THE ANNUAL REPORT ON THE WORKING OF THE RESERVE BANK OF INDIA

For the Year July 1, 2009 to June 30, 2010*

PART ONE: THE ECONOMY - REVIEW AND PROSPECTS

I

ASSESSMENT AND PROSPECTS

Policy attention shifted from crisis management to recovery in the second half of 2009-10. While growth consolidated, inflationary pressures emanated from the supply side due to weak South-West monsoon in 2009-10. The Reserve Bank had to initiate a process of calibrated exit from the accommodative monetary policy stance starting in October 2009 to contain inflation and anchor inflationary expectations. A clear indication of growth consolidation came during Q4 of 2009-10, when inflation became increasingly generalised. As a result, the Reserve Bank had to accelerate the pace of calibrated monetary adjustment going into 2010-11. While the growth outlook for 2010-11 remains robust, inflation has emerged as a major concern. Going forward, as the monetary position is normalised, addressing structural constraints in several critical sectors is necessary to sustain growth and also contain supply side risks to inflation. The fiscal exit, that has already started, will need to continue. Improving the overall macro-financial environment through fiscal consolidation, a low and stable inflation regime, strengthening of the financial stability framework and progress on structural reforms will help sustain growth and boost productivity. In the domain of central banking, the Reserve Bank will continue to address the medium-term objective of improving the contribution of finance to rapid and inclusive growth.

I.1 Following the global financial crisis, the domestic macroeconomic environment changed significantly over four distinct half-yearly phases starting from the second half of 2008-09. Each phase posed various challenges for the Reserve Bank. First, GDP growth decelerated in the second half of 2008-09, reflecting the impact of the global crisis. The Reserve Bank swiftly introduced a comprehensive range of conventional and unconventional measures to limit the impact of the adverse global developments on the domestic financial system and the economy. Second, in the first half of 2009-10, weakness in the economic

activity necessitated continuation of the monetary policy stimulus. The low inflation environment also created the space for continuation of an accommodative monetary policy stance. But, by the middle of the year, a deficient South-West monsoon triggered renewed concerns for recovery as well as food inflation. Third, despite the dampening pulls of the deficient monsoon and an adverse global economic environment, growth in GDP exhibited a robust recovery ahead of the global economy in the second half of 2009-10. Food inflation, that had started rising in response to the weak *kharif* production, turned out to be more persistent in the

^{* :} 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, data are analysed on the basis of financial year. Where available, the data have been updated beyond March 2010. 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.

second half of the year. Rising and increasingly generalised inflation warranted withdrawal of the policy stimulus. Since the policy challenge for the Reserve Bank was to anchor inflationary expectations without harming the recovery, a calibrated approach to monetary unwinding was adopted. Fourth, in the first few months of 2010-11, it became increasingly evident that growth momentum would further consolidate amidst persistent signs of weakness in the global economy. taking the annual growth closer to the pre-global crisis trajectory. But the headline inflation remained at or close to double digits over four successive months of the year and the inflation process had also become more generalised. The balance of policy attention, thus, had to shift from recovery to inflation.

ASSESSMENT OF 2009-10

- I.2 In 2009-10, the focus of macroeconomic policy shifted from containing the contagion of the global crisis to management of recovery. The impact of the global crisis on the Indian economy was particularly visible in the extent of deceleration in GDP growth over two successive quarters in the second half of 2008-09, and the weakness in both private consumption and investment demand. While exports declined, growth in industrial production decelerated sharply, capital inflows reversed, corporate sales growth dipped, exchange rate of the Rupee depreciated and asset prices, particularly stock prices, fell.
- I.3 Towards managing the crisis, the Reserve Bank had lowered the repo rate by 425 basis points, the reverse repo rate by 275 basis points and the CRR by 400 basis points over a period of about seven months between October 2008 and April 2009. The overall provision of potential liquidity through conventional as well as several non-conventional liquidity windows was close to ₹5,60,000 crore, or equivalent of about 9.0 per cent of GDP. The magnitude and the speed of monetary policy response were unprecedented, reflecting the scale and potential impact of the

- global crisis. The fiscal response, that involved deviation from the fiscal consolidation path defined by the FRBM, had also led to expansion in gross fiscal deficit of the central government from 2.5 per cent of GDP in 2007-08 to 6 per cent in 2008-09.
- 1.4 By the beginning of 2009-10, it was apparent that the risk of contagion to the financial system was minimal, even though sustained weakness in the real economy put some stress on the financial system. To enable a faster recovery, the growth supportive fiscal and the monetary policy stances continued into the first half of the year. As headline inflation turned negative during June-August 2009, the risks from policy stimulus were low in the near term. Financial market activities recovered ahead of GDP, and with the return of capital inflows, the Rupee also appreciated, reversing part of the depreciation that took place in the second half of 2008-09. Subdued private consumption demand and depressed private investment demand were reflected in the deceleration in credit and money growth. The large borrowing programme of the government, which was frontloaded in the first half, was managed in a non-disruptive manner, reflecting pro-active liquidity management by the Reserve Bank.
- 1.5 In the second half of the year, firmer signs of robust recovery gradually emerged. Investment demand accelerated, corporate sales growth picked up, credit demand recovered, exports and imports turned around, industrial production witnessed sharp recovery and capacity utilisation levels improved. Although a deficient monsoon dampened agricultural output, given the lower share of agriculture, adverse impact on overall GDP growth was small. However, against the backdrop of structural imbalances in many agricultural products, deficient monsoon had a stronger impact on inflation. Inflation in primary commodities moved up from single digit in October 2009 to 18.3 per cent by March 2010. There was also increasing generalisation of the inflation process, with high inflation in both manufactured products and fuel group. There was evidence of inflation persistence,

and relative price variability also declined, indicating increasing generalisation.

I.6 Notwithstanding the limitations of monetary policy in dealing with inflation driven by supply shocks, the Reserve Bank initiated calibrated normalisation of monetary policy aimed at anchoring inflationary expectations without hurting the recovery. Plans for fiscal exit were also announced in the Union Budget for 2010-11 in February 2010. Thus, while fiscal and monetary policy responses to the global crisis contributed to a faster recovery in growth in 2009-10, the need for appropriately timed policy exit was recognised early, in view of the emerging inflationary pressures as also the challenge to medium-term growth from high inflation and a weak fiscal position.

PROSPECTS FOR 2010-11

- The outlook for GDP growth in 2010-11 has 1.7 improved significantly, given the broad-based, robust recovery seen in the last quarter of 2009-10. The prospects of continuation of the momentum are good, driven by buoyant performance of the industrial sector, a better performance of the monsoon relative to last year, and sustained resilience of services. From the demand side, investment demand had already witnessed a sharp acceleration by the fourth quarter of 2009-10 and trends in the growth of production of capital goods in the first quarter of this year suggest continuation of the momentum. Private consumption demand, going by the recent pattern in corporate sales, the production of consumer durables and auto sales suggest a gradual pick-up, which could accelerate to make the growth process more self-sustaining. Although concerns about a possible weakening of global recovery persist, domestic risks to growth have receded significantly. As a result, the Reserve Bank revised upwards its GDP growth projection for 2010-11 to 8.5 per cent in July 2010, from 8 per cent with an upward bias in April 2010.
- I.8 Supply bottlenecks, whether in the form of inability of production to respond to growing demand or in the form of inadequacy of the supply

- chain, have exerted significant inflationary pressures in recent years, impeding the progress on inclusive growth through asymmetric impact on different sections of the society. In the first quarter of 2010-11, headline inflation remained in double digits. Continuation of the monetary policy normalisation process that started in October 2009 led to cumulative increase in the repo rate by 100 basis points, the reverse repo rate by 125 basis points and CRR by 100 basis points, effected over the period February 2010 to July 2010. The effective policy rate has, of course, been raised by 250 basis points in view of the repo rate emerging as the operating rate. Taking into account the double digit inflation in the first quarter of 2010-11, as well as the expected beneficial effect of a relatively better monsoon on food inflation, the base line projections available about global commodity prices, and the lagged impact of monetary policy measures, the Reserve Bank revised its inflation projection to 6.0 per cent for March 2011 in July 2010 from the earlier projection of 5.5 per cent made in April 2010.
- 1.9 The global economy, which recovered faster than expected in the first quarter of 2010, slipped again into a state of uncertainty caused by concerns relating to fiscal sustainability in the Euro zone and other advanced economies. Advanced economies will need to resolve the tension between continuing the fiscal stimulus to sustain the recovery and returning to fiscal consolidation to preserve medium-term growth prospects. The volatility in global markets so far has affected Indian stock markets, and the global near term outlook for trade and capital flows is uncertain. While the strength of domestic growth implies that import growth will exceed export growth, persistence of risk aversion among global investors due to uncertain global environment could make capital inflows more volatile. The multi-speed growth pattern across advanced and emerging economies and their divergent inflation paths would widen further the asymmetry in monetary exit, all of which could potentially add volatility to global commodity and asset prices as well as exchange rates. The uncertain global environment warrants adoption of caution in the formulation of policies during 2010-11.

I.10 In the evolving domestic and external environment, the Reserve Bank would have to deal with several near to medium-term challenges, many of which are complex and involve trade-offs. Some of the major challenges are outlined here.

NEAR TO MEDIUM-TERM CHALLENGES FOR THE RESERVE BANK

Monetary Policy Response to Supply Shocks

- 1.11 Negative supply shocks in last two years have imparted significant volatility to the inflation path in India, besides causing headline inflation to remain high. This has posed a challenge to the low and stable inflation objective of the Reserve Bank, given the usual limitations of monetary policy to deal with supply side pressures on inflation. Unlike demand shocks, supply shocks have asymmetric implications for inflation and growth. In the case of a negative demand shock, such as wealth loss arising from a crash in asset prices, the impact on output and prices generally moves in the same direction. As a result, the policy response becomes unambiguous. In the case of a negative supply shock, such as an increase in international oil prices or failure of monsoon, however, while headline inflation goes up, output may come down. Thus, in the case of a negative supply shock, a central bank encounters the dilemma of stabilising output versus containing inflation.
- 1.12 The Reserve Bank had to face this dilemma when the economy was recovering from a slowdown in growth in the second half of 2009-10. Despite the high headline inflation and increasing persistence and generalisation of the inflation path, the output stabilisation objective had to be pursued along with the anti inflationary measures aimed at anchoring inflation expectations. Given the asymmetric impact of negative supply shocks on output and inflation, the Reserve Bank's monetary policy actions needed to be crafted carefully, based on an assessment of what monetary policy could do effectively for such sources of inflation and the risk to recovery it may pose by premature monetary tightening. This was reflected in the Reserve Bank's

- calibrated approach to monetary policy normalisation, where the direction of policy was clear, even though the timing and magnitude of each action was conditioned by the evolving growth-inflation outlook, along with assessment of risks, both domestic and external.
- 1.13 Repeated supply shocks pose a constant challenge to ensuring a low inflation regime in India, which is necessary for achieving inclusive high growth. A medium-term approach is required to augment the supply by addressing structural supply constraints, particularly in items of mass consumption. Agricultural productivity requires particular attention, since demand-supply gaps in basic items such as pulses, oilseeds, vegetables and dairy products are growing, and with rising income and growth of the middle class, demand for such items will exhibit sustained increase. There are certain other items where the supply situation is also highly volatile, as has been the case with sugar in recent periods. One of the objectives of maintaining buffer stocks is to stabilise prices when output of basic consumption items decline. During 2009-10, however, the stocks of wheat and rice actually increased even when retail prices were high and domestic foodgrain production declined. While the critical significance of food security suggests the need for continuation of the policy of maintaining adequate buffer stocks, their timely use through more efficient distribution during periods of adverse shocks to farm output should receive grater policy attention. It has to be recognised that to meet the demand of a 1.2 billion population, India cannot depend on imports on a sustained basis, since imports at high cost, besides not helping in containing inflation will also potentially dilute efforts that may have to be put in place to address the domestic supply constraints.
- I.14 Crude oil has been another major source of supply shock, and import dependence in oil to the extent of more than 80 per cent adds complexity to management of inflation. Unlike food, the spillover to the core inflation in the case of oil is much faster, through the input cost

channel. While the past policy of allowing only partial pass-through to domestic inflation through an administered pricing mechanism helped in stabilising the influence of volatile international oil prices on domestic inflation, it also exerted significant fiscal pressures. Weak fiscal conditions represent a potential risk to both medium-term inflation and growth outlook. The June 2010 decision of the government to deregulate petrol prices completely while also revising the prices of other administered petroleum products to better reflect the international price trends is an important, long overdue reform, even though it came at a time when the headline inflation was already high. Complete deregulation of all petroleum products in due course will have to be the next logical step of this important reform. This will, first of all, help in avoiding suppressed inflation, which in turn will facilitate better adjustment of demand through greater energy conservation. Secondly, public sector oil companies often delay necessary investment plans under the burden of large under-recoveries associated with the administered pricing system. Greater investment on exploration activities and addition of refining capacity could also be possible with complete price deregulation. More importantly, full pass-through of international prices to domestic prices will encourage greater investment in alternative sources of energy. Since fuel for cooking purposes is a basic need, that may have to be subsidised at the margin, given particularly the risk to environment through deforestation as a possible response to high cost of cooking. But such subsidies must be better targeted and also appear explicitly in the budget, and be financed within the broad contours of the envisaged fiscal consolidation.

I.15 With services accounting for the largest share of the country's GDP, and increasing proportion of disposable income of the people being spent on services, prices of commonly used services have become important from the stand point of assessment of consumer welfare. While prices of certain services like telecommunications

have declined considerably, prices of other services like private education and health care have gone up significantly, though part of that may reflect premium for improving quality of services. For a realistic assessment of inflation conditions, thus, there is a need for a more representative national level measure of consumer inflation that covers the consumers across all sections of the society and also includes mass consumption services.

Improving Monetary Policy Transmission

1.16 The ability of monetary policy actions to achieve the ultimate goals relating to inflation, growth and even financial stability depends largely on the efficiency of the transmission process. Monetary policy decisions normally transmit through the financial system to the economy. Long and variable lags noticed in a country-specific context suggest that monetary policy should be forward-looking. In the wake of the global crisis, most of the advanced economies experienced sudden weakness in the transmission channel as their financial markets ceased to function normally. In India, since the financial system did not face a crisis, the damage to the transmission channel was minimal, even though the pre-global crisis time structural rigidities continued to limit the effectiveness of Reserve Bank's monetary policy actions. The major factors weakening transmission in India have been the administered interest rate structure on small savings, which are effective substitutes of bank deposits, structural asymmetry faced by banks in terms of the extent of rigidity seen in interest rates on outstanding term deposits in relation to cycles of policy rates, the fiscal stance often conditioning the market interest rates through the size of the borrowing programme, and the practice of large percentage of loans extended by the banks at below benchmark prime lending rate (BPLR), which added opacity to the assessment of transmission, besides also creating the scope for cross-subsidisation in terms of under-pricing of credit for corporates and overpricing of loans to agriculture and small and medium enterprises.

- 1.17 With a view to imparting transparency to the loan pricing process, and improving the assessment of monetary policy transmission and promoting competition in the credit market, the Reserve Bank introduced a new system of "base rate" effective from July 1, 2010, which replaced the earlier BPLR system. Transparency is critical for effective functioning of markets and promotion of competition. Moreover, there was a need for putting in place a relevant benchmark for pricing of loans, where the benchmark is linked to cost of funds as well as cost of operations. The base rate, thus, is expected to help in improving and enhancing the visibility of the transmission of monetary policy signals to credit markets. The recent decision of the government to appoint a committee to examine the issue of deregulating interest rates on small savings or to benchmark to market rates is important, given the known constraint to transmission from current arrangements of fixing interest rates on small savings unrelated to trends in market interest rates.
- 1.18 The other issue of policy relevance in the context of transmission is the possible existence of asymmetry in the pace of transmission in relation to different phases of the policy rate cycles. While the transmission during a phase of falling policy rates could be slow, the transmission may be somewhat faster when the policy rate cycle reverses. The impact of the Bank's calibrated monetary tightening was reinforced by sudden withdrawal of liquidity from the system in June 2010 due to 3G/BWA auction related increase in government's surplus balances with the Reserve Bank. The resultant shift in the LAF from reverse repo to repo involved a significant effective increase in the call rates, where the impact was 150 basis points higher than the extent of the increase in repo rates, given the 150 basis point width of the policy interest rate corridor. In July 2010, the width was brought down to 125 basis points; the narrowing of the band with a larger increase in the reverse repo rate will contribute to the intended anti-inflationary stance even if the LAF returns to the reverse repo mode temporarily. More importantly, given the large

effective transmission of the policy rate changes through the call rate, both deposit and lending rates can be expected to edge up gradually to enhance the impact of monetary tightening measures already effected to contain inflation, with a lag. In pursuing anti-inflationary tightening of policy rates, faster transmission would enhance the effectiveness of monetary policy.

Policy rate changes do not operate only 1.19 through changes in the term structure of the interest rate, but also through changes in the exchange rate, asset prices, and capital flows, all of which are sensitive to policy rate changes. The complexity of the process in transmission also has to be seen in the context of multiple assets of varied maturity held in the economy, all of which are not part of the conventionally measured stock of money. Besides deposit and lending through the banking system which are captured in the usual measures of monetary aggregates, alternative financing of transactions or economic activities, both from non-banking and external sources have increased significantly in step with the financial sector reforms. Thus, while complexity in the transmission process has increased over the years, the Reserve Bank has consistently taken measures to improve the transmission process, primarily through the development of financial markets as well as deregulation of interest rates, while also promoting competition in the financial system.

Fiscal Space for Increasing the Flexibility of Monetary Policy

I.20 In response to the global crisis, there was significant coordination between the government and the Reserve Bank in planning policy actions, conditioned by the compelling circumstances. Low inflation and weak demand for credit from the private sector allowed the Reserve Bank to maintain ample liquidity conditions and complete large borrowings of the government in a non-disruptive manner during 2009-10. With inflation firming up in the second half of 2009-10 and demand for credit from the private sector also exhibiting acceleration

in growth, fiscal exit became essential to gain the space required for monetary policy to respond effectively to the situation. Persistence of fiscal imbalances over extended periods tends to increase risks for inflation through money-financed pressures on aggregate demand, interest rates through crowding-out pressures, and exchange rate through the twin deficit channel. The Reserve Bank, thus, stressed the importance of fiscal consolidation once signs of a stronger recovery in growth started to emerge during 2009-10. The extent to which fiscal imbalances could pose risks to growth and financial stability became evident in several Euro zone countries, starting from the beginning of 2010-11 when market assessment of sovereign risks changed significantly in anticipation of possible default by Greece and a few other countries. The medium to long-term costs of fiscal stimulus used by countries in response to the global crisis have now started to surface, leading to the realisation that a financial crisis managed through fiscal interventions could potentially lead to a fiscal crisis.

1.21 The Union Budget for 2010-11, recognising the importance of fiscal consolidation to improve the overall macro-economic environment, announced plans for exit, both during the year and over the medium-term. The high growth phase of India during 2003-08 benefited from as well as facilitated the progress on fiscal consolidation. The emphasis in the current phase of consolidation, however, should be on the quality of adjustment, while also building adequate fiscal space to deal with future adverse shocks to growth and inflation. The strategy of consolidation in the medium-term cannot place undue importance on one-off gains in revenue, as they will not be available in the future. The receipts from 3G/BWA spectrum auctions turned out to be ₹1,06,262 crore, more than three times of the budgeted expectations of ₹35,000 crore. These additional resources, however, would be used to fund additional expenditure as reflected in the first batch of Supplementary Demands for Grants for 2010-11. Thus, such one-off gains are not available to contain fiscal deficit. It would be desirable to adopt a holistic approach involving

measures to augment revenue collection on a sustainable basis and rationalisation of recurring expenditure, with a focus on curtailing non-plan revenue expenditure. In this regard, subsidy reforms, such as the pricing of petroleum products linked to international prices are important to eliminate the scope for accumulated underrecoveries, which have been a major potential source of stress on the fiscal situation. The proposed implementation of the Direct Tax Code (DTC) and Goods and Services Tax (GST) by April 2011 will also ensure much needed reforms reflecting the changing structure of the economy and increasing integration of the economy with the rest of the world.

I.22 Fiscal consolidation needs to be carried forward, with particular emphasis on the quality of fiscal adjustment. The fiscal space in India is critical not only for the usual output stabilisation requirements around a high growth path, but also for limiting the impact of temporary but large supply shocks on headline inflation. After the sovereign debt-related concerns and the associated economic impact in the Euro zone, it is also possible that international investors will assign much greater importance to fiscal conditions of a country while planning their country exposures. This, in turn, has implications for capital flows.

Capital Flows – Managing Surges and Sudden Stops

1.23 Volatile capital movements have influenced the domestic stock price movements, exchange rate and domestic liquidity conditions significantly in the past. In 2009-10, the current account deficit widened to 2.9 per cent of GDP. Volatile capital flows have been a potential source of instability for EMEs. Costs could magnify for an economy during periods of both too little and too much of capital flows, unless they are managed judiciously. India, in recent years, had to manage phases characterised by large net inflows as well as sudden outflows in the midst of a global crisis. A judicious mix of flexible exchange rate, sterilisation of the

impact of inflows on domestic liquidity, cautious approach to liberalisation of the capital account, and the cushion of foreign exchange reserves has been used to deal with the adverse ramifications of capital flows.

1.24 While capital inflows last year and this year so far have remained moderate, there is a possibility of return of another phase of surge in capital flows to India, in response to global search for yield in an environment of easy liquidity conditions in advanced economies and the prospect of relatively higher return on investment in India in view of its superior growth outlook. While stronger growth could help in absorbing higher magnitude of foreign capital within the limits of sustainable current account deficit, excess inflows would entail the risk of exerting appreciation pressure on the exchange rate of the rupee, which in turn could weaken the competitive advantage of Indian exports. Sterilised interventions could limit the pressure on appreciation, but may lead to a higher interest rate environment. Unsterilised intervention, that could relieve the pressure on both exchange rate and interest rate, however, would involve excess liquidity creation. In an environment of high inflation, this option could only exacerbate the situation further.

High inflation would also adversely impact export competitiveness, through appreciation of the real effective exchange rate (REER), which would further widen the CAD. Excess capital flows, thus, would continue to pose challenges for the country's exchange rate, interest rate and inflation environment, and through these channels, may at times also weaken the beneficial impact of capital flows on economic growth. Unlike the pre-global crisis period, international perception seems to have changed significantly in terms of support for use of soft capital controls to deal with excessive capital flows. In the case of EMEs, surges in capital flows have contributed to asset price build up, along with exchange rate appreciation. Given the complications asset price build-up could pose for monetary policy and the potential risks to financial stability, management of capital flows in India would need to constantly strike a balance between the objectives of growth and financial stability.

Financing of Infrastructure

The infrastructure gap of India, both in 1.26 relation to other major countries and its own growing demand, has been a key factor affecting the overall productivity of investments. In a global context, India's productivity gap continues to be significant relative to several Asian countries. According to a recent report of the ILO (2010), India's labour productivity lags behind China and ASEAN, though the gap is narrowing. Preliminary findings of the India-KLEMS project on total factor productivity estimates also suggest moderation in productivity over the period 1997-2005 compared to the period 1992-97, due to significant decline in productivity in agriculture and industry (Box II.3). To raise productivity levels, higher investment in technology and infrastructure would be critical. Entrepreneurship needs to be incentivised for promotion of innovation and raising expenditure on research and development. The infrastructure gap in the power sector has been particularly high, and given the growing demand, larger capacity addition on a sustained basis would be required. Recent peak deficit levels in the case of power has been about 14 per cent, and the transmission and distribution losses also exceed 25 per cent. The requirement of high initial capital outlay, that too over longer terms, necessitates measures to address the financing constraint to capacity expansion in infrastructure.

II.27 The infrastructure investment need during the Twelfth Plan (2012-17) period is estimated to be about US\$ 1 trillion. The scale of the requirements needs to be seen in relation to India's GDP of US\$ 1.3 trillion in 2009-10 and total outstanding credit for the banking system as a whole of US\$ 0.7 trillion. Despite increasing participation of the private sector in bridging the infrastructure gap, public investment still has to play a dominant role. Fiscal consolidation and reorientation of expenditure towards capital expenditure would be important to meet the target.

The banking system, despite the risk of asset-liability mismatch while lending long-term for infrastructure projects, has seen high growth in credit to this sector in recent years. Bank credit to the infrastructure sector witnessed an annual compound growth of 48.6 per cent during the last ten years, and the share of bank finance to infrastructure in gross bank credit increased from about 2 per cent to more than 12 per cent during the corresponding period. Thus, while banks continue to be a prime source of financing for infrastructure projects, alternative non-banking financing has to be attracted with appropriate policies to be able to address the financing constraint to growth in infrastructure.

This suggests that private non-banking 1.28 financing has to increase significantly, from both domestic and external sources. Equity and debt financing needs would require accommodative FDI policies, development of a domestic corporate debt market and creation of debt funds. The India Infrastructure Debt Fund (IIDF) (proposed by the India-US Business CEOs Forum, the feasibility of which is being examined by the Planning Commission) aims at addressing a key challenge in the current financing pattern of infrastructure in India. The IIDF could be attractive for investors since they will acquire the infrastructure assets when the earnings from the investment would have started flowing in the form of user charges or tolls. The initial funding during the gestation lag, when the risk on investment is higher, may still have to come from banks or the government. While banks will get return in relation to higher risk, they would also be able to limit the asset liability mismatch. How the takeout financing market develops in India would be important, since banks may find little sense in transferring assets after the risky phase of investment gets over.

Financial Inclusion – Strengthening the Contribution of Finance to Sustainable Growth

I.29 The benefits of financial sector reforms have been visible in the step up in India's growth trajectory. Along with higher growth, better

distribution of the benefits of growth across different sections of the society and regions so as to contain inequality, reduce the incidence of poverty and improve the employment situation also needs to be pursued. While the incidence of poverty declined from 36 per cent in 1993-94 to 27.5 per cent in 2004-05 (as per the latest available NSS data), the absolute level of poverty remains daunting. Employment growth in the organised sector during 1994-2007 had also declined (Economic Survey, 2009-10). Because of the high food price inflation in recent years, the impact on the poorer sections of society in terms of erosion in purchasing power of income would have been stronger, since they lack an effective hedge against inflation. One of the avenues through which the welfare of the poor and unemployed could be improved is better access to credit and financial services. The potential of the financial system has not been harnessed fully due to the extent of financial exclusion prevailing today. Standard indicators of financial inclusion, ranging from percentage of population having bank accounts, insurance protection and debit/credit cards to distribution of availability of banking business across states, across different sections of the society and between urban and rural centres, suggest the possible existence of enormous untapped growth potential, which has not been exploited, partly due to lack of access to finance at reasonable cost. The current level of banking penetration, measured in terms of outstanding bank credit to GDP, is significantly below the levels reached in advanced economies and several EMEs.

I.30 The Reserve Bank has significantly scaled up its efforts aimed at increasing the level of penetration of bank financing in the economy, using appropriate regulation as well as moral suasion. The regulation on branch licensing has been relaxed to promote financial inclusion. The recent deregulation of bank lending rates for small loans below ₹2 lakh should promote financial inclusion by increasing the credit flow to small borrowers at reasonable rate and direct bank finance would

provide effective competition to other forms of high cost credit. Domestic commercial banks are also required to prepare their own Financial Inclusion Plans (FIPs) and implement over coming years, adhering to their laid out performance assessment norms. The Unique Identification Number (UID) project of the government will also help banks in meeting the Know Your Customer (KYC) norms while furthering financial inclusion. The government has already set up two funds - the Financial Inclusion Fund for meeting the costs of developmental and promotional interventions towards financial inclusion, and the Financial Inclusion Technology Fund for meeting the costs of technology adoption. Many government schemes involving large amounts of money often do not reach the targeted group of people in the absence of adequate penetration of banks. Financial inclusion could enhance the benefits of government programmes through direct transfer of the amounts to the bank accounts of the beneficiaries.

- I.31 While the contribution of agriculture and allied activities to overall GDP has declined over time to about 15 per cent, a large segment of the labour force and population still depends on agriculture and unorganised production activities and also live in rural areas. The proposal to set up a National Rural Financial Inclusion Plan with a target of providing access to financial services to at least 50 per cent of the excluded rural households by 2012, and the remaining by 2015, needs to be adopted.
- I.32 Given that the recent trend in urbanisation will accelerate, financial inclusion initiatives may also need to focus on the urban population since the needs, expectations, and constraints of the financially excluded people in the urban centers could be completely different. Financial inclusion is a win-win proposition for the people, banks and the nation. The merits of financial sector reform need to be seen through the prism of what finance could do to harness the growth potential with stability, and financial inclusion represents a critical component of the policy process that intends to make the financial system serve the needs of the real economy.

Financial Sector Reforms – What Next?

- I.33 The Indian approach to financial sector reforms, so far, has been driven by the predominant objective of enhancing the role of finance in promoting growth and economic development, while preserving financial stability, which is equally critical for sustained economic progress. While balancing the goals of efficiency and stability in introducing reforms, the Reserve Bank has moved towards deregulation of interest rates, encouraged competition, both from outside and within the country, promoted development of markets, and strengthened the legal infrastructure to facilitate better enforcement of financial contracts.
- 1.34 It has progressively liberalised the branch authorisation policy, providing in-built incentives for branch expansion in the unbanked areas. With regard to bank consolidation, the Reserve Bank has generally favoured a market-driven process. While there are merits in mergers/amalgamations from the regulatory point of view, such as creation of stronger banks with larger capital base, improved financial parameters, higher exposure thresholds, international acceptance and capacity to reap economies of scale and scope, larger benefits from mergers would accrue only where there may be synergy in operations and technology. If compatibility issues are not addressed properly, mergers could pose problems such as customer attrition, implementation costs and staff issues. On the issue of consolidation, the general preference on size of a bank should be neither too small to lack scale efficiency nor too large to cause too-big-to-fail and market dominance concerns.
- I.35 As regards the entry of foreign banks, the roadmap, which was up for review in 2009, was put on hold in light of the crisis. As announced in the Annual Monetary Policy for 2010-11, the Reserve Bank is in the process of preparing a discussion paper on the mode of presence of foreign bank in India or through wholly owned subsidiaries (WOS). Lessons from the global crisis have supported the subsidiary route or domestic

incorporation of foreign banks as it would provide better regulatory control over foreign banks and would also facilitate a simpler resolution in the event of bankruptcy, in relation to a branch structure.

- I.36 Market development continued in India, even when the impact of the global crisis was still not over, as evident from the Bank's initiatives to introduce currency futures in more currency pairs, interest rate futures, and credit default swaps (CDS). Going forward, three areas will continue to be important in policy debates, *i.e.*, development of long-term corporates bond markets, derivative markets to facilitate better price discovery and risk transfers, and more competition by allowing greater foreign participation.
- 1.37 Financial sector reforms will comprise banking, pension and insurance sectors. After the global crisis, the issue of inter-connectedness and systemic risks concerns will require greater policy focus while furthering the next course of reforms. The Financial Stability and Development Council (FSDC), that was announced to be set up in the Union Budget for 2010-11, aims at strengthening the institutional mechanism for financial stability, with an emphasis on macro-prudential supervision, large conglomerates and regulatory coordination. While coordination councils comprising both government functionaries and regulators would serve the intended objectives, particularly through exchange of information and views, there has to be a clear recognition that committees cannot assume executive responsibility for financial stability, especially in a crisis situation where speed and surprise could be the key elements of response. Moreover, explicit demarcation of responsibilities can help in strengthening crisis prevention, through speedy and effective response in the demarcated areas. Clarity in responsibilities is critical for effective accountability.
- I.38 Since the global crisis, there has been a decisive shift in trend towards assigning increased responsibility to the central banks for both "systemic oversight" and "macro-prudential regulation". This greater responsibility is driven by the capability of

the central banks among regulators and public institutions to perform the intended task. In order for the Reserve Bank to effectively discharge such responsibilities, the issue of institutional independence and autonomy becomes important. The recent enactment of the Securities and Insurance Laws (Amendment and Validation) Bill 2010 amending inter alia the RBI Act, 1934 had raised concerns in this regard. During the Parliamentary debate on the Bill, the government gave an assurance that the scope of the proposed Bill will be restricted to jurisdictional disputes on regulation. In operationalising the arrangement envisaged under the Bill, it is important to ensure that the autonomy of the regulators is not compromised, either in fact or in perception.

- I.39 Central banks have robust frameworks for macroeconomic analysis, and in India, the Reserve Bank has the responsibility for micro-prudential supervision of banks and non-banking financial companies. As a result, while macroeconomic analysis has helped in strengthening the micro-prudential supervision, supervisory information aggregated for the financial system as a whole has also helped in conducting more appropriate macroeconomic policies.
- The Reserve Bank has been deeply involved in the development of markets, and it monitors and analyses the impact of market trends on the economy and financial institutions. One responsibility which is already being undertaken by the Financial Stability Unit in the Bank relates to analysis of interactions between markets, financial institutions and the economy. Based on such macro-prudential analysis, it is expected to guide the course of macro-prudential supervision and regulation in India. Another important reason why central banks have to be the systemic risk regulator is because of their mandate on Lender of Last Resort (LOLR). It became evident during the global crisis how liquidity support through unconventional measures had to be extended by central banks to market entities not regulated by the central banks, in order to avert a liquidity crisis magnifying into a financial crisis. In India, the

unique combination of responsibilities for macroprudential regulation and micro-prudential supervision together with an implicit mandate for systemic oversight has allowed the Reserve Bank to exploit the synergies across various dimensions. Going forward, given the complex nature of the challenge, strengthening significantly the capacity for systemic risk assessment and macro-prudential regulation would be critical for the Reserve Bank.

Systemic Stability Risks – The New Regulatory Architecture for the Financial System

- 1.41 Addressing the regulatory gaps based on the lessons from the global financial crisis in advanced economies will be a major challenge for regulators all around the world. Much of the challenges in the domain of financial stability regulation would arise from complexities surrounding the assessment of systemic risk, interconnectedness, common exposures, risk concentrations in complex innovative products and use of models to manage and price risks which at times mask information. Even in areas where there is convergence of opinion, such as dynamic provisioning and counter-cyclical prudential regulation, their effectiveness is yet to be validated fully, since such measures may not be enough to avoid asset price bubbles and the associated risks to financial system stability. Errors in judgement while using macro-prudential measures could also trigger unanticipated adverse effects for the real economy.
- I.42 The post-crisis deliberations on future approach to strengthening financial stability broadly cover areas such as systemic risk regulation, tighter capital and liquidity standards, regulation and treatment of derivatives, restricting the activities of banks, resolution mechanisms to deal with failure of too-big-to-fail institutions, consumer protection, and introduction of a levy on banks. Some of the issues are yet to see international consensus, while others will be adopted in due course, either in response to development of clear international standards or as felt appropriate in country specific

- context. The common international response supporting stronger minimum capital adequacy requirements, with a focus on both the quality and quantity of the capital, and higher liquidity requirements could also involve some sacrifice of growth and employment. Thus, just as conflicting demands of growth and inflation objectives at times warrant clearer prioritisation of the focus of monetary policy, the apparent conflict between financial stability and economic growth would also have to be managed while adopting new regulatory changes to strengthen financial stability.
- 1.43 In view of the ambiguity persisting even after the global crisis about the role of monetary policy in relation to asset prices, use of prudential measures to regulate the exposure of regulated entities to asset price cycles could help in strengthening the overall stability framework, even though volatility in asset prices may still persist. The financial stability goal will require use of a combination of instruments involving regulation, supervision and monetary/macroeconomic policies to enhance the effectiveness of crisis prevention. Monetary policy, in pursuing the growth objective may remain accommodative for an extended period at times, which in turn could fuel credit and asset bubbles and thereby jeopardise the financial stability goal. Similarly, use of fiscal stimulus to limit the adverse real effects of a financial crisis could at times give rise to a fiscal crisis, which in turn could be a source of instability for the financial system. Thus, in the process of balancing inflation and growth considerations in the conduct of macroeconomic policies, financial stability has become a critical component, which would add complexity to policy formulation.
- I.44 Countries like India are yet to fully benefit from the financial system in harnessing the growth potential and achieving various developmental objectives. Any regulatory actions that may limit the flow of credit to the productive sectors of the economy would clearly bring to the fore the trade-off between stability and growth. In India, financial inclusion as a means to sustainable and inclusive growth will be a key factor in managing the trade-off.

Globalisation-induced Challenges to Monetary and Financial Sector Policies

1.45 The global crisis revealed how countries are interlinked beyond the conventional channels of trade and capital flows. Globalisation will continue to be a source of opportunity to maximise the country's growth potential, but there would be increasing pressures on current comparative advantages of India, besides raising the scope for faster transmission of shocks from the global economy to the domestic economy. Changes in global growth and inflation conditions, monetary policy stance of advanced economies, asset market trends, movements in exchange rates of key currencies and global commodity prices increasingly affect domestic macroeconomic and financial conditions, quite unrelated to domestic fundamentals or policies. In the past, global imbalances and the pattern of "capital flowing uphill", the challenge of the impossible trinity and costs of country specific approach to deal with the trinity, and inadequacy of global safety nets have posed complex globalisationinduced policy challenges for India, like other globalising EMEs.

For the purposes of appropriate and effective domestic policy response to global developments, constraints arise from two sources; first, the uncertainty about how stress originating in the domestic financial markets because of external developments could transmit to the real economy and second, how monetary policy responses could transmit through the financial markets to the ultimate goal variables. While past experience and empirical regularities can guide the actual conduct of policy response, at times, this may prove inadequate, if not inappropriate. Sound domestic policy environment is increasingly more important to minimise the impact of global shocks on domestic real economy. Past experience shows that some of the global shocks will emerge suddenly as black swans, and hence, policy space must be created and preserved at every stage to deal with such shocks.

Summing-up

I.47 The period since the middle of 2008-09 has been exceptionally challenging for the Reserve Bank, as it had to contend with testing conditions in three dimensions of its major objectives for the economy, *i.e.*, financial stability, growth and inflation. By the beginning of 2009-10, policy measures taken simultaneously in different segments of the financial markets in response to the global crisis had ensured return of normal conditions. Preventing a financial crisis at home in the face of a strong contagion from the global crisis became possible because of both swift and comprehensive policy measures introduced by the Bank, sound financial regulation and supervision, as well as moderate financial integration.

1.48 Even while financial contagion could be contained, the real economy slowed down in the second half of 2008-09 as the impact of the trade and confidence channels of contagion turned out to be much stronger than expected. Dealing with such a shock to the growth process was a challenge, since revival of confidence in response to recovery supportive monetary policy actions remained uncertain. The confidence building measures required strong coordination between the government and the Reserve Bank. This was reflected in deviation from the fiscal consolidation path, large increase in the borrowing programme of the government, ample liquidity conditions created by the Reserve Bank and significant reduction in policy interest rates. Even though India avoided a crisis, the magnitude of the policy response was akin to what was necessary to manage a crisis.

I.49 In moving from the "crisis management" phase in the second half of 2008-09 to "managing the recovery" during 2009-10, the same level of policy stimulus was allowed to continue till there was visible evidence of recovery in growth. In sustaining the growth supportive monetary policy stance, the pace and sustainability of recovery in private demand and risks to inflation were the two

critical factors. While persisting with a growth-supportive monetary policy stance, the Bank also ensured smooth completion of a large borrowing programme of the government, which was necessary to ensure the efficacy of the fiscal stimulus. Well functioning financial markets, with access to liquidity available from the Bank at low rates, helped in avoiding any constraint from the financial sector to the recovery.

I.50 The balance sheet of the Bank was managed prudently, and the asset and liability side developments reflected the result of operations of the Bank undertaken during the year in pursuit of its broad macroeconomic and financial sector objectives. The economy recovered with a lag in response to the stimulus, but in the second half of 2009-10 inflation exhibited acceleration, persistence and generalisation, as a result of which the balance of policy concerns shifted from recovery to inflation.

I.51 In 2010-11 so far, downside risks to growth have subsided significantly; on the other hand, high and generalised inflation has persisted. The Reserve Bank has stated its commitment to containing inflation through its calibrated monetary policy normalisation, with clarity on the direction of

the policy rates in the near-term as well as timely actions in cautious steps based on careful assessment of risks to both inflation and growth. With a near normal monsoon, it is expected that the economy will again reach the high growth-moderate inflation trajectory that was experienced before the global crisis. Structural bottlenecks to capacity creation in sectors where demand has been high and continues to grow will have to be addressed to minimise future possible disruptions to growth and inflation paths.

1.52 Financial stability will receive greater focus in the Reserve Bank, as in central banks around the world, while the untapped potential in finance as an instrument to attain higher and more inclusive growth will have to be harnessed better. However, global recovery related uncertainties may increase if the market concerns about fiscal sustainability spread from few countries in the Euro zone to other advanced economies. Conduct of monetary policy of the Reserve Bank, while driven by the possible domestic outlook, will have to recognise the possibility of sudden changes in the global outlook, which could spill over. While managing global shocks, India will also have to increase its resilience and productivity levels so as to strengthen its position in the global economy.