RESERVE BANK OF INDIA

ANNUAL REPORT 2008-09
SUMMARY

Summary of the Report of the Central Board of Directors on the Working of the Reserve Bank of India for the Year ended June 2009

The complete Annual Report can also be accessed on Internet

URL : www.rbi.org.in

*For the Year July 1, 2008 to June 30, 2009**

PART ONE : THE ECONOMY - REVIEW AND PROSPECTS

I ASSESSMENT AND PROSPECTS

The Indian economy exhibited significant resilience in 2008-09 in the face of an intense global financial crisis and the subsequent severe global recession. The contagion from the global crisis, however, posed the challenge of responding to the evolving risks and heightened uncertainties, which warranted swift and appropriate use of fiscal and monetary policy measures with a view to ensuring orderly functioning of the markets, preserving financial stability, and moderating the dampening effects on growth. For the Government, this involved temporary deviation from the fiscal consolidation process embodied in the Fiscal Responsibility and Budget Management (FRBM) Act. The Reserve Bank had to contend with the challenges over two distinct phases during the year, which required contrasting monetary policy responses. In the first half of the year, inflation firmed up under the pressure of hardening international commodity and food prices, which necessitated an anti-inflationary policy response. In the second half, however, restoring orderly conditions in the market and subsequently supporting the growth momentum emerged as the key challenges. This required adoption of accommodative monetary policy stance, which was reflected in the provision of ample liquidity at lower interest rates. Consequently, the financial system functioned without disruptions and credit conditions did not operate as a constraint to growth.

Reverting to the high growth trajectory at the earliest remains the key policy challenge in the near to medium-term. The sustained expansionary fiscal and monetary policy stances, however, entail the risk of aiding inflationary pressures in the near-term and constraining the growth process in the medium-run. Timely

* : While the Reserve Bank of India's accounting year is July-June, data on a number of variables are available on a financial year basis, i.e., April-March, and hence, the data are analysed on the basis of the financial year. Where available, the data have been updated beyond March 2009. For the purpose of analysis and for providing proper perspective on policies, reference to past years as also prospective periods, wherever necessary, has been made in this Report.

exit from the current policy stance, thus, would be critical, given the emerging signs of inflationary pressures. Credible action plan on fiscal consolidation, with an emphasis on the quality of fiscal adjustment driven by rationalisation of expenditure and efficiency of public services would be necessary to revert to the high growth trajectory. The adverse impact of deficient monsoon on growth, inflation and social security needs to be carefully managed. Policies conducive to high domestic savings and promoting the role of innovations, technology and reforms in enhancing the productivity of investment may have to receive greater attention. The financial stability framework would need to be strengthened further taking into account the lessons from the global financial crisis.

I.1 The Indian economy witnessed moderation in growth in 2008-09 in comparison with the robust growth performance in the preceding five years. The deceleration in growth was broad based across three major constituent segments of GDP, *i.e.* agriculture, industry and services. Moreover, deceleration in industry and services sector also persisted over four consecutive quarters of the year. Reflecting the contraction in global demand, exports declined. Domestic aggregate demand also moderated due to sharp deceleration in the growth of private consumption demand. Reflecting the expansionary fiscal policy response to the slowdown in growth, government consumption demand increased by 20.2 per cent, and the contribution of government consumption expenditure to overall growth accordingly increased to 32.5 per cent from an average contribution of 5.9 per cent in the preceding five years. Corporate performance remained dampened, with significant fall in sales growth in the second half of the year, and decline in profits in last three consecutive quarters of the year. In 2009-10 so far, emerging signs of recovery are yet to indicate any clear trend, and the deficient monsoon and the depressed export performance have to be seen along with the improving growth in core infrastructure sector, recovering industrial production and more optimistic business outlook. Recognising the balance of risks to growth, the First Quarter Review of Monetary Policy for 2009-10 placed the projection for GDP growth at 6.0 per cent, with an upward bias. The inflation environment remained highly volatile during 2008-09; WPI inflation rose to a high of 12.9 per cent in August 2008 and declined sharply thereafter to below 1 per cent by the end of the year, before turning negative since June 2009. The currently observed negative inflation essentially reflects the impact of the high base of the previous year, and this transitory trend may not persist beyond few months. Within WPI, essential commodities continue to exhibit high inflation. Moreover, inflation expectations have not abated as much as the overall decline in WPI inflation, and inflation as per different consumer price indices remain stubbornly high. The adverse impact of the deficient monsoon on food prices, notwithstanding the record foodgrains production in 2008-09 and the high buffer stocks, also indicates upside risks to inflation, besides the evidence from the Reserve Bank's Survey of inflation expectations suggesting increase in inflation over the coming three months to one year. The First Quarter Review of Monetary Policy for 2009-10 took into account the emerging outlook on inflation and revised the inflation projection upwards from the earlier 4.0 per cent to 5.0 per cent, while reiterating 3.0 per cent as the medium term inflation objective.

I.2 The Indian economy exhibited five successive years of high growth with moderate inflation and macroeconomic stability during 2003-08, before encountering the contagion from the global economic crisis in 2008-09. The average GDP growth of 8.8 per cent achieved during this phase was not only the highest ever recorded in India's post-independence economic history, but also one of the highest in the world in the recent period. More importantly, inflation in India averaged at about 5.3 per cent during this period. The macroeconomic environment remained stable and resilient to external shocks, despite rising degree of openness and significant reforms. India's ascent as a major emerging market economy with high potential for sustained robust growth was reflected in surges in capital inflows, which were in excess of the external financing needs as conditioned by the country's prudent emphasis on sustainable current account deficit as a means to stable growth. The impetus for growth emanated from the upsurge in the domestic savings rate from 23.5 per cent of GDP in 2001-02 to 37.7 per cent in 2007-08, which facilitated the step up in investment rate from 22.8 per cent to 39.1 per cent during the corresponding period. Fiscal consolidation and reforms unshackled the constraints to realisation of productivity and efficiency driven growth. Before the emergence of the global economic crisis in 2008-09, the high growth trajectory was generally seen as the sustainable critical threshold, and accordingly the policy focus was primarily shifting to address the growing infrastructure deficit and make progress on remaining areas of reforms, while also ensuring that the growth process becomes more inclusive.

I.3 The Indian economy confronted one of the severest external shocks in 2008-09 in the form of an intense global financial crisis coupled with a global recession, but exhibited notable resilience, with GDP growth at 6.7 per cent. Orderly conditions prevailed in various segments of the financial system during the year. The cyclical growth deceleration witnessed in the first half of 2008-09 got amplified in the second half of the year on account of the dampening effects of the global recession. When the global markets turned dysfunctional in September 2008, with intense scramble for liquidity and subsequent credit freeze under the pressure of deleveraging, the Indian markets reverberated the shock, which was seen in the form of higher volatility in all segments of the financial markets and sharp corrections in stock prices. The macro-financial conditions remained exceptionally challenging from the stand point of the conduct of Reserve Bank's policies, as it had to respond to multiple challenges, starting from containment of inflation in the first half of the year to containing the deceleration in growth, preserving the soundness of the banks and financial institutions, ensuring normal functioning of the credit market and maintaining orderly conditions in the financial markets in the second half. At times, the Bank had to operate on multiple fronts simultaneously, and in constant consultation and coordination with the Government, with the overriding objective of limiting the adverse effects of the global crisis to the extent possible.

I.4 Global developments prominently influenced domestic developments in 2008-09. There were two distinct phases during which the transmission of global shocks posed different but significant challenges for the Reserve Bank. In the first half of the year, the world experienced simultaneous increase in both food and commodity prices, and there was a return of inflation after a phase of "great moderation". Dealing with supply side sources of inflation posed significant challenges for the conduct of Reserve Bank's monetary policy, particularly in the face of emerging signs of cyclical slowdown on the one hand and the risk of spiralling headline inflation affecting inflation expectations on the other. In the second half of the year, the global financial crisis and the subsequent global recession changed dramatically the nature of the challenge emanating from globalisation. The sharp swings in global conditions within the year were reflected in the fast slide of the world economy into a deep recession from a phase of high growth over the preceding four consecutive years. There was a sudden plunge to dysfunctional markets from a phase of growing market bubbles that had brought down risk premiums to historic low levels. Post-September 2008, developments in the financial systems of advanced countries revealed that irrespective of the degree of globalisation of a country and the soundness of its domestic policies, a global crisis could spread to every economy. The contagion could transmit through sagging consumer and business confidence, which, in the current context, is turning out to be more critical than the contagion transmitted through trade and capital flows. The international transmission of liquidity shocks was fast and unprecedented; while falling asset prices and uncertainty about valuation of the traded instruments affected market liquidity, failure of leading global financial institutions and the deleveraging process tightened the market for funding liquidity. Given the growing risk of illiquidity cascading into solvency problems, liquidity management acquired priority in most central banks, since it was critical for preserving normalcy in financial markets, and thereby avoiding the risk of snowballing effects of financial stress on the real economy.

I.5 The Reserve Bank could restore normalcy in the financial markets over a short time period through its liquidity operations in both domestic currency and foreign currency; the absence of any direct exposure of the Indian banks and financial institutions to the troubled assets and failing financial institutions in the advanced countries helped in the avoidance of any serious stress in the financial system. The financial crisis in the advanced countries, however, precipitated into an intense synchronised global recession, which impacted the growth prospects of all countries through contraction in aggregate demand. With the earlier perception of decoupling fast turning out to be a myth, moderating the adverse effects of the contagion on growth emerged as a major globalisation-induced challenge in the second half of the year. The severity of the external shock had emerged as a test for the capacity of public policies to ensure soft landing in the face of persistent adverse global economic conditions.

I.6 India's capacity to withstand the global shock better than many other emerging market economies was partly on account of the sound macroeconomic and financial sector policy environment that had been put in place in the post-reform period by careful assessment of the opportunities and risks associated with reforms. After the balance of payments crisis in the early 1990s, as a matter of concerted policy effort, the extent of dependence on external finance for financing domestic growth has been limited to the sustainable level of the current account deficit, and capital flows in excess of the financing needs have resulted in comfortable foreign exchange reserves. The reserve management policy also assumes importance in the context of the market determined exchange rate regime where the Reserve Bank aims at containing undue volatility, recognising the adverse effects of a volatile exchange rate on trade, investment and growth. Despite significant pressures on India's balance of payments in the third quarter of the year, the foreign exchange reserves facilitated Reserve Bank's operations in the foreign exchange market to preserve orderly conditions, notwithstanding a phase of high volatility over a short period of time. The gradual and sequential approach to liberalisation of the capital account also prevented leveraging of the Indian financial system for taking positions in the troubled assets in the advanced economies. Despite significant financial sector reforms, adequate regulatory precautions have ensured that complex structures like synthetic securitisations do not contaminate the Indian markets, and prudential measures also limit the exposure of the banking system to sensitive sectors and asset price bubbles. Absence of structured products that could mask risk exposures, hide interconnectivity of market operators and allow excessive use of leveraged speculation has been a notable aspect of the Reserve Bank's prudence in regulation. Reserve Bank's mandatory SLR requirement of 25 per cent (now reduced to 24 per cent) also appeared relevant in the context of sharp deterioration in asset quality that was experienced by the leading international banks and financial institutions. More importantly, appropriate countercyclical regulations and provisioning requirements also contributed to preventing development of asset price bubbles in India.

I.7 The Reserve Bank had taken measures to modulate the monetary overhang that was building on account of sustained expansion in money growth; the withdrawal of monetary accommodation had in fact started in 2004 with gradual increase in both *repo* and *reverse repo* rates. Since April 2005 the Bank had also been expressing its concerns over the fast growth in credit, and the overdrawn state of the banking system to sustain the credit disbursement, given the mismatches between sources and uses of funds, and the associated increase in the credit-deposit ratios for certain banks. Recognising the unprecedented credit growth to the real estate sector during 2004-07, the provisioning requirements and risk weights were increased to prevent a build up of asset bubble. Absence of any sovereign issue in the international markets for financing the deficit of the Government has also helped in limiting the effects of adverse external shocks on the macroeconomic policy environment of the country. A large domestic market, reliance on domestic demand and domestic savings for growth, comfortable foreign exchange reserves, prudent management of the capital account and a sound and resilient domestic financial system, thus, represent the key factors that helped in moderating the impact of the contagion on India in relation to many other countries around the world.

I.8 The deceleration in growth from an average of 8.8 per cent during 2003-08 to 6.7 per cent in 2008-09, however, warranted swift and comprehensive policy response, given the overriding policy focus of maintaining a growth rate of around 9 per cent as the key means to ensure higher living standards for all in an inclusive growth process. As the post-September 2008 global developments affected the Indian markets through the global liquidity spiral and sharp spurt in risk aversion, the Reserve Bank had to operate in several markets simultaneously, with the use of conventional and unconventional measures, given the overriding aim of restoring orderly market conditions and preserving smooth flow of credit for all productive purposes.

ASSESSMENT OF 2008-09

Economic Growth

I.9 The deceleration in growth, which started with the cyclical slowdown in the first half of 2008-09, got magnified in the second half due to the contagion from the global crisis. Deceleration in growth to 5.8 per cent in two successive quarters in the second half of 2008-09 represented the weakest growth in recent period; more importantly, while industrial growth turned negative in the last quarter, the deceleration in services persisted in all successive quarters of the year. The sharp moderation in GDP growth warranted appropriate fiscal and monetary policy response, which was delivered swiftly, that too in a forward looking manner in the second half of the year, in anticipation of the adverse ramifications of the global crisis on the domestic growth.

The Fiscal Stance

I.10 The unprecedented magnitude and complexity of the challenge necessitated temporary deviation from the fiscal consolidation process embodied in the Fiscal Responsibility and Budget Management (FRBM) Act. The combined fiscal deficit (Centre and States), including the special securities issued to oil marketing and fertiliser companies, thus, reached 10.7 per cent of GDP in 2008-09.

Financing of Fiscal Deficit

I.11 The challenge associated with financing of higher deficits emerged in the form of managing large borrowing programmes of the Governments without disrupting the markets, and more importantly, without exerting upward pressures on the interest rates. Significant moderation in inflation in the second half of the year; the deceleration in demand for non-food credit, reflecting the slowdown in growth; and the decline in non-bank sources of funding for the commercial sector created the headroom for smoother management of the borrowing programme. The net market borrowings of the Centre and the States jumped to Rs.4,02,302 crore (7.5 per cent of GDP) in 2008-09 from Rs.1,66,895 crore (3.5 per cent of GDP) in 2007-08; special securities outside the market borrowing programme increased to Rs.95,942 crore in 2008-09 from Rs.38,050 crore in 2007-08.

The Monetary Stance

I.12 Reflecting the moderation in growth in the second half and the contraction in aggregate demand, non-food bank credit, which was growing at 29.4 per cent in October 2008 (year-on-year basis) fell to 17.5 per cent by end-March 2009. Part of the high growth in credit up to October 2008 reflected the shift in the pattern of resource mobilisation by the corporates in the face of emerging global credit squeeze. The external funding was partly substituted by recourse to domestic credit. Moreover, there was a sharp increase in credit to oil marketing companies which reflected the rising international oil prices and high cost of imported crude. After October 2008, however, with sharp fall in international oil prices, the demand from oil companies came down at the same pace. Moreover, decline in commodity prices, need for clearing the inventories accumulated at high cost in the face of falling demand and falling prices, as well as weakening business confidence contributed to the sharp drop in credit growth. Credit extended by private and foreign banks exhibited much sharper deceleration in growth in relation to the nationalised banks. More importantly, flow of resources from non-banking avenues (such as from the capital market, non-banking finance companies, ECBs, FCCBs, ADRs/GDRs and FDI) also fell by about 20 per cent over the level in the previous year. Relaxing all constraints on the expansion in credit at lower cost without dilution of the emphasis on asset quality emerged as a major challenge for the Reserve Bank. Many central banks around the world had to confront with the challenge of unfreezing the credit market; in India, however, the credit market functioned normally, and the deceleration in credit growth reflected slowdown in real activity. The Reserve Bank ensured ample surplus liquidity in the system to ensure flow of credit to productive sectors, within the prudence necessary for preserving the asset quality of the banks.

Liquidity Management

I.13 In recent years up to the first half of 2008-09, increase in net foreign assets of the Reserve Bank, reflecting the surges in capital flows, had become the dominant source for expansion of base money. In the third quarter of 2008-09, however, the balance of payments came under pressure, and the reserve drawdown that became necessary to finance the deficit in capital inflows, led to corresponding contraction in base money. The Reserve Bank had to more than offset the contraction in reserve money by expanding its net domestic assets (NDA) so as to ensure necessary growth in money supply consistent with the needs of economic growth, besides the provision of ample liquidity to alleviate any fear of liquidity shortage in the Indian markets. The Reserve Bank ensured the necessary expansion in NDA through conventional open market operations (OMOs) involving outright purchase of government securities in the secondary market, as well as provision of liquidity through acquisition of securities by *repos* under the LAF. Another instrument which allowed the Reserve Bank to expand liquidity was the unwinding of the MSS securities. MSS securities had become an important instrument of sterilisation to partly neutralise the expansionary effects of surges in capital flows in the earlier years. While dealing with the challenge of expanding the NDA to offset the impact of contracting NFA on reserve money, the unwinding of MSS balances not only created the scope for adequate liquidity expansion by the Reserve Bank without expanding its balance sheet, but the timing of the unwinding could also be modulated in such a way that the large borrowing programme of the Government was managed smoothly without exerting any market stress.

I.14 The reduction in CRR by 4 percentage points released Rs.1,60,000 crore of liquidity to the banking system. While the first round immediate impact of a reduction in the CRR leads to corresponding fall in the reserve money, it implies higher money multiplier, which leads to higher increase in broad money. Since moderation in reserve money growth was the result of a deliberate expansionary policy action, the Bank had to emphasise the "adjusted reserve money" indicator to communicate the monetary developments to the public.

Monetary Transmission

I.15 Despite persisting with the expansionary monetary policy stance in the post-September 2008 period, which was reflected in 400 basis points reduction in CRR, 4.25 percentage point reduction in the repo rate, 2.75 percentage point reduction in *reverse repo* rate and several other conventional as well as non-conventional windows for access to liquidity (resulting in the availability of more than Rs.4,00,000 crore of additional actual/ potential liquidity to the system by the end of the year), the transmission of monetary policy became a matter of concern. The complete transmission of monetary policy takes place with long and variable lags. But in the midst of a sudden reversal in risk perception, the risk premium could increase significantly to often more than offset the magnitude of fall in the policy rates. As a result, the cost of funds may not decline for the customers, or may even increase, despite significant fall in the policy rates. This was experienced in several advanced economies, where the yield spreads increased significantly at some stage, reflecting heightened risk aversion. In India, while reassessment of risk was one of the factors constraining the transmission of monetary policy, there were several other structural factors in operation as well. First, the administered interest rate structure for small savings restricts flexibility on deposit rates for the banks, as small savings could potentially compete with deposits depending on the relative difference in the interest rates offered on both savings instruments. Second, depositors often lock their deposits at the high interest rate for longer term during a high interest rate phase; as a result, banks face the constraint of reducing the cost of lending in a phase of economic slowdown since their cost of funds remains high because of term deposits contracted earlier at higher rates. Till the term deposits become due for maturity, at which stage the deposits could be renewed at the lower rate, the banks experience structural rigidity in their balance sheet. Third, several concessional administered loans to sectors like agriculture and exports are linked to the BPLR, which works as a disincentive to revise the BPLR downwards even in the face of falling policy interest rates and use of moral suasion by the Reserve Bank to emphasise the need for lower lending rates as one of the means to support recovery in growth. Fourth, banks often compete to mobilise bulk/wholesale deposits, and they have to prevent shifting of such deposits to other banks, which creates the associated pressure to delay the revision in interest rate to the extent possible. In the conduct of its policies, the Reserve Bank, as a public institution, has to also remain sensitive to the interest of the depositors, given particularly the role of high domestic savings in India in the high growth phase of 2003-08 and the relatively higher degree of insulation of Indian growth compared to most other countries during 2008-09. Despite significant moderation in WPI inflation to below 1 per cent by the end of 2008-09 and then to sub-zero level, CPI inflation at the retail level continues to be high, and inflation expectations also have not receded at the same pace as the WPI inflation. In view of these reasons, monetary policy effectiveness continues to remain a challenge, which though is a universal concern and not specific only to India. Since the last quarter of 2008-09, however, the deposit and lending rates have started to moderate in response to the significant reduction in policy rates and sustained ample liquidity in the system, besides the Reserve Bank's constant emphasis on better policy transmission in the credit market.

Inflation Divergence

I.16 Headline inflation, as measured by year-on-year variations in the WPI, declined sharply to 0.84 per cent by end March 2009 from the peak of 12.91 per cent on August 02, 2008. Excluding the volatile fuel and metals components in WPI, however, the WPI inflation was less volatile, in the range of 10.2 per cent in August 2008 to 4.8 per cent in March 2009. The pass-through of global commodity prices to domestic prices was incomplete because of administered price mechanism and fiscal interventions for several commodities, which helped in moderating the price pressures and containing the volatility in inflation. The prices of food articles, however, continued to rule high, as a result of which the consumer price indices (CPIs) remained firm near double digit levels, given the higher weight of food articles in CPIs. The Reserve Bank's Annual Policy Statement in April 2009 recognised the emerging significant divergences between inflation in WPI and CPIs and emphasised that for policy purposes it continuously monitors the full array of price indicators.

External Contagion and Financial Markets

I.17 In the post-September 2008 period, the major concern for the Reserve Bank was to deal with the knock-on effects of the global financial crisis. With sharp increase in the overnight call rate in India to 13 per cent on September 16, 2008 and further to a peak of 19.8 per cent on October 10, 2008, the volume under the LAF *repo* window of the Reserve Bank (which is used on a day-to-day basis by the banks for accessing liquidity) increased from around Rs.12,500 crore in the first half of September 2008 to Rs.68,000 crore in the second half of the month, and further to Rs.90,000 crore in early October 2008. Demand for liquidity had increased from many quarters, that too suddenly. Corporates had increased the demand for credit at home as a substitute for external financing in the face of global credit squeeze. Access to trade credit was becoming difficult, and the cost also had gone up. NBFCs and mutual funds, given the nature of their sources of funds, also faced major liquidity shortage. In view of the capital outflows and the pressures on the balance of payments in the third quarter of the year, the exchange rate came under pressure, which warranted intervention operations by the Reserve Bank to restore orderly conditions in the foreign exchange market. This, in turn, implied corresponding contraction in rupee liquidity in the banking system. The Reserve Bank, thus, had to ensure supply of adequate rupee as well as foreign currency liquidity to restore the call money rate within the LAF corridor and also to contain volatility in the exchange rate.

Reserve Bank's Responses to the Contagion

I.18 For enhancing the availability of domestic liquidity, besides the usual reduction in CRR, greater access under the LAF through *repos*, and unwinding of the MSS securities, several other conventional as well as unconventional instruments were also used depending on the nature and expected magnitude of the demand for liquidity, such as a second LAF window providing access to liquidity in the afternoon as against the normal LAF access in the morning, special 14 days *repo* facility using SLR eligible securities up to 1.5 per cent of NDTL for meeting the liquidity needs of NBFCs, housing finance companies and mutual funds, advance release of money at the request of the Government to the banks towards Agricultural Debt Waiver and Debt Relief Scheme, increase in export credit refinance limit for commercial banks, and special refinance facilities for specialised financial institutions such as the SIDBI, NHB and EXIM Bank. The additional liquidity that was made available exceeded Rs.4,00,000 crore (by the end of the year), which is unprecedented and amounted to 7.9 per cent of GDP.

I.19 For dealing with the excess demand conditions in the foreign exchange market, given particularly the objective of containing excessive large volatility, a number of measures were initiated to ease the supply situation by partly assuring greater access to the Reserve Bank's foreign reserves and partly by improving the inflows in response to specific measures. Besides the actual intervention sales in the foreign exchange market, the Reserve Bank also opened the forex swap facility for the banks. To ease the demand pressure from oil importing companies during the high and rising phase of international prices, the Bank had already started special market operations in the secondary market through commercial banks involving direct supply of forex liquidity against the oil bonds of the public sector oil marketing companies. The policy measures that aimed at improving the supply of forex liquidity included permitting banks to borrow from their overseas branches within prudential limits, relaxing further the external commercial borrowing policy, including allowing NBFCs and housing finance companies to borrow in foreign currency, and raising the interest rates on NRI deposits. Notwithstanding the demand pressure in the forex market, in view of depressed international asset prices, the corporates were permitted to prematurely buy back their FCCBs at prevailing discounted rates.

I.20 Recognising the difficult challenges in the credit market, the Reserve Bank had to balance the priorities of credit quality and improved credit delivery. As counter cyclical regulatory measures, the Reserve Bank reduced to normal levels the provisioning requirement for standard assets and risk weights for certain asset classes, which had been increased earlier during the period of rapid credit growth. With a view to further strengthening the domestic banking sector, the Reserve Bank also undertook a number of other regulatory initiatives, which include: (i) review of prudential framework for off balance sheet exposures of banks covering issues like risk weights, provisioning and credit conversion factors; (ii) strengthening of systems for monitoring large un-hedged foreign exchange exposure of corporates; (iii) enhancing cross border supervision and consolidated supervision of bank led conglomerates; (iv) reviewing supervisory framework for monitoring the activities of Special Purpose Vehicles(SPVs) and trusts set up by banks; (v) reviewing the appropriateness of the current supervisory framework for monitoring the overseas operations of Indian banks; (vi) issuing guidelines on managing maturity mismatch for addressing liquidity risks in the very short run; (vii) discouraging the practice of excessive reliance on call money borrowing by linking the borrowings to banks' capital; and (viii) modifications to guidelines on restructuring of advances. Despite the risk of contagion from the global financial crisis, the Indian banking system remained sound and resilient, as evident from the soundness indicators like capital adequacy, asset quality and profitability for 2008-09. While the capital adequacy level for the banking system was at 13.2 per cent at the end of the year, each individual bank was above the minimum 9 per cent capital adequacy requirement prescribed by the Reserve Bank. Stress-testing findings of the Committee on Financial Sector Assessment (CFSA) also suggested the resilience of the financial system and the adequacy of capital levels.

Impact of the Reserve Bank's Actions

I.21 Responding to the large and comprehensive domestic liquidity measures, the inter-bank call rate reverted to within the LAF corridor or around the ceiling by the end of October 2008 and the LAF window also moved from net injection to net absorption mode, indicating the surplus liquidity conditions in the system since November 2008. Reflecting the measures taken for improving the availability of forex liquidity, the average exchange rate of the rupee which had depreciated sharply from Rs.40.02 per US dollar at the beginning of April 2008 to Rs.51.23 per US dollar in March 2009, has appreciated since then to around Rs.48.0 per US dollar in the first half of August 2009. The 10-year benchmark government securities yield also softened from the October 2008 levels by the end of the year, despite significant increase in market borrowings in the second half of the year. Thus, the transmission of the Reserve Bank's policies to the money, forex and the government securities markets has been effective, thereby ensuring speedy restoration of orderly conditions over a short time span.

The Resilient External Sector

I.22 The external sector of the economy exhibited resilience despite significant pressures on the balance of payments through the trade and capital flows channels, particularly in the third quarter of the 2008-09, when the reserve loss (excluding valuation) was US$ 18 billion in just one quarter. While net capital flows remained negative even in the fourth quarter of the year, the reserve loss was negligible because of surplus in the current account. For the year as a whole, the current account deficit widened to 2.6 per cent of GDP in 2008-09 from 1.5 per cent of GDP in 2007-08, with a total loss of reserves of US$ 20.1 billion (net of valuation). Overall, there was substantial decline in net capital inflows from US$ 108 billion in 2007-08 to US$ 9.1 billion in 2008-09, with last two quarters of the year showing net outflows. The financial channel of the contagion from the global financial crisis, thus, was distinctly felt in the form of reversal in capital flows, which affected the domestic financial markets, in particular, the stock market and the forex market. The significance of maintaining comfortable foreign exchange reserves, even with a largely flexible exchange rate regime, thus, became evident during the year when one of the severest external shocks could be managed without any exceptional measures to modulate the specific transactions in the current and capital accounts.

Managing Macroeconomic Challenges

I.23 The management of the macroeconomic environment during 2008-09, thus, was exceptionally challenging for the Reserve Bank, as the magnitude and pace of the external contagion had the potential to cause severe disruptions to critical segments of the economy. Preventing a liquidity scare, with ample provision of liquidity, both domestic and foreign currency, was the immediate challenge in the post September 2008 period, and both money market and forex market returned to normal conditions within two months in response to Reserve Bank's actions. With a sound banking system, the liquidity of non-banks like NBFCs, mutual funds and housing finance companies were also met to avoid the failure of any financial institution on account of lack of access to liquidity. In the wake of net capital outflows and difficult conditions for access to international markets, while assuring the market to provide the needed liquidity from the comfortable foreign exchange reserves, steps were taken to make certain inflows more attractive. Given the overriding importance of containing the moderation in flow of credit to the private sector for sustaining the growth momentum, counter cyclical prudential regulations were used to encourage banks to lend. The policy rates were also brought down significantly so as to lower the cost of funds and thereby spur consumption and investment demand. The fiscal stimulus, that involved significant increase in the government borrowing programme, posed the challenge of smooth completion of the borrowings without disrupting the markets.

I.24 Notwithstanding the Reserve Bank's actions that prevented the financial system from stress and thereby avoided any risk to the growth process from the financial system, the slowdown in domestic aggregate demand on account of the apprehensions spilling over to the consumers and investors from the severe global recession emerged as the key challenge to sustained high growth. In 2008-09, management of high inflation in the first half and preserving the soundness and resilience of the financial system in the second half were the key policy challenges. By the beginning of 2009-10 the major policy concerns were slow recovery in growth despite use of large fiscal stimulus and accommodative monetary stance, global recession weakening the export prospects, less than expected correction in real estate prices constraining a recovery in housing demand, high food and consumer price inflation and the risk of inflationary pressures firming up further due to the impact of sustained recovery-focused fiscal-monetary policy stance, implications of protracted growth slowdown for asset quality of banks, and the increasing possibility of large borrowing programmes limiting the options for monetary policy by potentially exerting upward pressures on market interest rates and competing with the credit demand from the private sector, and thereby constraining the return to the high growth path in the medium-term.

PROSPECTS FOR 2009-10

The Uncertain Global Outlook

I.25 The external economic environment is unlikely to remain congenial for supporting a faster recovery in India, because despite improved financial market conditions and thaw in the pace of contraction in global activity, the recession in advanced countries is widely perceived to persist in 2009. The IMF's outlook released in July 2009 suggests that global growth would contract by 1.4 per cent in 2009, and the volume of world trade would also decline by 12.1 per cent. The recovery is widely perceived to be gradual, and even with the upward revision to the IMF's growth outlook for 2010 at 2.5 per cent, that would represent just about half of the growth achieved in 2007. Moreover, despite diminishing uncertainty and improving confidence as well as receding financial stress, bank lending conditions remain tight, housing markets are yet to bottom out, and banks' balance sheets need to be cleansed further. In the second quarter of 2009, while the rate of contraction in the US and Euro-area GDP slowed down significantly, Japan, Hong Kong, Germany and France recovered from the recession, and China and Korea exhibited acceleration in growth. Emerging signs of improvement in the global macro-financial conditions, however, need to gain roots for ensuring a sustained global recovery. According to the Global Development Finance of the World Bank June 2009, the industrial production in rich countries has declined by 15 per cent since August 2008, and that in developing countries (excluding China) the decline has been 10 per cent. The external financing conditions for the developing countries has been viewed to remain difficult in 2009, with private capital flows expected to decline from US$ 707 billion in 2008 to US$ 363 billion in 2009. The IIF's June 2009 projections for capital flows to EMEs suggest that net flows could fall sharply to about US$ 141 billion in 2009 from US $392 billion in 2008. According to the July 2009 estimates of the World Bank, remittance flows to developing countries could decline to US$ 304 billion in 2009 from US$ 328 billion in 2008, suggesting that the impact on remittance receiving countries may not be as strong as the trade and capital flows channels. Rising unemployment, however, entails the risk of tighter immigration policies. The assessments of international agencies indicate that trade, capital flows and remittances may take some time to revive to normal levels and contribute to growth. If the protectionist response of some countries continues, global recovery may not immediately lead to corresponding revival in world trade. Moreover, rebalancing of the global growth to correct the accumulated global imbalances of the past years may also affect the growth prospects of many countries.

Return to the High Growth Trajectory

I.26 Reverting to the high growth path at the earliest and ensuring an inclusive growth process represent the overarching priorities of the Government, and the macroeconomic policy environment has to respond to this broad overall objective. As external demand operates as a major drag on the recovery, growth impulses have to depend even more on domestic demand than in the past and public expenditure has to take the lead in boosting aggregate demand in the face of deceleration in private consumption demand and investment demand. This realisation is reflected in the increase in government expenditure by 33.1 per cent in 2008-09 and by 13.3 per cent over the high base of the previous year, as budgeted for 2009-10.

I.27 The relatively higher resilience of Indian growth to the global economic crisis was on account of the dominant role of domestic demand and domestic saving. The increase in savings rate from 23.5 per cent in 2001-02 to 37.7 per cent in 2007-08 largely allowed a sustainable investment driven high average growth of 8.8 per cent over 2003-08, besides the congenial productivity enhancing influence of reforms. In the process of reverting to the high growth path, same level of support from domestic saving may be required, which, however, may be difficult in the immediate run due to the operation of two factors, which would have dampened the performance on the saving front. Public sector savings, which had been showing signs of improvement in recent years reflecting the disciplining influence of the FRBM, is expected to register some deterioration due to higher fiscal deficits as the outcome of using appropriate fiscal stimulus to contain the slowdown in growth, besides the expected subdued performance of the public sector enterprises in a phase of economic slowdown. Depressed corporate earnings associated with deceleration in aggregate demand could also lead to some erosion in savings of the private sector. The growth in overall domestic savings, thus, could be expected to decline modestly in 2009-10. This, however, may not operate as a constraint to growth in the short-run, since in relation to the aggregate demand adequate liquidity is available in the banking system. Moreover, during the phase of economic slowdown, corporates could have undertaken efficiency enhancing restructuring of the production processes, which otherwise might have been difficult to implement in the preceding phase of high growth. This could help in strengthening the growth momentum once the recovery sets in. Inventory levels, which would have declined during the slowdown, may also support a faster revival when aggregate demand recovers. In the medium-run, as the fiscal stimulus is withdrawn gradually and the fiscal policy stance reverts to the path of consolidation and discipline, return to the same level of domestic savings that could be consistent with the sustainable growth level of 9 per cent would be feasible.

Aggregate Demand

I.28 The composition of aggregate demand had to tilt in favour of government demand, on account of the use of fiscal stimulus to contain the growth slowdown. In view of the payments made under the Farmer Debt Waiver Scheme, Sixth Pay Commission and fiscal stimulus measures, the share of government final consumption increased to over 11.1 per cent of GDP in 2008-09 from 9.8 per cent of GDP in the previous year. The revival in private consumption demand, however, is essential to not only stimulate investment demand but also to facilitate faster fiscal consolidation. In this context, promoting rural demand assumes significance not only in view of the higher share of rural consumption in aggregate private consumption but also because of greater vulnerability of rural consumption in an environment of deficient monsoon as well as high food articles inflation, both of which could erode rural disposable income.

Agricultural and Allied Activities

I.29 The agricultural growth prospects in 2009-10 have to be assessed taking into account the output impact of deficient monsoon. With almost 60 per cent of the agricultural land being rain-fed, Indian agriculture is still dependent on the performance of the monsoon, particularly the South-West monsoon. According to the August 2009 revised monsoon rainfall projections of the India Meteorological Department (IMD), the rainfall deficiency in 2009 (during June-September) could be about 13 per cent. The actual position up to the second week of August 2009 shows that the cumulative shortage of rainfall is about 29 per cent in relation to the normal levels. Moreover, production weighted rainfall index of the Reserve Bank shows a shortfall of 36 per cent, which is higher than what is indicated by the cumulative rainfall pattern. Crop sowing position as on August 13, 2009 indicates that sowing of most pulses and coarse cereals are higher than last year's levels, though paddy sowing has been substantially lower, *i.e.* about 19 per cent below last year's level. Given the fact that kharif paddy contributes about 86 per cent of total rice production and 36 per cent of total foodgrains production in India, foodgrains production in 2009-10 could be adversely affected because of the deficiency in rainfall. Rainfall deficiency entails the additional risk of shortfall in hydro power generation, which may also add to the existing infrastructure constraint to growth, particularly when the energy demand increases with the recovery.

I.30 While the record foodgrains production in 2008-09 and comfortable buffer stocks of rice and wheat have enhanced the capacity to deal with price pressures in 2009-10 on account of the deficient rainfall, enhancing the agricultural output, driven by higher yield and diversification of crops, assumes importance. Higher investment backed by sustained research and extension activities could be critical for augmenting yield. Besides the policy focus on using higher MSP to generate supply response and public investment on expanding the irrigation potential, improving the market structure for agricultural commodities ensuring competitive pricing, hedging options for management of crop uncertainty, adequate warehouse facilities and improved rural roads enhancing better connectivity with urban markets also must receive greater policy attention. Better water management with an emphasis on water harvesting would be important for moderating the impact of below normal monsoon on farm output.

Industrial Sector

I.31 Despite positive growth and signs of recovery in the first quarter of 2009-10, the growth outlook for the industrial sector remains mixed. In view of the prevailing uncertainties, the Reserve Bank has set up an Industry Monitoring Group drawing members from external agencies as well as from concerned departments of the Bank in April 2009 to periodically assess the developments in Industry in relation to changes taking place in the global economy and the financial sector.

I.32 The manufacturing sector's performance in a competitive environment and in the face of risks of rising protectionism could encounter several challenges. Despite the advantages of a large domestic market, abundant availability of skilled labour force, and the proximity to the fast growing Asian markets, productivity growth needs to catch up with the Asian economies, including China. This requires greater emphasis on quality, better adoption of technology, more flexible labour laws, significantly improved infrastructure and a policy environment supportive of the SMEs sector.

Services Sector

I.33 This sector has not only exhibited minimum growth of 9 per cent in the recent five years, but its share in aggregate GDP has also increased to about 64.5 per cent. Historically, the services sector has consistently showed resilience since 1990-91, and remained largely unaffected by the past instances of external crises such as the Gulf crisis in 1991, East-Asian crisis in 1997 and the technology meltdown in 2000. The current global economic crisis being unprecedented in the recent history in terms of the magnitude of the impact as well its duration, the past resilience of the services sector could be tested in 2009-10. The protectionist tendencies in some of the countries affected by the ongoing economic crisis have created concerns for the prospects of external demand for Indian services, but India's comparative advantage continues to be strong.

Growth Outlook

I.34 The Reserve Bank's survey of professional forecasters conducted in June 2009 indicated an upward revision in the median growth outlook to 6.5 per cent from the earlier outlook of 5.7 per cent as per the previous Survey conducted in March 2009. Currently available projections of growth for India in 2009-10 generated by various international and domestic organisations suggest a range of 4.8 per cent to 7.5 per cent. Taking into account the global developments as well as the developments in domestic aggregate demand and the recent output outlook for the three broad constituent components of GDP (*i.e.* agriculture, industry and services), the first quarterly review of the monetary policy for 2009-10 conducted on July 28, 2009 placed GDP growth for 2009-10 at "6.0 per cent with an upward bias". Since the presentation of the policy statement, while the extent of rainfall deficiency associated with the South West monsoon has increased, the IIP figures for June 2009 released in August 2009 show significant recovery in industrial output.

Inflation Outlook

I.35 In 2008-09, India witnessed large volatility in headline inflation, which exceeded 12 per cent at one point and then fell to below 1 per cent by the end of the year. Since June 2009, year-on-year WPI inflation has remained negative, primarily reflecting the high base effect of the previous year that resulted from significant increases in the prices of food and international commodities in the first half of 2008-09. The base effect could be expected to fade gradually and then disappear by October 2009, after which the positive WPI inflation will become visible. While WPI inflation has turned negative, other indicators of inflation based on CPI for June 2009 (point-to-point) continue to remain high at 11.5 per cent (for CPI-AL), 11.3 per cent (for CPI-RL), 9.6 per cent (for CPI-UNME) and 9.3 per cent (for CPI-IW). The significant divergent behaviour of the inflation is largely on account of the differences in the coverage of items and their weights in the WPI and CPI. At the disaggregated level, even within the WPI, inflation in food articles and essential commodities remain close to the inflation as per different indices of CPI. The divergent inflation pattern as per the WPI and CPI indices has increased the complexity in the assessment of inflation, and for policy purposes, the Reserve Bank monitors the full array of price indicators. Moreover, inflation expectations have not declined as much as the fall in WPI inflation and expansionary fiscal stance with an accommodative monetary policy may not lead to sobering of inflation expectations, even if the headline inflation remains negative for few months.

I.36 The steady increase in the WPI over its end-March 2009 level indicates the persisting upward momentum in inflation, and trends in global commodity prices in the first quarter of 2009-10 suggest that upside risks to inflation could persist from rebound in global commodity prices ahead of global recovery. Increase in Minimum Support Price (MSP), that may be seen as a measure to support the farmers in a below normal monsoon year could stoke inflation. More importantly, the deficient monsoon could affect the inflation outlook more than the growth prospects. The first quarter review of monetary policy conducted in July 2009 revised the inflation projection for the end of the year to 5 per cent from 4 per cent projected in April 2009, recognising the imminent signs of inflationary pressures, while highlighting the medium-term objective of 3.0 per cent inflation.

I.37 The divergent trends in inflation as measured by the WPI and CPIs have warranted a closer relook at the measurement issues as well as the choice of an appropriate price index for monitoring changes in price levels at the national level that could be used as the reference indicator for conduct of policies. In the absence of a nationwide single inflation indicator based on consumer prices covering the entire population, the wholesale price index (WPI) has been used as the headline inflation indicator as it is more representative and provides information on prices on a weekly basis with the minimum lag. The current WPI series (with base year 1993-94) does not completely capture the nature of transactions in the economy, as considerable structural changes have occurred in the economy since then. In this context, the Government's decision to revise the base year to 2004-05 is expected to improve the representativeness of WPI, as more number of products, including from the unorganised sector, is proposed to be covered in the new series, along with reassigning of weights. The ongoing efforts for compiling nationwide consumer price indices for both rural and urban areas by the Central Statistical Organisation (CSO), as per the recommendation of the National Statistical Commission, would also improve the information base on price movements.

The External Sector Outlook

I.38 The outlook for the external sector suggests that despite persistence of the global recession in 2009, the external sector is unlikely to cause concern for growth and stability in India. The latest available trends for 2009-10 indicate that current account deficit as percentage of GDP would be lower than that in 2008-09. Both exports and imports continued to decline in the first quarter of 2009-10, but the decline in imports has been sharper than the decline in exports, resulting in a narrowing down of trade deficit. However, global oil prices have increased in recent months, which, if sustained, may put some pressure on the trade and current account deficits. The relative stability in the software services exports and inward workers' remittances, as witnessed in the previous year, could impart resilience to the current account in 2009-10. Even though net capital flows to EMEs are expected to decline during 2009, capital flows to India may increase because of better medium-term growth and faster recovery prospects. Early indications for the first quarter of 2009-10 suggest that NRI deposits, FII portfolio inflows and inward FDI flows have generally been strong, as against the net capital outflows witnessed in the last two quarters of 2008-09.

I.39 The experience relating to surges in capital flows for successive years, followed by sharp reversals in the second half of 2008-09 highlight the importance of management of capital flows, given their ramifications for the exchange rate and the conduct of monetary policy, and more importantly, for the overall macroeconomic and financial stability. A diversified capital account, with a hierarchical preference for FDI over debt flows, and for long-term flows over short-term flows, should be the focus of external sector policy. Fuller capital account liberalisation remains a medium-term objective, recognising the growing ineffectiveness of micro controls in a world of growing trade and financial integration.

Fiscal Consolidation

I.40 The fiscal stance of the Government in the face of deteriorating global conditions and weakening domestic growth impulses was guided by the need for preventing a sharp contraction in growth in both 2008-09 and 2009-10, while recognising the need to revert to the path of fiscal consolidation as soon as possible. The fiscal consolidation during 2003-04 to 2007-08, driven by revenue buoyancy during the high growth phase, had created some fiscal space to activate discretionary counter-cyclical fiscal policy.

I.41 The quality of fiscal consolidation has to be given priority attention in view of the fact that even the post FRBM improvements in key deficit indicators were possible primarily on account of the revenue buoyancy. Not only that expenditure compression had the lowest contribution to fiscal consolidation, but even the composition of increase in expenditure tilted against capital expenditure. While the revenue expenditure to GDP ratio increased by 0.4 percentage points, that of capital expenditure declined by 1.1 percentage points, reflecting lack of focus on expenditure management in contributing to the quality of fiscal consolidation.

I.42 While the fiscal measures undertaken to revive growth have led to deviation in fiscal targets envisaged under the FRBM Act during 2008-09 and 2009-10, the Government has committed to return to FRBM mandate in the next two years. Though the stance of long-term fiscal policy beyond 2010-11 would emerge later this year when the Thirteenth Finance Commission presents its report, there are several factors which could enable the Government in returning to the FRBM path. Expenditure on account of payment of Sixth Pay Commission arrears and farm loan waivers would be paid out by 2009-10. Frontloading of the plan expenditure approved for the Eleventh Five Year Plan as fiscal stimulus measures would also imply lower plan expenditure in the remaining years. As tax collections, particularly direct taxes are cyclical in nature, revenue buoyancy is expected to rise again with the pickup in growth momentum. The Government could also reverse the indirect tax cuts with the revival of the economy. Goods and services tax (GST) proposed to be introduced from April 2010 could also be expected to improve the revenue buoyancy. In this regard, the Government has also recognised the importance of institutional reform measures encompassing all aspects of budget such as subsidies, taxes, expenditure and disinvestment.

I.43 The fiscal consolidation path may have to involve considerable and careful rationalisation of expenditure. The capital outlay to GDP ratio has been around 1.5 percent for last several years. Capital outlay, which is budgeted at 1.7 per cent of GDP during 2009-10 would need to be stepped up significantly over time. Non-plan expenditure would have to be checked. During 2009-10, non-plan revenue expenditure consisting mainly of interest payments, defence expenditure, subsidies, wages and pensions and grants to States appropriated over 60 per cent of the total expenditure (about 10 per cent of GDP). In the near future interest payments, which represent a major non-discretionary component of expenditure, could appropriate over one-third of total revenue receipts. This underpins the need for fiscal consolidation. The quality of fiscal consolidation, based on successful international experience, suggests that it should be driven by expenditure rationalisation/compression. A ceiling on the share of non-plan expenditure in total expenditure may be integrated into a medium-term plan for enhancing the quality of fiscal consolidation. Moreover, improving the productivity of public expenditure and quality of the public service should also be emphasised as an important part of the initiatives on expenditure led fiscal consolidation.

I.44 On the revenue front, introduction of goods and services tax (GST) is an important policy reform. The GST would facilitate greater vertical equity in fiscal federalism and reduce the cascading nature of commodity taxes, since the base for assessment would be the value addition. The share of services sector in total tax revenue is not commensurate with its share in GDP, although the services tax collections have witnessed an impressive growth during the period 2003-04 to 2008-09, from 0.3 per cent of GDP in 2003-04 to 1.2 per cent and budgeted at 1.1 per cent of GDP in 2009-10. With the introduction of GST, more number of services would also be brought into the tax net and consequently tax contribution from the services sector could be expected to increase substantially.

I.45 The fiscal consolidation process entails the risk of affecting social sector spending as much as infrastructure spending. The expenditure incurred on education and health in recent years as per cent to GDP showed marginal improvement from 0.4 per cent and 0.2 per cent in 2003-04 to 0.6 per cent and 0.3 per cent, respectively, in 2008-09. These are budgeted at 0.7 per cent and 0.4 per cent for 2009-10. Compared to other emerging market economies, expenditure on health and education is low in India. Given the already low level of expenditure on these crucial sectors, as a minimum, there is a need to maintain the gradual upward momentum witnessed in recent years. The process of fiscal consolidation, therefore, should not be achieved at the cost of cut backs in expenditure towards these sectors.

Disinvestment

I.46 In the context of options for faster return to the fiscal consolidation path, mobilisation of resources through disinvestment has been highlighted in some quarters. With the setting up of

National Investment Fund (NIF), all the proceeds from disinvestment of Central Public Sector Enterprises (CPSEs) are required to be routed to it, which is maintained outside the Consolidated Fund of India. There is a need to step up disinvestment for greater resources mobilisation.

Subsidies

I.47 Management of subsidy has posed a persistent policy challenge. The high fertiliser prices prevailing in global commodity markets during the first half of 2008-09 and the enhanced minimum support price for wheat and rice led to sharp increases in fertiliser and food subsidies in 2008-09 (RE) by Rs.44,863 crore and Rs.10,960 crore, respectively, over the budget estimates. Apart from these subsidies, which are explicitly provided for in the Budget, implicit subsidies provided for by way of issue of special securities to oil and fertiliser companies amounted to Rs.75,849 crore and Rs.20,000 crore, respectively, in 2008-09 so as to compensate for under recoveries. This has added to the subsidy burden of the Government. Without explicit mandated provisions to cap expenditure on subsidies, needs for greater public investment in infrastructure, both physical and social, could be sacrificed as an outcome associated with higher subsidies.

Infrastructure

I.48 India's high growth trajectory has exerted significant pressures on the available physical infrastructure, and infrastructure deficit is widely recognised as a major constraint to attracting foreign investment and promoting efficiency in production in India. The Eleventh Five Year Plan envisages stepping up of the gross capital formation in infrastructure from 5 per cent of GDP in 2006-07 to 9 per cent of GDP by end of the Plan period in 2011-12, and this could be critical to achieve the 9 per cent growth. The large financing requirement that is necessary to almost double the investment in infrastructure has to be also seen in the context of challenges for investment in both public and private sectors. Public investment continues to dominate the infrastructure sector in India and when the Government is expected to go through an exit phase to revert to the fiscal consolidation path, accelerating the pace of public expenditure for infrastructure could become difficult. In attracting private investment to infrastructure projects, the challenge is to make the investment attractive enough in terms of expected return on capital while also being fair to the consumers and actual users of the infrastructure. Moreover, besides the current focus on growth, improving the quality of life through provision of modern physical and social infrastructure should also be given greater importance.

Technology and Innovations

I.49 For sustaining the high growth, there has to be significant emphasis on raising the productivity levels, for which innovations and adoption of technology would be critical. Any contribution to growth that emanates from factors other than labour and capital is generally seen as the contribution of technology in growth accounting, which is broadly captured under "total factor productivity

(TFP)". International as well as domestic empirical evidences recognise the role of technological progress in economic growth through increase in TFP. Factors ranging from education, rule of law, openness to trade and capital flows and institutional reforms could contribute to technological progress, besides innovations and adoption of new technology. For enhancing productivity, thus, expenditure on primary health, education, vocational training and R & D may be raised, besides facilitating larger flow of credit. Entrepreneurship needs to be incentivised for promotion of innovation and growth of old and new businesses.

Food and Energy Security

I.50 The global developments on the food and energy fronts in 2008 highlighted the importance of food and energy security for ensuring sustainable and inclusive high growth in India. Insulating the common man from the vulnerability associated with high food price inflation warrants a more robust food security system in India, which could allow high growth in agriculture without depressing the prices too much while also preventing escalation in food prices in the eventuality of production shortfalls. The extent of volatility that was witnessed in international food prices in 2008-09, and the specific measures that the Government of India had to undertake in terms of banning export of certain items and reducing the prices of certain imported items through lower tariffs, also highlight that India may have to put in place a more comprehensive food management system that is consistent with high growth and low inflation objectives while also ensuring adequate supply of food articles at the lowest possible prices to the vulnerable sections of the society. This is particularly relevant on account of the fact that a large segment of the Indian population has no access to any assured social safety fall back options.

I.51 Besides food security, energy security is another challenge, and the behaviour of energy prices in 2008-09 only highlights the urgency that should be assigned to this issue. Significant dependence on imports for ensuring assured supply of POL products in the domestic market warrants adequate strategic policies to contain any potential risk to future growth path arising from possible emergence of sudden deficits in energy availability. Incentives to private investment and higher public investment on exploration and production of crude and natural gas would be necessary. Any fiscal measures to moderate the impact of high oil prices over a sustained period could drag the fiscal position to unsustainable levels. Decontrol of prices for all POL products by linking the pricing directly to international prices, and delivering subsidies explicitly as a cash outgo affecting the budget deficit contemporaneously, instead of through oil bonds, could be the first step towards promoting energy security. The next important steps could involve provision of sufficient fiscal incentives for promoting energy conservation and efficient use, for attracting private investment in generation and conservation of power, and more importantly, research and extension activities on non-conventional clean energy.

Employment

I.52 The employment effects of the global economic recession have been a key driving factor behind the use of large stimulus packages all over the world. While no information is available at the macro-level in India on the unemployment scenario arising from the slowdown in growth, unemployment very much remains a concern, and there are evidences of some increase in unemployment in certain sectors.

Urbanisation

I.53 Approximately 30 per cent of India's population resides in urban areas currently. The proportion of people living in urban areas is going to increase at a faster pace in the next thirty years on account of organic growth as well as the continued rural-urban migration. Considering the important role that urbanisation has played in economic development more recently in South-East Asia and China, the role of proper urban planning and management cannot be overemphasised. Focus is required not just on hard infrastructure such as water, sanitation, sewerage, urban transportation, power and communication, but also on softer areas such as education (primary, secondary, higher and vocational) and health.

Financial Sector Reforms

I.54 While India's financial sector remained resilient in the face of global shocks, there are a number of areas where the reforms would be needed to promote stability and generate growth impulses for the real economy. An important challenge is to channelise more savings to the financial system, particularly in rural areas and from the urban informal sector. This would need further penetration of the banking system. The Reserve Bank's emphasis on financial inclusion is important in attaining this objective over time. Further reduction in the cost of banking services may require greater competition among product lines, improved delivery mechanisms and increasing use of information technology. With a view to ensuring that domestic savings could finance long-term investment in projects having long gestation lags, the insurance and pension sectors, would be critical, due to the very nature of their liabilities, as well as a vibrant bond market. This may, however, require a number of reforms in the insurance sector. Deep and liquid domestic markets with varied participation can absorb overall risk better and reduce the excessive volatility that often adds uncertainty to the investment climate. From this perspective, the corporate bond market in India has lagged behind in comparison with other financial market segments. Cross-border banking, in the post crisis period, has to be examined with greater caution, and future reforms in this area must be guided by progress on adequate mechanisms and systems to prevent the possibility of sudden and large external contagion creating systemic risks for the domestic financial system. For sustaining the high growth path, improving the investment climate and enhancing the absorptive capacity would be critical. In this context, financial sector reforms have to emphasise promoting financial inclusion, ensuring wide and deep financial markets and facilitating the growth of strong, competitive and sound financial institutions.

Financial Stability Architecture

I.55 The post-crisis revamping of the architecture for promoting financial stability as a precondition to growth could encompass macroeconomic policy issues as well as financial regulation and supervision. In the sphere of monetary policy, alongside the predominant emphasis on inflation, asset price bubbles driven by credit boom and excessive use of leverage has to receive greater attention, notwithstanding the current lack of clarity on how does monetary policy respond to asset prices? The fiscal policy stance has to recognise the limits of pro-cyclical fiscal stance, and the importance of adequate fiscal consolidation and sustainability as a necessary stimulus to high growth and stability. In the Indian context, inherent rigidities that constrain faster consolidation has to be taken into account; adequate fiscal space has to be built up as a cushion over time to deal with future shocks to the growth process. Leverage driven or export/capital flows dependent growth could increase the amplitude of the business cycle and the real costs of an external or financial sector shock could be disproportionately high. In the sphere of regulatory and supervisory architecture, alongside the current emphasis on the soundness of individual banks and institutions as a means to ensure systemic stability, increasing emphasis has to be laid on macro-prudential regulation that could promote and strengthen systemic stability.

I.56 In India, elements of macro-prudential regulation were visible even before the global crisis started, in terms of counter-cyclical use of risk-weights and provisioning norms. Macro-prudential analysis could provide the early warnings for timely identification of systemic risks, while macro-prudential regulation could prevent the emergence of systemic risk in the financial system. In view of the interconnectedness between banks and institutions, financial markets, and the economy, systemic risk analysis would involve interpreting the changing dynamics between these three segments on a continuous basis. Any vulnerability in any small segment of these broad areas could amplify and become systemic in view of the strong inter-linkages.

I.57 The international initiatives that could lead the process for strengthening the global financial systems would involve significant coordination among national regulators, besides revamping of national stability frameworks reflecting the global trends and country specific requirements. The ongoing international initiatives indicate a multipronged approach, covering several important aspects of stability: (a) introducing automatic stabilisers into the regulatory framework by adopting counter-cyclical capital charge, so that adequate cushion could be built up during the booming phase of the business cycle which could be used to deal with the asset quality problems that may arise during the waning phase of the business cycle; (b) adequacy and quality of capital as per Basel-II risk based capital framework, and simultaneous use of simpler measures such as the *leverage ratio*; (c) capital requirements for reputational and other risks in respect of securitisation activities and activities undertaken by the sponsored or connected conduits/shadow banks; (d) capital treatment for trading book exposures, and the need for supplementing *value-at-risk* approach with *incremental risk charge* so as to minimise the incentive for regulatory arbitrage between banking books and trading books, (e) strengthened Pillar 2 supervision, focusing on risk concentration, off-balance sheet exposures, valuations of financial instruments, access to funding liquidly during hypothetical possibility of a financial crisis, stress test practices adopted in banks and system level stress-tests and their integration into capital and liquidity planning; and (f) promotion of market discipline under Pillar 3 through better disclosure and clarity on the risk associated with exposure to certain instruments. The international deliberations have also highlighted other important issues like the risk associated with distorted incentive structures for the market players, the inadequacy of self regulation for rating agencies, the deficiencies of models for risk analysis and measurement, and the need for improving market structure for derivatives. The emerging international standards and best practices would have to be carefully examined from the stand point of their relevance to India, while further strengthening the domestic financial stability framework to avoid systemic stress on the financial system.

POLICY CHALLENGES

I.58 The macroeconomic conditions in 2009-10 so far, and the expected outlook for growth and inflation suggest that there are clear policy challenges for the Reserve Bank as well as for the economy as a whole. A major challenge for the Reserve Bank is to deal with the unpleasant combination of subdued growth with emerging risk of high inflation, which poses a complex dilemma on the appropriate stance of monetary policy. In such conditions, while withdrawal of monetary accommodation entails the risk of weakening recovery impulses, sustained accommodation and the associated protracted phase of high money growth can only increase inflation in future. Secondly, large borrowing programmes and high fiscal deficits complicate the challenge even further by accentuating inflationary expectations, which could worsen the actual inflation situation over time while also putting upward pressure on interest rates. Subdued growth with high inflation erodes the disposable income of the masses, and as a result, the recovery becomes even more difficult because of sustained depression in aggregate demand. Low inflation is an essential precondition to spur private demand, and monetary accommodation of the large fiscal stimulus could support recovery in growth only in a low inflation environment. Thirdly, for any early signs of recovery to gain momentum, private sector credit must grow. Better monetary policy transmission that could enhance the demand for credit is a key challenge, notwithstanding the usual dynamics of any credit market which may not respond to monetary policy actions. Finally, with the return of capital inflows to the pre-crisis period and revival in demand for credit from the private sector, the costs of any delay in withdrawal of monetary accommodation and fiscal consolidation could increase.

I.59 The emerging inflation outlook and the medium-term consequences of sustained accommodative monetary stance for inflation suggest that timing and pace of exit from the current accommodative monetary policy stance would be a major challenge for the Reserve Bank. If the stimulus is sustained longer, the imbalances left in the system could create market induced pressures, besides engendering the inflation situation, which may work against the recovery. The exit options for fiscal policy have to be seen in the context of the fact that economic recovery in itself could allow the automatic stabilisers to operate, by raising the revenues, and creating scope for reduction in public expenditure. What would be more important, however, is the discretionary unwinding measures to ensure reverting to the fiscal consolidation path as an essential requirement for returning to the high growth path. This cannot happen through expenditure compression alone, because of associated growth implications; hence part of the adjustment has to come through revenue buoyancy, higher tax base and better compliance. For the monetary policy, which has to be primarily guided by the assessment of the likely path of the business cycle and the inflation cycle, balancing the goals of supporting growth and containing emerging inflationary pressures could become increasingly challenging over 2009-10, in the face of an expansionary fiscal stance.

I.60 For the Reserve Bank, thus, besides the near term challenges of emerging inflationary pressures, management of large borrowing programmes and the associated potential conflict between monetary and fiscal policy, there are other medium-term issues associated with globalisation as well international initiatives on revamping the architecture for promoting financial stability. While openness offers a number of benefits, it increases the risks from external demand and capital flows. Swings in capital flows and sudden stops can have a significant impact on exchange rates, domestic monetary and liquidity conditions and overall macroeconomic and financial stability. Global growth and monetary conditions, therefore, have an influence on domestic policies.

I.61 The single mandate linked to inflation objective has often been highlighted as a necessity for ensuring a better inflation environment, but given the importance of other objectives for a country of India's size and diverse needs, the operational relevance of an inflation-centric mandate has to be examined carefully. Supply driven large volatility in WPI inflation that was witnessed in 2008-09 could erode credibility of any inflation-centric monetary policy. Moreover, the WPI inflation has been quite different from the CPI based inflation in India in the recent period, and as a result which measure of inflation may be the most appropriate reference for conduct of monetary policy has also been an issue. The Reserve Bank operates with multiple objectives of price stability, growth and financial stability. In the pursuit of multiple goals, the available instruments are used optimally with a mix of interest rate changes, quantitative liquidity adjustment, prudential regulations and credit policy measures. For promoting financial stability, the new international initiatives in response to the global financial crisis have to be monitored and examined, with an emphasis on country specific relevance, and the future approach to financial sector reforms may have to be based on lessons from the recent crisis.

I.62 For the economy as a whole, the most critical challenge is to revert to the high growth path, which would be possible only with a faster recovery. The longer the growth impulses remain dampened, the fiscal policy will exhaust any available fiscal space, and the costs of large fiscal stimulus will also increase with time. Secondly, deficient monsoon and the possible adverse effects on agricultural output may not only put pressure on food prices but also increase the demand for more subsidies and relief measures. The pressure on the fiscal situation could only increase if drought related policy response involves further expansion in government expenditure, and the additional costs associated with possible import of essential commodities to improve domestic supply conditions. Given the fact that food prices remain high, despite low overall WPI inflation, and that all CPI indices exhibit little moderation in inflation, the supply side of food management would assume critical significance for the Government. Thirdly, the unemployment effects of a long phase of economic slowdown, with weakly developed social security system, suggest that the Government's preparedness for dealing with situations as in 2008-09 should be strengthened, which must include counter-cyclical fiscal stance allowing build up of significant cushion during periods of high growth. But despite the FRBM, fiscal consolidation process remained slow. More importantly, the public expenditure was also not reoriented to address constraints to high growth, such as physical and social infrastructure.

I.63 The macroeconomic outlook for 2009-10, in terms of expected gradual recovery in growth and the emergence of inflation pressures by the end of the year pose difficult challenge for the conduct of policy, in terms of balancing the two key objectives. While the fiscal stance has clearly tilted towards the growth objective, the associated accommodative monetary policy stance, if sustained longer, entails the risk of higher inflation, which in itself may become a constraint to higher growth in the medium-run. In India, globalisation certainly had the associated benefits, directly in terms of exports and capital inflows, and indirectly in terms of global perceptions of India as a major emerging economic power. The manner in which Indian policies could manage the contagion from the global crisis would have only further improved the global perception of India. The global crisis, when it started to spread, did not differentiate countries on the basis of soundness of their macroeconomic policies. In a globalised world, consumers' and investors' perceptions could often be influenced by global developments, and hence, strengthened multilateral surveillance and effective global action to prevent the emergence of major global imbalances would have to be ensured so as to allow national policies the space for pursuing and achieving the high and sustainable growth objectives. Overall, Indian growth continues to be driven by domestic demand and domestic saving, with foreign capital supplementing within the prudent approach to sustainable current account deficit. Thus, return to 9 percent growth trajectory would largely be determined by the country's structural fundamentals and the responsive macro policy environment.

II ECONOMIC REVIEW

The domestic macroeconomic conditions changed significantly during the course of the year reflecting sharp deterioration in global economic conditions. In the first half, the policy challenge was to deal with high inflation and emerging signs of cyclical slowdown; in the second half, however, containing the adverse effects of the contagion from global economic crises necessitated coordinated monetary and fiscal policy actions with a view to moderating the pace of slowdown in growth, preserving the soundness of domestic banks and financial institutions, and maintaining orderly and well functioning markets. The growth supportive fiscal stance led to deviations from the fiscal consolidation path and the fiscal deficit rose accordingly. The monetary policy stance remained accommodative; the Reserve Bank ensured ample liquidity in the system while reducing the cost of liquidity significantly by appropriate reduction in policy interest rates. The sharp decline in WPI inflation in the second half of the year created some space for pursuing accommodative monetary policy. Indian banks and financial institutions largely escaped the heat of the global contagion because of strong fundamentals and no direct exposure to the troubled assets and stressed institutions in the advanced countries. The Reserve Bank's swift and necessary responses ensured orderly functioning of the markets. Thus, the conditions in the financial system did not operate as a constraint to growth in India, unlike in the advanced countries. Deceleration in demand, however, emerged as a major concern in the second half of the year, because of its dampening effects on growth.

ECONOMIC REVIEW

II.1 The environment for policy making remained exceptionally challenging during 2008-09. Notwithstanding the benefits of globalisation experienced by the world economy in terms of a four-year phase of high growth and low inflation, the crisis in 2008-09 brought to the fore the associated risks of globalisation for national economies. In the second half of the year, global credit squeeze, stressed financial institutions, dysfunctional markets, and above all, falling global output, investment, employment and trade, posed testing conditions for the use of national policies to counter growth moderation and to preserve financial stability.

II.2 India, in the midst of a severe global recession, could still contain the moderation in growth, preserve financial stability and ensure normal functioning of the markets. The macroeconomic policy framework of India and the approach to regulation and supervision of financial institutions and markets clearly contributed to soften the impact of the global financial crisis on the domestic economy. In a globalised world, however, the natural process of transmission of contagion operating through the trade, capital flows and confidence channels affected the domestic economic and financial conditions. Real GDP growth, which had averaged at 8.8 per cent during 2003-08, decelerated to 6.7 per cent in 2008-09.

AGGREGATE SUPPLY

Agriculture

II.3 The performance of the Indian agriculture is conditioned largely by the monsoon coupled with its spatial and temporal distribution, besides other factors such as Government's price support policy, investment in agriculture, access to irrigation, credit and other inputs like fertiliser and pesticides and development of markets for hedging risks. Management of food stocks in India and developments in the world agriculture market, in terms of production, trade and prices also assume significance because of their implications for prices of agriculture products in the domestic market.

II.4 The agriculture sector, after recording a robust growth well above its trend during 2003-08, came to witness a marked deceleration during 2008-09, primarily due to the high base effect. The total foodgrains production during 2008-09, however, reached a record level of 233.9 million tonnes, representing an increase of about 3 million tonnes over the previous year.

Industrial Performance

II.5 The industrial production, which was on a robust growth trajectory during 2003-08, with an average growth of 8.7 per cent, witnessed a significant moderation thereafter to 2.7 per cent in 2008-09, on the back of heightened uncertainty and weak domestic and external demand. The moderation in growth (year-on-year) that began in the first quarter of 2007-08, turned out to be one of the longest spells in the recent past.

II.6 A notable aspect of the deceleration in IIP growth during 2008-09 is that it was broad based, affecting all the three sectors, *viz.*, mining, manufacturing and electricity. The deceleration was relatively sharp in the manufacturing sector.

Infrastructure Industries

II.7 The infrastructure sector witnessed deceleration alongside the industrial sector. The core sector comprising coal, electricity, finished steel, cement, petroleum refinery and crude oil decelerated to 2.8 per cent in 2008-09 (from 5.9 per cent in 2007-08), which is the lowest growth thus far since 1998-99.

Micro, Small and Medium Enterprises

II.8 The Micro, Small and Medium Enterprises (MSMEs) in India occupy an important place in manufacturing and service sector. During 2007-08, MSMEs recorded a growth of 18.8 per cent in the nominal value of output as against 17.5 per cent in 2006-07. The rise in production in this sector, however, was accompanied by a significant deceleration in employment growth to 2.9 per cent in 2007-08 as compared to 4.3 per cent in 2006-07.

Services Sector

II.9 The services sector, which made rapid strides in growth in the Indian economy over the past few years, witnessed moderate slowdown in growth during 2008-09. Growth in real GDP originating from services sector moderated to 9.4 per cent during 2008-09 from 10.8 per cent in 2007-08. While services sector's share in GDP improved marginally from 63.0 per cent in 2007-08 to 64.5 per cent during 2008-09, its relative contribution to GDP growth increased significantly from 74.1 per cent to 88.2 per cent during the same period.

AGGREGATE DEMAND

II.10 The relative resilience of Indian growth in the face of a severe synchronised global recession has largely been ascribed to the relatively greater role played by the domestic demand as opposed to external demand in shaping the overall growth outcome in India. Domestic demand in the form of both consumption and investment continued to remain the main driver of the India's economic growth process in 2008-09. Consumption expenditure dominated the demand side of national income, accounting for 66.6 per cent share in GDP. Private final consumption expenditure (PFCE) accounted for 55.5 per cent, while government final consumption expenditure (GFCE) constituted 11.1 per cent of GDP in 2008-09. Gross capital formation accounted for 36.6 per cent of GDP during the same period.

II.11 Given the significant importance of PFCE for GDP, it is notable that the growth rate of PFCE decelerated significantly to 2.9 per cent in 2008-09 from 8.5 per cent in 2007-08. The growth in GFCE in India registered a sharp increase and more than doubled to 20.2 per cent in 2008-09 from 7.4 per cent in 2007-08, reflecting the pay out of the Sixth Pay Commission Award and other counter-cyclical fiscal stimulus measures.

Saving and Capital Formation

II.12 The Indian economy has been witnessing an increasing trend in gross domestic saving since 2002-03, which reached a peak level by 2007-08, with improved performance of the private corporate sector and enhanced contribution of public sector, due to the progress made in fiscal consolidation. Gross domestic saving as per cent of GDP at current market prices increased from 35.7 per cent in 2006-07 to 37.7 per cent in 2007-08. The private corporate saving rate improved for the sixth consecutive year, reflecting better corporate performance and higher retained earnings. Saving of the household sector also increased, *albeit,* marginally. Public sector saving – which had witnessed a turnaround from dis-saving prior to 2003-04 to positive saving, was largely the result of higher savings of non-departmental as well as departmental enterprises, which recorded gradual but significant improvement in 2007-08. Domestic saving financed more than 95 per cent of investment, and the remaining, by capital flows. Domestic investment rate reached 39.1 per cent of GDP in 2007-08 from 36.9 per cent in 2006-07.

MONEY, CREDIT AND PRICES

II.13 The monetary and credit conditions in India showed phases of sharp shifts during 2008-09, reflecting the volatile developments in growth, inflation and financial markets, and the consequent policy responses.

II.14 In the early part of the year, the previously experienced pattern in terms of increase in net foreign assets of the Reserve Bank as a primary driver of expansion in reserve money continued. As capital outflows and the resultant interventions in the foreign exchange market led to contraction in net foreign assets of the Reserve Bank in the second half of the financial year, the impact on liquidity had to be more than offset by expansion in net domestic assets of the Reserve Bank, which became necessary to meet the growing demand for liquidity in the face of trickling contagion from the global financial crisis.

II.15 During 2008-09, net Reserve Bank credit to the Government became the key source for expanding the net domestic assets, and this option also coincided with a time when large fiscal stimulus had become necessary to contain the economic slowdown. Besides the policy induced compositional shifts on the asset side of the Reserve Bank's balance sheet, on the liability side also there were major policy driven changes on account of reduction in reserve requirement and unwinding of Government's deposits under market stabilisation scheme (MSS) with the Reserve Bank. While both these measures expanded the liquidity available to the banking system and the Government, the combined effect amounted to contraction in Reserve Bank's balance sheet. Thus, unlike in many other countries where expansion in the central bank balance sheet size became the symbol of quantitative easing, the behaviour of the Reserve Bank's balance sheet reflected the policy driven expansion in liquidity through lower reserve requirements and unwinding of MSS on the liabilities side and increase in domestic assets to offset the impact of the contracting foreign assets on the assets side of the balance sheet.

Reserve Money

II.16 Growth in reserve money during 2008-09 reflected the impact of monetary policy responses to the changing liquidity positions arising from domestic and global financial conditions. In terms of components, reserve money variation during 2008-09 was conditioned by the increase in currency in circulation and changes in cash reserve ratio (CRR) for banks. 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 contagion from the international financial turmoil and associated impact on the domestic monetary and liquidity conditions, particularly against the comfort of easing inflationary pressures, the Reserve Bank reduced CRR by a total of 400 basis points, since October 11, 2008. This reduction in CRR released primary liquidity of the order of Rs.1,60,000 crore into the banking system. Bankers' deposits with the Reserve Bank, as a result, contracted by 11.3 per cent during 2008-09 as against an increase of 66.5

per cent during 2007-08. Reserve money growth as on March 31, 2009 was 6.4 per cent (y-o-y) as compared with 31.0 per cent a year ago. In the context of sharp changes in the CRR during 2008-09, for analytical purposes, use of reserve money growth adjusted for the first round impact of CRR changes is considered more appropriate. Adjusted for the first round effect of the changes in CRR, reserve money growth (y-o-y) as on March 31, 2009 was at 19.0 per cent as compared with 25.3 per cent a year ago.

Monetary Survey

II.17 Broad money (M_3) growth (y-o-y) was at 18.6 per cent at end-March 2009, lower than 21.4 per cent a year ago. The moderation in broad money (M_3) growth mainly reflected a deceleration in aggregate deposits expansion during 2008-09 in response to the downturn in economic activity. Currency with the public remained high during the first half of 2008-09 reflecting the effects of disbursement under the Farmers' Debt Waiver Scheme and the Sixth Pay Commission payouts along with higher inflationary situation prevailing during that period. Growth in time deposits decelerated during the first two quarters of 2008-09 but witnessed robust expansion thereafter reflecting some switching from demand deposits and other savings instruments to time deposits. With depressed equity markets, increase in risk perception, in the face of snowballing uncertainty and risk free high interest rates still available on time deposits, motivated investors to shift their financial savings to time deposits during the third quarter of 2008-09. The expectations of near-term decline in interest rates also contributed to the compositional shift in deposits in favour of term-deposits.

II.18 On the sources side of broad money (M_3), growth in bank credit to the commercial sector decelerated and expansion in net foreign exchange assets of the banking sector moderated to a large extent during 2008-09. On the other hand, net Reserve Bank credit to the Centre increased, reflecting the decline in outstanding balances under MSS, increase in purchases under open market operations (including purchase of oil bonds under special market operations) and decline in the Centre's surplus balances with the Reserve Bank. Growth in scheduled commercial banks' (SCBs) credit to the Government witnessed some moderation during this period. Bank credit to the commercial sector expanded by 16.8 per cent (y-o-y) at end-March 2009 as compared to 21.1 per cent a year ago.

II.19 During 2008-09, the growth in non-food bank credit (y-o-y) decelerated from a peak of 29.4 per cent in October 2008 to 17.8 per cent by March 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 their access to external sources of credit constrained, 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 to 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. 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 64.9 per cent at end-March 2009 from 73.6 per cent a year ago.

Price Situation

II.20 The significant volatility in inflation that was witnessed in India during the course of 2008-09 is unprecedented, and different contrasting phases within the year had different dynamics in terms of the underlying factors explaining the inflation process, posing equally contrasting policy challenges. The external and supply side factors had a dominant role during the first phase of acceleration of inflation to double digit level as well as during the subsequent sharp slowing down of inflation to below one per cent by the end of the fiscal year. Mirroring global trends, WPI inflation in India reached an intra-year peak of 12.9 per cent in August 2008 but declined subsequently to 0.8 per cent by end-March 2009. Accordingly, the monetary policy stance of the Reserve Bank during the first half of 2008-09 was primarily conditioned by the urgency to contain inflationary expectations, whereas in the second half, fading inflation concerns allowed the balance of policy focus to shift clearly towards preventing deceleration in growth and preserving orderly conditions in the financial markets.

II.21 Various measures of consumer price inflation remained high in the range of 8.0-9.7 per cent in March 2009 as compared with 7.3-8.8 per cent in June 2008 and 6.0-7.9 per cent in March 2008. The higher order of increase in consumer price inflation as compared to WPI inflation could be attributed to higher weight of food articles in CPIs and higher prices of food articles.

GOVERNMENT FINANCES

II.22 The stabilising role of fiscal policy assumed centre stage in the face of a slowing economy confronted with a decline in external demand as well as domestic private demand. This necessitated significant and swift change in the fiscal stance from gradual consolidation in the previous years to proactive counter-cyclical expansion in 2008-09, which led to considerable deviation from the recent trends in all deficit parameters.

Central Government Finances – 2008-09

Revised Estimates

II.23 The Union Budget for 2008-09 was presented against the backdrop of robust average GDP growth of 8.8 per cent witnessed during the period 2003-04 to 2007-08, and accordingly the Budget had set somewhat optimistic targets for the key deficit indicators for 2008-09. The key deficit indicators of the Central Government in the revised estimates, however, turned out to be significantly higher than the budget estimates, reflecting the impact of adequate fiscal interventions that became necessary to deal with the challenges of high inflation in the first half and the slowing economy in the second half. The deviations in the deficit indicators as given in the revised estimates from their respective budgeted levels need to be seen in the context of the unprecedented and unexpected post-budget developments in the economy and the fiscal response to the same. During the first half of 2008-09, the Government undertook fiscal measures in the form of tax cuts in primary and manufactured products to contain the inflationary pressures arising from high global commodity prices, which led to some revenue loss. During the second half of the year, as concerns relating to growth moderation increased, the Government had to undertake additional spending and effect further tax cuts as part of the fiscal stimulus package to support aggregate demand in the face of sharp deceleration in private consumption demand.

Debt Position of the Central Government

II.24 The outstanding domestic liabilities of the Central Government comprising internal debt and other liabilities such as National Small Savings Fund (NSSF), state provident funds, other accounts, reserve funds and deposits declined to 56.6 per cent of GDP at end-March 2009 (RE) from 57.7 per cent at end-March 2008. The reduction in debt to GDP ratio, despite the sharp increase in Government borrowings to finance the higher deficits and increased recourse to extra-budgetary liabilities such as special securities to oil marketing and fertiliser companies, was enabled by a higher nominal GDP growth relative to the growth in domestic liabilities and a sharp reduction in government's liabilities under the MSS. Internal debt continues to be the largest component of the outstanding liabilities of the Central Government (64.2 per cent of the total debt at end-March 2009) followed by liabilities on account of NSSF and other accounts (15.2 per cent and 10.2 per cent, respectively).

II.25 The ratio of interest payments to revenue receipts increased from 31.6 per cent in 2007-08 to 34.3 per cent in 2008-09 (RE) largely on account of increase in the net market borrowings on the one hand and slowdown in the growth of revenue receipts on the other.

Extra - Budgetary Items

II.26 In addition to providing explicit subsidies through the Budget, the Central Government has, over the years, also been providing implicit subsidies to Food Corporation of India (FCI), fertiliser companies and oil marketing companies through issuance of special bonds to compensate for under-recoveries arising from keeping retail prices below the input costs. These bonds are considered to be fiscal deficit neutral since they do not involve immediate cash outflow and are, therefore, not treated as part of budgetary expenditure/receipts. However, these bonds have fiscal implications as they carry repayment obligations 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. 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 GDP. Along with explicit subsidies provided for food, fertiliser and petroleum in the Budget, the total subsidy burden of the Central Government in 2008-09 was about 4.2 per cent of GDP.

State Government Finances: 2008-09

II.27 The fiscal correction and consolidation path followed by the State Governments in the recent years had enabled them to achieve considerable improvement in their finances up to 2007-08, with the revenue surplus of States reaching 0.9 per cent of GDP and gross fiscal deficit (GFD) moderating to 1.5 per cent of GDP in 2007-08. Reflecting the ramifications of the overall macroeconomic slowdown, however, the consolidated fiscal position of States witnessed deterioration in revised estimates (RE) for 2008-09 *vis-à-vis* the budget estimates (BE). The consolidated revenue surplus of twenty-seven States at 0.1 per cent of GDP in 2008-09 (RE) was lower by 0.4 percentage points than the budget estimates for the year. Out of 27 States, the revenue account of 23 States continued to be in surplus in 2008-09 (RE) *albeit* at a lower level.

II.28 During 2008-09 (RE), increase in grants from Centre (by 8.2 per cent) and States' own non-tax revenue (by 19.4 per cent) over their respective budgeted levels contributed to higher than budgeted revenue receipts, despite a decline in States' own tax revenue (by 1.9 per cent). The consolidated GFD of States at 2.7 per cent of GDP in 2008-09 (RE) was around 30.3 per cent higher than the budget estimates. Apart from the decline in revenue surplus, the increase in GFD in 2008-09 (RE) was on account of increase in capital outlay (by 8.6 per cent) coupled with the decline in non-debt capital receipts (by 64.6 per cent) over the budgeted level.

II.29 The financing pattern of GFD at the State level has undergone a significant change in recent years on account of decline in collections under the NSSF. Market borrowings continued to be the major source of financing of GFD in 2008-09 (RE), contributing more than two-third of the financing needs, while the special securities issued to NSSF financed merely 1.5 per cent of GFD.

Combined Government Budgetary Position of Centre and States - 2008-09

II.30 The combined finances of the Central and State Governments in terms of the key deficit indicators showed significant deterioration during 2008-09 (RE) as compared with the budget estimates due to decline in revenue receipts coupled with sharp increase in expenditure. The combined fiscal deficit (including special securities amounting to 1.8 per cent of GDP issued to oil marketing and fertiliser companies) was 10.7 per cent of GDP in 2008-09 (RE) as compared with 4.6 per cen in 2008-09 (BE).

Combined Debt

II.31 The combined outstanding liabilities as a proportion of GDP at 74.7 per cent showed a marginal decline over end-March 2008 despite the substantial increase in fiscal deficit. This was mainly due to the growth in nominal GDP surpassing the growth in liabilities. Rising deficits associated with counter-cyclical expansionary fiscal policy and the revenue loss arising from economic slowdown could impinge on the sustainability of debt in the near term. This could potentially lead to adverse market reactions and may, thereby, render the fiscal stimulus partly counterproductive.

Fiscal Outlook for 2009-10

Central Government

II.32 The Union Budget for 2009-10 was presented against the backdrop of continued uncertainties in the global economy and its attendant effects on Indian economy. It reiterated the objective of the Government to keep the economy on a high growth trajectory amidst global slowdown by creating demand through increased public expenditure in identified sectors. The key deficit indicators, *viz.,* GFD, revenue deficit and primary deficit, as per cent of GDP, were budgeted higher than their revised estimates in the preceding year. The GFD for 2009-10 was budgeted at 6.8 per cent of GDP as compared with 6.5 per cent of GDP in 2008-09 (RE) and 6.2 per cent in the provisional accounts for 2008-09.

State Budgets 2009-10

II.33 The fiscal correction and consolidation at the State Government level during the past few years has suffered a setback in view of the moderation in economic activities. The consolidated revenue account of the State Governments is budgeted to turn into deficit of 0.6 per cent of GDP after being in surplus in the previous three years. As a result, GFD is budgeted to be higher at 3.4 per cent of GDP as compared with that in 2008-09 (RE). The progress with respect to implementation of Fiscal Responsibility Legislation (FRL) at State level has, therefore, suffered a setback.

Combined Finances: 2009-10

II.34 The combined budgetary position of the Central and State Governments for 2009-10 indicates that the key deficit indicators as per cent of GDP are budgeted to remain at elevated levels mainly due to sharp rise in expenditure.

FINANCIAL MARKETS

II.35 The financial markets of the advanced countries were disrupted during 2008-09; at times even turned dysfunctional as the sub-prime crisis affected the financial markets first, before transmitting to financial institutions and the real economy. With the adverse feedback loop becoming stronger over time, failing institutions and weakening growth prospects increased the level of stress in the financial markets. The main impact of the unfolding global financial crisis on the Indian financial markets, particularly following the collapse of Lehman Brothers in September 2008, was in the form of reduction in net capital inflows and significant correction in the domestic stock markets on the back of sell-off by the foreign institutional investors (FIIs). The withdrawal of funds from the Indian equity markets, as in the case of other emerging market economies (EMEs) and reduced access of the Indian entities to funds from the international markets put significant pressure on dollar liquidity in the domestic foreign exchange market. These developments created expectations of BoP difficulties and led to depreciation pressure and higher volatility in the foreign exchange market. The constrained access to foreign funding and the lacklustre domestic capital market put pressures on some segments of the financial system, such as NBFCs and mutual funds. Liquidity pressures on mutual funds, which in turn were provider of funds to other sectors, like NBFCs, further stifled the flow of funds. Consequently, the pressure for funding liquidity came to rest on banks.

II.36 With a view to maintaining orderly conditions in the foreign exchange market which had turned volatile, the Reserve Bank conducted foreign exchange market operations, particularly in October 2008. In addition, the Reserve Bank instituted a rupee-dollar swap facility for Indian banks with overseas branches/ subsidiaries to give them comfort in managing their short-term foreign funding requirements. It also continued with the Special Market Operations (SMO) which were instituted in June 2008 for meeting the foreign exchange requirements of public sector oil marketing companies, taking into account the then prevailing extraordinary situation in the money and foreign exchange markets. Measures to ease foreign exchange liquidity also included those aimed at encouraging capital inflows, such as an upward adjustment of the interest rate ceiling on the foreign currency deposits by non-resident Indians, substantially relaxing the external commercial borrowings (ECB) regime for corporates, and allowing NBFCs and housing finance companies access to foreign borrowings.

II.37 Reflecting the impact of the measures taken by the Reserve Bank, call rates in the money market settled back into the informal LAF corridor starting November 2008, having breached the upper bound in the preceding two months. In the foreign exchange market, the Indian rupee generally depreciated against major currencies up to the end of the financial year, before appreciating in the first quarter of 2009-10. In the credit market, the lending rates of scheduled commercial banks (SCBs) began to soften at a gradual pace from November 2008. The government securities market was bearish for most of the fourth quarter of 2008-09; however yields, particularly in the medium to long-term maturity strengthened. Indian equity markets, picking up global cues, staged some recovery in the last week of March 2009, which continued in Q1 of 2009-10 and thereafter.

II.38 As a fallout of the global financial crisis, foreign funding dwindled and the domestic capital market slumped, which, in turn, put pressure on some segments of the Indian financial system such as mutual funds and NBFCs. The Reserve Bank addressed the financial stress faced by non-banks indirectly through the banking channel and through an SPV, without compromising either on the eligible counter-parties or on the asset quality of its balance sheet.

II.39 The yields in the secondary market for government securities hardened in Q1 of 2008-09 on account of heightened inflationary expectations in the face of sharp increase in global commodity prices and concomitant monetary policy response in the form of hikes in the CRR and the LAF repo rate. Subsequently, the yields generally eased around mid-September 2008 following some reduction in inflationary pressures due to lower crude oil prices. The yields, however, hardened moderately towards end-September 2008 when liquidity conditions tightened due to advance tax outflows and the adverse developments in international financial markets. In Q3 of 2008-09, the yields sharply moderated, reflecting lower policy rates and injection of ample liquidity to ease the pressure on money markets arising from the financial market turmoil.

II.40 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 that became necessary to deliver fiscal stimulus. Further, the large market borrowing requirements 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 from 6.02 per cent at end-February 2009 to 6.88 per cent on March 12, 2009, notwithstanding a further cut in the LAF interest rates effective March 5, 2009. The increased borrowings by the State Governments also impacted the sentiment adversely. The subsequent announcement of enhanced amounts of auction-based purchases of government dated securities by the Reserve Bank helped to improve market sentiment with moderation in yield. The yields again hardened on the back of announcement of government dated securities auction calendar on March 26, 2009. During the initial period of 2009-10, the yield declined on account of easing of liquidity, OMO purchases and reduction in policy rates; however, since the second half of May, yield started hardening.

II.41 Bank deposit and lending rates, which hardened up to October 2008, started easing somewhat from November 2008, reflecting measures taken by the Reserve Bank to contain the spillovers of the global financial crisis on the domestic credit markets. Interest rates offered by PSBs on deposits of all maturities eased moderately between March 2008 and March 2009, while those of private sector banks on deposits of one year to three years firmed up. The actual lending rates (other than export credit) on demand and term loans for the SCBs, increased between March 2008 and December 2008. This complicated the transmission mechanism in the face of falling policy rates and declining inflation. Although the policy rates have been substantially eased since early October 2008, significant rigidity has been witnessed in banks' deposit and lending rates, which continue to be high despite some moderation in the past few months. In 2009-10 so far, the reduction in the deposit and lending rates was somewhat more pronounced as the liquidity conditions remained easy and risks seemed to have abated and the impact of policy easing appeared to have worked through. There has been a reduction in the term deposit rates and the BPLRs across bank groups.

II.42 The primary issuances in the Indian capital market remained subdued during 2008-09, reflecting depressed secondary markets, deceleration in the domestic output growth and associated contraction in investment demand, a sharp drop in FII exposure to Indian capital market and the overall adverse sentiment on account of the global crisis.

II.43 The global stock market crash was widespread as the stock prices in almost all countries around the world witnessed substantial correction, notwithstanding the differences across countries in terms of fundamentals and the extent of impact of the financial crisis on the real economies. Many EMEs became part of the global asset price bubble, as the turmoil in the advanced countries became widespread. The domestic equity markets remained generally weak during 2008-09 and witnessed one of the highest degrees of volatility in stock prices in recent years. The BSE Sensex fell to a low of 8160 on March 9, 2009, witnessing a decline of 60.9 per cent from the peak of January 8, 2008. The corresponding decline in market capitalisation was 63 per cent.

EXTERNAL SECTOR

International Developments

II.44 The global economic and financial market conditions deteriorated to unprecedented proportions during 2008-09, creating one of the severest external shocks, not only for advanced economies but also for all emerging market economies (EMEs), including India. Irrespective of the degree of globalisation of a country and soundness of respective domestic policy environments, the deepening of crisis in the advanced countries snowballed into a synchronised global contraction with specific channels of transmission of contagion gathering speed and intensity over time. The 'negative feedback loop' contaminated each and every sector and the downward spiral turned almost resistant to large doses of policy stimulus engineered and delivered by countries around the world, revealing thereby the complex nature and the enormous dimensions of the crisis.

II.45 The subprime crisis that emanated from the US housing mortgage market in the second half of 2007 snowballed into a global financial crisis with the global financial landscape changing significantly during the course of 2008 wherein several large international financial institutions either failed or were restructured to avoid failure. With the unfolding of financial crisis, the strains on the balance sheets of financial institutions increased over time, which further threatened the viability of some of the leading global financial entities. The multi-dimensional ramifications of the crisis were manifested in intense deleveraging, extreme levels of risk aversion, mounting losses of banks and financial institutions, the collapse of commodity prices from their peaks and sharp corrections in asset prices. All these together led to a sharp slowdown in growth and trade flows, and rising unemployment, besides triggering large scale reversals in capital flows. The deleveraging by large financial institutions was disorderly under the pressure of market driven contraction in their balance sheets on the asset side and inadequacy of capital in the face of rising losses. This deleveraging process created severe disruptions in the short-term funding markets, as reflected in the tightening of access and widening of risk spreads. A wide range of non-bank financial institutions also came under strain during the crisis with rapidly falling asset prices. While the pension funds exhibited rapid decline in their asset values, life insurance companies experienced losses on equity and corporate bond holdings. The massive erosion of financial wealth arising from asset price shocks had severe adverse impact on both the corporate and the household balance sheets, which was amplified by the deteriorating employment conditions. These, in turn, led to deterioration in consumer confidence and contraction in consumption demand, while at the same time reducing the values of collaterals of the corporates and their ability to raise resources. The financial crisis, thus, had cascading effects on the global economy through financial, trade and confidence channels. The deceleration in growth outlook was so rapid that the IMF had to repeatedly revise its global growth projections downwards for 2009, *i.e.* from a somewhat healthy 3.8 per cent in April 2008 to (-) 1.4 per cent in July 2009, which is the deepest recession seen since the post-World War II (IMF, 2009). While major advanced economies slipped into recession, the EMEs - which were perceived to remain decoupled from the crisis till the early part of 2008- also experienced significant growth deceleration.

II.46 Apart from the intensity, the global slowdown was also more widespread and synchronised due to the much higher degree of global integration through international trade and finance. Even EMEs with sound macroeconomic and financial pre-conditions have been strongly affected by the financial contagion, which in late 2008 spilled over to the real sector, with export and GDP growth rates plunging and trade finance contracting across the world. Thus, the notion of decoupling of EMEs, which was held until early 2008, faded as the crisis intensified and spread across countries with greater speed. In the EMEs, the adverse impact of the crisis was transmitted through both financial and trade channels, particularly to the East Asian countries that rely heavily on manufacturing exports and the emerging European and Commonwealth of Independent States (CIS) economies, which excessively depend on capital inflows to propel growth. Latin America, the Middle East and Africa suffered from falling commodity prices and weak export demand. Although emerging and developing economies as a group are projected to grow by 1.5 per cent in 2009, real GDP is expected to contract across many countries under the drag of falling export demand, lower commodity prices and tighter financing constraints.

II.47 One of the important manifestations of the global financial crisis was in the form of massive erosion in the capital base of the large financial institutions across countries. IMF's Global Financial Stability Report (April 2009) projected that the write-downs suffered by all holders of the US-originated assets since the outbreak of the crisis until 2010 could increase from an initial estimate of US$ 945 billion to US$ 2.7 trillion, largely as a result of the worsening growth scenario. The estimates for write-downs extended to include other assets, although more uncertain, could reach a total of around US$ 4 trillion, about two-thirds of which would be incurred by banks.

II.48 The significance of the trade channel was evident in the global world trade decelerating from a growth of 7.2 per cent in 2007 to 2.9 per cent in 2008 and according to the latest IMF projections, it is expected to decline by 12.2 per cent in 2009. The World Trade Organisation (WTO) (2009) estimates also suggest that the world exports could contract by 10.0 per cent in volume terms in 2009 - the largest such contraction witnessed since the Second World War.

II.49 The transmission of shocks through the financial channel was largely evident in a flight to safety and rising home bias, besides the compulsions of deleveraging that created selling pressures around the world. Private capital flows are expected to decline in 2009 in line with the projected contraction in world growth. On a net basis, capital flows have been attracted by countries with the most liquid and safe government securities markets. According to the IMF, private capital flows to emerging and developing countries in 2008 declined significantly to US$ 109 billion from US$ 618 billion in 2007.

India's Balance of Payments Developments

II.50 In the face of one of the severest external shocks, India's balance of payments (BoP) exhibited resilience, characterised by a current account deficit (CAD) well within the sustainable limits, and limited use of foreign exchange reserves despite the pressure of large capital outflows. The transmission of external demand shocks was swift and severe on export growth, which, on BoP basis, declined from a peak of 43 per cent in Q1 of 2008-09 to (-)9 per cent in Q3 and further to (-)24 per cent in Q4 – a fall for the first time since 2001-02. Import demand growth, which remained robust till the Q2 of 2008-09, fell to single digit level in Q3, followed by a substantial decline in Q4 (-27 per cent), moving in tandem with the slowdown in the domestic industrial demand and the sharp decline in international crude oil and other primary commodity prices. Thus, trade deficit generally expanded in the first three quarters of 2008-09 due to the combined effect of high crude oil prices driven increases in imports and the collapse in external demand. However, in Q4 of 2008-09, with the pace of decline in imports outpacing that in exports, trade deficit narrowed down significantly. For the fiscal year 2008-09, trade deficit witnessed a marked expansion to 10.3 per cent of GDP. Two components of the current receipts, which remained relatively resilient in the face of the global slowdown were software services and workers' remittances. The remittance inflows from overseas Indians, despite witnessing a slowdown in the second half of 2008-09, still remained relatively stable as compared to the earlier shocks during the Gulf crisis and the Asian crisis. Despite higher invisibles surplus, which turned the current account into a surplus in Q4 of 2008-09, the large expansion in trade deficit led to a higher current account deficit of 2.6 per cent of GDP in 2008-09 (1.5 per cent of GDP a year ago).

II.51 The impact of the crisis through the financial channel was reflected in the sharp turnaround in the capital flows cycle from a sustained phase of surges in capital inflows to large outflows, particularly in Q3 of 2008-09, which continued during Q4 as well.

II.52 The adverse impact of the global trade and financial shocks on the BoP of India could be contained due to the adequate cushion in the form of foreign exchange reserves. The foreign exchange reserves of India (excluding valuation effects) fell by US$ 20.1 billion during 2008-09, even though the foreign exchange reserves level (including valuation effects) fell by US$ 57.7 billion during the year, reflecting the impact of appreciation of the US dollar against major international currencies.

External Debt

II.53 The outstanding external debt stock of India modestly increased at end-March 2009, mainly on account of increase in long-term debt. In terms of original maturity, the shares of long-term debt and short-term debt in the total debt were 78.5 per cent and 21.5 per cent, respectively, at end-March 2009. In terms of currency composition, US dollar denominated debt accounted for 57.1 per cent of total external debt at end-March 2009, followed by Japanese Yen (14.2 per cent), Indian Rupee (13.2 per cent), SDR (9.2 per cent) and Euro (4.1 per cent).

II.54 Despite apprehensions in the second half of 2008-09 about the availability of short-term trade credits due to tightness in the global credit markets, financing of short-term trade credit did not pose much problem in India. Based on residual maturity, the total short-term debt obligations accounted for 40.6 per cent of the total external debt outstanding at end-March 2009. The total short-term debt in terms of residual maturity (US$ 93.3 billion) at end-March 2009 consists of short term debt based on original maturity of US$ 49.4 billion and long-term external debt of US$ 43.9 billion due for repayment within one year. Out of the US$ 43.9 billion, the NRI deposits constitute the major portion (US$ 32.1 billion), which are more likely to be rolled over, going by the past trend.

II.55 The debt service ratio remained stable and reasonably low. The major indicators of external sector vulnerability reflect India's continued resilience in the face of one of the severest global crises.

Foreign Exchange Reserves

II.56 During 2008-09, the widening of current account deficit coupled with net capital outflows resulted in the drawdown of foreign exchange reserves of US$ 20.1 billion (excluding valuation) as against accretion to reserves of US$ 92.2 billion in 2007-08. Taking into account the valuation losses of US$ 37.7 billion arising out of depreciation of major currencies against the US dollar, India's foreign exchange reserves recorded a decline of US$ 57.7 billion during 2008-09 to US$ 252.0 billion as at end-March 2009. This magnitude of decline in reserves created some pressure on the foreign exchange market. Although both US dollar and Euro are intervention currencies, the foreign exchange reserves are denominated and expressed in US dollar only. Any change in the level of foreign exchange reserves is largely the outcome of the Reserve Bank's intervention in the foreign exchange market to smoothen excessive exchange rate volatility and the valuation changes that result from movements in the exchange rate of the US dollar against other currencies.

II.57 India's foreign exchange reserves remained at a comfortable level despite the drawdown during the crisis, as reflected by different adequacy indicators such as merchandise import cover (10.3 months at end-March 2009) and reserves to debt ratio (109.6 per cent at end-March 2009).

II.58 The developments during 2008-09 suggest that despite the adverse shocks from the global financial crisis, which led to considerable contraction in India's exports, widening of current account deficit, reversal in capital flows and drawdown of reserves, India's BoP position remained relatively resilient and did not become a source of major disruption in the foreign exchange market. The CAD-GDP ratio continued to remain within manageable limits. Services exports and remittances provided sustained support to India's current account position even in the face of a severe global economic slowdown. Notwithstanding some reversal of capital flows in the second half of the year, inflows under FDI and NRI deposits exhibited resilience, reflecting continuous attractiveness of India as a long-term investment destination and also the impact of various measures to attract capital flows. Various soundness indicators for the external sector relating to current account, external debt and reserve adequacy suggest that because of the continued policy emphasis on external stability, the Indian economy could manage shocks from a severe global crisis and maintain macroeconomic stability.

II.59 The regulations governing capital flows in India have been liberalised substantially in the past three years, taking into account the macroeconomic conditions, state of the financial sector development, risk management capabilities of financial institutions and depth of financial markets. At the same time, the Government has followed a hierarchy in the liberalisation of inflows by way of according preference to equity inflows rather than debt, besides the emphasis on a diversified capital account. The macro-level policy focus on sustainable levels of current account deficit and external debt; active capital account management while persisting with gradual liberalisation process consistent with the assessed needs of the country; and strengthening self insurance in a globalised world in the form of adequate reserves, have been vindicated in the face of the current global crisis.

PART TWO : THE WORKING AND OPERATIONS OF THE RESERVE BANK OF INDIA

III MONETARY AND CREDIT POLICY OPERATIONS

Monetary management during 2008-09 had to contend with the challenges of high inflation in the first half and the high speed and magnitude of the external shock and its spill-over effects through the real, financial and confidence channels in the second half. Policy initiatives by the Reserve Bank were aimed at providing ample rupee liquidity, ensuring comfortable foreign exchange liquidity and maintaining a market environment conducive for the continued flow of credit at viable rates to productive sectors of the economy. The large government borrowings resulting from the fiscal stimulus, and net capital outflows in the second half of the year warranted simultaneous offsetting operations by the Reserve Bank in different markets, particularly the money market, the government securities market and the foreign exchange market. The flexible use of multiple instruments enabled the Reserve Bank to steer the liquidity and interest rate conditions amidst uncertain global macroeconomic environment.

III.1 The stance of monetary policy shifted in phases in response to multiple challenges that emerged during the course of the year in the form of significant changes in both outcome and outlook relating to inflation, growth and stability of financial markets. The policy stance shifted from monetary tightening in response to the elevated inflationary pressures in the first half of 2008-09 to monetary easing in the second half as significant moderation in inflationary pressures created the scope for enhancing the magnitude and speed of response to the weakening growth impulses as well as to occasional disorderly pressures in financial markets. In response to the knock-on effects of the global economic crisis on the Indian economy, the Reserve Bank reduced the CRR by a cumulative 400 basis points to 5.0 per cent of NDTL, the repo rate by 425 basis points to 4.75 per cent and the reverse repo rate by 275 basis points to 3.25 per cent since October 11, 2008 (Table 3.1).

LIQUIDITY MANAGEMENT

III.2 Central banks around the world faced complex challenges in the conduct

Table 3.1: Movement in Key Policy Rates and Reserve Requirements

(Per cent)

Effective since	Bank Rate	Reverse Repo Rate	Repo Rate	Cash Reserve Ratio	Statutory Liquidity Ratio
1	2	3	4	5	6
March 31, 2004	6.00	4.50	6.00	4.50	25
September 18, 2004	6.00	4.50	6.00	4.75 (+0.25)	25
October 2, 2004	6.00	4.50	6.00	5.00 (+0.25)	25
October 27, 2004	6.00	4.75 (+0.25)	6.00	5.00	25
April 29, 2005	6.00	5.00 (+0.25)	6.00	5.00	25
October 26, 2005	6.00	5.25 (+0.25)	6.25 (+0.25)	5.00	25
January 24, 2006	6.00	5.50 (+0.25)	6.50 (+0.25)	5.00	25
June 9, 2006	6.00	5.75 (+0.25)	6.75 (+0.25)	5.00	25
July 25, 2006	6.00	6.00 (+0.25)	7.00 (+0.25)	5.00	25
October 31, 2006	6.00	6.00	7.25 (+0.25)	5.00	25
December 23, 2006	6.00	6.00	7.25	5.25 (+0.25)	25
January 6, 2007	6.00	6.00	7.25	5.50 (+0.25)	25
January 31, 2007	6.00	6.00	7.50 (+0.25)	5.50	25
February 17, 2007	6.00	6.00	7.50	5.75 (+0.25)	25
March 3, 2007	6.00	6.00	7.50	6.00 (+0.25)	25
March 30, 2007	6.00	6.00	7.75 (+0.25)	6.00	25
April 14, 2007	6.00	6.00	7.75	6.25 (+0.25)	25
April 28, 2007	6.00	6.00	7.75	6.50 (+0.25)	25
August 4, 2007	6.00	6.00	7.75	7.00 (+0.50)	25
November 10, 2007	6.00	6.00	7.75	7.50 (+0.50)	25
April 26, 2008	6.00	6.00	7.75	7.75 (+0.25)	25
May 10, 2008	6.00	6.00	7.75	8.00 (+0.25)	25
May 24, 2008	6.00	6.00	7.75	8.25 (+0.25)	25
June 11, 2008	6.00	6.00	8.00 (+0.25)	8.25	25
June 25, 2008	6.00	6.00	8.50 (+0.50)	8.25	25
July 5, 2008	6.00	6.00	8.50	8.50 (+0.25)	25
July 19, 2008	6.00	6.00	8.50	8.75 (+0.25)	25
July 30, 2008	6.00	6.00	9.00 (+0.50)	8.75	25
August 30, 2008	6.00	6.00	9.00	9.00 (+0.25)	25
October 11, 2008	6.00	6.00	9.00	6.50 (-2.50)	25
October 20, 2008	6.00	6.00	8.00 (-1.00)	6.50	25
October 25, 2008	6.00	6.00	8.00	6.00 (-0.50)	25
November 03, 2008	6.00	6.00	7.50 (-0.50)	6.00	25
November 08, 2008	6.00	6.00	7.50	5.50 (-0.50)	24 (-1.00)
December 08, 2008	6.00	5.00 (-1.00)	6.50 (-1.00)	5.50	24
January 05,2009	6.00	4.00 (-1.00)	5.50 (-1.00)	5.50	24
January 17,2009	6.00	4.00	5.50	5.00 (-0.50)	24
March 05,2009	6.00	3.50 (-0.50)	5.00 (-0.50)	5.00	24
April 21,2009	6.00	3.25 (-0.25)	4.75 (-0.25)	5.00	24

Note: 1. With effect from October 29, 2004, the nomenclature of repo and reverse repo was changed 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. The nomenclature in this Report is based on the new usage of terms even for the period prior to October 29, 2004.

2. Figures in parentheses indicate changes in policy rates/ratios.

of their liquidity management operations, as the pressure on funding liquidity became unprecedented in the face of significant erosion in market liquidity. Sharp corrections in asset prices affected market liquidity, which had the potential to create insolvency problem for several leading global financial institutions. Moreover, as the liquidity needs of non-banks, ranging from investment banks, insurance companies, housing finance companies, hedge funds to even money market mutual funds increased exponentially, it came to the notice of the central banks that liquidity injected by the central banks to the commercial banks may not reach the non-banks in the face of heightened risk aversion and uncertainties about the soundness of even the most reputed global financial institutions. The global financial crisis not only tested the limits of conventional liquidity management operations of central banks, but also necessitated extensive resort to a range of unconventional measures as it became increasingly evident that to avoid a systemic financial crisis, not only the liquidity needs of "too big to fail" banks have to be met, but even the liquidity needs of "too interconnected to fail" financial institutions (such as Bear Stearns & AIG) must also be met.

III.3 Despite no direct exposure of the Indian banks and financial institutions to the failing international institutions or troubled assets, liquidity management operations of the Reserve Bank assumed greater urgency in the face of the knock-on effects of the global financial crisis, which manifested not only as reversals in capital inflows but also adverse market expectations, causing sharp correction in asset prices and pressures on the exchange rate. The Reserve Bank had to swiftly respond to the rapidly evolving macroeconomic conditions. In the initial few months of 2008-09, inflation expectations driven by surge in global commodity prices, dictated a contractionary stance; during the following few months, the autonomous pressures on liquidity arising from capital outflows, and drying up of sources of overseas funding necessitated discretionary expansion; in the last few months, the surge in Government's market borrowings to deal with the slow-down of the economy elicited further accommodating response from the Reserve Bank. Thus, by synchronising the liquidity management operations with those of exchange rate management and non-disruptive internal debt management operations, the Reserve Bank ensured that appropriate liquidity was maintained in the system so that all legitimate requirements of credit were met, particularly for productive purposes, consistent with the objective of price and financial stability. The management of liquidity was through appropriate use of CRR stipulations and open market operations (OMO), including MSS and LAF and a slew of special facilities.

IV CREDIT DELIVERY

Ensuring adequate flow of credit to all productive sectors of the economy without diluting the emphasis on asset quality is one of the objectives of the Reserve Bank. This became all the more important in the wake of the dampening effects of the synchronised global recession on the domestic growth momentum in the second half of 2008-09 and the associated deceleration in credit demand. While announcing a number of measures for sectors which were affected by the global crisis, the Reserve Bank continued with its focus on financial inclusion and financial literacy/credit counselling. Strengthening credit delivery mechanisms to the targetted sections of the population under different schemes has been an important aspect of the Reserve Bank's policy focus in recent years.

IV.1 In the face of a severe global credit squeeze, credit markets in India continued to function normally. While the global credit markets faced problems on the supply side because of the pressure of forced deleveraging by banks and financial institutions, in India the economic slowdown and the associated contraction in aggregate demand, which largely affected the credit markets in the second half of 2008-09. Expansion in credit at a reasonable cost, without diluting the credit standards, was seen by the Reserve Bank as essential to promote consumption and investment demand in a slowing economy.

IV.2 It has been the endeavour of the Reserve Bank to improve credit delivery mechanisms for the small borrowers, particularly for the agriculture and the small enterprises sectors by creating a conducive environment for banks to provide adequate and timely finance at reasonable rates without procedural hassles. In the wake of the crisis in 2008-09, the Reserve Bank took various measures for enhancing the flow of credit to those sectors of the economy, which were more severely hit due to the world-wide recession, and also to the employment-intensive sectors. The Reserve Bank has also been emphasising the role of the financial system in ensuring greater financial inclusion, supporting employment generation in rural and unorganised sectors, and promoting financial literacy and credit counselling.

IV.3 India's mandated priority sector lending has helped in imparting resilience to the agricultural sector. Even in the wake of the global financial crisis, this lending norm kept the flow of institutional credit to agriculture intact. The farm loan waiver package implemented by the Government also helped the agriculture sector.

IV.4 Bank credit to small scale industrial (now micro and small enterprises) sector constitutes a major segment of total credit to the non-farm sector. The total credit provided by public sector banks to small enterprises sector as on the last reporting Friday of March 2009 amounted to 26.5 per cent of the total priority sector advances of these banks. Public sector banks have been advised to operationalise at least one specialised SME branch in every district and centre having a cluster of SME units. At end-March 2009, 869 specialised SME bank branches were operationalised by banks.

IV.5 Recognising the potential of micro finance to positively influence the economic conditions of the poorer sections of the society, the Reserve Bank has been providing a facilitating environment for the development of the micro finance sector in the country. The SHG-bank linkage programme, being implemented by commercial banks, RRBs and co-operative banks, is the major channel for providing micro finance in the country, covering more than 7.01 crore poor households. At end-March 2008, a total of 3.6 million SHGs with a total outstanding bank loan of Rs.17,000 crore were credit linked with the banks. As on March 31, 2008, a total of 5.0 million SHGs were having savings bank accounts with the banking system of which the commercial banks had the maximum share (56.0 per cent) followed by the RRBs (28.0 per cent) and co-operative banks (16.0 per cent).

IV.6 The export sector confronted not only the challenge of decelerating global demand but also tighter access conditions in the market for trade credit. In response, a number of measures were taken to address the concerns relating to trade credit and to give a boost to the export sector.

V DEVELOPMENT AND REGULATION OF FINANCIAL MARKETS

In the backdrop of the global financial turmoil, securing and maintaining domestic financial stability was accorded priority from a policy perspective, with readiness for swift responses to any risk to financial stability from adverse international developments. The institutional framework for financial markets was further strengthened in terms of new instruments, better market infrastructure and enhanced prudential norms. The key measures aimed at the money market were designed to enable the market function smoothly in an environment of global liquidity squeeze and to contain the excessive stress on some of the segments. The Reserve Bank also took initiatives relating to improving the efficiency of the auction process, operational readiness for introduction of STRIPS, clearing and settlement of OTC rupee interest rate derivatives and revision of repo accounting norms. Measures were also undertaken to simplify the procedures in the conduct of foreign exchange transactions with a view to facilitating prompt and efficient customer service and the process of liberalisation of the capital account continued by further relaxing the regulations governing the movements of cross-border capital flows.

V.1 Deep and efficient financial markets are essential for realising the growth potential of an economy; however, disorderly financial markets could be a source of risk to both financial institutions and the economy. The serious ramifications of disorderly, volatile and disruptive conditions in the global financial markets became clearly evident during 2008-09. The strong inter-linkages among markets, financial institutions and the real economy also highlighted the significance of focused attention given to the development and regulation of markets in India.

V.2 The contagion from the global markets did affect the Indian markets, particularly in the post-Lehman period up to November 2008, but swift and commensurate policy response from the Reserve Bank ensured that the markets functioned normally and also remained orderly and resilient.

MONEY MARKET

V.3 For effective transmission of monetary policy and integration among various segments of the financial market, a developed money market is an essential precondition. In the context of the significant changes in the policy rates and liquidity operations of the Reserve Bank, the behaviour of the money market during 2008-09 assumed critical significance. During 2008-09, the key measures aimed at the money market were designed to enable the market function smoothly in an environment of global liquidity squeeze and to contain the excessive stress on some of the market segments.

V.4 The Reserve Bank introduced a special 14-day term repo facility for banks in October 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 MFs, NBFCs and housing finance companies. A special refinance facility was introduced on November 1, 2008 to provide funding to schedule commercial banks up to 1.0 per cent of their NDTL as on October 24, 2008 at the repo rate. 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 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. The liquidity stress faced by mutual funds, particularly the money market mutual funds (MMMFs) during September-October 2008, 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 view of the systemic implications of the activities of such funds, it was proposed to identify and address the macro-prudential concerns arising from the current framework in consultation with SEBI.

GOVERNMENT SECURITIES MARKET

V.5 The government securities market acquired renewed attention not only in the context of the fiscal stimulus plan of the Government but also on account of the marked preference for safety under conditions of stress in the financial system. In terms of market development, the Reserve Bank initiated various steps to further broaden and deepen the government securities market in consultation with market participants, which included: (i) improving the efficiency of auction process, (ii) new issuance structure for floating rate bonds (FRBs), (iii) operational readiness for introduction of STRIPS, (iv) new settlement mechanism for non-current account holders, (v) clearing and settlement of OTC rupee interest rate derivatives and (vi) revision of repo accounting norms.

FOREIGN EXCHANGE MARKET

V.6 The foreign exchange market in 2008-09 testified the relevance of Reserve Bank's policy approach to exchange rate, foreign exchange reserves and capital account in the face of adverse external shocks arising from the global economic crisis. In the midst of the shocks emanating from the global financial markets, the transactions in already liberalised areas continued without any concerns. The process of liberalisation in the pursuit of fuller capital account convertibility also continued by further relaxation of regulations governing the movement of cross-borders capital flows, especially in the areas of inward and outward foreign direct investments, while recognising the downside risks emanating from higher level of capital outflows from the country.

VI FINANCIAL REGULATION AND SUPERVISION

The banking system in India remained largely unaffected by the financial crisis, while several banks and financial institutions in the advanced countries failed or had to be bailed out with large sovereign support. The financial soundness indicators for the banking system in India during 2008-09 showed stability and strength; every bank in the system remained above the minimum regulatory capital requirement. Stress test findings suggested the resilience of the financial system, in the face of the severe external contagion from the global financial crisis. As at end-March 2009, all Indian scheduled commercial banks had migrated to the simpler approaches available under the Basel II framework. Post-crisis changes that may be necessary to strengthen the regulatory and supervisory architecture would be based on the evolving international consensus as well as careful examination of their relevance to the India-specific context. The time schedule for implementation of advanced approaches under Basel II has been notified and an inter-disciplinary Financial Stability Unit has been set up to monitor and address systemic vulnerabilities.

VI.1 Indian banks and financial institutions exhibited resilience in the midst of a severe global financial crisis. Notwithstanding the growing financial integration and globalisation, the banking system in India had no direct exposure to the sub-prime assets that triggered the crisis in the advanced economies. The indirect exposure of banks in this regard was also insignificant. Much before the crisis started in the advanced economies, the Reserve Bank had taken a number of measures which contributed to strengthening the resilience in the Indian banking system.

VI.2 In the overall architecture for the regulation and supervision of the financial system in India, the Reserve Bank's regulatory and supervisory purview extends to a large segment of financial institutions, including commercial banks, co-operative banks, non-banking financial institutions and various financial markets. At end-March 2009, there were 80 commercial banks (excluding RRBs); 4 local area banks; 86 RRBs; 1,721 UCBs; 4 development finance institutions; 12,739 NBFCs (of which 336 NBFCs were permitted to accept/hold public deposits) and 18 primary dealers (PDs) [of which 11 were banks undertaking PD business as a departmental activity, known as bank-PDs, and 7 were non-bank entities, also referred to as stand-alone PDs]. The Board for Financial Supervision (BFS) has been mandated to ensure integrated oversight over the financial institutions that are under the purview of the Reserve Bank.

Board for Financial Supervision (BFS)

VI.3 The BFS, constituted in November 1994, remains the principal guiding force behind the Reserve Bank's supervisory and regulatory initiatives. It reviews the inspection findings in respect of commercial banks/UCBs and periodic reports on critical areas of functioning of banks such as reconciliation of accounts, fraud monitoring, overseas operations and banks under monthly monitoring. In addition, the BFS also reviews the micro and macro prudential indicators, banking outlook and interest rate sensitivity analysis. It also issues a number of directions with a view to strengthening the overall functioning of individual banks and the banking system.

VI.4 Indian banks continued to expand their presence overseas during 2008-09. Between July 2008 and June 2009, Indian banks opened 20 branches/subsidiaries/representative offices overseas. At end-June 2009, 20 Indian banks (14 public sector banks and 6 private sector banks) had presence abroad with a network of 221 offices (141 branches, 52 representative offices, 7 joint ventures and 21 subsidiaries) in 52 countries. Several foreign banks opened branches and representative offices in India during 2008-09. At end-June 2009, 32 foreign banks were operating in India with 293 branches. Besides, 43 foreign banks were also operating in India through representative offices. There were 73 banks under liquidation all over India as on June 30, 2009. The matter regarding early completion of liquidation proceedings is being followed up with official/Court liquidators.

Basel II Implementation

VI.5 Foreign banks operating in India and Indian banks having operational presence outside India migrated to the simpler approaches available under the Basel II framework with effect from March 31, 2008. Other commercial banks (excluding local area banks and RRBs) also migrated to these approaches from March 31, 2009. Thus, the standardised approach for credit risk, basic indicator approach for operational risk and standardised duration approach for market risk (as slightly amended under the Basel II framework) have been implemented for banks in India. Taking into consideration the need for upgradation of risk management frameworks as also the capital efficiency likely to accrue to the banks by adoption of the advanced approaches envisaged under the Basel II framework and the emerging international trend in this regard, it was considered desirable to lay down a timeframe for implementation of the advanced approaches in India. This would enable the banks to plan and prepare for their migration to the advanced approaches for credit risk and operational risk, as also for the internal models approach (IMA) for market risk.

NPA Management

VI.6 The three legal options available to banks for resolution of NPAs, *viz.*, the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act, 2002), Debt Recovery Tribunals (DRTs) and *Lok Adalats*, have led to a steady increase in the adjudication and recovery of disputed amounts.

Counter-Cyclical Prudential Norms

VI.7 Banks' loans and advances portfolio often move pro-cyclically, growing faster during an expansionary phase and *vice versa*. During times of expansion and accelerated credit growth, there is a tendency to underestimate the level of inherent risk and the converse holds during times of recession. This tendency is not effectively addressed by capital adequacy and specific provisioning requirements since they capture risk *ex-post,* not *ex-ante*. It is, therefore, necessary to build up capital and provisioning buffers during a cyclical boom, which could be used to cushion banks' balance sheets in the event of a downturn in the economy or deterioration in credit quality on account of other reasons. In order to ensure that asset quality was maintained in the light of high credit growth, risk weights and provisioning requirements on standard advances for banks' exposures to the sectors showing above average growth had been progressively raised during the last 3-4 years, as a counter-cyclical measure. However, with the global financial crisis starting to affect Indian economy from September 2008 onwards, the Reserve Bank reduced the enhanced risk weights and provisioning requirements to the normal level. Risk weight for all unrated claims, long-term as well as short-term, regardless of the amount of claim, on the corporates was reduced from 150 per cent to 100 per cent in November 2008. Risk weight on the claims secured by commercial real estate and exposure to NBFCs-ND-SI was reduced to 100 per cent from 125 per cent.

VI.8 Prior to the unfolding of the global crisis, to ensure that asset quality was maintained in the light of high credit growth, the general provisioning requirement for standard advances in specific sectors, *i.e.*, personal loans, capital market exposures and commercial real estate loans had been increased from 0.4 per cent to 2.0 per cent, and to 1.0 per cent for residential housing loans beyond Rs.20 lakh in January 2007. To mitigate the impact of the current economic slowdown, as a counter-cyclical measure, the provisioning requirement for standard assets was reduced with effect from November 15, 2008, to a uniform level of 0.4 per cent, except in the case of direct advances to the agricultural and the SME sectors, which continue to attract provisioning of 0.25 per cent. The revised norms were made effective prospectively and thus, the provisions already held were not to be reversed. Similar instructions were issued to UCBs.

VI.9 In December 2008, in view of the growing concern of possible increase in stress in the Indian banking system, certain modifications were made to the guidelines on restructuring of advances (issued in August 2008) as a one-time measure and for a limited period of time, *i.e.*, up to June 30, 2009.

Supervisory Initiatives

VI.10 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 submitted its Report in January 2009. The recommendations of the Group are being examined for initiating further action. An Inter-departmental Group is also examining additional areas/issues which need to be brought under the supervisory focus, including modalities for on-site supervision of overseas branches and subsidiaries of Indian banks. The Group is expected to submit its Report shortly. Keeping in view the systemic importance of financial conglomerates (FCs), efforts are being initiated to strengthen the FC monitoring system further by introducing certain prudential measures such as group-wide capital adequacy requirements; safe conduct of Intra-Group Transactions and Exposures (ITEs) and management of risk concentrations; governance systems in FCs including 'fit and proper' principles and risk management systems; supervisory co-operation and information-sharing amongst the sectoral regulators.

Monitoring of Frauds

VI.11 The fraud monitoring function of the Reserve Bank has assumed greater significance in recent years as there has been an increase in the number of frauds involving larger amounts. Frauds have been noticed in traditional as also new areas, such as housing loans, credit cards, internet banking and outsourcing business. The complexity of the cases is increasingly exposing banks to greater operational risk. The Reserve Bank, as part of its supervisory process, has been sensitising banks from time to time about common fraud-prone areas, *modus operandi* of frauds and the measures to be taken to prevent/reduce the incidence of frauds.

URBAN CO-OPERATIVE BANKS

VI.12 The Reserve Bank has entered into MoUs with 26 State Governments and with the Central Government (for multi-State UCBs) and Task Forces on Urban Co-operative Banks (TAFCUBs) were constituted in these States and at the Centre for identification of non-viable UCBs and deciding their future set up. The MoU arrangement now covers over 99 per cent of the banks that account for over 99 per cent of deposits in the sector. With a view to providing an additional avenue for non-disruptive exit of weak/ unviable entities in the co-operative banking sector, the Reserve Bank issued guidelines on merger/amalgamation of UCBs with Deposit Insurance and Credit Guarantee Corporation (DICGC) support in January 2009.

RURAL CO-OPERATIVES

VI.13 The Reserve Bank regulates state co-operative banks (St.CBs) and district central co-operative banks (DCCBs) under the Banking Regulation Act, 1949, (AACS) while NABARD supervises them. Only 14 out of the 31 St.CBs and 75 out of the 371 DCCBs have been granted licences by the Reserve Bank so far. 16 St.CBs have also been granted scheduled status under Section 42 of the Reserve Bank of India Act, 1934. The CFSA had observed that there was a need to draw up a roadmap for ensuring that only licensed banks operated in the co-operative space by the year 2012. This would expedite the process of consolidation and weeding out of non-viable entities from the co-operative space. Accordingly, it was announced in the Annual Policy Statement for 2009-10 that a roadmap would be worked out for achieving this objective in a non-disruptive manner in consultation with

NABARD. The discussions with NABARD have been initiated in the matter.

REGIONAL RURAL BANKS

VI.14 The process of consolidation through amalgamation of RRBs is now almost complete, resulting in a decline in the total number of RRBs to 84 as on July 31, 2009. The process of recapitalisation of RRBs with negative net worth is complete, with 27 RRBs fully recapitalised with an amount of Rs.1,796 crore at end-July 2009.The CFSA had suggested a phased introduction of CRAR in RRBs, along with the recapitalisation, after consolidation of these entities. It was, therefore, announced in the Annual Policy Statement for 2009-10 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. Accordingly, NABARD has been advised to constitute a Working Group to suggest bank-wise actionable measures for RRBs which had CRAR less than 1 per cent as on March 31, 2008 so that they could achieve the target of 7 per cent by March 2010.

ALL INDIA FINANCIAL INSTITUTIONS (AIFIs)

VI.15 As at end-March 2009, there were four institutions, *viz*., EXIM Bank, NABARD, NHB and SIDBI, regulated by the Reserve Bank as all-India Financial Institutions (AIFIs). In the wake of the emerging global developments and their impact on financial institutions, the Reserve Bank received requests from select AIFIs for liquidity support for on-lending to HFCs/NBFCs/MFIs and exporters, and accordingly, took a number of measures. In December 2008, the Reserve Bank sanctioned refinance facilities of Rs.7,000 crore, Rs.5,000 crore and Rs.4,000 crore for SIDBI, EXIM Bank and NHB, respectively, under the relevant provisions of the Reserve Bank of India Act, 1934. The availment of refinance by the above AIFIs under this facility is restricted to a period of 90 days and the amount could be flexibly drawn and repaid during the period. The facility could be rolled over and would be available up to March 31, 2010. The ceiling on aggregate resources mobilised by SIDBI, NHB and EXIM Bank was raised subject to conditions, with effect from December 8, 2008, for a period of one year.

NON-BANKING FINANCIAL COMPANIES

VI.16 Traditionally, deposit taking NBFCs (NBFCs-D) were subjected to prudential regulation on various aspects of their functioning while the non-deposit taking NBFCs (NBFCs-ND) were subject to minimal regulation. In the light of the growing integration of the financial sector, it was felt that all systemically relevant entities offering financial services ought to be brought under a suitable regulatory framework to contain systemic risk. Therefore, as a first step, in December 2006 all NBFCs-ND with an asset size of Rs.100 crore and above as per the last audited balance sheet were designated as systemically important NBFCs-ND (NBFCs-ND-SI) and a specific regulatory framework was put in place from April 1, 2007 for such entities. On a review of the experience with the regulatory framework, it was felt desirable to enhance the capital adequacy requirement and put in place guidelines for liquidity management and reporting, as also norms for disclosures. Thus, NBFCs-ND-SI were advised to attain minimum CRAR of 12 per cent by March 31, 2010 and 15 per cent by March 31, 2011.

MACRO-PRUDENTIAL INDICATORS (MPIs)

VI.17 The crisis adversely impacted all the segments of the financial markets where banks actively operate, *viz.*, credit market, money market, foreign exchange market, equity market and bond market. The key performance analysis of the MPIs for the SCBs during 2008-09 under four broad parameters, *viz.*, business growth, capital adequacy, asset quality and profitability suggest that while growth in business moderated, the other critical financial soundness measures continued to remain stable and comfortable.

VII PUBLIC DEBT MANAGEMENT

The expansionary counter-cyclical fiscal policy stance adopted by the Government, in the face of emerging ramifications of the global economic crisis for growth and aggregate demand, resulted in a sharp increase in both the borrowings of the Central and State Governments during 2008-09 over their respective budget estimates. The key challenge for the Reserve Bank in its debt management operations for 2008-09, therefore, was to manage this vastly expanded government market borrowing programme without creating any disruptive pressures on the government securities market. The Reserve Bank employed a combination of measures involving monetary easing and use of innovative debt management tools such as synchronising the Market Stabilisation Scheme (MSS) buyback auctions and open market purchases with the Government's normal market borrowings and de-sequestering of MSS balances. By appropriately timing the release of liquidity to the financial system to coincide with the auctions of government securities, the Reserve Bank ensured a relatively smooth conduct of the Governments' market borrowing programme, resulting in the decline in the cost of borrowings during 2008-09 for the first time in the last five years. Reflecting the continued need for fiscal stimulus in 2009-10, the combined net market borrowing programme of the Centre and the State Governments (dated securities and 364-day Treasury Bills) is estimated to be Rs.5,37,957 crore as against Rs.3,46,083 crore in 2008-09. This calls for continuance of the active debt management strategy by the Reserve Bank so as to mitigate pressures on interest rates and avert possible crowding-out of private sector demand for credit.

VII.1 Management of large government borrowing programme in a manner supporting the expansionary counter-cyclical fiscal policy stance of the Government without creating any disruptive pressures on the government securities market was a key challenge for the Reserve Bank in 2008-09. To deal with the growth dampening moderation in private consumption and investment demand, some deviation from the fiscal consolidation path and introduction of adequate fiscal stimulus became essential, which concomitantly escalated the size of the borrowing programme significantly. In 2008-09, larger recourse to market borrowing and flight to safety were the common trends across countries around the world; while the cost of borrowings declined in general, reflecting the low policy interest rates and quantitative easing stance of the central banks, significant increase in risk aversion and resultant preference for government securities led to a larger demand for these securities.

VII.2 Recognising the challenge of managing the large Government borrowings,the Reserve Bank had to continuously review and adapt its debt management strategy, in consultation with the Central Government, in response to the evolving economic conditions, while striving to ensure that the sharp and abrupt increase in the Government's market borrowing programme was conducted in a non-disruptive manner, without any conflict with its monetary management function. Higher government borrowings could potentially raise the interest rates in the system by pushing up yields on government securities, which entail the risk of conflicting with the low interest rate stance that may be pursued by the monetary authority in the face of an economic slowdown. During the second half of 2008-09, the Reserve Bank's policy stance aimed at increasing bank credit to the commercial sector at lower cost, reflecting the trends in policy rates to support the revival of economic growth; this objective had to be attained while managing a large Government borrowing programme. The Reserve Bank, therefore, employed a combination of measures involving easing of monetary conditions and use of innovative tools for debt management such as synchronising the Market Stabilisation Scheme (MSS) buyback auctions and open market purchases with Government's normal market borrowings and de-sequestering of MSS balances. The release of liquidity to the financial system by the Reserve Bank was timed appropriately to coincide with the auctions of government securities, ensuring the smooth conduct of the large market borrowing programme of the Government.

VII.3 The combined net market borrowings (dated securities and 364-day Treasury Bills) of the Central and the State Governments in 2008-09 were 209 per cent of their net borrowings during 2007-08. In addition, special securities (oil and fertiliser bonds) amounting to Rs.95,942 crore were issued by the Central Government outside the market borrowing programme for 2008-09.

CENTRAL GOVERNMENT

Market Borrowings: *Dated Securities*

VII.4 In line with global trends of increased Government spending as a response to counter economic slowdown, the Government of India announced three stimulus packages in 2008-09. Accordingly, the net market borrowing through dated securities was nearly twice the amount raised in 2007-08 and more than twice the budget estimate for 2008-09. The gross market borrowing through dated securities was 75 percent higher than during 2007-08 (6.8 per cent higher in 2007-08).

VII.5 During the first half of 2008-09, the weighted average yield increased from 8.14 per cent in April 2008 and peaked at 8.81 per cent in September 2008. The yields softened thereafter, reflecting the availability of liquidity in the system. The weighted average yield on dated securities issued during the year, therefore, decreased for the first time in the last five years in 2008-09. The weighted average coupon on the outstanding stock of dated securities as on March 31, 2009 also declined over the previous year. The weighted average maturity of the dated securities issued during the year was the lowest since 2003-04. As a result, the weighted average maturity of the outstanding stock as on March 31, 2009 decreased over the previous year.

STATE GOVERNMENTS

Market Borrowings

VII.6 The net allocation under the market borrowing programme of State Governments inclusive of additional allocations for shortfall in National Small Savings Fund (NSSF) collections and towards the second stimulus package for 2008-09 was about two-thirds higher than that in 2007-08. Taking into account the repayments, the gross allocation amounted to Rs.1,29,081 crore during 2008-09, of which 91.5 per cent was actually raised by the State Governments during the year. The entire amount was raised through the auction route during 2008-09 as in the previous year. Reflecting the softer interest rate environment since the second half of the year, the weighted average yield of State Government securities issued during 2008-09 was lower than the previous year despite the significantly larger market borrowings. The average range of cut-off yield during 2008-09, however, was considerably wide due to large intra-year variations.

VII.7 The size of combined net market borrowing requirements of the Central and State Governments for 2009-10 (dated securities and 364-day Treasury Bills), at Rs.5,37,957 crore, is estimated to be higher than the 2008-09 actual borrowings by 55.4 per cent, which was on top of an increase of 108.8 per cent over 2007-08. Accordingly, the smooth conduct of debt management would assume even greater importance during the current fiscal year. Hardening of yields witnessed in recent months could militate against the low interest rate regime required to stimulate and revive the economy. The Reserve Bank would continue with its active liquidity management policy to ensure that the large government borrowing does not crowd out present and potential credit demand from the private sector. As the private sector demand picks up with the revival of the economy, and the need for fiscal stimulus also declines correspondingly, the Government could phase out its large borrowings, thereby allowing the private sector demand to propel and sustain the growth momentum, without being constrained by concerns on the availability of liquidity in the system.

VIII CURRENCY MANAGEMENT

During 2008-09, there was a marked improvement in the quality of banknotes. The value of banknotes increased by 17.1 per cent and by 10.7 per cent in volume terms. The Reserve Bank has taken further steps to strengthen mechanised processing of banknotes, as a part of the Clean Note Policy. The Reserve Bank is examining various options to increase the life of banknotes, especially in the lower denominations. For the third year in succession, the indent for banknotes for 2008-09 was met in full by the printing presses. The Bank continued its efforts to bring down the cost of banknotes while maintaining their quality. The policy of rationalisation and consolidation of currency chests resulted in further decline in the number of chests maintained by the public sector banks. The Reserve Bank has taken several steps to check the menace of counterfeit banknotes.

VIII.1 Issue and management of currency continues to be one of the traditional functions of the Reserve Bank since its inception. The challenges to managing currency have, however, increased over time. Given the expansion of the economy and the growing needs for banknotes, the task of currency management has become increasingly complex. Distribution of fresh notes as well as withdrawal and destruction of soiled notes constitute the core of the currency management operations of the Reserve Bank.

VIII.2 The number of soiled banknotes disposed of by the Reserve Bank during 2008-09 increased significantly, following continued and concerted efforts to increase its disposal capacity. All the currency chests maintained with the banks have already been equipped with Note Sorting Machines (NSMs).

VIII.3 The long-run secular decline in the share of currency in broad money (M_3) continued in 2008-09. The ratio has declined steadily from as high as 39.7 per cent as at end-March 1971 to 16.0 per cent as at end-March 2001 and gradually thereafter to 14.0 per cent as at end March 2009, reflecting financial deepening, increased use of credit and debit cards and liquid financial markets.

VIII.4 Reserve Bank continued with its efforts to provide good quality banknotes and took a series of initiatives under a multi-pronged approach involving regular supply of fresh banknotes, speedier disposal of soiled banknotes and extended mechanisation of cash processing activity. The Reserve Bank has also been examining various options to enhance the life of the banknotes as part of its clean note policy.

VIII.5 The core central banking function of note issue and currency management is performed by the Reserve Bank through its 19 Issue Offices, a currency chest at Kochi and a wide network of 4,279 currency chests and 4,040 small coin depots. The Reserve Bank has agency arrangements, mainly with scheduled commercial banks, under which currency chest facility is granted to them. The currency chests with Sub Treasury Offices (STOs) are being gradually phased out and their number reduced further to 15 during 2008-09. The State Bank Group continued to have the largest share (71.3 per cent) of currency chests, followed by nationalised banks (25.3 per cent).

VIII.6 The Bharatiya Reserve Bank Note Mudran Pvt. Ltd. (BRBNMPL), a wholly owned subsidiary of the Reserve Bank was set up in 1996 to take over the work of the New Note Press project. BRBNMPL prints bank notes at its two note presses *viz.,* Mysore (Karnataka) and Salboni (West Bengal). The total supply of banknotes by BRBNMPL during 2008-09 (July-June) was 8,501 million pieces as compared with 8,488 million pieces during 2007-08. During 2008-09, 5,160 million pieces of notes were supplied by Government owned Security Printing and Minting Corporation of India Limited (SPMCIL) as compared with 5,442 million pieces in 2007-08.

VIII.7 It has been the Reserve Bank's effort to consistently bring down the cost of printing banknotes and to encourage the note printing presses to bring about greater efficiencies in their operations, while maintaining the quality of the printed banknotes. As a part of these ongoing efforts, the Reserve Bank continued to source banknotes from the lowest cost producers, *viz.,* the Security Printing and Minting Corporation of India Ltd. (SPMCIL) and the Bharatiya Reserve Bank Note Mudran (Pvt.) Ltd. (BRBNMPL).

VIII.8 During the year, for the first time, new bi-metallic Rs.10 coins (with themes 'Unity in Diversity' and 'Connectivity and Information Technology') were introduced. A total of 80 million pieces of the same were minted and issued through public counters of Reserve Bank/banks.

Counterfeit Banknotes

VIII.9 Detection of counterfeit banknotes showed a rising trend. 3,98,111 counterfeit banknotes were detected at the Reserve Bank's offices and bank branches during 2008-09 as compared to 1,95,811 in the previous year. Out of this, 3,42,281 pieces were detected at bank branches, which indicates the increased use of NSMs at their end. The Reserve Bank has taken several steps to check the menace of counterfeit bank notes. The installation of NSMs by all the banks at their currency chest branches (to facilitate examination and detection of counterfeit notes at the currency chest level itself), and the setting up of the Forged Note Vigilance Cells (FNVCs) at the banks (to ensure stringent levels of anti-counterfeit management in the banking system) helped significantly in the increased detection of counterfeit bank notes.

IX PAYMENT AND SETTLEMENT SYSTEMS AND INFORMATION TECHNOLOGY

The payment and settlement systems in India functioned normally in the midst of the global financial crisis, ensuring the continued confidence of the public in these systems. The Payment and Settlement Systems Act, Board for Regulation and Supervision of Payments and Settlement Systems Regulations, 2008 and the Payment and Settlement Systems Regulations, 2008 have come into effect in August 2008 and accordingly, the Board for Regulation and Supervision of Payment and Settlement Systems was reconstituted. While the growth and penetration of conventional non-cash modes of payments continued to remain strong in 2008-09, new modes of payments like mobile payment transactions and pre-paid credit instruments have also started. Harnessing information technology (IT) for internal functioning of the Reserve Bank as well as for delivery of services have continued to ensure greater efficiency. The rapid advances in the application of IT and emerging forms of payments and their settlement systems necessitate the Reserve Bank to improve the regulatory frameworks while integrating these developments to the overall goals of the financial system.

IX.1 The ability of economic agents to transfer money and exchange financial claims embedded in financial instruments smoothly and securely through payment and settlement systems is critical not only for sustaining the public confidence in the financial system but also for creating an efficient and deep financial system. The Reserve Bank, as the supervisor and regulator of the payments and settlement systems, strives to ensure development of efficient and smooth systems matching the needs and growing sophistication of the financial sector. The rapid advancements in the field of information technology (IT) have contributed to emergence of new products as well as methods of payment and settlement. Emergence of new modes of payments and increasing complexity of transactions, however, also pose challenges in terms of formulating appropriate regulatory and supervisory frameworks. Apart from facilitating advancements in the payment and settlement systems, the information and communication technology has been harnessed into the functioning of the Reserve Bank in all important areas.

IX.2 The Payment and Settlement Systems Act, 2007 (the PSS Act, 51 of 2007) and the two regulations, *i.e.* (i) Board for Regulation and Supervision of Payment and Settlement Systems Regulations 2008 and (ii) Payment and Settlement Systems Regulations, 2008 have come into effect from August 12, 2008. The PSS Act stipulates that no person other than the

Reserve Bank shall commence or operate a payment system, except under and in accordance with an authorisation issued by the Reserve Bank as per the provisions of the PSS Act. All persons operating a 'payment system' or desirous of setting up a payment system as defined in the PSS Act, need to apply for authorisation to the Reserve Bank, unless specifically exempted in terms of the PSS Act, in the form and manner as stipulated in the Payment and Settlement Systems Regulations, 2008. The Stock Exchanges and the Clearing Corporations of the Stock Exchanges have been exempted from the provisions of the PSS Act.

IX.3 Since the PSS Act became effective, the Reserve Bank has received applications for authorisation from operators/proposed operators of prepaid and other cards, payment gateways, money transfers, mobile payments, and Automated Teller Machine (ATM) network. Authorisation has so far been accorded to 21 entities for operating specified payment systems. The banks providing mobile payment services in accordance with the "Mobile Banking Transactions in India - Operative Guidelines for Banks" issued on October 8, 2008 under Section 18 of the PSS Act, are required to obtain approval from the Reserve Bank. Approval has so far been accorded to 29 banks to provide mobile payment services.

IX.4 In order to strengthen the institutional framework for the payment and settlement systems in the country, the Board for Regulation and Supervision of Payment and Settlement Systems (BPSS) as a Committee of its Central Board was constituted by the Reserve Bank in March 2005 following the notification of the Reserve Bank of India, Regulations, 2005. The BPSS was reconstituted in August 2008 following the notification of the PSS Act and the Board for Regulation and Supervision of Payment and Settlement Systems Regulations, 2008. The important directions of the Board, *inter-alia,* include: (i) grant of authorisation to various payment system providers in terms of the provisions of the PSS Act, (ii) guidelines on mobile payments, (iii) guidelines on issuance and operation of prepaid payment instruments in India, (iv) rationalisation of the charges for electronic payment products and outstation cheque collection, (v) migration of large-value payments to more secure electronic modes and (vi) incentivising the usage of satellite communication for penetration of banking services to remote places.

IX.5 In accordance with the directions of the BPSS, operative guidelines on mobile banking for banks were issued on October 8, 2008 and Guidelines for prepaid payment instruments in India were issued on April 27, 2009. The use of other bank ATMs for cash withdrawal has become free of charge with effect from April 1, 2009. The Reserve Bank has also rationalised the service charges for 'Electronic Payment Products' and outstation cheque collection. Steps have been initiated to increase the threshold limit of cheques in 'High Value Clearing' from Rs.1 lakh to Rs.10 lakhs and to progressively discontinue this service in view of alternate channels being already available to clear high value transactions.

IX.6 The total turnover under various payment and settlement systems rose by

13.9 per cent in terms of value during 2008-09 as compared with 41.8 per cent during 2007-08. The Systemically Important Payment System's (SIPS) share in the total turnover accounted for 53.8 per cent, followed by Financial Markets' Clearing at 33.9 per cent.

Information Technology in the Reserve Bank

IX.7 In its efforts to ensure that IT paves the way for efficiency and excellence, the Reserve Bank has been taking steps to ensure that users of IT get the IT services at their desktop and ensure business continuity at all times without the end users having to worry about the activities 'behind the scene'. Towards this end, the major focus of the IT related endeavours was on migration of various application systems to the data centres, aimed at providing all IT based services from the data centres, for both the users within the Reserve Bank as well as external users. A self evaluation of the IT based operational thresholds of the Reserve Bank reveals a high level of conformity to the objectives in this regard.

IX.8 An important constituent of IT based operations pertains to business continuity, with the objective being that IT based systems should be available even in the event of any breakdown, and more so, if a disaster strikes. All the critical systems at the data centres have been planned and designed in such a manner that there is adequate provision for redundancy and back-up. Furthermore, Disaster Recovery (DR) exercises covering all systems as also the participants are conducted on a regular basis.

IT for the Financial Sector

IX.9 IT intensity of banks and the speed of adaptation of new technology in the financial sector are closely related, to a large extent, on the IT initiatives of the Reserve Bank. With the objective of achieving harmony, the Reserve Bank publishes periodically updated versions of the Financial Sector Technology (FST) Vision, which enable the banks to plan their IT implementation in a manner which would ensure congruity with the approaches followed by the Reserve Bank. The latest version of the FST Vision document was published in 2007-08, which outlined various goal posts for adoption by both the Reserve Bank and the commercial banks.

X HUMAN RESOURCES DEVELOPMENT AND ORGANISATIONAL MATTERS

As a knowledge driven public institution, the Reserve Bank assigns significant importance to the management of human resources. The Reserve Bank constantly strives to enhance the professional skills of the staff through appropriate training as well as providing scope for learning in every important area relevant to central banking for the staff at all levels. The two-way interactions through various collaborative efforts with different external institutions and agencies, both within the country and outside, provide opportunities for acquiring relevant feedback and gaining important insights from the experience and practices of others. The interactions of the Reserve Bank with the public through its various education as well as customer service delivery mechanisms aim at greater information dissemination about the Reserve Bank's role and functions in the economy. Various modes of communication have also been effectively utilised to improve the flow of information, with better clarity. The improvements in internal functioning of the various departments have been ensured through appropriate checks and balances and internal auditing policy. The contribution of the Reserve Bank to economic research activities in India has been significant, which range from research by its own staff members to supporting academic research initiatives outside.

X.1 The range of complex issues and policy challenges that emerged from the global financial crisis clearly highlight the importance of the quality of human resources available in the central banks to ensure financial stability in a market economy. The global crisis brought the role of central banks to the centre stage of crisis management, testing the resolve and competence of the available human resources to face the challenges. The Reserve Bank, as the central bank of one of the fastest growing emerging economies in the world with an expanding and liberalised financial system, recognises the critical significance of ensuring quality human resources to be able to discharge all the responsibilities effectively and efficiently. In its continued concerted efforts to strengthen the human resources, as a public institution, it faces stiff competition from the market in search of right talent. Moreover, in view of the increasing importance of coordination and cooperation among central banks in a globalised world on the one hand, and the need for continuous interactions with the market entities on the other, to enhance the understanding of issues and to maintain the flow of information through relevant feedback, existing human resources need to be exposed on a regular basis to other central banks and markets. Empowering the existing staff with adequate training in leading universities and research organisations is another important task of human resources management in central banks. The Reserve Bank has a multi-pronged approach to strengthen its human resources, using alternative available avenues in relation to the Bank's identified needs.

Human Resources Audit

X.2 The Reserve Bank has several HR systems and policies designed to enhance and harness the potential of its human capital. The Bank has decided to undertake an HR audit in order to further improve the HR processes and evolve the HR function accordingly. This audit, while analysing the existing HR processes, will help identify areas for further improvement. The HR audit will be employed in some critical HR areas like Performance Appraisal, Recruitment Policies and Practices, Transfers and Rotations, Promotions, Training and Development and Compensation Policy.

Visits/Attachments

X.3 With a view to strengthening the scope for acquiring relevant knowledge from other institutions on a sustained basis as also to spread better awareness outside about the critical role played by the Reserve Bank in the economy, an External Services and Technical Co-operation Cell was constituted in the Human Resources Development Department. The Department coordinates training/exposure purpose visits by external visitors/ delegations to the Bank from foreign central banks, overseas universities and other institutions from India and abroad. During the year 2008-09, the department arranged interface/ training sessions for a total of 73 international visitors from foreign central banks and reputed international educational institutions. Interface sessions were also arranged for 148 domestic visitors, mainly from the Foreign Service Institute, National Defense College and participants of the Higher Command Courses from the armed forces.

Staff Strength

X.4 The total staff strength of the Reserve Bank as on December 31, 2008 was 20,952 as compared with 21,494 a year ago. Of the total staff, 21.2 per cent belonged to Scheduled Castes and 8.9 per cent belonged to Scheduled Tribes. Of the total staff, 41.8 per cent was in Class I, 23.4 per cent in Class III and the remaining 34.8 per cent in Class IV. Almost one-fourth of the total staff is involved in work related to currency management.

Platinum Jubilee

X.4 The year 2009 marks a momentous milestone in the history of the Bank as it entered into its 75th year of its establishment. In order to commemorate the Platinum Jubilee of the Reserve Bank of India, the year 2009 has been earmarked for launching a series of initiatives and events for making the Reserve Bank a more useful and effective public entity so as to enable it to serve the country and its public in general better.

XI THE RESERVE BANK'S ACCOUNTS FOR 2008-09

The balance sheet of the Reserve Bank for the year ended June 30, 2009 reflected the impact of liquidity augmenting measures adopted by the Reserve Bank to deal with the contagion from the global economic crisis. Unlike the significant expansion in the balance sheets of the central banks of several advanced economies that resulted from their policy responses to the crisis, the behaviour of the Reserve Bank's balance sheet was distinctly different since specific measures, such as reduction in CRR and unwinding of Government's MSS balances implied corresponding contraction in the Reserve Bank's liabilities, even as both measures were the key channels for injecting large liquidity to the financial system. Thus, through contraction in the balance sheet size, the Reserve Bank could expand the availability of liquidity. On the asset side of the balance sheet also, the contraction was driven by the decline in foreign assets. Even though domestic assets expanded because of OMOs and accommodation of liquidity needs of select Indian financial institutions, on account of large and sustained reverse repo operations, the net effect also contributed to the decline in the size of the balance sheet. During the year, gross income and expenditure of the Reserve Bank were at Rs.60,731.98 crore and Rs.8,217.88 crore, respectively; after meeting the allocation needs for both the Contingency Reserve (CR) and the Asset Development Reserve (ADR), Rs.25,009 crore was allocated for transferring to the Government. Earnings from foreign and domestic sources were at Rs.50,796.21 crore and Rs.9,935.77 crore, respectively.

Surplus Transferable to the Government of India

XI.1 The surplus transferable to the Government of India for the year 2008-09 amounted to Rs.25,009.00 crore, including Rs.1,436.00 crore towards the interest differential on special securities converted into marketable securities for compensating the Government for the difference in interest expenditure which the Government had to bear consequent on conversion of such special securities.

INCOME

XI.2 The gross income of the Reserve Bank for the year 2008-09 was Rs.60,731.98 crore as against Rs.57,750.79 crore in 2007-08 and registered an increase of 5.16 per cent over the previous year. This was mainly on account of increase in income from the domestic sources. Income from the domestic sources increased by 69.34 per cent during the year.

Earnings from Foreign Sources

XI.3 The Reserve Bank's earnings from the deployment of foreign currency assets and gold decreased by Rs.1,087.06 crore (2.10 per cent) from Rs.51,883.27 crore in 2007-08 to Rs.50,796.21 crore in 2008-09. This was mainly on account of fall in interest rates in the international markets. Before accounting for mark-to-market depreciation on securities, the rate of earnings on foreign currency assets and gold was 4.24 per cent in 2008-09 as against 5.09 per cent in 2007-08. The rate of earnings on foreign currency assets and gold, after accounting for depreciation, decreased from 4.82 per cent in 2007-08 to 4.16 per cent in 2008-09.

Earnings from Domestic Sources

XI.4 The income from domestic sources in 2008-09 at Rs.9,935.77 crore was higher as compared with the last year's level at Rs.5,867.52 crore. The higher income is primarily on account of increase in 'Interest on Domestic Securities and LAF operations' which increased from Rs.4,533.87 crore in 2007-08 to Rs.8,683.11 crore in 2008-09 and 'Interest on Loans and Advances' which increased from Rs.325.60 crore in 2007-08 to Rs.1,254.80 crore in 2008-09.

EXPENDITURE

XI.5 Total expenditure of the Reserve Bank increased by Rs.2,120.75 crore (34.78 per cent) from Rs.6,097.13 crore in 2007-08 to Rs.8,217.88 crore in 2008-09.

Establishment Expenditure

XI.6 Establishment expenditure for the year 2008-09 was at Rs.2,448.25 crore as compared with Rs.1,430.87 crore during the year 2007-08 and showed an increase of Rs.1,017.38 crore (71.10 per cent). Establishment expenditure also includes provision towards Gratuity and Superannuation Fund and Leave Encashment Fund (Retiring employees) of Rs.1,037.92 crore (previous year Rs.221.02 crore). The increase in provision is mainly on account of enhancement of long term employee benefits. Salaries accounted for 17.39 per cent of the total establishment expenditure whereas allowances were 15.34 per cent and the other miscellaneous expenses were 23.41 per cent of the total establishment expenditure. The expenditure towards various funds (*i.e.*, Provident Fund, Gratuity and Superannuation Fund, *etc.*) constituted 43.86 per cent of the total establishment expenditure.

Non-Establishment Expenditure

XI.7 The expenditure incurred on security printing charges (cheques, note forms, *etc.*) in 2008-09 increased by Rs.30.94 crore (1.52 per cent) to Rs.2,063.17 crore from Rs.2,032.23 crore in 2007-08. Although the supply of banknotes in 2008-09 declined marginally by 269 million pieces from 13,930 million pieces in 2007-08 to 13,661 million pieces in 2008-09, the marginal increase in expenditure on security printing was on account of moderate increase in prices of banknotes. The amount of agency charges paid during 2008-09 was Rs.2,999.19 crore as against Rs.2,111.14 crore during 2007-08. The increase of

Rs.888.05 crore was attributed to: (a) increase in the amount of underwriting commission paid to the Primary Dealers at Rs.249.45 crore in 2008-09 as against Rs.18.33 crore in 2007-08 in the context of large increase in the borrowing size of the Government of India and (b) increase in the agency commission from Rs.2,092.81 crore in 2007-08 to Rs.2,749.74 crore in 2008-09 largely due to rise in the volume of Government transactions conducted by the agency banks.

BALANCE SHEET

LIABILITIES

National Industrial Credit (Long-Term Operations) Fund

XI.8 The National Industrial Credit (Long-Term Operations) Fund was established by the RBI under Section 46 C of the Reserve Bank of India Act, 1934 on July 1, 1964. During 2008-09, there were no operations in the Fund except the credit of Rs.1.00 crore out of the Reserve Bank's surplus.

National Housing Credit (Long Term Operations) Fund

XI.9 The National Housing Credit (Long Term Operations) Fund was established by the Reserve Bank in terms of Section 46 D (1) of the Reserve Bank of India Act, 1934 in January 1989. A token contribution of Rs.1.00 crore was made to the Fund out of the Reserve Bank's surplus during 2008-09.

Deposits - Banks

XI.10 'Deposits - Banks' represent balances maintained by banks in their current accounts with the Reserve Bank for maintaining Cash Reserve Ratio and as working funds for meeting payment requirements.

Deposits - Others

XI.11 'Deposits - Others' include deposits from financial institutions, employees' provident fund deposits and sundry deposits.

Other Liabilities

XI.12 'Other Liabilities' include the internal reserves and provisions of the Reserve Bank, Currency and Gold Revaluation Account (CGRA) and surplus pending transfer to the Government. The balance in 'Other Liabilities' increased by Rs.72,739.45 crore (22.52 per cent) from Rs.3,22,968.10 crore as on June 30, 2008 to Rs.3,95,707.55 crore as on June 30, 2009, mainly on account of increase in the level of Currency and Gold Revaluation Account (CGRA).

XI.13 The Contingency Reserve and the Asset Development Reserve reflected in 'Other Liabilities' are in addition to the 'Reserve Fund' of Rs.6,500.00 crore held by the Reserve Bank as a distinct balance sheet head.

Currency and Gold Revaluation Account (CGRA) and Exchange Equalisation Account (EEA)

XI.14 Gains / losses on valuation of foreign currency assets and gold due to movements in the exchange rates and / or prices of gold are not taken to the Profit and Loss Account but instead booked under a balance sheet head named as the

Currency and Gold Revaluation Account (CGRA). The balance represents accumulated net gain on valuation of foreign currency assets and gold. During 2008-09, there was an accretion of Rs.35,630.20 crore in CGRA, thus increasing its balance from Rs.1,63,211.83 crore as on June 30, 2008 to Rs.1,98,842.03 crore as on June 30, 2009. The increase in CGRA was on account of net effect of depreciation of other currencies against the US dollar, depreciation of Indian rupee against the US dollar and increase in the price of gold. The balance in the Exchange Equalisation Account (EEA) represents provision made for exchange losses arising out of forward commitments. The balance in EEA as on June 30, 2009 stood at Rs.26.98 crore.

Contingency Reserve and Asset Development Reserve

XI.15 The Reserve Bank maintains a Contingency Reserve (CR) to enable it to absorb unexpected and unforeseen contingencies. With a transfer of Rs.26,191.40 crore to CR during 2008-09 from the Reserve Bank's income, the balance in CR increased to Rs.1,53,392.21 crore as on June 30, 2009 from Rs.1,27,200.81 crore as on June 30, 2008. The balance in CR is sufficient to meet the contingent liabilities.

XI.16 To meet the internal capital expenditure and make investments in its subsidiaries and associate institutions, the Reserve Bank had created a separate Asset Development Reserve (ADR) in 1997-98 with the aim of reaching one per cent of the Reserve Bank's total assets within the overall indicative target of 12 per cent set for CR and ADR. In the year 2008-09, an amount of Rs.1,309.70 crore was transferred from income to ADR, raising its level from Rs.12,772.25 crore as on June 30, 2008 to Rs.14,081.95 crore as on June 30, 2009. CR and ADR together constituted 11.89 per cent of the total assets of the Bank as on June 30, 2009. ADR now accounts for one per cent of the assets of the Bank.

ASSETS

Foreign Currency Assets

XI.17 The foreign currency assets comprise foreign securities held in the Issue Department, balances held abroad and investments in foreign securities held in the Banking Department. These assets declined by Rs.81,010.25 crore from Rs.12,98,552.05 crore as on June 30, 2008 to Rs.12,17,541.80 crore as on June 30, 2009. The decrease in the level of foreign currency assets was mainly on account of net sales of US dollars in the domestic foreign exchange market.

Investment in Government of India Rupee Securities

XI.18 Without adjusting for transfer of securities under the Liquidity Adjustment Facility (LAF) operations, the investment in Government of India securities increased by Rs.1,26,086.86 crore from Rs.72,540.33 crore as on June 30, 2008 to Rs.1,98,627.19 crore as on June 30, 2009. The increase was on account of purchase of special securities from the oil marketing companies (*i.e.* the Oil Bonds) under the Special Market Operations and increase in the open market operations.

Investments in Shares of Subsidiaries and Associate Institutions

XI.19 There was no change in the Reserve Bank's investments in the shares of its subsidiaries and associate institutions during the year.

Other Assets

XI.20 'Other Assets' comprise income accrued but not received, fixed assets, gold holdings in the Banking Department, amounts spent on projects pending completion and staff advances. The level of 'Other Assets' increased by Rs.332.80 crore from Rs.30,805.95 crore as on June 30, 2008 to Rs.31,138.75 crore as on June 30, 2009.

Auditors

XI.21 The accounts of the Reserve Bank for the year 2008-09 were audited by M/s. Kalyaniwalla & Mistry, Mumbai and M/s. Mukund M. Chitale & Co. Mumbai as the Statutory Central Auditors. The branch offices were audited by the Statutory Branch Auditors, namely, M/s. Basant Ram & Sons, New Delhi, M/s. Ved Prakash Agrawal & Co., Nagpur, M/s. G. Natesan & Co., Chennai and M/s. S. K. Basu & Co., Kolkata. The auditors were appointed by the Central Government.

RESERVE BANK OF INDIA
BALANCE SHEET AS AT 30TH JUNE 2009

ISSUE DEPARTMENT

(Rupees thousands)

2007-08	LIABILITIES		2008-09	2007-08	ASSETS		2008-09
	Notes held in the				Gold Coin and Bullion:		
16,22,71	Banking Department	21,25,80		32308,81,20	(a) Held in India	38326,27,06	
612323,93,51	Notes in Circulation	701655,32,71		–	(b) Held outside India	–	
				578878,86,61	Foreign Securities	662064,41,42	
612340,16,22	Total Notes issued		701676,58,51	611187,67,81	Total		700390,68,48
				106,05,41	Rupee Coin		239,47,03
				1046,43,00	Government of India Rupee Securities		1046,43,00
				–	Internal Bills of Exchange and other Commercial Paper		–
612340,16,22	Total Liabilities		701676,58,51	612340,16,22	Total Assets		701676,58,51

BANKING DEPARTMENT

2007-08	LIABILITIES	2008-09	2007-08	ASSETS	2008-09
5,00,00	Capital paid-up	5,00,00	16,22,71	Notes	21,25,80
6500,00,00	Reserve Fund	6500,00,00	3,57	Rupee Coin	4,77
	National Industrial Credit		6,23	Small Coin	3,41
17,00,00	(Long Term Operations) Fund	18,00,00			
	National Housing Credit				
191,00,00	(Long Term Operations) Fund	192,00,00			
	Deposits			Bills Purchased and Discounted :	
	(a) Government		–	(a) Internal	–
191626,05,59	(i) Central Government	22990,42,88	–	(b) External	–
41,31,39	(ii) State Governments	41,34,50	–	(c) Government Treasury Bills	–
	(b) Banks				
298809,97,22	(i) Scheduled Commercial Banks	250664,49,62			
4122,66,68	(ii) Scheduled State Co-operative Banks	3520,91,11	688343,34,97	Balances Held Abroad	512320,77,65
5186,27,25	(iii) Other Scheduled Co-operative Banks	3489,08,20			
63,20,69	(iv) Non-Scheduled State Co-operative Banks	67,07,47	129208,79,55	Investments	151675,42,39
8699,14,56	(v) Other Banks	6671,76,11			
12110,22,52	(c) Others	16475,59,86		Loans and Advances to :	
			–	(i) Central Government	–
			–	(ii) State Governments	–
319,29,20	Bills Payable	195,86,03		Loans and Advances to:	
			2102,14,00	(i) Scheduled Commercial Banks	280,00,00
			–	(ii) Scheduled State Co-operative Banks	–
			–	(iii) Other Scheduled Co-operative Banks	–
			–	(iv) Non-Scheduled State Co-operative Banks	–
			–	(v) NABARD	–
			132,68,98	(vi) Others	11102,82,48
322968,10,34	Other Liabilities	395707,55,24		Loans, Advances and Investments from National Industrial Credit (Long Term Operations) Fund:	
				(a) Loans and Advances to:	
			–	(i) Industrial Development Bank of India	–
			–	(ii) Export Import Bank of India	–
			–	(iii) Industrial Investment Bank of India Ltd.	–
			–	(iv) Others	–
				(b) Investments in bonds/debentures issued by:	
			–	(i) Industrial Development Bank of India	–
			–	(ii) Export Import Bank of India	–
			–	(iii) Industrial Investment Bank of India Ltd.	–
			–	(iv) Others	–
				Loans, Advances and Investments from National Housing Credit (Long Term Operations) Fund:	
			50,00,00	(a) Loans and Advances to National Housing Bank	–
			–	(b) Investments in bonds/ debentures issued by National Housing Bank	–
			30805,95,43	Other Assets	31138,74,52
850659,25,44	Total Liabilities	706539,11,02	850659,25,44	Total Assets	706539,11,02

Significant Accounting Policies and Notes to the Accounts as per the Annex.

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 30TH JUNE 2009

(Rupees thousands)

2007-08	INCOME		2008-09
21112,12,68	Interest, Discount, Exchange, Commission *etc.*[1]		33230,88,41
21112,12,68	Total		33230,88,41
	EXPENDITURE		
2,58,19	Interest		1,32,87
1430,86,61	Establishment		2448,25,15
1,79,12	Directors' and Local Board Members' Fees and Expenses		1,66,90
30,56,42	Remittance of Treasure		32,45,84
2111,13,56	Agency Charges		2999,19,46
2032,23,04	Security Printing (Cheque, Note forms *etc.*)		2063,16,97
16,29,01	Printing and Stationery		20,63,03
38,60,16	Postage and Telecommunication Charges		52,69,10
69,17,25	Rent, Taxes, Insurance, Lighting *etc.*		85,87,49
2,01,16	Auditors' Fees and Expenses		2,26,68
2,13,64	Law Charges		2,32,80
156,16,54	Depreciation and Repairs to Bank's Property		234,56,38
203,57,98	Miscellaneous Expenses		273,45,74
6097,12,68	Total		8217,88,41
15015,00,00	Available Balance		25013,00,00
	Less: Contribution To:		
	National Industrial Credit (Long Term Operations) Fund	1,00,00	
	National Rural Credit (Long Term Operations) Fund [2]	1,00,00	
	National Rural Credit (Stabilisation) Fund [2]	1,00,00	
	National Housing Credit (Long Term Operations) Fund	1,00,00	
4,00,00			4,00,00
15011,00,00	Surplus Payable to the Central Government		25009,00,00

1. After making the usual or necessary provisions in terms of Section 47 of the Reserve Bank of India Act, 1934 amounting to Rs. 27501,09,93 thousands (2007-08: Rs. 36638,65,84 thousands).
2. These funds are maintained by the National Bank for Agriculture and Rural Development (NABARD).

S.V. Raghavan	K.C. Chakrabarty	Usha Thorat	Shyamala Gopinath	D. Subbarao
Chief General Manager	Deputy Governor	Deputy Governor	Deputy Governor	Governor

REPORT OF THE AUDITORS

TO THE PRESIDENT OF INDIA

We, the undersigned auditors of the Reserve Bank of India (hereinafter referred to as the Bank), do hereby report to the Central Government upon the Balance Sheet of the Bank as at June 30, 2009 and the Profit and Loss Account for the year ended on that date.

We have examined the Balance Sheet of the Bank as at June 30, 2009 and the Profit and Loss Account of the Bank for the year ended on that date and report that where we have called for information and explanations from the Bank, such information and explanations have been given to our satisfaction.

These financial statements include the accounts of nineteen Accounting Units of the Bank which have been audited by the Statutory Branch Auditors. The branch audit reports have been furnished to us which we have considered in preparing our report.

These financial statements are the responsibility of the Bank's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion and according to the best of our information and explanations given to us and as shown by the books of account of the Bank, the Balance Sheet read with Significant Accounting Policies and Notes to the Accounts is a full and fair Balance Sheet containing all necessary particulars and is properly drawn up in accordance with the Reserve Bank of India Act, 1934 and Regulations framed thereunder so as to exhibit a true and correct view of the state of the Bank's affairs in conformity with the accounting principles generally accepted in India.

For Kalyaniwalla & Mistry	For Mukund M.Chitale & Co
Chartered Accountants	Chartered Accountants
Daraius Z. Fraser	Abhay V. Kamat
Partner	Partner
(M. No. 42454)	(M.No. 39585)

Dated August 13, 2009