.	Principle	Status of compliance
	Conditions for effective supervision	
1.	Conditions for effective insurance supervision	LO
	Responsibilities of supervisor	
2.	Supervisory objectives	LO
3.	Supervisory authority	LO
4.	Supervisory process	LO
5.	Supervisory co-operation and information sharing	LO
	Form and governance of insurers	
6.	Licensing	LO
7.	Suitability of persons	LO
8.	Changes in control and portfolio transfers	O
9.	Corporate governance	PO
10.	Internal control	PO
	Actual practice of supervisors	
11.	Market analysis	PO
12.	Reporting to supervisors and off-site monitoring	LO
13.	On-site inspection	LO
14.	Preventive and corrective measures	LO
15.	Enforcement or sanctions	PO
16.	Winding-up and exit from the market	PO
17.	Group-wide supervision	PO
	Key financial and risk management processes	
18.	Risk assessment and management	PO
19.	Insurance activity	PO
20.	Liabilities	O
21.	Investments	LO
22.	Derivatives and similar commitments	PO
23.	Capital adequacy and solvency	O
	Distribution, consumer protection, disclosures and fraud	
24.	Intermediaries	O
25.	Consumer protection	O
26.	Information, disclosure & transparency towards the market	LO
27.	Fraud	PO
	Anti-Money laundering	
28.	Anti-money laundering, combating the financing of terrorism (AML/CFT)	LO

O – observed, LO – Largely observed, PO – Partly observed, NO – Not observed.

Memo Items

Assessment	Number
Observed	5
Largely Observed	13
Partly Observed	10
Not Observed	–

the key financial parameters do not reveal any discernable concerns. There has been considerable convergence of financial results and efficiency across bank groups within the sector. Competition within the sector has increased over time as evidenced by the declining share of PSBs and increasing share of NPBs in the banking business.

The single-factor stress testing in areas of credit, interest and liquidity risks shows that the commercial banks are reasonably resilient. But some improvements are required in the risk mitigation approaches of the banking sector in general and with particular reference to liquidity aspects, both from regulatory as well as internal risk control perspectives. This gains particular significance in the context of current international experience. Further, the present stress testing exercise has its limitations as it does not take into account co-related risks due to non-availability of data and a model for undertaking such an analysis. However, there is a need for developing such an analysis over a period of time. The stress testing exercise done with reference to September 2008 also does not reveal any additional cause of concern for the Indian banking system. A stronger banking sector would require more flexibility regarding the approach towards government ownership of commercial banks, more clarity in the stance towards enhanced presence of foreign banks, a more conducive environment for mergers/ amalgamations, improvements in corporate governance and more focus on capacity building and appropriate executive compensation structure. The ongoing global financial crisis has highlighted the importance of cross-border co-operation.

The financial results of the co-operative and rural banking structure show some degree of vulnerability, but they are systemically not very large. There is a need to address issues relating to governance and government overlap in the regulation of this sector. The regulatory structure requires a significant overhaul. While MoUs between the Government and Reserve Bank/NABARD have been a welcome attempt to circumvent the problems arising out of dual control of regulation of co-operative banks, the progress made in this regard should be continuously monitored so that it evolves with changing circumstances and withstands the test of time.

An analysis of the NBFC sector shows that it is the non-deposit taking NBFCs-ND which have become the frontrunners in this sector. This sector requires close monitoring particularly from the angle of its linkages with other financial institutions and markets. Also, though considerably reduced, there remains some scope for reducing arbitrage opportunities particularly in respect of those companies not falling within the ambit of any of the regulatory authorities at present, with suitable regulatory changes.

While the housing finance sector has witnessed a significant growth in recent years, the share of HFCs in the housing loan market has declined. There is also a need for taking up work relating to the housing price index at the earliest. Most HFCs have been facing liquidity problems from October 2008 caused by overall liquidity shortage at the beginning of the year as also increased reliance on short-term market borrowings which during the current year dried up due to liquidity problems faced by major investors, such as mutual funds. Strengthening the financial position of NHB, which is the designated refinancing institution for housing, would partly address the issue of liquidity of HFCs.

The growth of insurance sector has been impressive both in the life and non-life segments. While the financial results are generally satisfactory, there are some concerns relating to profitability and liquidity in the non-life segment. Stress testing shows that though shocks in equity price, withdrawal and mortality experience do not have any material effect, the solvency ratios are sensitive to interest rate and expense variations.

The recent global financial turmoil has brought into sharp focus the liquidity and contagion risks facing the financial institutions. In this context, there is a requirement for an integrated risk management approach which takes into account all facets of risk and their contiguous properties and increased regulatory co-operation and information sharing.

Given the general robustness of the regulatory and supervisory environment complemented by a gradual approach towards financial sector reforms, India has remained relatively less affected by financial crises which have impacted the international financial system at different points in time, from the 1990s till date.

IV. FINANCIAL MARKETS

In keeping with evolving global financial developments and the ongoing Indian financial sector reforms, financial markets have, for a variety of purposes, emerged as a major channel of resource mobilisation. Overall, the gradual removal of structural bottlenecks and a shift away from the erstwhile administered interest rates have led to greater domestic market integration. This process has, however, tended to make the system more vulnerable to contagion risk.

The IOSCO Principles for Securities Regulation are generally applicable to the equities and corporate bond markets. However, taking into account their importance for systemic stability, the Advisory Panel on Financial Regulation and Supervision has also assessed the foreign exchange, money and government securities markets against IOSCO principles. The Advisory Panel on Financial Stability and Stress Testing has also examined the stability and development aspects of the financial markets and suggested ways for their improvement. The compliance position based on assessment of IOSCO principles across markets at a glance is furnished in Table IV.1.

The regulatory jurisdiction over financial markets is mainly divided between the Reserve Bank and SEBI. Over time, clarity of regulatory powers has been established through new legislations and amendments to existing legislations and notifications by the Government. The Reserve Bank of India (Amendment) Act, 2006 provides, *inter alia,* comprehensive powers to regulate the money, foreign exchange and government securities market. Accordingly, these amendments empower the Reserve Bank to deal in derivatives, to lend or borrow securities and to undertake repo or reverse repo transactions; remove the ambiguity regarding the legal validity of derivatives; determine the policy relating to interest rates or interest rate products and give directions in that behalf to all agencies dealing in securities, money market instruments, foreign exchange, derivatives and to inspect such agencies.

Table IV.1: Compliance at a glance – Assessment of IOSCO Principles

Markets/Assessment	Equities market	Foreign exchange market	Govt. securities market	Money market
Fully Implemented	20	16	19	19
Broadly Implemented	8	–	2	4
Partly Implemented	2	5	5	5
Not Implemented	–	–	–	–
Not Applicable	–	9	4	2

4.1 Equity Market

The last two decades have seen tremendous growth in Indian equity markets. There has been significant improvement in the market and settlement infrastructure, and major strides have been taken in areas of risk management which received a major impetus after the setting up of SEBI as the market regulator. The turnover in both the cash and derivatives markets, as well as market capitalisation and returns from stock markets, increased considerably until end-2007. But since early 2008 there has been considerable volatility, with a downward bias in market capitalisation and price-to-earnings ratios, largely due to global financial developments. The recent volatility has, however, not affected the smooth functioning of the stock markets and the settlement of trades. On the contrary, it has brought to the fore the resilience of the market infrastructure and its arrangements for risk management. This is also a pointer to the robust regulatory environment within which the equity market operates in India.

Assessment of IOSCO Principles

The assessment of IOSCO principles as regards regulation of the equity/corporate bond market reveals an overall significant level of compliance (Table IV.2). The responsibilities of SEBI are well-defined. It regulates market players through a combination of on-site inspection, off-site reporting, investigation and surveillance of the market and regulated entities; there is full, timely and accurate disclosure of financial results and information that are material to investors' decisions; the holders of securities are treated in a fair and equitable manner; capital requirements have been prescribed for market intermediaries; and there is ongoing supervision of exchanges and trading systems to ensure the integrity of trading.

The assessment has, however, revealed some gaps in areas of responsibilities of the regulator; operational independence and accountability of the regulator, inspection, investigation and surveillance powers; assistance provided to foreign regulators; minimum entry standards, capital and prudential requirements; internal organisation and operational conduct of market intermediaries; and the procedures for dealing with the failure of a market intermediary. The Advisory Panel on Financial Regulation and Supervision was of the view that there is significant overlap between SEBI and the Government, with the Government having the powers to issue directions to SEBI even in areas other than policy. Hence, it recommended that Section 16 of the SEBI Act could be amended, empowering policy directions to be issued only in the public interest. Further, it also felt that Section 5(2) of the SEBI Act, whereby the Central Government has the right to terminate the services of the Chairman or Member at any time by giving a notice of three months, appears to be in conflict with the tenor of other sections in the SEBI Act and could have implications for the operational independence of SEBI. Hence, it felt that Section 5(2) can be removed from the SEBI Act.

Table IV.2: Assessment of IOSCO Principles – Equities, Corporate Bond and Derivative Market		
Sr. No.	**Principle**	**Status of compliance**
	Principles of regulator	
1.	Responsibilities of regulator	BI
2.	Operational independence and accountability	BI
3.	Power, resources and capacity to perform functions	FI
4.	Regulatory processes of regulator	FI
5.	Professional standards of staff of regulator	FI
	Principles relating to self-regulation	
6.	Regulatory regime	FI
7.	Regulators' oversight over SROs and standards adopted by SROs	FI
	Principles relating to enforcement	
8.	Inspection, investigation and surveillance powers	FI
9.	Enforcement powers	FI
10.	Use of inspection, investigation, surveillance and enforcement powers	BI
	Principles relating to co-operation	
11.	Authority to share information with domestic and foreign counterparts	FI
12	Information-sharing mechanisms	FI
13.	Assistance provided to foreign regulators	PI
	Principles relating to issuers	
14.	Disclosure of financial results	FI
15.	Treatment of holders of securities	FI
16.	Accounting and auditing standards	BI
	Principles relating to collective investment schemes	
17.	Standards for eligibility and regulation	BI
18.	Rules governing legal form and structure	FI
19.	Disclosure requirements	FI
20	Asset valuation and pricing and redemption of units	FI
	Principles relating to market intermediaries	
21.	Minimum entry standards	BI
22.	Capital and prudential requirements	BI
23.	Internal organisation and operational conduct	PI
24.	Procedure for dealing with failure of market intermediary	BI
	Principles relating to secondary markets and clearing and settlements	
25.	Trading systems	FI
26.	Regulatory supervision	FI
27.	Transparency of trading	FI
28	Detection of manipulation and unfair trading practices	FI
29.	Management of large exposures, default risk and market disruption	FI
30.	Systems for clearing and settlement of securities	FI

FI – Fully implemented; BI – Broadly implemented; PI – Partly Implemented; NI – Not Implemented; NA – Not applicable.

However, the CFSA differs and feels that checks and balances and accountability arrangements have to be part of a sustainable regulatory model since the regulator, with whatever degree of autonomy, cannot function in a vacuum. It also needs to be noted that the Government has never exercised these powers *vis-à-vis* Statutory Regulatory Authorities (SRAs). Further, it was felt that oversight by the Government is essential since this could provide breadth and depth to the market.

Some major issues that need to be addressed in the equity market are: an improvement in IPO processes, better risk management by market participants, enhancement of knowledge standards and strengthening of the inter-exchange cross-market surveillance. To enhance accessibility for investors, the Securities Appellate Tribunals should be strengthened by setting up regional branches. Certain organisations that currently function as trade and industry associations but perform some Self-Regulatory Organisation (SRO)-like roles, could be considered for being accorded SRO status.

Other issues that merit consideration are setting up a Central Integrated Platform (CIP) with multiple nodes to enable investors to apply electronically for public issues, simplifying the debt issuance process with a view to rationalising public issues, strengthening the inter-exchange cross-market surveillance to consider serious contagion risks and faster convergence of Indian Accounting Standards with International Financial Reporting Standards.

4.2 Foreign Exchange Market

The foreign exchange market in India is one of the fastest growing across countries, as is evident from both the spot and derivatives segments. The Indian foreign exchange market volumes have shown the fastest growth between 1998 and 2007 among the countries surveyed by the Bank for International Settlements (BIS). The total annual turnover increased from USD 1.3 trillion during 1997-98 to USD 12.3 trillion during 2007-08. The daily average turnover has seen a substantial pick-up from about USD 5 billion during 1997-98 to USD 49 billion during 2007-08. The forward and swap market as a per cent of total turnover continued to hover around 50 per cent. Apart from increased turnover, the low and stable bid-ask spread of the INR/USD market is an indicator of the deep liquidity and efficiency of the market. However, since September 2008, considerable volatility has been witnessed in the market.

Assessment of IOSCO Principles

The assessment of the foreign exchange market reveals that while most of the applicable principles relating to the regulator, enforcement, market intermediaries, secondary markets and clearing and settlement systems are fully implemented, there are gaps in areas relating to operational independence and accountability of the regulator, co-operation and detection of manipulation and unfair trading practices (Table IV.3).

Derivatives

As regards derivatives, some issues to be considered are the need for a uniform accounting regime across banks and corporates, the desirability of banks entering into complex derivatives transactions with only those corporates that adopt the revised accounting standards and the introduction of disclosure of forex derivative transactions by non-bank entities. Lack of appropriate standards could lead to institutions being unaware of the inherent risks in such derivatives exposure, which could result in over-leveraging. Therefore, there should be adequate monitoring and regulation.

Sr. No.	Principle	Status of compliance
	Table IV.3: Assessment of IOSCO Principles – Foreign Exchange Market	
	Principles of regulator	
1.	Responsibilities of regulator	FI
2.	Operational independence and accountability	PI
3.	Power, resources and capacity to perform functions	FI
4.	Regulatory processes of regulator	FI
5.	Professional standards of staff of regulator	FI
	Principles relating to self-regulation	
6.	Regulatory regime	NA
7.	Regulators' oversight over SROs and standards adopted by SROs	NA
	Principles relating to enforcement	
8.	Inspection, investigation and surveillance powers	FI
9.	Enforcement powers	FI
10.	Use of inspection, investigation, surveillance and enforcement powers	FI
	Principles relating to co-operation	
11.	Authority to share information with domestic and foreign counterparts	PI
12	Information-sharing mechanisms	PI
13.	Assistance provided to foreign regulators	PI
	Principles relating to issuers	
14.	Disclosure of financial results	NA
15.	Treatment of holders of securities	NA
16.	Accounting and auditing standards	NA
	Principles relating to collective investment schemes	
17.	Standards for eligibility and regulation	NA
18.	Rules governing legal form and structure	NA
19.	Disclosure requirements	NA
20	Asset valuation and pricing and redemption of units	NA
	Principles relating to market intermediaries	
21.	Minimum entry standards	FI
22.	Capital and prudential requirements	FI
23.	Internal organisation and operational conduct	FI
24.	Procedure for dealing with failure of market intermediary	FI
	Principles relating to secondary markets and clearing and settlements	
25.	Trading systems	FI
26.	Regulatory supervision	FI
27.	Transparency of trading	FI
28	Detection of manipulation and unfair trading practices	PI
29.	Management of large exposures, default risk and market disruption	FI
30.	Systems for clearing and settlement of securities	FI

FI – Fully implemented; BI – Broadly implemented; PI – Partly Implemented; NI – Not Implemented; NA – Not applicable.

Unhedged corporate exposure in foreign exchange entails systemic risk and it is in the interests of the entire financial sector to add further options for hedging in respect of currency exposures of corporates. The Advisory Panel on Financial Regulation and Supervision was of the view that in the interests of systemic stability, all restrictions requiring underlying for hedging need to be abolished in a phased manner within a given time-frame.

The CFSA recognises that the concept of economic exposure has been accepted by the Reserve Bank to permit hedging. The Reserve Bank should, however, undertake an in-depth examination of the pros and cons of this recommendation before doing away with the requirement of underlying altogether.

Trade Monitoring and Risk Management

Electronic trading platforms function as broking systems and as such do not require any approval from the Reserve Bank as authorised persons under the Foreign Exchange Management Act (FEMA). They perform activities similar to voice brokers, but use different channels of communication and technology. Hence, they should be subjected to the same regulatory discipline as brokers. Such trading platforms in India are not covered under the Payment and Settlement Systems (PSS) Act, 2007. Only in the event of such trades getting translated into payment instructions resulting in clearing/settlement and the same entity carrying out these functions would the provisions of the PSS Act get attracted. Currently, foreign exchange brokers in India are accredited by the Foreign Exchange Dealers Association of India (FEDAI) and the system has been working well. Therefore, there is no need for amending FEMA and bringing these entities under the regulatory ambit of the Reserve Bank.

The foreign exchange positions of banks are monitored by the Reserve Bank through Aggregate Gap Limits. There is a case for monitoring foreign exchange positions based on VaR, which captures the risks better and is more aligned to Basel II norms. All Over-the-Counter (OTC) trades should be compulsorily recorded and settled through a clearing corporation. The Reserve Bank has prescribed capital requirements for market intermediaries. Initial capital and risk-based capital requirements are specified separately for banks. There are capital requirements in terms of net-owned funds for Authorised Persons. Authorised dealers also have regulatory capital requirements which take into account their on-and off-balance sheet risks. There are no risk-based capital requirements for full-fledged money changers (FFMCs). Although there is no documented procedure for dealing with the failure of a market intermediary, there are various risk-mitigating elements in place. Banks are subject to prompt corrective actions that are based on triggers in relation to their key financial indicators. This has been stipulated in order to minimise the damage to investors and to contain systemic risk. As regards FFMCs, the only risk they pose is in respect of foreign exchange holdings that they retain overnight. But they do not pose systemic risk as they only buy and sell foreign exchange, routing their transactions through banks.

FEDAI

Some industry associations also perform SRO-like functions. The FEDAI is one such association. If it is to be made a full-fledged SRO the issues that would need to be addressed to resolve any conflict of interest would include: corporate governance such as the composition of its board and the independence of its directors, the independence and functioning of key committees of the board, and transparent disclosure practices. Furthermore, if FEDAI is made an SRO, it should also be brought under the regulatory purview of the Reserve Bank.

4.3 Government Securities Market

Given the important strategic intervention role that the Government is required to play in any country, the government securities market is one of the most important segments of the financial market. The market also serves as an important transmission channel for monetary policy. Without it, or with one that functions poorly, the regulatory power to intervene during times of crisis would be severely circumscribed. India has for long recognised this and always paid special attention to the development of the government securities market.

The new provisions of the Government Securities Act, 2006 enables development of practices and regulations taking into account new technology. In recent times, and consequent to the various steps taken to develop the government securities market, there has been tremendous growth in both the volume and liquidity in this segment. The outstanding stock of government securities increased from Rs.76,908 crore in 1991-92 to Rs.13,32,435 crore in 2007-08. The outstanding stock as a per cent of GDP increased from 11.8 per cent to 28.3 per cent during the corresponding period. Trade associations like Fixed Income Money Market Dealers Association (FIMMDA) have also played a crucial role in the development of the government securities market.

Assessment of IOSCO Principles

Though the overall applicability of IOSCO principles to the government securities market is not mandated, an assessment of this market with the IOSCO principles revealed that most principles relating to responsibilities and powers of the regulator, enforcement, collective investment schemes, market intermediaries, secondary market and clearing and settlement systems were fully implemented (Table IV.4).

The principles relating to operational independence and accountability of the regulators, home-host co-operation, disclosure of financial results and procedure for dealing with failure of a market intermediary are not fully implemented.

Under the existing mechanism, the Reserve Bank owns the trading platforms of government securities markets settlements, while the Clearing Corporation of India (CCIL) manages these platforms as the central counterparty. The Panel on Financial Regulation and Supervision recommended that the trading platforms should be hived off from the Reserve Bank in a phased manner. The CFSA feels that the Reserve Bank could take a considered view in the matter.

Given the calibrated movement towards fuller capital account convertibility and the increased need for foreign funds to develop social overhead capital, the Panel on Financial Regulation and Supervision felt that Central/State Governments can consider reducing the time lag in publication of audited financial results and increase the frequency of financial disclosures so that government debt can be appropriately rated. This would make government-issued paper more attractive to the international investor. In this context, CFSA notes that from 2006-07 onwards, the audited annual accounts of the Central Government are presented within a time lag of about 6 to 9 months. The Advisory Panel on Financial Stability and Stress Testing observed that, as fuller capital account convertibility takes place, investment in government securities by foreign entities would also require the strengthening of disclosure requirements. This is because with gradual progress towards fuller capital

Table IV.4: Assessment of IOSCO Principles – Government Securities Market

Sr. No.	Principle	Status of compliance
	Principles of regulator	
1.	Responsibilities of regulator	FI
2.	Operational independence and accountability	PI
3.	Power, resources and capacity to perform functions	FI
4.	Regulatory processes of regulator	FI
5.	Professional standards of staff of regulator	FI
	Principles relating to self-regulation	
6.	Regulatory regime	NA
7.	Regulators' oversight over SROs and standards adopted by SROs	NA
	Principles relating to enforcement	
8.	Inspection, investigation and surveillance powers	FI
9.	Enforcement powers	FI
10.	Use of inspection, investigation, surveillance and enforcement powers	FI
	Principles relating to co-operation	
11.	Authority to share information with domestic and foreign counterparts	PI
12	Information-sharing mechanisms	PI
13.	Assistance provided to foreign regulators	PI
	Principles relating to issuers	
14.	Disclosure of financial results	PI
15.	Treatment of holders of securities	NA
16.	Accounting and auditing standards	NA
	Principles relating to collective investment schemes	
17.	Standards for eligibility and regulation	BI
18.	Rules governing legal form and structure	FI
19.	Disclosure requirements	FI
20	Asset valuation and pricing and redemption of units	FI
	Principles relating to market intermediaries	
21.	Minimum entry standards	FI
22.	Capital and prudential requirements	FI
23.	Internal organisation and operational conduct	FI
24.	Procedure for dealing with failure of market intermediary	BI
	Principles relating to secondary markets and clearing and settlements	
25.	Trading systems	FI
26.	Regulatory supervision	FI
27.	Transparency of trading	FI
28	Detection of manipulation and unfair trading practices	FI
29.	Management of large exposures, default risk and market disruption	FI
30.	Systems for clearing and settlement of securities	FI

FI – Fully implemented; BI – Broadly implemented; PI – Partly Implemented; NI – Not Implemented; NA – Not applicable.

account convertibility, Indian Government bonds could be progressively accessed by prospective international investors. The CFSA feels that though increased transparency and disclosure standards are desirable objectives in respect of sovereign debt instruments, they need to be viewed independently of the issue of capital account convertibility.

Market Development

The major measures for the development of the government securities market include diversification of the investor base to non-banks and retail segments, availability of varied hedging instruments for effective mitigation of interest rate risk across the gamut of market participants, a gradual increase in the number of trading days for short selling in government securities along with appropriate borrowing/lending mechanisms in government securities, and capacity building to study the suitability of a derivative product and its appropriateness. Scaling down regulatory prescriptions for mandated investments in government securities and the introduction of AS 30 would result in an increase of tradeable assets.

The CFSA notes that the Banking Regulation (BR) Act was amended in 2006 which removed the statutory floor on SLR.[7] Any reduction in SLR should, however, factor in the pressure of expenditure and the consequent fiscal deficit as well as market borrowings under the Market Stabilisation Scheme, given that the SLR requirement prescribed for banks enables smooth conduct of the Government's borrowing programme. The SLR needs to be equally viewed as a prudential requirement to sustain the liquidity position and asset quality of banks. A reduction in SLR could increase the possibility of the banks acquiring more illiquid and low-quality assets. Also, there is a need to find alternate sets of investors in government securities that would buttress the demand for such instruments.

A Working Group constituted by the Reserve Bank has examined ways of activating the interest rate futures market. An RBI-SEBI Technical Committee is considering operationalisation of the recommendations of the report, and it is expected that products as per the recommendations of the Group shall be introduced in early 2009 along with supporting changes in the regulatory/accounting framework. The CFSA is of the view that exchange traded derivatives should be introduced at an early date and the settlement of all OTC derivatives should be routed through a clearing corporation.

4.4 Money Market

The Reserve Bank traditionally regulates the money markets. The Government Notification under Section 16 of the Securities Contract (Regulation) Act and the amendment to the RBI Amendment Act 2006 have further clarified the powers available to the Reserve Bank to regulate the money markets. The important components of the money market in India are inter-bank call (overnight) money, market repo, collateralised borrowing and lending obligation (CBLO), Commercial Paper (CP), Certificate of Deposit (CD) and term money market. Treasury bills constitute the main instrument of short-term borrowing by the Government. Historically, the call money market has constituted the core of the money market in India. However, the collateralised segments, *viz.*, market repo and CBLO have come into prominence in recent years. The market continues to be liquid with a low and stable bid-ask spread. A better trading and settlement infrastructure coupled with the introduction of financial market

[7] As per Section 24 of the BR Act the banks are required to maintain in the form of cash and unencumbered securities a percentage of their net demand and time liabilities. The amendment to the BR Act in 2006 has removed the statutory floor on SLR and empowers the Reserve Bank to flexibly prescribe SLR.

reforms have led to a decline in money market volatility. In the derivatives segment, the swap market (especially overnight index swaps) has been the active segment and is used by banks as well as other entities to manage their interest rate risk more than any other instrument. The notional principal outstanding in respect of Interest Rate Swaps has increased.

Assessment of IOSCO Principles

The assessment of compliance with reference to the IOSCO principles has revealed that the money market is generally compliant with the standards (Table IV.5). Most principles relating to the regulator, enforcement, issuers, secondary markets, clearing and settlement and collective investment schemes are fully implemented. Gaps, however, exist in the principles relating to operational independence and accountability, home-host co-operation and those relating to market intermediaries. One of the major gaps identified by the Advisory Panel on Regulation and Supervision pertains to the operational independence of the Reserve Bank since the reasons for the removal of the Governor/Deputy Governors have not been specified in the RBI Act, but this is a general issue related to the governance of the Reserve Bank and not specifically germane to the money market. Another issue relates to regulatory co-operation, whereby co-operation with foreign regulators is not formalised.

Market Development

Interest rate deregulation has made financial market operations more efficient, but it has also exposed the participants to increased risks. Interest rate derivative products could be an effective risk mitigant in this regard. Rupee derivatives in India were introduced in July 1999, when the Reserve Bank permitted banks/FIs/PDs to undertake interest rate swaps/ forward rate agreements. Currently, interest rate swaps are the predominant instruments. The swap market, especially the Overnight Indexed Swaps (OIS) market, has been very active in India and is used by banks as well as other entities to manage their interest rate risk more than any other instrument. However, the absence of a term money market, and therefore a 3- or 6-month benchmark rate, has led to market concentration on the overnight benchmark. The development of active interest rate futures market would contribute to the development of term money market. For the development of the IRF market, there is a case for permitting banks to take trading positions in the interest rate futures market as they are already allowed in the OTC interest rate swap market.

There is a need to permit short-selling of different kinds of money market securities in a phased manner. In the interests of market development, broad-basing market repo by allowing AAA-rated corporate bonds to be repoable, with appropriate safeguards, should be considered. This would also require a reasonably well-developed corporate bond market along with a transparent and efficient clearing and settlement system. The commercial paper market has witnessed vibrant growth in the past three years. Though it is not obligatory on the part of financial institutions to provide any 'stand-by' facility to the issuers of corporate paper, the existence of an appropriate liquidity back-up is imperative for mitigating risks in the

Table IV.5: Assessment of IOSCO Principles –Money Market		
Sr. No.	Principle	Status of compliance
	Principles of regulator	
1.	Responsibilities of regulator	FI
2.	Operational independence and accountability	PI
3.	Power, resources and capacity to perform functions	FI
4.	Regulatory processes of regulator	FI
5.	Professional standards of staff of regulator	FI
	Principles relating to self-regulation	
6.	Regulatory regime	NA
7.	Regulators' oversight over SROs and standards adopted by SROs	NA
	Principles relating to enforcement	
8.	Inspection, investigation and surveillance powers	FI
9.	Enforcement powers	FI
10.	Use of inspection, investigation, surveillance and enforcement powers	FI
	Principles relating to co-operation	
11.	Authority to share information with domestic and foreign counterparts	PI
12	Information-sharing mechanisms	PI
13.	Assistance provided to foreign regulators	PI
	Principles relating to issuers	
14.	Disclosure of financial results	FI
15.	Treatment of holders of securities	FI
16.	Accounting and auditing standards	FI
	Principles relating to collective investment schemes	
17.	Standards for eligibility and regulation	BI
18.	Rules governing legal form and structure	FI
19.	Disclosure requirements	FI
20	Asset valuation and pricing and redemption of units	FI
	Principles relating to market intermediaries	
21.	Minimum entry standards	BI
22.	Capital and prudential requirements	BI
23.	Internal organisation and operational conduct	PI
24.	Procedure for dealing with failure of market intermediary	BI
	Principles relating to secondary markets and clearing and settlements	
25.	Trading systems	FI
26.	Regulatory supervision	FI
27.	Transparency of trading	FI
28	Detection of manipulation and unfair trading practices	FI
29.	Management of large exposures, default risk and market disruption	FI
30.	Systems for clearing and settlement of securities	FI

FI – Fully implemented; BI – Broadly implemented; PI – Partly Implemented; NI – Not Implemented; NA – Not applicable.

commercial paper market. The Panel on Financial Stability Assessment and Stress Testing recommends that the rating of commercial paper should take into account the availability of an appropriate liquidity back-up.

4.5 Corporate Bond Market

The corporate bond market needs to develop as a critical segment of the financial sector. This has been strongly recommended as a key reform area by the Advisory Panel on Financial

Stability Assessment and Stress Testing as well as the peer reviewers. In India, however, it has failed to take off so far, largely because of lack of buying interest, poor transparency and an absence of pricing of spreads against the benchmark yield curve. An inadequate supply of paper from corporates, given the increased access to the offshore market for Indian corporates (though on the wane in recent times), large issuance of credit-risk-free government securities and low-risk subordinated debts by banks as part of their Tier II capital at attractive interest rates, and the absence of delivery versus payment (DVP) and tax deducted at source (TDS) systems for corporate bonds have also acted as impediments to the development of secondary market activities.

But change is long overdue and development of this market is essential to further facilitate the financing needs of the country. Therefore, effective and concerted regulatory and legislative initiatives are needed so that the market can develop to its full potential. These measures include the need to develop institutional investors, making corporate bonds repo-able in a phased manner, the introduction of DVP in corporate bonds and ensuring that settlement takes place through a clearing corporation, the consolidation of all trades reported in different reporting platforms and dissemination of the same to enhance transparency, the rationalisation of stamp duty, the abolition of TDS, reforms in pension and insurance sectors and having timely, efficient bankruptcy procedures. In short, there is a long way to go.

There remains the question of allowing foreign investors into the corporate bond market. However, given the interest rate differentials in India *vis-à-vis* international rates, without corresponding expectations related to the evolving inflation and exchange rates, opening up the Indian debt market to foreign investment could raise issues of financial stability. There is, therefore, a need to follow a cautious approach.

4.6 Credit Risk Transfer Mechanism

Financial markets require mechanisms that allow the smooth but transparent transfer of risk to voluntary and well-informed investors. In India the Credit Risk Transfer (CRT) mechanism needs to gain ground but the approach has to be gradual. Liquidity risks emanating from off-balance sheet items and the inter-linkages of CRT instruments with other markets need to be recognised. CRT instruments could be exchange-traded to enhance transparency and their transactions recorded and settled through a clearing corporation. Adequate disclosure norms need to be in place. The approach to the development of the securitised market should be gradual and calibrated.

Despite the benefits to financial resilience, changes in the credit markets have also led to concerns and unease, particularly in view of the recent financial turmoil. In the context of issues concerning credit risk transfer, one of the measures that could be considered before adopting regulatory incentives for the development of credit derivatives markets is a need for objective rating, within an appropriate regulatory framework for the credit rating agencies.

Further, financial institutions need to develop capacity to measure their exposure to risk in a less benign market and economic environment. Senior management and boards of directors must understand the limitations and uncertainty that pervade the tools used to assess these risks, try to better understand the potential scale of losses that the firm may face, carefully examine how well risk exposures reflect the overall risk appetite of the firm and the size of capital and liquidity cushion maintained in relation to those exposures. Market participants need to keep pace with changes in the market through continued investment in both risk management and processing infrastructure. Credit derivatives should be recorded and settled through a clearing corporation.

4.7 Concluding Remarks

Financial markets in India have evidenced significant development since the financial sector reforms initiated in the early 1990s. The development of these markets has been done in a calibrated, sequenced manner and in step with those in other markets in the real economy. The emphasis has been on strengthening price discovery, easing restrictions on flows or transactions, lowering transaction costs, and enhancing liquidity. Benefiting from a series of policy initiatives over time, greater domestic market integration has also been witnessed.

The equity, government securities, foreign exchange and money markets along with their corresponding derivatives segments have developed into reasonably deep and liquid markets and there has been significant increase in domestic market integration over the years. However, the credit derivative market is yet to take off in any significant manner. As regards corporate bonds, though the primary market has seen an increase in issuance, the secondary market has not developed commensurately.

The equity market has witnessed wide-spread development in infrastructure and its functioning is comparable to advanced markets. It has seen significant increase in growth and diversity in composition in the past two decades. Certain areas, however, could be further developed. Among some of the major steps to be considered are:

- According SRO status to certain trade and industry associations to enhance regulatory efficiency, subject to appropriate safeguards;
- Further improvements in infrastructure and risk management systems;
- More focused monitoring of market intermediaries; and
- Streamlining of issuance procedures and the enhancement of knowledge standards of the current and potential market participants through national investor education and financial literacy.

With the economy moving towards fuller capital account convertibility in a calibrated manner, focused regulation and monitoring of the foreign exchange market assumes added importance. In this context, there is a need to strengthen infrastructure, transparency and disclosure, and product range in the forex derivatives segment. Strengthening the trading infrastructure, market conduct, transparency of OTC derivatives in the forex market, accounting and disclosures in line with international practices, including disclosures by non-bank corporates, needs to be done on a priority basis. The recent introduction of currency futures is a step in this direction.

The government securities market has witnessed significant transformation in its various facets: market-based price discovery, widening of the investor base, introduction of new instruments, establishment of primary dealers and electronic trading and settlement infrastructure. This is the outcome of persistent and high-quality reforms in developing the government securities market. There are still areas where further development need to be undertaken. Increased transparency and disclosures, gradual scaling down of mandated investments and development of newer instruments are some major areas which could be considered. Regulatory incentives to increase the size of trading book could be considered as a measure to further develop the government securities market.

The money market is an important channel for monetary policy transmission and India has generally conformed to being a liquid market. In the ongoing global financial crisis, whereas many money markets in advanced countries have experienced serious difficulties, the Indian money market has continued to function normally. The gradual shift towards a collateralised inter-bank market, phasing out of non-bank participants from the call and notice money market, policy direction towards reductions in cash reserve requirements, the introduction of new instruments such as CBLO, implementation of RTGS, significant transformation of monetary operations framework towards market-based arrangements and facilitating trading through NDS-CALL are some of the factors that have contributed to the development of a relatively vibrant and liquid money market. However, the inability of market participants to take a medium to long-term perspective on interest rates and liquidity, coupled with the absence of a credible long-term benchmark, is a major hurdle for further market development and needs to be addressed.

The development of the corporate bond market, could be a source of long-term finance for corporates. The development of this market currently suffers from a lack of buying interest, absence of pricing of spreads against the benchmark and a flat yield curve. It requires regulatory and legislative reforms for its development.

The unbridled proliferation of complex credit derivatives and excessive risk transfer by adoption of the originate-to-distribute model is recognised as one of the root causes of the current financial crisis. The recent credit turmoil has also underscored the importance of liquidity risk arising from off-balance sheet commitments, implicit or explicit, of the credit intermediaries. The Reserve Bank had put in place regulatory guidelines that were aligned with global best practices while tailoring them to meet country-specific requirements. While the development of markets for credit derivatives and asset securitisation products could play a critical role in furthering economic growth, this requires to be pursued in a gradual manner by sequencing reforms and putting in place appropriate safeguards before introduction of such products.

While financial market reforms need to be accorded appropriate priority, given the risks arising from cross-sectoral spillover of financial markets to other segments of the financial system, there is a need to be careful and nuanced in approaching financial market reforms in the interest of financial stability.

V. FINANCIAL INFRASTRUCTURE

A robust and secure financial infrastructure is the cornerstone of financial stability and development. The CFSA, taking into account the Indian institutional and market environment, looked into aspects relating to stability and development in the following areas as part of the financial infrastructure, *viz.*, regulatory structure, legal infrastructure, liquidity infrastructure, governance infrastructure, accounting and auditing, payment and settlement infrastructure, business continuity management (BCM), safety net and financial system integrity. A comprehensive assessment of adherence to standards relating to corporate governance, legal infrastructure, accounting and auditing, and payment and settlement systems was done, while a review of the AML/CFT standards was also undertaken.

5.1 Regulatory Structure

In India, different segments of the financial system are regulated by different regulators. The Reserve Bank regulates banks and NBFCs, and most of the financial markets, *viz.*, the government securities, money and foreign exchange markets. SEBI regulates the equity and corporate bond markets while IRDA regulates the insurance sector. The Pension Fund Regulatory and Development Authority (PFRDA) as a pension regulator for the pension sector is on the anvil. Though the Reserve Bank of India regulates all banks, NABARD supervises the rural co-operative banks and the RRBs. The Reserve Bank regulates Non-banking Financial Companies and NHB regulates the Housing Finance Companies.

Independence of Regulatory and Supervisory Authorities

The independence of the regulatory agencies is crucial for financial stability. Regulators provide a public good at a cost that underscores the need to maintain their financial independence. The financial independence of the Reserve Bank, SEBI and IRDA is assessed to be generally adequate. The Reserve Bank's governance structure is laid down clearly in various legislations and there is adequate openness and transparency in its decision making. SEBI is empowered to frame regulations without the approval of the Central Government and is able to operate and exercise its powers given under various statutes without external political and commercial interference. IRDA is an independent agency which reports to Parliament through the Ministry of Finance.

Regulatory Co-operation

The CFSA has noted that the existence of different regulators is consistent with this transitional phase of financial development. However, multiple and conflicting roles of the regulators could lead to an increase in the scope for regulatory arbitrage, which can be exploited by financial conglomerates. To prevent or minimise this, a high degree of co-operation amongst the regulatory agencies is a must. Going forward, the issue relating to inter-regulatory co-operation will assume further importance in effectively addressing regulatory arbitrage issues related to derivative products, like Collateralised Debt Obligations, when they gain popularity in Indian markets.

In order to be able to regulate the sector effectively, effective and transparent regulatory co-ordination mechanisms are in place that aim at streamlining capital adequacy (like double/ multiple gearing of capital), accounting standards, appropriate disclosure requirements particularly in relation to overall risk management, and financial policy transparency.

Over a period of time most overlapping issues have been resolved. However, according to the Advisory Panel on Financial Regulation and Supervision, ensuring the effective co-ordination of the financial policies by strengthening the existing institutional arrangements for regulatory co-operation and strengthening information-sharing arrangements, both within and across borders among the regulators, continues to be a contentious issue.

The CFSA is, however, of the view that the recent global financial crisis has highlighted the fact that rigid institutionalisation and formalisation of co-ordination arrangements may not be of much help and might even turn out to be counter-productive. A more appropriate solution could be a 'consensus' approach by the members of the High Level Co-ordination Committee on Financial Markets (HLCCFM) as is currently practised. The arrangements, however, would need to be continuously monitored and the effectiveness of the HLCCFM strengthened through greater exchange of information in a need-based and timely manner. [One member of the CFSA, however, felt that formalisation of the HLCCFM with a clear mandate would be desirable for timely and effective crisis resolution.]

There is the issue of the regulation of competing products issued by different sets of institutions falling under different regulatory regimes. This raises questions regarding a level playing field for marketing certain products. It is desirable that a co-ordinated view be taken in respect of overlap and conflict of regulatory jurisdictions, taking on board the various regulations in this regard. If required, appropriate amendments could be made to mitigate the conflicts arising from regulatory overlap.

An associated issue with respect to regulatory co-operation relates to inter-regulatory co-ordination with overseas regulators. This has gained importance in view of the increased need for the supervision of cross-border financial intermediaries in the context of greater integration with external markets. Early adoption of a suitable framework for cross-border supervision and supervisory co-operation with overseas regulators will be needed through appropriate interpretation of the existing statutes and undertaking legal amendments, if necessary.

Principles-based vs. Rules-based Regulation

There has been in recent times, been some debate over selecting principles-based regulation or rules-based regulation. It has been suggested by some that India should adopt the former.

Almost all countries follow a rules-based approach wherein the regulators attempt to prescribe in great detail what exactly the regulated entities can and cannot do. In principles-based regulation, the broad principles of regulation are articulated, essentially to avoid the codifying of details of allowable products, markets or business plans; in this system, how a principle would be applied remains at the discretion of the regulator.

India follows a model of regulation which is primarily rules-based. Over a period of time, India has built up a large repository of subordinate laws through a codification of detailed rules and regulations by specialised regulators, which detail the permissible features of financial products and services and also the functioning of the financial markets.

The CFSA notes that the Financial Services Authority, UK, one of the few countries which applies principles-based regulation, has a set of as many as 60 manuals or sourcebooks, each containing detailed rules. The CFSA further notes that principles-based regulation hardly exists as a common practice. Furthermore, principles-based and rules-based regulatory approaches can be complementary to each other in as much as principles also contain a set of rules. Hence, ideally it is desirable to identify a set of principles and then group the existing rules under them and consider validating the rules under these broad principles. This would also obviate the rules/regulations degenerating into *ad hocism.*

Supervision of Financial Conglomerates

While most financial supervisors have recognised that financial conglomerates require and deserve some form of specialised supervision, the regulatory approaches to this kind of supervision differ greatly in their responses to some of the underlying problems of conglomerate regulation.

The supervision of Financial Conglomerates (FCs) in India is in its early stages. While there is a monitoring and oversight framework for financial conglomerates, there are some legal impediments that prevent effective information sharing and joint inspections by regulators.

Currently, a monitoring and oversight framework is in place for them that complements the regular supervision of individual entities by the respective regulators, *viz.*, the Reserve Bank, SEBI, and IRDA. A system of Consolidated Financial Statements/ Consolidated Prudential Reporting is also applicable to the banks. The monitoring framework rests on three components:

- off-site surveillance through receipt of quarterly FC returns;
- reporting relevant concerns on financial conglomerates to the standing Technical Committee that has members from the Government, the Reserve Bank, SEBI, IRDA and PFRDA; and

- holding of periodic discussions by the principal regulator with the top management of the conglomerate in association with other principal regulators to address outstanding issues/supervisory concerns.

There is no legislation specifically permitting regulation of FCs and holding companies in India. The Reserve Bank could, in the interests of financial stability, be armed with sufficient supervisory powers and monitoring functions in respect of financial conglomerates. It needs to be examined whether, given the nature of financial conglomerates in India, an amendment to the existing legislation would be sufficient or whether there is need for a new legislation for supervision of financial conglomerates. CFSA is of the view that legislation of a new Act, similar to the 1999 Financial Services Amendment Act, or the Gramm-Leach-Bliley (GLB) Act of USA is required to empower the regulator (the central bank) to have regulatory jurisdiction of the holding company. The following recommendations should be considered for strengthening the regulatory and supervisory framework for financial conglomerates:

- In the case of an FC where the apex institution is a bank holding company, the responsibility for regulation and supervision of the concerned bank would lie with the Reserve Bank.
- In the case of an FC where the apex institution is a non-bank holding company (financial or non-financial) having a bank within its structure, the responsibility for regulation and supervision of such non-bank entities would lie with the Reserve Bank.
- In the case of an FC where the apex institution is a non-bank financial holding company whose activity is within the regulatory jurisdiction of the Reserve Bank, the responsibility for regulation and supervision of the apex body/non-bank financial entity would lie with the Reserve Bank, irrespective of whether there is a bank within its structure.
- In the case of an FC where the apex institution is a non-bank non-financial holding company, the apex body/non-bank non-financial entity should be explicitly within the regulatory outreach of the Reserve Bank to the extent that the Reserve Bank is empowered to obtain information as relevant from time to time, even if there does not exist a bank within the financial conglomerate structure.
- The interactive relationship between the Reserve Bank and the other regulators of the insurance, securities, commodities, and housing needs to be streamlined.

As regards the supervision of these entities, there could be a 'Lead Regulator' with supervision being conducted collaboratively by the regulators with the lead regulator coordinating the supervision across various jurisdictions, subject to the parameters of co-ordination being well defined and ground rules being specified.

Entities within the financial conglomerates functioning in a regulatory vacuum should be brought under the regulatory reach of the lead regulator. Allowing 'intermediate' holding companies may not be feasible till an appropriate regulatory structure for such an entity is in place. In the interests of financial stability, there is a need for strengthening inter-regulatory co-operation and information-sharing arrangements, both within and across borders among the regulators.

Self-Regulatory Organisations

Self-Regulatory Organisations (SROs) are entities authorised by statute or an agency to exercise some delegated jurisdiction over a certain aspect of the industry or markets. They are non-government organisations which have a statutory responsibility to regulate their own members through the adoption and enforcement of rules of conduct for fair, ethical and efficient practices. There is a view that SROs could potentially enhance regulatory efficiency and optimise regulatory costs.

It is argued that SROs may have an inherent advantage in being able to respond more quickly and flexibly to changing market conditions than the regulator and to increase the pace of development since industry and the regulator would align their efforts towards a common goal. The self-regulation culture could help increase investor confidence, and help keep the momentum of market development at a steady pace. In India, though some associations/trade bodies perform SRO like functions, most of them are not formally recognised. There is a need to complement the existing regulatory structure by having SROs in various market segments.

The definitional ambiguities regarding SROs need to be sorted out. Formal oversight by the regulator in respect of SROs is, a necessity. As SROs are essentially trade bodies, issues relating to conflict of interest could arise; hence, it is necessary that issues like arm's length relationship of SROs with the associated trade bodies and their corporate governance policies be looked into by the regulator before according SRO status to any entity. Granting of SRO status to any institution would thus necessitate the fulfillment of certain preconditions, like introduction of transparent policies by the regulators for defining, identifying, and approving SRO status to institutions which are already performing implicitly or more explicitly self-regulatory functions in the financial sector. This could be the first step to pave the way for evolving a more generalised framework.

Co-ordination Between On-site Supervision and Off-site Monitoring

In order to reap the full benefits of synergies arising out of the complementarity of effective supervision, there is a need as well as room for the enhancement of co-ordination between on-site and off-site supervision.

Capacity Building

Given the innovations that have taken place in the banking arena coupled with new developments in areas like risk management and Basel II, the issue of capacity building, both from the perspective of the regulated and the regulator, has gained importance. The regulator could aspire for an 'adequate' incentive structure that would enable it to attract and retain talent and qualified professionals. With the ongoing integration of financial markets and diversification of asset classes, capacity building also assumes importance in the insurance and securities markets.

With aspects like the need for financial innovations and improving risk management in the context of Basel II gaining prominence against the backdrop of increasing globalisation in the banking sector, commercial banks in general and PSBs in particular have to build their staff competence. Issues relating to incentive structure, recruitment, promotion, retention, training, transfer, and succession plans be addressed, which in turn could help alleviate the inherent constraints related to capacity building in the banking sector. The Reserve Bank, along with the other regulators cannot lag behind market players and they run a huge risk if they do not have expertise in areas of risk management, and which, going forward, would require supervisory validation of various models in the Basel II environment. Also, keeping abreast of market developments including understanding the implications of the existence of complex derivative products in the banks' portfolios is a *sine quo non* in this regard.

Likewise, in the case of SEBI, capacity building and skill enhancement are issues, particularly with various innovations and new developments in the securities market.

In the insurance sector, as recommended by the Panel on Financial Stability and Stress Testing, there is a need for insurance staff to develop their treasury function and investment management skills. In order to effectively monitor the sector, IRDA needs to take steps to strengthen its machinery in terms of adequate skills for its officials, which would require capacity building.

CFSA underscores the need for all regulators to take steps in capacity building, including improvements in compensation structure. Developing a second line of professionals and having an appropriate succession plan, thereby augmenting institutional memory, is also necessary.

5.2 Liquidity Infrastructure

Liquidity Management

Systemic liquidity infrastructure refers to a set of institutional and operational arrangements – including key features of central bank operations and money and securities markets – that have a first-order effect on market liquidity and on the efficiency and effectiveness of liquidity management by financial firms.[8] While aspects relating to financial

[8] Dziobek, C., Hobbs, J.K., and Marston, D. (2000) as quoted in *Handbook on Financial Sector Assessment*, World Bank and IMF, September 2005.

markets and liquidity position of banks are covered elsewhere, this section addresses issues relating to liquidity management by the Reserve Bank and related aspects of the management of capital account in the context of large inflows/outflows of capital.

Active liquidity management is an integral part of the Reserve Bank's monetary operations. Liquidity management has been rendered complex by large capital flows witnessed in recent years. Swings in capital inflows without offsetting changes in the current account balances can lead to large and possibly disruptive changes in exchange rates. Inflows of foreign currency have had major consequences for the liquidity of the domestic financial system.

Until the end of 2007, large capital movements necessitated the Reserve Bank to sterilise the excessive monetary impact of inflows, using the market stabilisation scheme (MSS), cash reserve ratio and Open Market Operations (OMO). The Liquidity Adjustment Facility (LAF), introduced in June 2000, enabled the Reserve Bank to manage day-to-day liquidity or short-term mismatches under varied financial market conditions to ensure stable conditions in the overnight money market. In the context of sustained large capital flows, large-scale OMO led to a decline in its holding of government securities. This and the legal restrictions on the Reserve Bank on issuing its own paper became constraints on future sterilisation operations. So, a new instrument called Market Stabilisation Scheme (MSS) was introduced in April 2004, wherein dated securities/treasury bills are issued to absorb surplus liquidity.

All aspects related to liquidity infrastructure from the stability perspective were analysed by the Panel on Financial Stability Assessment and Stress Testing. Some of the issues that have arisen in liquidity management and that have been highlighted by the Panel are listed below:

- The movement of overnight rates has often witnessed significant volatility at the end of each quarter due to advance tax payment, and at the end of the last quarter ,due to year-end considerations for banks. This volatility has been accentuated by the difficulties in estimating cash flows with any reasonable degree of accuracy in the government accounts, largely arising from difficulties in projecting the receipts and payments of Governments.
- A fallout of the introduction of LAF has been the passive role adopted by some banks in managing their day-to-day liquidity position. Also, its operations are constrained by the availability of securities with the Reserve Bank, when liquidity has to be absorbed, and with market participants, when they are in need of liquidity.
- CRR has been increasingly used as a tool to modulate growth in credit and as an instrument of monetary management. In a market-oriented financial system, a high CRR (which was at 9 per cent as on August 30, 2008), when unremunerated, causes distortion in the term structure of interest rates. [CRR has been reduced in stages since then to 5 per cent as of January 17, 2009.]. CFSA notes in this context that since liquidity carries a cost, it is important that market participants have an incentive to recognise and bear some of the cost.

- While the central bank has been absorbing liquidity through OMO, MSS and CRR on a term basis, there is no window available to provide liquidity to the market on a term basis except through emergency lending, which the banks can access only in times of deep distress.[Such window has been opened in the current circumstances utilising Section 17 (3) (b) of the RBI Act.]
- In the absence of any short-term liquidity window from the central bank, apart from the overnight LAF, there have been a few instances where the liquidity at the short end dried up, causing call rates and short-term deposit rates to witness steep hikes, even under overall benign liquidity conditions. It is noted that the Reserve Bank does have the option of also conducting a term LAF.

Some of the recommendations made by the Panel to further strengthen the liquidity management framework in India along with CFSA's comments where applicable are given below:

- Systems and procedures need to be developed for smoothing out well-known spikes in liquidity and call money rates arising out of quarterly tax payments. Hence, there is a need to strengthen management of government cash balances. The introduction of auction of Central Government surplus balances with the Reserve Bank in a non-collateralised manner could be considered, which would also make available the government securities in the Reserve Bank's investment accounts for its own market operations. The CFSA notes that a Working Group in the context of better cash management by the Government has been set up.
- There is a need for strengthening the asset-liability management of banks, including the development of the term money market as also the development of liquidity forecasting models. There is also a need to refine the indicators of liquidity. This is necessary both for better monetary/credit management and for minimising systemic risk and financial crisis propagation. There is a requirement of skill development of the market participants to assess their own liquidity requirements. Capacity building on the part of Reserve Bank is also required for strengthening its liquidity forecasting ability.
- Introduction of LAF has been a major step as regards money market operations. However, it has also led to a passive role adopted by some banks in managing their day-to-day liquidity position. Additional collaterals like high-quality AAA-rated paper for conducting repo may be explored over time.
- In the absence of any short-term liquidity window from the central bank, in a range of about 15 days to three months, banks find it difficult to lend short term when they perceive liquidity tightness due to tax outflows and large government borrowings. Though the Advisory Panel on Financial Stability and Stress Testing

felt that an appropriately designed term liquidity facility can provide powerful incentives to develop the term money market, the CFSA is not in favour of introducing a term liquidity facility since it is of the view that the existing instruments are adequate to address seasonalities and short-term uncertainties in liquidity conditions that cause volatility in overnight rates. Moreover, the Reserve Bank is free to introduce term repos as and when necessary within the LAF framework.

In the light of recent events following the sub-prime crisis, like the treatment of Northern Rock in the UK and Bear Stearns and American International Group (AIG) in the US, the Advisory Panel on Financial Regulation and Supervision highlighted the need for more careful management of liquidity risk. In this context the Panel suggested constitution of a Working Group with the specific mandate to examine the following:

- The powers available as per extant provisions with the Reserve Bank as LoLR.
- The scope of putting a mechanism whereby the same can be activated at the shortest possible time.
- The scope of expanding the instruments that can be permitted for providing liquidity.

The CFSA feels that the choice of tools in times of crisis would vary depending on the circumstances. The Reserve Bank's interventions should depend upon specific circumstances and judgment about contagion and systemic stability and it would not be practical to lay down upfront the extent to and circumstances under which it would play the role of the lender of last resort.

5.3 Management of the Capital Account

In the context of the management of the capital account, the key issue for the monetary authority is to determine whether the capital inflows are of a permanent and sustainable nature or temporary and subject to sudden stops and reversals. There is a need to examine the likely implications of excessive inflows and outflows on monetary operations. Strategic management of the capital account would warrant preparedness for all situations.

The sub-prime turmoil caused the shock of reversal in capital flows combined with increase in spreads. Consequent to greater integration of financial markets, India has, in recent times, been experiencing the challenge of managing liquidity. The adverse impact on domestic rupee liquidity due to reversal of capital flows can be countered by the Reserve Bank by substituting net foreign exchange assets as a source of reserve money with net domestic assets in its balance sheet, so that the domestic primary liquidity is sustained adequately to meet the credit needs of the economy, consistent with growth prospects.

Monitoring of the unhedged positions of corporates by banks needs to be strengthened, since the currency risk has the potential to transform into credit risk.

The reversal of capital flows, difficulty in refinancing of external commercial borrowings and availment of trade credit despite buoyant FDI inflows has affected the equity market, and consequently mutual funds have faced redemption pressures during late 2008. This has also impacted the exchange rate due to FII outflows and the rupee has tended to depreciate. The reversal of flows has also affected domestic liquidity as corporates, due to problems in availing finance from abroad, have started approaching the domestic market. The additional liquidity requirements have been met through a cut in the Cash Reserve Ratio, LAF injections, winding down or MSS buy-back and by providing general or sector-specific refinance facilities. The leeway available to the Reserve Bank will depend upon monetary and credit projections. It also has to take into account the potential inflationary pressures that it could create if actual liquidity injection becomes excessive.

Contrary to the perception that India was decoupled from global economic conditions, it has been seen that the disorderly unwinding of global imbalances, particularly in the current context of financial turmoil, has affected the Indian economy indirectly. Though the exposure of banks, corporates and households in India to the external sector is limited, there is a need to be alert to unforeseen domestic and global shocks and pro-actively manage the risks. Hence, there is a need to be vigilant and remain in a state of constant preparedness to meet any adverse consequences in the face of disorderly unwinding of global imbalance.

5.4 Market Integrity

Given the concerns about the origin and source of investment funds flowing into the country, there is a need to take suitable measures which would enhance the confidence of foreign investors and regulators alike in the Indian financial system.

One important concern in the context of market integrity is the foreign portfolio investment through the participatory note (PN) route by Foreign Institutional Investors (FIIs). The Government in this regard is of the opinion that since FIIs maintain records of the identity of the entity they issue PNs to and SEBI can obtain this information from the FIIs, there does not appear to be any cause for concern from the 'Know Your Customer' (KYC) angle. Further, PNs can be issued or transferred only to persons who are regulated by an appropriate foreign regulatory authority. The Reserve Bank's concern is that as PNs are tradeable instruments overseas, this could lead to multi-layering which will make it difficult to identify the ultimate holders of PNs. Furthermore, the transactions of the FIIs with the PNs are outside the real-time surveillance mechanism of SEBI.

5.5 Accounting Standards

Accounting standards and the integrity of its implementation lie at the heart of a successful market economy. It is a welcome feature of the Indian economy that Indian Accounting Standards are broadly in line with International Accounting Standards, which are now known as International Financial Reporting Standards (IFRSs). To be sure, there are still some gaps in areas relating to the convergence of Indian Accounting Standards with IFRSs in developing sector-specific guidance, authority for issuance of standards and the training of professionals. These issues are being addressed. The ongoing global financial crisis and subsequent problems relating to derivatives transactions in India have brought to the fore the necessity for early adoption of accounting standards AS 30 and 31 relating to financial instruments.

The autonomy of the Accounting Standards Board (ASB) would be greatly enhanced if it is given the authority to issue the standards and the Council of Institute of Chartered Accountants of India (ICAI) confines itself to the administrative, but not the functional, control of the ASB. There is a need for the ASB to consider the development of standards on various subjects as also to provide sector-specific guidance. ICAI should constitute an independent Interpretation Committee. Awareness should be created about IFRSs among auditors and all others who are involved in the process. ICAI should also continue to conduct training programs and take steps to enhance and broaden the scope, possibly with regulators (to enhance resource availability), and to impart more formalised training to preparers of financial statements.

5.6 Auditing Standards

The International Auditing Standards (ISAs), devised by the International Auditing Practices Committee (IAPC) and later renamed the International Auditing and Accounting Standards Board (IAASB), are widely accepted in India following efforts by the Auditing and Accounts Standards Board (AASB) in India to develop similar auditing standards. Though ICAI has taken steps to align Indian auditing standards with ISAs, there are still some gaps which need to be addressed in areas relating to convergence with ISAs, implementation of auditing standards, strengthening the peer review process, access to working papers and independence of auditors. AASB should strive for convergence with ISAs and efforts also need to be made at the Institute level in this regard. Efforts should be made to issue Exposure Drafts by the AASB when they are issued by IAASB. ICAI needs to take proactive steps by bringing out more technical guidance and other literature to help SMEs understand new standards and aspects relating to their practical implementation. The Quality Review Board set up by ICAI needs to start functioning more effectively at the earliest. It should play a more proactive role as an independent oversight body for the auditing profession in India.[9]

There is a need to give functional independence to the AASB *vis-à-vis* the Council of the Institute by making it the final authority for drafting and issuance of the Standards, with the Council confining itself to administrative, but not functional, control of AASB.

The certification authorities/auditors should be made responsible to the respective regulatory authorities to the extent that they are involved in certifying/auditing entities that fall within the regulatory domain of the Reserve Bank/SEBI or any other regulator as applicable.

5.7 Business Continuity Management (BCM)

While information technology has revolutionised the way financial institutions and markets conduct their business, it has also significantly increased their vulnerability to

[9] The recent disclosure of massive falsification of annual financial statements and quarterly financial results submitted to the stock exchanges by a large public listed company audited by a 'Big-4' auditing firm reinforces the need for much greater strengthening of the peer review process. It also highlights the need for the Quality Review Board to immediately start functioning and for it to play a pro-active role as an independent oversight body for the auditing profession in India.

unexpected interruptions. Business Continuity Management involves arranging for emergency operations of critical business functions and for their resource recovery planning after natural or man-made disasters.

Banks need to continuously test and upgrade their BCM plans by incorporating new changes in their business and technology improvements. A BCM drill conducted by the Reserve Bank for participants in the payment systems revealed that some participants, in spite of having adequate systems to take care of Business Continuity, needed to ensure that these systems operated with ease in case of a contingency. Areas of concern remained, particularly in aspects related to human resource management and assessment of the business continuity processes of the vendors.

In addition to mitigating risks emanating out of IT-related issues on the lines as recommended by the Panel on Financial Stability Assessment and Stress Testing, issues relating to appropriate succession planning and proper delineation of duty in the event of a major operational disruption and continuous upgrading of training, particularly for the personnel operating in the alternate sites, are considered imperative for an appropriate BCM. Of equal importance may be issues relating to proper MIS to the top management and factoring in the BCM as an integral part of operational risk management for the institutions. Capacity building on the part of the regulators to assess the state of BCM in the regulated entities could also be a major area of focus.

5.8 Payment and Settlement Infrastructure

The smooth functioning of the payment and settlement systems is a pre-requisite for the stability of the financial system. In order to have focused attention on payment and settlement systems, a Board for Regulation and Supervision of Payment and Settlement Systems (BPSS) was set up in March 2005 as a Committee of the Reserve Bank Central Board. The launching of Real Time Gross Settlement System (RTGS) has led to the reduction of settlement risk in large value payments in the country. The setting up of National Securities Depository Limited (NSDL) and Central Depository Services (India) Limited (CDSL) for the capital market settlements and Clearing Corporation of India Ltd. (CCIL) for government securities, forex and money market settlements has improved efficiency in market transactions and settlement processes. A series of legal reforms to enhance the stability of the payment systems, like the introduction of the Information Technology (IT) Act, 2000 that recognises electronic payments, and an amendment to the Negotiable Instruments Act, 1881 to enable cheque truncation and to define e-cheques have been carried out. While these amendments helped promote electronic payment, they could not provide an all-encompassing solution to the requirements of providing a legal basis for payment and settlement systems. Illustratively, the statutes did not provide for legal backing for multilateral netting. There was no legal basis for settlement finality. Also, the system did not provide for any law for regulation and supervision of payment systems. In order to address these issues, the Payment and Settlement Systems Act was passed in 2007. The Securities Contract (Regulation) Amendment Act, 2007 has amended the Securities Contract Regulation Act, 1956 so as to provide a legal framework for trading in securitised debt, including mortgage-backed debt. These legal reforms undertaken since the last FSAP greatly contributed to the compliance of Indian systems to international standards.

The Panel's assessment of the Core Principles of Committee on Payment and Settlement Systems (CPSS) for systemically important payment systems, is that, in India, they operate cheaply and efficiently, with minimal systemic risk. A summary of the assessment of Core Principles is given in Table V.1.

The RTGS system is compliant with most principles covering, *inter alia,* legal basis, finality of settlement, governance and transparency principles, while gaps exist in risk management, efficiency and operational reliability. The High Value Clearing Systems are compliant with all core principles except those relating to risk management and timely completion of multilateral net settlement.

Some of the initiatives that could be considered for improving the RTGS and High Value Clearing Systems include: improving the risk management techniques in areas where the Reserve Bank does not operate the clearing houses; migrating all high value transactions to

Table V.1: Assessment of Systemically Important Payment Systems

	Principle	RTGS	High Value Clearing System
CP I.	Legal basis	O	O
CP II.	Clarity of rules and procedures	O	O
CP III.	Risk management	BO	BO
CP IV.	Finality of settlement	O	O
CP V.	Timely completion of multilateral net settlement	NA	PO
CP VI.	Settlement in central bank money	O	O
CP VII.	Security and operational reliability	BO	O
CP VIII.	Efficiency	BO	O
CP IX.	Public disclosure of participation criteria	O	O
CPX.	Transparency in governance arrangements	O	O
Responsibilities of central banks			
A	Transparency of roles and major policies	O	O
B	Compliance with Core principles	BO	BO
C	Oversight of Payment Systems	O	O
D	Co-operation with other central banks	O	O

O – Observed; BO – Broadly Observed; PO – Partly Observed; NA – Not Applicable.

Compliance Status at a glance

Assessment	RTGS	HV Clearing
Observed	9	11
Broadly Observed	4	2
Partly Observed	–	1
Not Applicable	1	–

secure electronic channels like RTGS and National Electronic Funds Transfer (NEFT) to eliminate settlement risk; and increasing the level of utilisation of the electronic payments infrastructure. Steps may be taken to optimise the utilisation of the electronic payments infrastructure and to reduce the charges for such transactions.

Retail Payment Systems

The retail electronic payment systems in India are the NEFT and the Electronic Clearing Service (ECS). NEFT is an electronic message-based payment system that provides a nation-wide, secure one-to-one funds transfer facility for bank customers, with centralised settlement of all transactions taking place at Mumbai. ECS is a retail payment system which facilitates bulk payments that can be classified as one-to-many and receipts that are many-to-one.

The two components of this system are ECS (Credit) and ECS (Debit). ECS (Credit) facilitates bulk payments whereby the account of the institution remitting the payment is debited and the payments remitted to beneficiaries' accounts. ECS (Debit) facilitates the collection of payments by utility companies. In this system, the accounts of the customers of the utility company in different banks is debited and the amounts are transferred to the account of the utility company.

The benefits of facilities like ECS are so far not trickling down adequately to the lower end of the customer segment. Though there has been significant improvement in retail payment systems, there is a continuing need to develop solutions that utilise new technologies and which would facilitate all segments of society to gain access to the benefits of new technology. Given the high level of software capabilities available in India, it is of utmost importance that this process be accelerated and that India leapfrogs intermediate steps and moves rapidly to IT-based systems. Deficiencies in retail payments at present mainly pertain to the inefficient outstation cheque collection process.

The current low utilisation of the electronic payments infrastructure can be increased with the use of technology to make the facilities more accessible to customers. The Reserve Bank should strive for 100 per cent computerisation of clearing house operations.

The development of a funds transfer or payment system through mobile phones would not only reduce transaction costs, but would also potentially allow these facilities to be used by a large unbanked segment.

Government Securities Settlement Systems

An assessment against the CPSS-IOSCO Recommendations for Securities Settlement Systems has revealed that the settlement systems in the government securities market are compliant with all the principles.

Equity Market Settlement Systems

The stock exchanges and the central counterparties (CCPs) (National Securities Clearing Corporation and the Bank of India Shareholding Ltd) are compliant with the relevant international standards. A summary of the assessment of the equities settlement and government securities settlement systems against the CPSS-IOSCO Recommendations is given in Table V.2 and that of CCPs is given in Table V.2.

With the screen-based online trading system, trades between direct market participants are confirmed online at the time of trade. The trades are settled on a rolling basis of T+2 days settlement cycle. In order to provide clarity on the applicability of insolvency laws and finality of settlement and netting for transactions made through Regional Stock Exchanges and clearing corporations in equities settlement, there is a need to incorporate specific clarificatory provisions to that effect in the Securities Contracts (Regulation) Act, 1956.

Table V.2: Assessment of Recommendations for Securities Settlement Systems

	Recommendation	Government Securities Settlement	Equities Settlement
1.	Legal basis	O	O
2.	Confirmation of trades	O	O
3.	Rolling settlement	O	O
4.	Benefits and costs of central counterparties	O	O
5.	Securities lending and borrowing	O	BO
6.	Dematerialisation of securities	O	O
7.	Elimination of principal risk	O	O
8.	Final settlement	O	O
9.	Risk management in deferred net settlements	O	O
10.	Credit risk in the cash leg of securities transactions	O	O
11.	Operational risk	O	O
12.	Accounting practices	O	O
13.	Governance arrangements for CSDs and CCPs	O	O
14.	Participation criteria for CSDs and CCPs	O	O
15.	Safety, security and efficiency of systems	O	O
16.	Communication procedures	NA	O
17.	Information on risks and costs	O	O
18.	Disclosure of responsibilities and objectives of settlement systems	O	O
19.	Risks in cross-border settlement	NA	NA

O – Observed; BO – Broadly Observed; PO – Partly Observed; NA – Not Applicable.

Compliance Status at a glance

Assessment	Government Securities Settlement	Equities Settlement
Observed	17	17
Broadly Observed	–	1
Not Applicable	2	1

Central Counterparties

The Reserve Bank took the initiative of setting up the Clearing Corporation of India (CCIL) with some of the major banks as its core promoters to upgrade the country's financial infrastructure in respect of clearing and settlement of debt instruments and forex transactions. CCIL currently provides guaranteed settlement facility for government securities clearing, clearing of Collateralised Borrowing and Lending Obligations (CBLO) and foreign exchange clearing.

The role of CCIL as the only CCP catering to money, securities and forex markets, leads to concentration risk. Though concentration of business with CCIL helps pool the risks and reduce the overall transaction costs for the system, the risk management systems in CCIL should be further strengthened. CCIL may endeavour to develop capacity to measure intra-day exposure and margin requirements (based on intra-day exposures) for government securities, CBLO and forex segments.

The assessment of NSCCL and BOISL/BSE in the equities settlement systems shows that they comply with all recommendations.

A summary of the assessment of CCIL against the CPSS-IOSCO Recommendations for CCPs is given in Table V.3.

CCIL is compliant with the recommendations pertaining to, among others, legal risk, participation requirements, operation risk management, governance and regulation and oversight. The major issues brought out in the assessment pertain to the lack of adequate financial resources, measurement and management of credit exposures, money settlements and default procedures.

Though the CCIL's risk management systems are satisfactory, concomitant with the increase in its business, its liquidity requirements have also increased. As part of its operations, CCIL also encounters intra-day liquidity shortfalls. To tide over the intra-day liquidity requirements, CCIL has availed of dedicated Lines of Credit (LoC) from a few commercial banks. Given the significant increase in the volumes of trade in the debt, money and forex markets and as the settlements at CCIL are effectively taking place at the end of the day, it would be very difficult for CCIL to raise liquidity from commercial banks equivalent to international benchmarks. The grant of a limited purpose banking licence will enable CCIL to avail of a repo window with another bank or from the Reserve Bank to fulfill the requirement of additional liquidity, when needed. Appropriate amendments in the legal provisions could be considered, making it easier to go ahead with issuing differentiated bank licenses for this purpose.

The CFSA notes that initially CCIL was operating with lines of credit facilities from various banks for up to Rs.400 crore, which were subsequently increased to Rs.1,300 crore, and

Table V.3: Assessment of Recommendations for Central Counterparties – CCIL; NSCCL & BOISL/BSE		
Recommendation	**CCIL**	**NSCCL & BOISL/BSE**
1. Legal risk	O	O
2. Participation requirements	O	O
3. Measurement and management of credit exposures	BO	O
4. Margin requirements	BO	O
5. Financial resources	PO	O
6. Default procedures	BO	O
7. Custody and investment risks	O	O
8. Operational risk	O	O
9. Money settlements	BO	O
10. Physical deliveries	NA	O
11. Risks in links between CCPs	NA	NA
12. Efficiency	BO	O
13. Governance	O	O
14. Transparency	BO	O
15. Regulation and oversight	O	O

O – Observed; BO – Broadly Observed; PO – Partly Observed; NA – Not Applicable.

Compliance Status at a glance

Assessment	CCIL	NSCCL & BOISL/BSE
Observed	6	14
Broadly Observed	6	–
Partly Observed	1	–
Not Applicable	2	1

this is being further enhanced to Rs.1,600 crore. CCIL is also in the process of putting in place the concept of clearing member under which the settlements will be done only in the books of a few members, in which case the liquidity requirements in the CCIL system may come down automatically.

5.9 Legal Infrastructure

Effective insolvency and creditor rights systems play a vital role in helping to sustain financial soundness and in promoting commercial confidence. They enable market participants and stakeholders to price risks more accurately, and to manage and resolve the risks of default and non-performance. The legal framework for insolvency of banks, NBFCs and insurance companies and the general corporate insolvency regime in India are broadly compliant with the World Bank Principles for Effective Insolvency and Creditor Rights Systems. Even so, there are several gaps particularly in the implementation of the extant legislations.

Major legislative amendments in recent years were undertaken to strengthen the laws relating to debt recovery and enforcement of security which include:

- The Legal Services Authority Act, 1987 that has conferred the statutory basis to the Lok Adalats (people's courts).

- The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act), has been extended to cover co-operative banks. The Enforcement of Security Interest and Recovery of Debts Laws (Amendment) Act, 2004 has amended the SARFAESI Act, Recovery of Debts due to Banks and Financial Institutions Act, 1993 and the Companies Act, 1956.
- The Credit Information Companies (Regulation) Act, 2005 is aimed at providing for regulation of credit information companies and at facilitating efficient distribution of credit.

The assessment of adherence to the World Bank Principles for Effective Insolvency and Creditor Rights Systems has brought out the fact that despite having well-conceived insolvency laws and institutional framework, the implementation of these laws leaves a great deal to be desired. The 'Doing Business Report' of the World Bank has highlighted India's low ranking in enforcing bankruptcy laws.

A summary of assessment of World Bank Principles for Effective Insolvency and Creditor Rights Systems is provided in Table V.4.

The assessment has brought out the complexities of legal and judicial systems in India, raising concerns about the long delays in the winding-up process. Whereas an amendment to the Companies Act, based on the recommendations of an Expert Committee, has been made which would enable the setting up of a National Company Law Tribunal (NCLT), this major proposal itself could not take off due to a pending law suit. The determination of the appeal pending against the amendment to the Companies Act will have a significant impact on the implementation of bankruptcy laws in India.

Legal Framework for Insolvency of Banks

Due to the complexity of the Indian banking sector, the legal frameworks applicable to insolvency of banks that are statutory corporations, nationalised banks and those in the co-operative sector have different legal principles applicable to them. The amendments to various legislations relevant to the financial sector have given greater legislative mandates to the regulators in discharging their regulatory and supervisory roles. There is a need to harmonise the legislative framework in India, particularly with regard to legislations in the financial sector.

The insolvency of financial institutions, if it occurs, has serious contagion effects and repercussions across the economic system, destabilising economic activity. Hence, a separate comprehensive insolvency regime for banks and other categories of financial institutions is critical in the context of financial stability.

Table V.4: Assessment of Principles for Effective Insolvency and Creditor Rights Systems						
		Principles/Sub-Principles	O	BO	PO	Total
A.	**Legal Framework for Creditor Rights**					
	A1	Key Elements of Legal Framework for Creditor Rights	–	–	1	1
	A2	Security (Immovable Property)	–	1	–	1
	A3	Security (Movable Property)	–	1	–	1
	A4	Registry Systems	–	3	–	3
	A5	Commercial Enforcement Systems	–	2	–	2
	Total – A		**–**	**7**	**1**	**8**
B.	**Risk Management and Corporate Workout**					
	B1	Credit Information Systems	5	–	–	5
	B2	Director and Officer Accountability	1	–	–	1
	B3	Legislative Framework enabling Workouts	4	2	–	6
	B4	Informal Workout Procedures	3	–	–	3
	B5	Regulation of Workouts and Risk Management Practices	2	–	–	2
	Total – B		**15**	**2**	**–**	**17**
C.	**Legal Framework for Insolvency**					
	C1	Key Objectives and Policies	–	1	–	1
	C2	Due Process: Notification and Information	2	1	–	3
	C3	Eligibility	–	–	1	1
	C4	Applicability and Accessibility	2	–	2	4
	C5	Provisional Measures and Effects of Commencement	–	2	1	3
	C6	Management	2	–	–	2
	C7	Creditor and Creditors' Committee	–	–	2	2
	C8	Collection, Preservation, Administration and Disposition of Assets	1	1	1	3
	C9	Stabilising and Sustaining Business Operations	1	1	–	2
	C10	Treatment of Contractual Obligations	2	–	2	4
	C11	Avoidable Transactions	3	–	–	3
	C12	Claims and Claims Resolution Procedures	3	1	1	5
	C13	Claims Filing and Resolution	–	1	–	1
	C14	Re-organisation Proceedings	2	3	1	6
	C15	International Consideration	–	1	–	1
	Total – C		**18**	**12**	**11**	**41**
D.	**Institutional and Regulatory Frameworks**					
	D1	Role of Courts	–	1	–	1
	D2	Judicial Selection, Qualification, Training and Performance	–	1	–	1
	D3	Court Organisation	1	–	–	1
	D4	Transparency and Accountability	1	–	–	1
	D5	Decision-making and Enforcement of Orders	1	–	–	1
	D6	Integrity of System – Court and Participants	1	–	–	1
	D7	Role of Regulatory or Supervisory Bodies	–	1	–	1
	D8	Competence and Integrity of Insolvency Representatives	1	–	–	1
	Total – D		**5**	**3**	**–**	**8**
	Grand Total (A+B+C+D)		**38**	**24**	**12**	**74**

O – Observed; BO – Broadly Observed; PO – Partly Observed.

The Indian legal framework for insolvency of banking companies is in substantial compliance with emerging international standards. However, one major area in which there are no clear legal provisions in respect of bank insolvency is the formal legal mechanism for sharing of information with other regulatory bodies and overseas regulators and the extent of co-operation between them. This is a general issue that is also receiving considerable attention in the wake of the ongoing global financial crisis and concomitant bankruptcies of large global financial institutions.

Competition Issues in Banking

The Competition (Amendment) Act, 2007, which has recently amended various provisions of the Competition Act, 2002, has conferred wide powers on the Competition Commission.

Though Section 21A of the Competition Act provides for the Commission to make references to a statutory authority when the issue before it relates to an Act whose implementation is entrusted to that statutory authority, the opinion of the statutory authority in such a case has not been given any binding effect on the Commission and the final decision has been left to the Commission. The provisions of the Competition Act, as amended, are likely to raise issues of regulatory overlap/conflict in future, and could potentially pose a serious problem to the financial sector. The provisions are also likely to become hurdles in the path of recovery of distressed banks. Under the provisions, every person or enterprise proposing to enter into a combination is required to give notice to the Commission before entering into a combination and wait for 210 days.

Other Aspects Relating to Insolvency

The contractual rights of creditors are recognised under the laws in India. Certain provisions in the law that give priority to the claims of the sovereign over that of the secured creditors cause concerns as regards their security interest. The law should provide that the priority of charge for State dues should not operate in respect of prior mortgages created in favour of the secured creditors.

The lack of a registry, which keeps a record of the security interests created in respect of movable properties, is another lacuna in the system of registration of security interest. The Central Registry, which is provided for under the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interests Act (SARFAESI) Act, and which could take care of a major part of the transactions of banks and financial institutions, is yet to be set up. The Central Registry should be set up urgently to have a central and reliable record of all security interests created by banks and financial institutions. The Central Registry should also be allowed to register all transactions creating security interests (both in movable as well as immovable property) by entities/individuals in addition to those of banks/financial institutions. For this purpose, it may be appropriate to bring in a separate legislation in respect of the Central Registry. In the course of time, the Central Registry (with an adequate number of branches all over the country) should be the sole registry for registration of all security interests over properties, and the registries under various statutes should be wound up with suitable amendments to the respective Acts dealing with registration of security interests. The Central Registry should be constituted to provide a good database and reliable record on the creation of security interests/charges under the SARFAESI Act.

Even though the legal principles governing the enforcement mechanism are adequate, there are delays in implementing these principles at the ground level. The recovery mechanism in the case of unsecured credit is less efficient and cases are pending for execution with the Debt Recovery Tribunals (DRTs) due to lack of information about the properties of the debtors. Even though the number of new cases filed in the DRTs has come down owing to the enactment of the SARFAESI Act, the number of pending cases is still large. In order to minimise the delay, the number of DRT benches should be increased and a separate bench should be formed to deal with cases of large unpaid debts involving Rupees 1 crore and above.

Some of the other issues that need to be highlighted are:

- Since there are no comprehensive credit guarantee scheme in the market, it would be worthwhile to improve the scheme notified under the DICGC Act, 1961.
- It would be worthwhile having a common legislation to deal with the creation and registration of security interests (collaterals), irrespective of the nature of the security and its location.
- There is a need to amend Section 14 of the SARFAESI Act to provide an enabling provision for the district magistrate to delegate his powers under the SARFAESI Act to other executive magistrates in the District, so that the delay in taking possession/control of the secured asset may be obviated.
- There is a need to grant priority (by statute) to the claim of banks or financial institutions in respect of the financial assistance given to rehabilitate a sick/weak company in financial distress. Such priority of claim should also extend while disbursing the assets in liquidation.
- The mechanism of rehabilitation through the Sick Industrial Companies Act (SICA) has not been effective. The new provisions introduced in the Companies Act vide the Companies (Second Amendment) Act, 2002 once brought into operation are expected to improve the rehabilitation mechanism.
- The law should provide for a creditors' committee at the initial stage of insolvency proceedings to consider the re-organisation of the borrowing entity. Such committees should be empowered to participate in the decisions along with the liquidator and to file a report independently to the court/tribunal for improving liquidation proceedings.
- The Companies (Second Amendment) Act, 2002 should be brought into operation quickly to empower the liquidator/Court to protect the assets of the company and to even sell the undertaking as a going concern.
- The lack of judicial time, lack of expertise and consequent lack of proper appreciation of issues pertaining to insolvency are causing delays in deciding court cases. This can be solved to a large extent if the NCLT and the National Company Law Appellate Tribunal are set up.

- There is a need to accord priority for the authorities to improve and rationalise the systems and procedures so that the huge loss inflicted on stakeholders on account of insolvency process in India can be substantially minimised. The need to have an efficient bankruptcy law for the financial sector is essential from the point of view of the efficiency of the systems as well as the stability of the financial sector.

5.10 Corporate Governance

There is a comprehensive corporate governance framework in India for listed companies and the listing agreement forms an important pillar in this framework. There are various legal and regulatory requirements pertaining to corporate governance in place. There are enabling provisions that allow shareholders to participate in and be informed of decisions concerning fundamental corporate changes. The quality of corporate governance in Indian companies would be a key determinant in affecting their ability to attract capital, business, global partners and quality manpower.

A summary assessment against the OECD Principles for Corporate Governance is given in Table V.5.

The assessment shows that most of the principles were fully or broadly implemented. Some of the recommendations made by the Panel for strengthening corporate governance practices in India are enumerated below:

Certain requirements of Clause 49 of the Listing Agreement were non-mandatory. Given the fact that listed companies are required to disclose the extent to which the non-mandatory requirements have been adopted, the listed companies may be required to also disclose the reasons for non-compliance of non-mandatory requirements. There is a need to strengthen the existing framework with regard to risk management in listed companies. While international practices and developments have apparently been factored into the evolution of the corporate governance framework in India, the corporate governance code should be constantly reviewed in light of the ever-changing global scenario. Introducing the requirement of having Risk Committees can be specifically explored in this regard.

Participation in Annual General Meetings

There are certain constraints which prevent shareholders from participating in Annual General Meetings (AGMs) due to their dispersed geographical spread. Though a number of initiatives have been taken in this regard, such as introduction of postal ballots for voting for some decisions and provision for proxy voting, there is a need to increase participation by shareholders. For this purpose, there is a need to consider various measures that would enable increased participation. It has also been suggested, for example, that initiatives could be explored, such as holding the AGMs where majority shareholders reside or using alternate

Table V.5: Assessment of OECD Principles of Corporate Governance		
Principle	**Description**	**Assessment**
I.	**Ensuring the basis for an effective Corporate Governance framework**	
IA	Enhancement of market integrity and promotion of transparent and efficient markets	BI
IB	Transparent and enforceable legal and regulatory requirements	FI
IC	Division of responsibilities amongst authorities	FI
ID	Efficient supervisory, regulatory and enforcement framework	FI
II.	**The rights of shareholders**	
IIA	Basic shareholder rights	FI
IIB	Rights to participate in fundamental decisions	FI
IIC	Shareholders' AGM rights	FI
IID	Disproportionate control disclosure	BI
IIE	Markets for corporate control should be allowed to function	BI
IIF	Cost/benefit to voting	PI
IIG	Consultation amongst shareholders, including institutional investors	FI
III.	**Equitable treatment of shareholders**	
IIIA	All shareholders should be treated equally	BI
IIIB	Insider Trading and abusive self-dealing is prohibited	FI
IIIC	Board/Managers disclose interests	FI
IV.	**Role of stakeholders in corporate governance**	
IVA	Stakeholder rights respected	FI
IVB	Redress for violation of rights	BI
IVC	Performance enhancement	FI
IVD	Access to information	FI
IVE	Free communication of unethical practices to the Board	PI
IVF	Enforcement of creditor rights	BI
V.	**Disclosure and transparency**	
VA	Disclosure standards	FI
VB	Standards of accounting & audit	FI
VC	Independent audit annually	BI
VD	Accountability of auditors	BI
VE	Fair & timely dissemination	FI
VF	Provision of professional advice	BI
VI.	**Responsibilities of the Board**	
VIA	Board acts with due diligence, care	FI
VIB	Treat all shareholders fairly	BI
VIC	Apply high ethical standards	FI
VID	The board should fulfill certain key functions	BI
VID	The board should be able to exercise objective judgment	BI
VIF	Access to information	FI

FI – Fully Implemented; BI – Broadly Implemented; PI – Partly Implemented; NI – Not implemented.

Compliance Status at a glance

Assessment	**Number**
Fully Implemented	18
Broadly Implemented	12
Partly Implemented	2

methods of voting which are convenient to shareholders. Investor associations can play an active role in providing a platform for co-ordination among investors.

Transparency

Institutional investors need to be encouraged to declare their voting policy and to participate effectively in corporate decision-making. There is a need to prescribe an upper limit on the tenure of independent directors. There is also a need for strengthening the disclosure mechanism to bring about greater transparency in ownership structures to address concerns arising from cross-holding and non-transparent structures.

Enforcement Mechanism

Ownership of companies through cross-holdings and the use of trusts and private companies for owning shares in group companies gives rise to opaque structures. There is, therefore, a need for strengthening the enforcement mechanism by focusing efforts on tracking defaulters or non-compliance by the company, which would act as deterrents for future non-compliance and also boost the confidence of investors in the system.

Appropriate penalties may be provided for in the law for non-compliance pertaining to related-party transactions. Penal provisions for fraudsters may be strengthened in corporate law by providing for the disgorgement of gains and confiscation of assets.

Corporate Governance Code for Unlisted Companies

Unlisted companies are a significant part of the corporate world in India. A number of Indian groups have deliberately moved into the unlisted sector, attracted by less onerous reporting and other requirements and presumably not deterred by potentially lower access to capital. While a strong corporate governance framework is in place for listed companies, there is a need for enhancing the focus on unlisted companies to strengthen the overall system.

Accordingly, it is recommended that a separate Corporate Governance Code for unlisted companies may be brought out under the Companies Act by the Ministry of Corporate Affairs, which takes into account the interests of stakeholders in such companies. Unlisted companies can voluntarily evolve and adopt a code of corporate governance. Trade and Industry Associations like CII, FICCI and ASSOCHAM can play an important role in this regard. The Ministry can also consider mandating, in respect of unlisted companies above a particular size, compliance with applicable provisions of Clause 49 of the Listing Agreement. The role and responsibilities of the Ministry of Corporate Affairs may be crystallised in the Companies Act itself, especially in the case of mergers and amalgamations.

5.11 Deposit Insurance

In India, deposit insurance is offered by the Deposit Insurance and Credit Guarantee Corporation (DICGC) that is fully owned by the Reserve Bank. Deposit insurance is mandatory and covers all banks (commercial/co-operative/RRBs/Local Area Banks (LABs).

Deposit Insurance Fund

To provide *de jure* independence to DICGC, the need for building up a standalone insurance fund assumes importance. A fund, financed solely through premiums paid by insured parties, would incentivise deposit insurance providers to not only perceive a direct stake in the financial health of the insurance system, but also motivate them to scrutinise deposit insurance operations and maintain industry self-policing.

A risk-adjusted premium could prove to be expensive for weak financial entities. An increase in ceiling of flat rate premia could, therefore, be considered to strengthen the deposit insurance fund.

Adequacy of the Deposit Insurance Fund

The adequacy of the Deposit Insurance Fund (DIF) is an important issue for ensuring solvency of the fund and maintaining public confidence in the deposit insurance system. It would be necessary to constantly monitor the DIF and perhaps, if the situation arises, there will be a need to take a view on the issue of raising the premium in order to strengthen the DIF. To ascertain the adequacy of DIF, stress tests were undertaken based on three scenarios for March 2007. The stress tests revealed that under each of the scenarios, the DICGC[10] will be in a position to meet the claims, although in the latter two scenarios the Designated Reserve Ratio (DRR) would drop sharply.

Exemption from Income Tax

Given that the DICGC is acting as a trust for the public at large and small depositors in particular, there is a case for providing exemption from income tax to the Corporation which could be considered by the Government.

Information Sharing

A Committee, comprising the regulatory/supervisory departments of the Reserve Bank and DICGC, should be constituted on a standing basis for regular sharing and exchange of information on regulated entities.

Settlement of Claims

The issue of whether DICGC needs to be involved in the resolution as part of the liquidation process to reduce the time frame to meet the claims of insured depositors needs to be deliberated upon. Delinking the settlement of DICGC's claims from the liquidation process by an amendment to the BR Act and DICGC Act should also be considered.

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[10] **Scenario I**: The average growth in claims settled during the last five years was applied to claims settled for 2006-07. **Scenario II**: Estimation of insured deposit of all the Grade IV UCBs if they were to be liquidated (Grade IV UCBs: banks meeting the following conditions: (a) CRAR less than 50 per cent of the prescribed limit; (b) net NPL of 15 per cent or more as on March 31 of the previous year). **Scenario III**: If the commercial banks which have been amalgamated (during 2003-2006) with other banks were to be liquidated. The assumptions underlying the analysis are as follows: (i) The liability of the Corporation will grow at a rate estimated on the basis of the past five years; (ii) total insured deposit has been taken as the liability of the Corporation on a particular year; (iii) around 60 per cent of the assessable deposit has been taken as the insured deposit, and (iv) while estimating the liability, it is assumed that the assessable deposit and, hence, insured deposit remains constant for the next period as well.

5.12 Review of Anti-Money Laundering (AML)/Combating Financing of Terrorism (CFT)

The financial sector has been brought under the purview of the KYC/AML regime consequent to the enactment of the Prevention of Money Laundering Act (PMLA), 2002 and guidelines issued by the respective regulators for entities regulated by them. Subsequent to assessment by the Asia Pacific Group in 2000, a number of initiatives have been taken by the Reserve Bank, SEBI and IRDA to plug the gaps like issuance of KYC/AML guidelines by the Reserve Bank to the co-operative sector, NBFCs and authorised full-fledged money changers. The recommendations emanating from the present review are: a need to maintain written records of Suspicious Transactions Records (STRs); need to bring money transfer agencies within the ambit of PMLA; need to make requisite amendments to PMLA Rules to make tipping off in the case of STRs a legal offence; and need to make suitable amendments to PMLA, whereby STR on attempted transactions are reported by various financial entities.

5.13 Concluding Remarks

Financial infrastructure contributes to the effective functioning of institutions and markets and thereby to stability; this serves as the foundation for adequate access to financial services and sustained financial development.

An efficient and robust regulatory structure is an essential prerequisite for the stability of the financial system. The current arrangements of the co-ordination among the domestic regulators are assessed to be adequate. But one of the members felt that that formalistion of HLCCFM with a clear mandate is important for timely and effective resolution of a crisis when it occurs. The systemic implications of increased cross-sectoral and cross-border conglomeration of financial companies highlight the need for increased focus on co-ordination and information sharing among regulators. The Reserve Bank could, in the interest of financial stability, be armed with sufficient supervisory powers and monitoring functions in respect of financial conglomerates. Legislation of a new Act to empower the regulator to have regulatory jurisdiction of holding companies is required. The recent international financial turbulence has shown that there is no single fool-proof method of financial regulation and that an ideal system would have elements of both principles-based and rules-based regulation.

There is a consideration that having SROs in the financial sector, albeit with proper safeguards, would add depth and expertise in market operations and reduce the overall cost of regulation. But, there is a need to avoid potential conflicts of interest through safeguards and to have a formal oversight of SROs.

Active liquidity management has been an integral part of the Reserve Bank's monetary operations and is being achieved through various instruments. However, the use of monetary policy requires to be further honed in order to deal with the impact of external capital flows. Reduction in mandated SLR, acceptance of highly-rated corporate paper for repo and reverse repo purposes, better cash management by the Government and capacity building for better liquidity forecasting are some of the major steps recommended for consideration over time.

Indian Accounting Standards are generally in alignment with International Accounting Standards, except for some modifications to suit local customs, usages and level of development in the country. There has been significant progress in accounting standards; however, some issues remain to be addressed. ICAI needs to be made an autonomous body with its own staff and independent funding. There is a need for developing country- or sector-specific standards where similar standards are not being developed by IASB. Attempts need to be made by ICAI to attain convergence with IFRS at the earliest. Given that India has been a member of IASB since its inception, ICAI could contribute actively to the agenda-setting of IASB. There is a need to put in place mechanisms for monitoring compliance with standards, and ICAI needs to increase the scope and frequency of training programmes on implementation of accounting standards.

India is one of the earliest countries to have adopted International Auditing Standards by amending them to suit Indian requirements. There has been significant progress since ROSC-2004; however, there are some areas which need attention. AASB needs to take steps to attain convergence with International Auditing Standards. It needs to take proactive steps by bringing out more technical guidance and other literature to help small and medium practitioners to understand standards. The functioning of the Quality Review Board should start at the earliest and steps need to be taken to accelerate the process of making the Board of Discipline and Disciplinary Committee functional. The Quality Review Board needs to play a more proactive role as an independent oversight body for the auditing profession in India. The issue relating to non-acceptance of qualified reports from companies needs to be addressed. The principal auditor of the company should have access to the working papers of auditors. There is a need to give functional independence to AASB.

The increased dependence on information technology systems by financial institutions for transactions as well as record maintenance gives rise to a need for proactively managing business continuity. The assessment of compliance to business continuity principles, as applied to select banks, and the payment and settlements systems has indicated that, overall, the systems available in these institutions were in consonance with the requirements. However, certain issues like outsourcing applications, system maintenance and change control and incident response simulation are required to be monitored more closely from the BCM angle. Continuous upgrading of BCM processes as also capacity building of regulators remain areas to be under constant focus.

A smooth and efficient payment and settlement infrastructure plays an important role in maintaining stability in the financial sector. The CFSA acknowledges that significant progress has been made in improving the payment systems infrastructure in India with the introduction of RTGS, High Value Cheque Clearing System, setting up of CCIL as the central counterparty in the government securities, foreign exchange and CBLO segments as also in the settlement of equities transactions. The legal framework for payment and settlement has also been strengthened by the recent notification of the Payment and Settlement Systems Act and Rules. This has made India largely compliant with international standards and codes in this area. The assessments have, however, highlighted some gaps in the system, particularly with regard to the adequacy of financial resources with CCIL and improving its risk management measures. The current low utilisation of the electronic payments infrastructure can be increased with the use of technology to make the facilities more accessible to customers, thus optimising the use of this infrastructure and achieving greater financial inclusion.

The CFSA notes that though there have been improvements in legal infrastructure in the financial sector like setting up of DRTs and the enactment of the SARFAESI Act, the major concern is that, despite the robust insolvency laws, the time taken for completion of liquidation proceedings is one of the highest in the world and the recovery rate one of the lowest. The operationalisation of the Companies Act (Second Amendment), 2002 will address the current problems relating to delays in completion of liquidation proceedings.

There is a need to review certain provisions in the Competition (Amendment) Act which are likely to raise issues of regulatory overlap/conflict in future and pose a serious problem to the stability of the financial sector. The CFSA considers that a separate insolvency regime for banks and other categories of financial institutions is vital in the context of financial stability, as any abrupt handling of insolvency of such institutions will have a serious contagion effect and repercussions across the economic system that will destabilise economic activity.

In India, there is a comprehensive corporate governance framework in place for listed companies and the listing agreement forms an important pillar of corporate governance framework. There is a need to strengthen the corporate governance framework with regard to risk management in listed companies. Listed companies need to disclose the reasons for non-compliance with non-mandatory requirements. Steps need to be taken to protect the interests of shareholders, such as equitable treatment of all shareholders including minority shareholders and alternate methods of voting, which are convenient for shareholders and in which investor associations can play a constructive role, need to be put in place. There is a need for strengthening the disclosure mechanism to bring about greater transparency in ownership structures and stringent penal action needs to be taken where such practices are unearthed. Penal provisions for fraudsters may be strengthened in corporate law by providing for disgorgement of gains and confiscation of assets. The corporate governance framework needs to evolve with the changing times and there is a parallel need to strengthen the corporate governance framework for unlisted companies.

The coverage limit of deposit insurance offered by the DICGC is comparable to international levels. Stress tests to ascertain the adequacy of the DIF shows that the DICGC would be in a position to meet the claims even under a worst-case scenario. However, the delay in the failure resolution process and the non-involvement of the DICGC in the failure resolution process remain major concerns. In order to enhance the efficacy of the deposit insurance system in India, it is felt that the pros and cons of DICGC's involvement in the bankruptcy process need to be deliberated upon. Alternatively, delinking of DICGC claims from liquidation proceedings by amendments to the DICGC Act and BR Act should be considered.

Major areas where action needs to be taken to further strengthen AML/CFT practices and align them with international standards are the effective implementation of record-keeping requirements and a robust regime for submission of STRs and inclusion of money transfer agencies in PMLA.

VI. TRANSPARENCY ISSUES

The recent turmoil in the financial markets has brought to the fore the importance of enhanced transparency and disclosure of information to ensure financial stability and effective and smooth functioning of the markets. India has made significant strides in enhancing transparency in monetary and financial policies, fiscal transparency and data dissemination.

6.1 Transparency in Monetary Policy

India is largely compliant with the IMF's Code of Good Practices on Transparency in Monetary Policy. The roles, responsibilities and objectives of the Reserve Bank are well-defined. The Reserve Bank follows an open and consultative approach in formulating monetary policy. The channels of communication in disseminating the policy objectives have improved significantly, with the Reserve Bank's dissemination practices being fully compliant with the IMF's Special Data Dissemination Standards, The summary assessment is given in Table VI.1.

Some of the main issues, however, have come out of the assessment pertaining to review of legislation with regard to the objectives of monetary policy, the issue of operational independence, and the accountability of the Reserve Bank as also the separation of debt management from monetary management.

Review of Legislations

The Reserve Bank has explicit multiple objectives of monetary policy with changing relative emphasis. It also follows a multiple indicator approach, which has been reasonably effective. The present legislative framework provides enough room and manoeuvrability for the Reserve Bank to operate monetary policy in consonance with evolving needs and circumstances. The key element of the framework at present is the flexibility enjoyed by the Reserve Bank while going about its assigned task of maintaining the monetary stability of India. If this advantage is not to be lost, and it should not be, then the objectives ought not to be more stringently framed in legislation, since in that case it may not be possible for the Reserve Bank to adapt its policies flexibly as necessitated by evolving circumstances. Without invoking the rigour of statutory rigidity, which will strait-jacket the Reserve Bank's policies, the current flexibility, to determine the objectives and their relative importance within and consistent with the meaning of the Preamble of the RBI Act, will be a major factor in helping it to conduct monetary policy successfully. Though all of the Reserve Bank's powers are not derived from a single legislation, collectively there is no ambiguity about its role, functions and powers *vis-à-vis* the regulated institutions and markets. It has also been given additional powers through amendments to the RBI Act as well as other legislations, and any need for

Table VI.1: Summary of Assessment of Transparency in Monetary Policy		
No.	**Area/Practices**	**Assessment**
I.	**Clarity of Roles, Responsibilities and Objectives of Central Banks for Monetary Policy**	
1.1	Objectives and institutional framework of monetary policy to be defined in legislation	PO
1.1.1	Public disclosure of objectives of monetary policy in legislation	BO
1.1.2	Responsibilities of the central bank to be defined in legislation	O
1.1.3	Legislative authority to the central bank to utilise monetary policy instruments	O
1.1.4	Public disclosure of institutional responsibility for foreign exchange policy	O
1.1.5	Modalities of accountability for conduct of monetary policy and any other responsibilities to be defined in legislation	O
1.1.6	Overriding of central bank policies by the Government	O
1.1.7	Legislative clarity on appointment of central bank top management	PO
1.2	Institutional relationship between monetary and fiscal operations	O
1.2.1	Public disclosure of conditions for granting credits, advances, or overdrafts to the Government	O
1.2.2	Public disclosure of amounts and terms of credits, advances, or overdraft to the Government and deposits of the Government	O
1.2.3	Public disclosure of procedures for central bank participation in primary and secondary markets for government securities	O
1.2.4	Public disclosure of central bank involvement in the rest of the economy	O
1.2.5	Public disclosure of allocation of central bank profits and maintenance of capital	O
1.3	Agency roles performed by central bank on behalf of the Government to be clearly defined	O
1.3.1	Public disclosure of other responsibilities of central bank like fiscal agent to the Government and management of foreign exchange reserves	O
1.3.2	Public disclosure of allocation of responsibilities between the central bank and the Government for primary and secondary issues of government securities	O
II.	**Open Process for Formulating and Reporting Monetary Policy Decisions**	
2.1	Public disclosure of framework, instruments and targets used to pursue objectives of monetary policy	O
2.1.1	Public disclosure of procedures and practices governing monetary policy instruments	O
2.1.2	Public disclosure of rules and procedures for central bank's relationship with counterparties in its monetary operations	O
2.2	Public disclosure of the composition, structure and functions of a permanent monetary policy-making body	NA
2.2.1	Public disclosure of advance meeting schedule of the policy-making body	NA
2.3	Public disclosure of changes in the setting of monetary policy instruments	O
2.3.1	Public disclosure of main considerations underlying its policy decisions	O
2.4	Issue of periodic public statements on progress towards achieving policy objectives	O
2.4.1	Central bank to present policy objectives to public specifying *inter alia* their rationale, quantitative targets, instruments and assumptions	O
2.4.2	Issue of a report on the evolving macroeconomic situation and its implications for policy objectives	O

2.5	Public consultations for proposed substantive technical changes to the structure of monetary regulations	O
2.6	Public disclosure of regulations on data reporting by financial institutions to the central bank	O
III.	**Public Availability of Information on Monetary Policy**	
3.1	Central bank data disclosures to be compliant with IMF's SDDS	O
3.2	Public disclosure of central bank balance sheet on a pre-announced schedule and information on aggregate market transactions	O
3.2.1	Public disclosure of summary central bank balance sheet on a frequent and pre-announced schedule	O
3.2.2	Public disclosure of information on central bank's monetary operations on a pre-announced schedule	O
3.2.3	Disclosure of emergency financial support by central bank	PO
3.2.4	Public disclosure of a country's foreign exchange reserve assets, liabilities and commitments by the monetary authorities on a pre-announced schedule	O
3.3	Central bank to maintain public information services	O
3.3.1	Central bank to have a publications programme including an Annual Report	O
3.3.2	Senior central bank officials to explain the institutional objectives to the public	O
3.4	Public availability of texts of regulations issued by the central bank	O
IV.	**Accountability and Assurances of Integrity by the Central Bank**	
4.1	Central bank officials to appear before a designated public authority to report on the conduct of monetary policy	O
4.2	Public disclosures of audited financial statements of its operations on a pre-announced schedule	O
4.2.1	Public disclosure of information on accounting policies and independent audit of the financial statements	O
4.2.2	Public disclosure of internal governance procedures	O
4.3	Public disclosure of information on expenses and revenues in operating the central bank	O
4.4	Public disclosure of standards for the conduct of the staff of the central bank	O
4.4.1	Public disclosure of information about legal protection for officials of the central bank	O

Memo Items:

Assessment	I	II	III	IV	Total
O	14	10	9	7	40
BO	1	–	–	–	1
PO	2	–	1	–	3
NA	–	2	–	–	2

O – Observed; BO – Broadly Observed; PO – Partly Observed; NA – Not Applicable.

additional powers may not require an overhaul of the present legislative framework but can be addressed through amendments as required. The Reserve Bank has wide-ranging statutory powers of extending central bank money to banks as the lender of last resort, including to any individual entity in extraordinary circumstances. Therefore, a legislative amendment to specify the objectives of monetary policy is not considered necessary at this juncture. However, one member of the CFSA felt that instead of multiple objectives, the Reserve Bank should primarily have the objectives of price stability, financial stability and growth.

The issue of regulatory overlap has come in for some discussion in recent times. It is argued that such overlap tends to confuse the markets. While the point is well-taken, it may nevertheless not be possible to fully remove the overlap in financial regulation and supervision *vis-à-vis* the Government, as the roles of the Government in these respects are founded in the Indian Constitution. If necessary, further amendments could be considered to the BR Act to bring it in alignment with modern banking and financial practices.

The presence of representatives of the Reserve Bank on the boards of the regulated entities may be avoided in normal circumstances, but they may need to be placed on the boards in the case of re-structuring, moratorium and other exceptional circumstances emanating from weakness of the entities. Hence, the legal provision, as an enabling provision for the presence of such representatives, needs to be retained.

Operational Independence

As far as the issue of operational independence of the central bank is concerned, the Reserve Bank enjoys independence *vis-à-vis* the executive arm of the state through conventions, agreements and MoUs in specific areas.

The specification of procedures and reasons for the removal of the Governor/Deputy Governor as also for supersession of the Board could potentially lead to the loss of well-established *de facto* independence. Any modifications that might be required to strengthen monetary policy as also the regulatory framework might be carried out by necessary amendments to existing legislations as needed, which would not call for a fundamental review of legislations or an overhaul of the existing legal framework.

The policies of the Reserve Bank need to be consistent with public policy and, where consultations with the Government are needed, the existing formal and informal arrangements for consultations ensure that in practice, the central bank is *de facto* independent. It would be impractical to record such processes of consultations and is also not desirable to do so. [One member of the CFSA felt that though the system of achieving operational autonomy through *de facto* means rather than *de jure* means has worked well so far, situations might arise when the independence and autonomy of the Reserve Bank may be circumscribed by the executive. To guard against such eventualities, the member recommended that all the issues relevant for securing *de jure* independence of the Reserve Bank may be considered for formalisation.]

Separation of Debt Management

Following the announcement in the Union Budget 2007-08, the Central Government is proceeding with the establishment of a Middle Office, as a prelude to setting up of a full-fledged Debt Management Office (DMO).

The Government is in favour of proceeding with the setting up a full-fledged DMO for the following reasons: (i) With the enactment of the FRBM Act, the basic source of conflict of interest has been removed. In the interest of prudent macro-economic and fiscal management, it is better for the Government to adopt a responsible fiscal policy and face the real market cost of funding. (ii) The stipulations with respect to mandatory investment in 'SLR' (government) securities, helps the Government to finance its fiscal deficit at costs that are perhaps lower than they would otherwise be. These mandatory requirements could also inhibit the natural development of the bond market. As the economy and financial markets develop over time, such requirements can be expected to come down. Government debt issuance and management will then need more intense engagement with the market participants and with investors in particular. Professional competence in a DMO will then be absolutely necessary. (iii) The issue of harmonising the functions of debt management and forex intervention in the interest of preserving financial stability can be addressed in the design of the DMO, by ensuring adequate, immediate and continuing channels of communication between the proposed DMO and the Reserve Bank. (iv) The development of the securities market has to be a collective effort between the Government, and all the financial market regulators. Though, it can be argued that the two roles of providing price and financial stability and of developing markets should be separated, mixing the two roles can lead to inadequate or tardy development of the government securities market. (v) As far as staffing issues are concerned, the DMO can hire from the Reserve Bank and from the market. (vi) Competition may improve public debt management. The states should be given a choice of debt managers: they can remain with the Reserve Bank or move to the DMO.

While most members of the CFSA concurred with the proposal to set up a DMO, one member felt that the DMO should be an independent body. The Chairman, personally viewed that the time is not ripe for the complete separation of debt management at the current juncture for the following reasons: (i) the high level of fiscal deficit along with an extremely high level of overall government debt to GDP ratio; (ii) setting up the DMO under the Government may lead to a conflict of interest between the Government's role as a debt manager and its status as the owner of a substantial portion of the banking sector; iii) even after separating the debt and monetary management roles, the management of government debt, regulation of the banks and monetary policy will continue to be inter-linked; (iv) the difficulty in harmonising the operations of debt issue redemptions, SLR maintenance and MSS, as is being done at present; (v) practical difficulties in setting up new government authorities; (vi) the Reserve Bank has the advantage of the large size of its staff and expertise developed in managing, *inter alia,* debt management operations; and (vii) it may not be appropriate for a Central Government authority to also do State Government debt management.

The Chairman, however, supported the need for a well-structured Middle Office that could help debt management, as a whole.

Price Index for Measuring Inflation

The accurate measurement of inflation is critical. The issue has come in for a great deal of discussion in recent years, both at the formal and informal levels. A suggestion has been made that India needs only one index of inflation rather than the multiple indices it currently employs. However, given the economic and demographic diversity that exists in India, a combination of different measures of inflation gives useful information on diverse aspects that is found to be meaningful in formulating an appropriate policy. Relying on a single index might result in loss of information on some crucial sectors and might be less useful in tackling the diversity of issues. Though price stability is a dominant objective of monetary policy, switching over to the CPI as the only inflation indicator is not an immediate imperative. In India, many data series such as on unemployment rate, labour productivity, capacity utilisation, inflation expectations and housing prices and volumes are yet to be made available. The weekly WPI data gives a feel of the economic dynamics with a shorter lag than the CPI. Until a system is in place to generate the above-mentioned data to help in monetary policy formulation, giving up the weekly compilation of WPI is not advisable.

Role of Technical Advisory Committee on Monetary Policy (TACMP)

Over the last decade or so, central banks have increasingly adopted a more consultative process for the formulation of monetary policy. India adopted this practice through structured pre-policy consultations with various stakeholders and the TACMP was set up in July 2005, keeping in mind that there may be a move towards collegial decision-making in future. The members of the Committee are not appointed on a full-time basis, and, as such, they cannot be made accountable for decisions. Furthermore, unlike many inflation-targeting countries, no particular decision like setting of a short-term interest rate rests with the Committee. The issue of making the discussions at the TACMP public can be considered and can be done when it is considered desirable. Under the current circumstances and given the ambit within which TACMP provides its advice, the need for strengthening the role of TACMP should be kept in view and practices/procedures towards this goal could be considered as it gains more experience.

Role of the Reserve Bank in the Foreign Exchange Market

In a globalised economy, the foreign exchange market plays a very important role. Whether or not a central bank should intervene in it has been the subject of academic debate and lay discussion for several years. Interventions made by the Reserve Bank in the foreign exchange market are mainly to contain excessive volatility. The policy on exchange rate management is transparently stated and it is consistent with current monetary policy objectives.

6.2 Transparency in Financial Policies

The assessment of transparency in financial policies has revealed that all three major regulators in the financial sector, namely, the Reserve Bank, SEBI and IRDA are compliant with the relevant standards. No significant weaknesses have been identified with respect to transparency practices in banking supervision, securities supervision or insurance supervision. At present, co-operation and information-sharing between the Reserve Bank and other regulators is handled by a High Level Co-ordination Committee on Financial Markets (HLCCFM). Any move to institutionalise the HLCCFM could prove to be counter-productive as it could reduce flexibility in the formulation of financial policies; however, the present information-sharing mechanism could be improved. The summary assessment of transparency in financial policies is given in Table VI.2.

Most financial sector regulatory laws in India appear to be formulated in favour of transparency. In this regard, the laws governing SEBI and IRDA are relatively new and designed to provide a higher degree of operational transparency than the laws that are of older provenance.

Dispute Resolution Mechanism

In order to resolve disputes between participants in the government securities market, a formal dispute resolution mechanism needs to be put in place.

Information Disclosure

SEBI, along with the stock exchanges and other regulators, should invest in technology to ensure that all the information they receive from the companies, market intermediaries (such as brokers) and mutual funds are treated as public goods and disseminated on a real-time basis to the public without any privileges to any special bodies. Embargo for data releases, if any, should be for a specified time period and exceptions, if any, to this stance on information dissemination should be explained on the official website of the regulator.

6.3 Fiscal Transparency

Constitutional provisions govern the functional responsibilities and *inter se* relationships among different tiers of governments. There has been significant improvement in the practices adopted by the Centre and State Governments in enhancing fiscal transparency with the enactment of the FRBM Act in 2003 and the Fiscal Responsibility Legislations (FRLs) by the states. A summary assessment of adherence to fiscal transparency standards by the Central and State Governments is given in Table VI.3.

The Central Government is largely compliant with the IMF's Code of Good Practices on Fiscal Transparency, while the State Governments have some way to go before achieving full compliance with the standards.

The structure of the Government in India at the various levels, *viz.*, Centre, states and local authorities, their responsibilities and the relationship between the Government and the rest of the economy are clearly defined under the Indian Constitution and are publicly

Table VI.2: Summary of Assessments of Transparency in Financial Policies				
No.	Area/Practices	Assessment		
		RBI	SEBI	IRDA
V.	**Clarity of Roles, Responsibilities and Objectives of Financial Agencies**			
5.1	Objectives and institutional framework of financial agencies to be defined in legislation	O	O	O
5.1.1	Public disclosure of broad objectives of financial agencies in legislation	O	O	O
5.1.2	Public disclosure of responsibilities of financial agencies and authority to conduct financial policies	O	O	O
5.1.3	Public disclosure of modalities of accountability for financial agencies	O	O	O
5.1.4	Public disclosure of procedures for appointment and removal of members of the governing bodies of financial agencies	PO	O	O
5.2	Public disclosure of relationship between financial agencies	PO	O	O
5.3	Public disclosure of role of payment systems	O	NA	NA
5.3.1	Public disclosure of policy principles by agencies overseeing payment systems	O	NA	NA
5.4	Public disclosure of relationship between financial agencies and SROs	O	O	O
5.5	SROs performing regulatory and supervisory functions to be guided by same good transparency policies as specified for financial agencies	O	O	NA
VI.	**Open Process for Formulating and Reporting of Financial Policies**			
6.1	Transparency in conduct of policies by financial agencies	O	O	O
6.1.1	Public disclosure of regulatory framework and operating procedures governing conduct of financial policies	O	O	O
6.1.2	Public disclosure of regulations for financial reporting	O	O	O
6.1.3	Public disclosure of regulation for the operation of organised financial markets	O	O	NA
6.1.4	Public disclosure of structure of fees charged by financial agencies to financial institutions	O	O	O
6.1.5	Public disclosure of procedures for information-sharing and consultation between financial agencies	PO	O	O
6.2	Public disclosure of significant changes in financial policies	O	O	O
6.3	Issue of periodic public reports on how policy objectives are pursued by financial agencies	O	O	O
6.4	Public consultations before proposed substantive technical changes to the structure of financial regulations	O	O	O
VII.	**Public Availability of Information about Financial Policies**			
7.1	Issue of a periodic public report on the major developments of the sectors of the financial system by financial agencies	O	O	O
7.2	Public reporting of aggregate data related to jurisdictional responsibilities on a timely and regular basis	O	O	O
7.3	Public disclosure of balance sheet on a pre-announced schedule and information on aggregate market transactions	O	O	O

7.3.1	Public disclosure of emergency financial support by financial agencies	PO	NA	NA
7.4	Financial agencies to establish and maintain public information services	O	O	O
7.4.1	Financial agencies to have a publications programme including a periodic report on their principal activities	O	O	O
7.4.2	Senior officials to disclose institution's objectives and performance to the public	O	O	O
7.5	Public availability of texts of regulations and other directives issued by financial agencies	O	O	O
7.6	Public disclosure of deposit insurance schemes and other client asset protection schemes, its procedures and performance	O	O	NA
7.7	Public disclosure of information on consumer protection arrangements	O	O	O
VIII.	**Accountability and Assurances of Integrity by Financial Agencies**			
8.1	Officials of financial agencies to appear before a designated public authority to report on the conduct of financial policies	O	O	O
8.2	Public disclosures of audited financial statements on a pre-announced schedule	O	O	O
8.2.1	Public disclosure of information on accounting policies and independent audit of the financial statements	O	O	O
8.2.2	Public disclosure of internal governance and internal audit procedure	O	O	NO
8.3	Public disclosure of information on operating expenses and revenues	O	O	O
8.4	Public disclosure of standards for the conduct of the officials and staff of financial agencies	O	O	O
8.4.1	Public disclosure of information about legal protection for officials of financial agencies in the conduct of official duties	O	O	O

Memo Items:

Assessment	RBI	SEBI	IRDA
O	32	33	29
BO	–	–	–
PO	4	–	–
NO	–	–	1
NA	–	3	6

O – Observed; BO – Broadly Observed; PO – Partly Observed; NA – Not Applicable;
NO - Not Observed.

Table VI.3: Summary of Assessments – Fiscal Transparency			
No.	Area/Practices	Assessment	
		Centre	States
I.	**Clarity of Roles and Responsibilities**		
1.1	**Distinguishing the government sector from the rest of the public sector and rest of the economy**		
1.1.1	Clarity in structure and functions of government	O	O
1.1.2	Fiscal powers of executive, legislative and judiciary to be well-defined	O	O
1.1.3	Relationship and responsibilities of different levels of government to be clearly specified	PO	PO
1.1.4	Clarity in relationships between the Government and public corporations	O	PO
1.1.5	Clarity in government's relationships with the private sector	O	PO
1.2	**Clear and open legal, regulatory, and administrative framework**		
1.2.1	Comprehensive budget, tax, and other public finance laws for collection and use of public funds	O	O
1.2.2	Clarity of laws and regulations related to the collection of revenues	O	BO
1.2.3	Time for consultation about proposed laws and regulatory changes	O	O
1.2.4	Clarity in contractual arrangements between the Government and public or private entities	O	O
1.2.5	Legal basis for government's liability and asset management	O	O
II.	**Open Budget Processes**		
2.1	**Timetable for budget preparation**		
2.1.1	Budget calendar should be specified and adhered to	O	O
2.1.2	The annual budget should be realistic, and prepared and presented within a comprehensive medium-term macroeconomic and fiscal policy framework.	O	BO
2.1.3	Description of major expenditure and revenue measures	O	BO
2.1.4	Assessment of fiscal sustainability and clarity on assumptions about economic developments and policies	BO	BO
2.1.5	Clear mechanisms for the co-ordination and management of budgetary and extra-budgetary activities within the overall fiscal policy framework	O	O
2.2	**Clear procedures for budget execution, monitoring, and reporting**		
2.2.1	The accounting system should provide a reliable basis for tracking revenues, commitments, payments, arrears, liabilities, and assets	PO	PO
2.2.2	Presentation of timely midyear report on budget developments to the Legislature	O	BO
2.2.3	Presentation of supplementary revenue and expenditure proposals during the fiscal year to the legislature	O	O
2.2.4	Presentation of audited final accounts and audit reports to the legislature	O	O
III.	**Public Availability of Information**		
3.1	**Public disclosure of information on past, current, and projected fiscal activity and major fiscal risks**		
3.1.1	Budget documentation to cover all budgetary and extra-budgetary activities of the Central Government	O	O
3.1.2	Disclosure of forecasts and sensitivity analysis for the main budget aggregates for at least two years following the Budget	PO	PO
3.1.3	Nature and fiscal significance of Central Government tax expenditures, contingent liabilities, and quasi-fiscal activities to be part of the budget documentation	PO	PO
3.1.4	Receipts from all major revenue sources, including resource-related activities and foreign assistance, should be separately identified	O	O
3.1.5	Publish information on the level and composition of debt and financial assets, significant non-debt liabilities, and natural resource assets	O	PO
3.1.6	The budget documentation should report the fiscal position of sub-national governments and the finances of public corporations	BO	NO
3.1.7	The government should publish a periodic report on long-term public finances	O	PO
3.2	**Fiscal information should be presented in a way that facilitates policy analysis and promotes accountability**		
3.2.1	A clear and simple summary guide to the budget should be widely distributed at the time of the annual budget	O	O
3.2.2	Fiscal data should be reported on a gross basis, distinguishing revenue, expenditure, and financing, with proper expenditure classification	O	PO

3.2.3	The overall balance and gross debt of the general government, or their accrual equivalents, should be standard summary indicators of the government's fiscal position	O	NO
3.2.4	Results achieved relative to the objectives of major budget programs should be presented to the legislature annually	O	PO
3.3	**Timely publication of fiscal information**		
3.3.1	The timely publication of fiscal information should be a legal obligation of government	O	O
3.3.2	Advance release calendars for fiscal information should be announced and adhered to	O	PO
IV.	**Assurances of Integrity**		
4.1	**Fiscal data should meet accepted data quality standards**		
4.1.1	Budget forecasts and updates should reflect recent revenue and expenditure trends, underlying macroeconomic developments, and well-defined policy commitments	O	BO
4.1.2	The annual budget and final accounts should indicate the accounting basis used in the compilation and presentation of data	BO	PO
4.1.3	Data should be internally consistent and reconciled with relevant data from other sources. Major revisions to be explained	BO	PO
4.2	**Fiscal activities should be subject to effective internal oversight and safeguards**		
4.2.1	Ethical standards of behavior for public servants should be clear and well-publicised	O	O
4.2.2	Public sector employment procedures and conditions should be documented and accessible to interested parties	O	O
4.2.3	Procurement regulations, meeting international standards, should be accessible and observed in practice	O	PO
4.2.4	Purchases and sales of public assets should be undertaken in an open manner, and major transactions should be separately identified	O	O
4.2.5	Government activities and finances should be internally audited, and audit procedures should be open to review	O	O
4.2.6	The national revenue administration should be legally protected from political direction, and report regularly to the public on its activities	O	O
4.3	**Fiscal information should be externally scrutinised**		
4.3.1	Public finances and policies should be subject to scrutiny by a national audit body	O	O
4.3.2	The national audit body to submit all reports, including its annual report, to the legislature and publish them	O	O
4.3.3	Independent experts to assess fiscal forecasts, the macroeconomic forecasts on which they are based, and their underlying assumptions	PO	PO
4.3.4	A national statistical body should be provided with the institutional independence to verify the quality of fiscal data	O	O

Memo Items:

Assessment	Centre				States			
	I	II	III	IV	I	II	III	IV
O	9	7	10	10	6	4	4	8
BO	–	1	1	2	1	4	–	1
PO	1	1	2	1	3	1	7	4
NO	–	–	–	–	–	–	2	–

O – Observed; BO – Broadly Observed; PO – Partly Observed; NO – Not Observed.

disclosed. The budgetary process has a legal basis and follows the regulatory and administrative framework for fiscal management. There is a well-established internal audit system in all Central Government departments. The pre-Budget Economic Survey and Budget documents provide past, current and projected information on fiscal indicators. Under the FRBM Act, the Central Government is setting forth a one-year rolling target for prescribed fiscal indicators with specification of underlying assumptions.

Some of the major observations and recommendations following the assessment are:

(i) Functional overlaps by the Central Government on the functional domain of states in some important spheres like health and agriculture has led to a deterioration in the quality of governance, hampering timely responses to external shocks, and negates the purpose of defining separate spheres of responsibility. Such functional overlaps need to be minimised or properly institutionalised, so that the roles of the Central and State Governments are clearly defined in practice and accountability is appropriately established.

(ii) A clear channel needs to be established as part of the implementation process of the Finance Commissions' recommendations. To enhance transparency of Finance Commission awards, the revenue-sharing calculations must be placed in the public domain.

(iii) To reduce delays by the Governments in honouring payments to various entities and individuals, there is a need for formally including such provisions as part of legal contracts along with suitable recourse mechanisms. Public-private partnership (PPP) documents should include time-limits within which payment obligations should be honoured.

(iv) There are discrepancies in reporting of liabilities and deficit at various levels, particularly borrowings by public sector units (PSUs), and there is scope for improvement in transparent fiscal reporting on these matters.

(v) All states should set up State Finance Commissions and ensure timely submission of reports and report compliance, along with the rationale for rejecting any of the recommendations.

(vi) A common reporting framework for compensation and assignments to local bodies applicable to all states should be developed. Transfers of funds devolved to local levels should also be reported separately for rural and urban local bodies. State Governments should provide economic and functional classification of expenditures annually in a systematic manner. A Working Group needs to be set up to address the issue of discrepancies in fiscal data reported by various data disseminating agencies. The Group should also analyse the reasons for such discrepancy, like consistency in definition, approach or time lag.

(vii) The mode of calculating the fiscal deficit does not at present capture the impact of off-budget items or provide such figures separately. The gross fiscal deficit reported in the budget document needs to be accompanied by an augmented fiscal deficit to capture off-budget items, such as oil bonds, Food Corporation of India bonds and fertiliser bonds. The Thirteenth Finance Commission is looking into these issues.

(viii) The budget documents do not cover the actual audited expenditure statement, which comes out with a lag of about six to nine months. Efforts should be made by both Central and State Governments to reduce this time lag and increase the frequency of financial disclosures. Expenditure on all government-funded schemes, along with a description of what they propose to achieve, should be available on a yearly basis with progressive actual expenditure on each scheme. Though these details are available in the Annual Reports/Outcome Budgets of separate Ministries to which the schemes pertain, comparable time-series information should also be made available for the preceding years, so that it is not difficult to monitor yearly actual expenditure on these schemes.

(ix) The budgetary structure in India does not, at present, adequately convey the functional content of each budget head category. Consideration may be given to appoint a Working Group to restructure and rationalise the budget head structure for reporting expenditures. The revised budget head structure should be made binding on Central and State Governments.

Accrual-based Accounting

The CFSA notes that the recommendation of the Twelfth Finance Commission to move from cash-based accounting towards accrual-based accounting was in principle accepted by the Government. While accrual accounting provides more comprehensive, accurate and reliable financial information and promotes better transparency, switching over to accrual accounting requires a huge investment in skill development as also better availability of fiscal information.

There should not be any hasty move towards accrual-based accounting, which should be attempted only in phases after ascertaining the benefits and costs of so doing and preparing a strong ground in terms of skills and awareness at all levels. However, this should not preclude Governments from removing serious distortions caused by cash-based fiscal reporting on account of factors such as deferment of payment of subsidies through issue of bonds.

Fiscal Reporting and Monitoring

The fiscal reporting and monitoring at the Centre and at state-levels could be further enhanced by providing sensitivity analysis for fiscal projections, with respect to the underlying parameters assumed and quantification of fiscal risks.

There is a need to reconcile discrepancies in the fiscal data reported by various data disseminating agencies and also to restructure and rationalise the budget head structure for reporting expenditures.

The public capital outlay in any state is an aggregate of State Government-funded outlays, and outlays funded directly by the Central Government that are not all routed through the State Exchequer. There is a significant time lag in availability of the combined finance accounts for the Central Government and State Governments due to the delay in finalising the state accounts, which makes the public capital outlay in a state difficult to quantify. The Working Group on budget heads should also address this issue specifically.

6.4 Data Dissemination

India was among the first set of countries that subscribed to the IMF's Special Data Dissemination Standards (SDDS).

A Commission set up by the Government in January 2000 under the Chairmanship of Dr. C. Rangarajan recommended the setting up of the National Statistical Commission (NSC) to serve as a nodal and empowered body for all core statistical activities of the country, to evolve, monitor and enforce statistical priorities and standards and to ensure statistical co-ordination among the different agencies involved. The NSC was consequently set up in July 2006.

On assessment, it was found that India is compliant with the SDDS and exceeds the requirements under the code in several areas. A recent improvement in India's disclosures was in May 2007, when the Central Statistical Organisation (CSO) for the first time released quarterly estimates of expenditure components of the GDP in current and constant (1999-2000) prices. However, the assessment has highlighted the lacunae in certain areas in the official data collection machinery under the Data Quality Assessment Framework and has made recommendations to address these issues. A summary of compliance with the Data Quality Assessment Framework is given in Table VI.4.

Prior to liberalisation, statistical data were obtained by government agencies through powers and authority granted to the administrative machinery by various legislations. With the reform process initiated since the early 1990s, this aspect has weakened and data submission is mainly voluntary. There has also been a significant expansion in the role of the services sector in the economy, whose data is not adequately captured at present. There is a need for a collaborative arrangement between the Central and State Governments in generating accurate and reliable industrial data. The quality of the agricultural data has also become worse with the weakening of the land revenue system and the consequent unreliability of the estimates of land use. There is also a need to supplement the national statistics with state-level statistics, which would allow comparable analysis of economic problems and performance at the state level. Better co-ordination between the CSO and the central ministries involved in data collection, as also between the state statistical bureaus and the ministries in the states, is needed.

Central Statistical Organisation

There is a need to strengthen the CSO in the compilation of national accounts statistics and Index of Industrial Production (IIP). It should be well-supported by the legal and institutional environment.

With liberalisation and reforms, several of the traditional links that compiled and provided statistics to the CSO have deteriorated. Generally, the accuracy and reliability of the

Table VI.4: Data Quality Assessment Framework – Summary of Results

	Element	National Accounts	WPI	CPI-IW	Government Finance Statistics	Monetary Statistics	Balance of Payments
0.	**Pre-requisites of quality**						
0.1	Legal & institutional environment	LO	LO	O	LNO	O	LO
0.2	Resources	LO	O	O	LO	O	O
0.3	Relevance	LO	O	O	LO	O	O
0.4	Other quality management	O	O	O	O	O	O
1.	**Integrity**						
1.1	Professionalism	O	O	O	O	O	O
1.2	Transparency	O	LO	O	LO	O	O
1.3	Ethical standards	O	O	O	O	O	O
2.	**Methodological Soundness**						
2.1	Concepts & definitions	LO	LO	O	LNO	O	LO
2.2	Scope	LO	O	LNO	LO	O	O
2.3	Classification/Sectorisation	LO	O	O	O	O	O
2.4	Basis for recording	LO	O	O	O	O	O
3.	**Accuracy and Reliability**						
3.1	Source data	LNO	LO	LO	O	O	O
3.2	Assessment of source data	LNO	LNO	O	O	O	O
3.3	Statistical techniques	LNO	O	LO	O	O	O
3.4	Assessment and validation of intermediate data and statistical outputs	O	O	O	O	O	O
3.5	Revision studies	LO	O	O	LO	O	LO
4.	**Serviceability**						
4.1	Timeliness and periodicity	O	O	O	LO	O	O
4.2	Consistency	LO	O	O	O	O	O
4.3	Revision policy and practice	LO	O	LO	LO	O	O
5.	**Accessibility**						
5.1	Data accessibility	LO	O	O	LO	O	O
5.2	Metadata accessibility	LO	LO	O	LNO	O	O
5.3	Assistance to users	LO	LO	O	LO	O	O

O – Observed; LO – Largely Observed; LNO – Largely Not Observed; NO – Not Observed.

Compliance at a glance

Assessment	National Accounts	WPI	CPI-IW	Government Finance Statistics	Monetary Statistics	Balance of Payments
Observed	6	15	18	10	22	19
Largely Observed	13	6	3	9	–	3
Largely Not Observed	3	1	1	3	–	–
Not Observed	–	–	–	–	–	–

expenditure side of the GDP is much lower than that of the production side. There is a need to substantially improve the accuracy of expenditure-side statistics of the national accounts.

There are also several gaps in the statistical techniques used by the CSO. The statistical techniques need greater independent review, so that the CSO can make appropriate changes in its techniques. Advance notice may also be given for major changes in methodology, source data and statistical techniques. The CSO may study and analyse its revisions and make such studies public to help users understand the revisions better.

The CSO should assume direct responsibility for the generation of the IIP. It should create the frame, select the sample and collect the data directly from the units. In the process of consolidation of the source agencies, it should reduce its reliance on the administrative machinery and industry associations and strengthen its own direct capabilities. The CSO can further improve the transparency of the IIP if it also reveals the size (number) of units in the frame, the sample size and the monthly response rate for each item of the IIP. The IIP needs to adjust its basket of commodities and the weights assigned to these quicker than it currently does. The publication of the response rate with each release would also enable users to anticipate changes in the estimates and appreciate the revisions when they occur.

Central Government

There are multiple agencies involved in the measurement of employment, unemployment and wages in India. In spite of a proliferation of agencies, India does not provide a single comprehensive and reliable estimate of any of the three basic measures of labour markets – employment, unemployment and wages – on a regular basis with an acceptable periodicity or timeliness. The fragmented efforts in the compilation of statistics relating to the labour markets should be consolidated under one institution that is adequately empowered to undertake this task comprehensively and effectively. The CSO, as the premier statistical agency of the country, is the most appropriate agency to undertake this responsibility with the help of the National Sample Survey Organisation (NSSO).

Statistics should be compiled by professional statistical agencies that deploy appropriate statistical methodologies rather than by the administrative arms of the Government through voluntary or statutory compliance of legislations.

The Wholesale Price Index (WPI) provides only the index and not the price, which limits the utility of the WPI. In the interests of increasing the transparency and application of the WPI, the practice of providing the prices underlying the creation of the indices needs to be restored.

The Labour Bureau in the generation of the Consumer Price Index- Industrial Workers (CPI-IW) and the Office of Economic Advisor in the Ministry of Commerce and Industry in the generation of the WPI should improve their transparency substantially by revealing the number of respondents in the frame, the monthly response rates, the revision in the responses and the policies they follow with respect to revisions. This information may also be made public for a fair assessment of the credibility of the price indices.

The WPI suffers seriously from outdated weights. The base year used for compiling WPI is 1993-94. Infrequent updating of weights leads to the use of outdated weights in the indices. It also often excludes new products for the same reason. There should be frequent updating of weights in the compilation of the WPI. The Abhijit Sen Committee, formed in 2004, has recommended a changeover to a monthly index in the WPI in line with standard practice in other countries. Accordingly, the Government plans to release a revised WPI with 2004-05 as the base year from 2009.

Reserve Bank of India

India does not provide any forward-looking indicators as part of SDDS. The Reserve Bank conducts quarterly surveys on capacity utilisation and order-book positions. This information could possibly be used to develop a full set of forward-looking indicators and disseminated.

There is no formal law or arrangement assigning responsibility for the collection, processing and dissemination of data relating to balance of payments with the Reserve Bank. Thus, data collection is a function of the regulations in force and is vulnerable to possible changes in the future. Data collection may suffer as it did in the case of the Index of Industrial Production and the WPI. Arrangements could be made by the Reserve Bank so that the data is collected through a more professional and sustainable system.

6.5 Concluding Remarks

The recent turmoil in the financial markets has brought to the fore the importance of enhanced transparency and disclosure of information to ensure financial stability and effective and smooth functioning of the markets. India has made significant progress in enhancing transparency in monetary and financial policies, fiscal arena and data dissemination. There are some areas where further transparency and disclosure can be achieved.

The main issues that have come out of the assessment of transparency in monetary policy pertain to the review of legislations with regard to the objectives of monetary policy, the issue of operational independence and accountability of the Reserve Bank and the separation of debt management and monetary management. The CFSA feels that an overhaul of legislation may not be appropriate at the current juncture. The CFSA endorses the move to set up the Middle Office as the DMO within the Ministry of Finance to conduct both internal and external debt management, as a measure that will improve risk management.

The Reserve Bank, SEBI and IRDA are compliant with the relevant standards in transparency in financial policies. Any move to institutionalise the HLCCFM could prove to be counter-productive as it could reduce flexibility in the formulation of financial policies; however, the present information-sharing mechanism could be improved.

The major area of concern arising out of the assessment of fiscal transparency is in the reporting of off-budget items, like oil bonds, and the need to have an augmented fiscal deficit figure to capture these items. Likewise, any move towards accrual accounting should also be attempted in a gradual manner.

There has been significant improvement in the data dissemination practices of various agencies, namely, the Central Statistical Organisation, the Office of the Economic Adviser in the Ministry of Commerce and Industry and the Reserve Bank. There is an urgent need to strengthen the functioning and data dissemination practices of the CSO, which had weakened after data submission became a voluntary process. There is also a need to consolidate the process of compiling labour data and this should be done by a professional statistical organisation. As far as price indices are concerned, updating the weights and inclusion of new products in the basket of goods needs to be expedited.

VII. DEVELOPMENT ISSUES IN THE SOCIO-ECONOMIC CONTEXT

A stability assessment of the financial sector should also address key development issues that have a bearing on the fair and efficient functioning of financial institutions and markets and the legal/institutional infrastructure. In India, there are broader development aspects in the socio-economic context, which affect social stability and have an indirect bearing on financial stability.

The social challenge of growth and development goes beyond aspects of human deprivation such as illiteracy, malnutrition, drinking water and sanitation to encompass elements related to economic deprivation which, in the context of the current assessment, are areas like financial inclusion, customer service, and access to finance for small-scale industries (SSIs). Thus, social stability is very important and has an indirect bearing on financial stability.

Financial inclusion is one of the major determinants of economic growth. Higher economic growth and infrastructure, in turn, play a crucial role in promoting financial inclusion. In order to achieve the objective of growth with equity, it is imperative that infrastructure is developed in tandem with financial inclusion, as this would facilitate and enhance credit absorptive capacity.

Bank nationalisation in India marked a paradigm shift in the focus of banking from class banking to mass banking. The co-operative sector and regional rural banks (RRBs) are other major conduits in the banking sector to promote financial inclusion. Post offices are another major institution that provide bank-like facilities to less affluent segments of the population. There is a need to expand access to insurance by the rural and urban poor.

The focus of financial inclusion in India has progressed from ensuring bare minimum access to a no-frills savings bank account for the unbanked population to the concept of 'Total Financial Inclusion'.

The entire range of recommendations of the Rangarajan Committee on Financial Inclusion needs to be reviewed and implemented in a phased manner in order to promote and achieve financial inclusion.

Financial inclusion can be enhanced through products tailored to the needs of small borrowers. However, for such initiatives to be successful, a credit culture needs to be imbibed by the unbanked population especially in semi-urban and rural areas through the creation of a conducive climate. Banks should scale up IT initiatives for financial inclusion at a greater speed, while ensuring that solutions are highly secure, amenable to audit, and follow widely-accepted open standards to ensure eventual inter-operability among the different systems.

Business correspondents (BCs) may be suitably incentivised to popularise the process by making them aware of intangible synergies, taking into account both risks and returns from a longer-term perspective.

A possible approach towards greater financial inclusion could be to explore new design principles by segregating customer handling, risk orientation, risk measurement, risk transfer and risk aggregation.

Exploitation of synergies between local financial institutions and national level financial entities would help achieve greater financial inclusion.

Mobile banking services can be used for micro-payment by extending financial services through virtual accounts. These have the potential to significantly lower transaction costs, while expanding outreach to rural areas.

Urban India has a huge population of poor migrants, who are denied basic banking facilities. For them to be provided with banking services, KYC norms may need to be further moderated. In order for banks to be effective conduits for achieving the goals of financial inclusion, they would also need to finance household and consumption expenditure to avoid non-institutional sources of borrowing.

There is a need for granting banks greater operational flexibility to enable them to fix interest rates in respect of small customers, achieve reduction in costs, acquire better risk assessment capabilities and ensure better flow of credit information to credit information bureaus.

Financial literacy and awareness need to be taken up in a big way. With the objective of mainstreaming the activity of money-lending as also strengthening the synergies between the formal and informal segments, the model legislation suggested by the Technical Group to Review the Legislation on Money Lending (2007) needs to be implemented.

It could be explored whether banks may be assessed on their performance relating to financial inclusion and rated accordingly. The Government has an important and crucial role in assisting financial inclusion through strengthening the rural infrastructure and facilitating the production and distribution of output.

The Micro and Small Enterprises (MSEs), despite their dominant numbers and importance in job creation, have traditionally faced difficulty in obtaining formal credit or equity funding. Lending institutions must improve their ability to provide financial services to MSEs through commercial mechanisms that lower the costs and minimise their risk exposure. Reducing the transmission cost of evaluating MSE credit could be a way of securing a level playing field.

In spite of various initiatives to improve customer service, there are gaps in the implementation of guidelines which give rise to customer grievance. Customer service by banks could be improved through measures like financial education, credit counselling and improvement in information dissemination. While there is a need for banks to develop customer databases so that they can tailor products and services in line with customer needs, the risks associated with maintaining the confidentiality of such data and the threat of identity theft need to be addressed through proper control mechanisms.

Sustainability combines environmental, social, ethical and governance factors. Banks need to develop a culture of Socially Responsible Investing (SRI).