

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

III

MONETARY POLICY OPERATIONS

The changing growth-inflation outlook during the course of the year broadly conditioned the conduct of monetary policy. In the first half of 2009-10 when headline WPI inflation remained subdued, the accommodative monetary policy stance, adopted in response to the global crisis and aimed at stimulating a faster recovery in growth, was sustained. In the second half, high and generalised inflation coincided with stronger signs of broad-based recovery which required raising the emphasis of policy focus on containing inflation, without endangering the recovery process. The monetary stance had to be calibrated carefully in view of the risk of disrupting the recovery, given the uncertainties in the global economy as also the gradual recovery in domestic private demand. The large borrowing programme of the government and the pick-up in demand for credit from the private sector necessitated active management of liquidity conditions, while moderating the magnitude of liquidity overhang, consistent with the anti-inflationary stance. The possibility of a turn in the interest rate cycle magnifying interest rate sensitive capital inflows to India required closer monitoring of global liquidity and interest rate conditions.

III.1 The conduct of monetary policy during 2009-10 and in the first quarter of 2010-11 was broadly guided by the evolution of policy stance from “managing the crisis” to “managing the recovery” and further to “containing inflation and anchoring inflation expectations”. Throughout the period, the operations of monetary policy had to contend with uncertainty about the global recovery, even as the situation improved with every successive quarter in 2009-10. Further, the Reserve Bank had to strike a judicious balance amongst its various objectives such as a stronger recovery, well-anchored inflationary expectations, stable markets and smooth completion of the large borrowing programme of the government.

THE MONETARY POLICY PROCESS

III.2 The formulation of monetary policy in the Reserve Bank reflects an extensive consultative process where the views and suggestions of

various stakeholders are elicited and analysed. While the pre-policy consultations with industry associations, bankers and economists contribute to the information set used for policy making, the surveys conducted by the Reserve Bank targeted at the common man, corporates and professional forecasters also provide important lead information. After the policy, as part of the communication process, questions from the press and analysts are answered, which help in receiving post-policy feedback. The institutional framework for consultation on important technical aspects of policy making is a critical part of the monetary policy process in India.

III.3 The Technical Advisory Committee (TAC) on Monetary Policy reviews macroeconomic and monetary developments and advises the Reserve Bank on the stance of monetary policy and monetary measures. The TAC’s role is advisory in

nature and the responsibility, accountability and time path of decision-making remains entirely with the Reserve Bank. Between the usual quarterly cycles formalised for policy announcements, monetary measures can be announced at any point of time depending upon the evolving macroeconomic conditions.

III.4 It has been the endeavour of the Reserve Bank to make the policy making process more consultative. With effect from October 2005, the Reserve Bank has introduced pre-policy consultation meetings with the IBA, market participants (FIMMDA, FEDAI and PDAI), representatives of trade and industry (CII, FICCI, ASSOCHAM and FIEO), credit rating agencies (CRISIL and ICRA), and other institutions (UCBs, MFIs, SMEs, NBFCs, rural co-operatives and RRBs). These meetings focus on macroeconomic developments, liquidity position, interest rate environment and monetary and credit developments along with forward-looking suggestions. This consultative process has contributed to enriching the policy formulation mechanism and enhanced the effectiveness of monetary policy measures. In addition, meetings are also held with economists, media persons, analysts and journalists on a half-yearly basis in April and October to know their views on the global/domestic macroeconomic situation and solicit their advice on monetary policy measures.

III.5 The Resource Management Discussion meetings are held with chairpersons of select banks every year before the announcement of the Annual Monetary Policy and the Second Quarter Review. Such meetings are held with senior officers of select banks before the First and Third Quarter Reviews. They serve as a forum for obtaining feedback from the banking industry on the measures announced in the previous policy as also suggestions for the forthcoming policy and help in understanding banks' policies and strategies for resource mobilisation and deployment. These meetings provide a platform to discuss the likely credit flow to various sectors and industries, expectations on

macroeconomic scenario and various policy issues impacting the banking industry. These provide inputs for formulation of monetary policy and help in communicating the Reserve Bank's stance on various issues and the rationale for its policies and changes therein.

III.6 Institutional arrangements have been put in place internally to guide the policy formulation process. The inter-departmental Financial Markets Committee (FMC) holds a daily meeting to review developments in the money, foreign exchange and government securities markets as well as assess liquidity conditions to guide appropriate market interventions. Meetings of the FMC are chaired by Deputy Governor/Executive Director.

III.7 The internal Monetary Policy Strategy Group meets regularly to review monetary and credit conditions and takes a medium-term view on the stance of monetary policy. The inter-departmental Technical Group has been constituted to prepare reviews/forecasts of inflation and GDP growth for policy purposes. In addition, the inter-departmental Corporate Sector Performance Group submits quarterly reports on the performance and outlook for the private corporate sector.

III.8 After the policy announcement, the Governor addresses the press through video conferences and a separate brief press statement is issued. The video recording of the press conference is maintained on the Reserve Bank's website for at least a month, while the Governor and the Deputy Governors interact with print and electronic media over the next few days.

III.9 The Reserve Bank also takes note of suggestions and feedback received through letters, e-mails or any other means of communication from stakeholders and individuals. Extensive use is made of the website in communicating with external audiences and getting their feedback on the policy measures. The site is used not only to disseminate information emanating from the Reserve Bank but also to seek

feedback on reports and recommendations as well as on draft regulatory guidelines which are a sequel to the policy measures announced by the Reserve Bank.

III.10 Communication policies and strategies of the Reserve Bank are tailored to meet the needs of specific function to be performed on the one hand, and have an overall consistent or common policy framework within which the central bank functions on the other. The Reserve Bank's overall approach to communicating its policy measures is driven by the principle of democratic accountability and enhancing the effectiveness of monetary policy. In this context, the Reserve Bank's

communication policy recognises the complexities inherent in the Indian economy at the current stage of development.

III.11 The global crisis brought to the fore many new challenges for central banks, besides necessitating search for better solutions to the conventional challenges. Given the complex nature of many challenges, the Reserve Bank's usual consultative process had to be scaled up. The First International Research Conference was organised to elicit the best possible suggestions at the international level on some such challenges that the Reserve Bank would have to deal with in future (Box III.1).

Box III.1

Challenges to Central Banking in the Context of Financial Crisis: Major Findings of the First International Research Conference

The global crisis has spawned an animated debate on what went wrong in the sphere of policy making at the national as well as global level, and what central banks in particular need to learn from the crisis. Even though India clearly avoided a financial crisis at home, the global crisis revealed that the challenges for central banks in a globalised world could be too complex as well as too many. Recognising the need to learn by seeking suggestions from some of the most eminent economists and policy makers from around the world as well as central bank governors on major challenges that the central banks in general have to face and manage after the global crisis, the Reserve Bank organised its First International Research Conference (FIRC) on "Challenges to Central Banking in the Context of Financial Crisis" on February 12 and 13, 2010. It was the flagship event of the Bank's Platinum Jubilee celebrations.

Governor Dr. D. Subbarao highlighted in his opening remarks why central banking could be expected to change in important ways after the crisis and outlined five key challenges of significance to central banking profession in general: (a) managing national monetary policy decisions in a globalising environment, given the growing complexity in the interactions between external developments and domestic variables, (b) redefining the mandate of central banks, given the pre-crisis attraction of inflation targeting and the post-crisis debate on the role of central banks in relation to asset prices, (c) the responsibility of central banks towards financial stability, (d) managing the costs and benefits of regulation, in view of the difficulty in drawing a fine balance between regulation and financial innovations, and (e) the autonomy

and accountability of central banks, particularly in the context of fiscal position of countries after the crisis and their approaches to fiscal exit.

It was expected that the deliberations during the conference would provide some guidance, if not clear solutions, on these and other challenges for central banks. Some questions, however, remain unanswered. There was no consensus on the role of monetary policy for directly doing anything about asset prices and no convergent view was expressed on whether financial stability could be an explicit mandate of monetary policy. The lender of last resort (LOLR) function and regulation were generally seen as two important potential instruments to safeguard financial stability, which together though may not always be sufficient to avoid a financial crisis. Captivating discussions on the impossible trinity, however, did not offer any clear direction on how best to resolve the impossible trinity, implying that countries may have to adopt their own approach in country-specific contexts. The need for macro-prudential regulation as a necessary, if not sufficient, next step was recognised. How financial innovations, with appropriate precautions, could contribute to high global growth, more particularly in emerging market and developing economies, was discussed. A key message from the conference was that LOLR cannot solve insolvency problems. It was also viewed that different dimensions of central bank independence may come under threat if high debt levels of the governments persist over protracted periods of time. Four areas where central banks have achieved gradual progress were generally recognised, *i.e.*, (a) managing inflation;

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(... Concl.)

(b) managing shocks – both external and internal; (c) managing volatility – with skill and judgment, and (d) achieving a level of autonomy while acquiring credibility. Further progress, particularly in the area of financial stability, however, would require credible steps to face the challenges from asset prices and regulatory gaps.

After the technical discussions, governors of eight central banks offered their enlightening views on ten important issues in two panel discussions, which reflected crafting of country-specific positions into their respective global perspectives. The theme for the first panel – domestic monetary policy – covered five important issues, namely (a) the implications of the crisis for inflation targeting; (b) the role of asset prices in monetary policy formulation; (c) the role of central banks in managing crises; (d) the role of central banks in regulation; and (v) exit from the crisis measures. The theme for the second panel discussion – international monetary system – covered five key issues, namely (a) exchange rate policies and reserve accumulation; (b) management of capital flows; (c) future of the global reserve system; (d) reform of the IMF; and (e) potential

for developing regional monetary arrangements. These issues have been particularly important for the central banks of most EMEs. Governor Dr. Subbarao stressed in his remarks during the discussions that the international monetary system was inadequate to prevent a major structural problem, *i.e.*, the global imbalances, which had to manifest in the form of some crisis or the other at some stage. He noted that even though India did not contribute to global imbalances or the global crisis, it has to face the consequences.

The overall key message from this conference was that given the known challenges, both before and after the crisis, despite lack of consensus on many critical issues, every central bank has to move in the direction of taking right steps that it may deem appropriate, without waiting for the global system to move. It would be wrong, however, to presume that “best global policies are the sum of the best national policies”. In a globalised world, thus, national policies alone, despite being the most appropriate, cannot prevent a crisis unless some of the global challenges are addressed collectively at the global level.

MONETARY POLICY OPERATIONS: CONTEXT AND RATIONALE

Annual Policy Statement 2009-10

III.12 The Annual Policy Statement 2009-10 was presented in the backdrop of an uncertain global environment and significant slowdown in the domestic economic activity with deceleration in growth seen in all constituent sectors of the economy. The fiscal and monetary stimuli measures initiated in the second half of 2008-09, coupled with lower commodity prices, helped in cushioning the downturn in growth. For policy purpose, the Policy Statement placed the real GDP growth for 2009-10 at around 6.0 per cent. This reflected significant moderation, in relation to the 8.9 per cent average annual growth achieved during 2003-08, requiring continuation of an accommodative monetary policy stance.

III.13 As global commodity prices abated significantly under the pressure of global recession, domestic headline WPI inflation declined to close to zero. While prices of manufactured products

decelerated sharply and of fuel group declined, prices of food articles remained high. Keeping in view the global trend in commodity prices and domestic demand-supply balance, the Annual Policy Statement placed the WPI inflation at around 4.0 per cent by end-March 2010. Money supply (M_3) growth for 2009-10 was placed at 17.0 per cent and the adjusted non-food credit growth at 20.0 per cent.

III.14 Based on the overall assessment of the macroeconomic situation, the Policy Statement emphasised the need to ensure a policy regime that would enable credit expansion at viable rates while preserving credit quality so as to support the return of the economy to a high growth path. The monetary stance emphasised the need to maintain a monetary and interest rate regime supportive of price stability and financial stability, taking into account the emerging lessons of the global financial crisis. Against the backdrop of global and domestic developments, the Reserve Bank reduced the LAF rates to their historically lowest levels. The repo rate and the reverse repo rate were reduced by 25 basis points each (Table III.1).

Table III.1: Movements in Key Policy Rates in India

(Per cent)

Effective since	Reverse Repo Rate	Repo Rate	Cash Reserve Ratio
1	2	3	4
April 26, 2008	6.00	7.75	7.75 (+0.25)
May 10, 2008	6.00	7.75	8.00 (+0.25)
May 24, 2008	6.00	7.75	8.25 (+0.25)
June 12, 2008	6.00	8.00 (+0.25)	8.25
June 25, 2008	6.00	8.50 (+0.50)	8.25
July 5, 2008	6.00	8.50	8.50 (+0.25)
July 19, 2008	6.00	8.50	8.75 (+0.25)
July 30, 2008	6.00	9.00 (+0.50)	8.75
August 30, 2008	6.00	9.00	9.00 (+0.25)
October 11, 2008	6.00	9.00	6.50 (-2.50)
October 20, 2008	6.00	8.00 (-1.00)	6.50
October 25, 2008	6.00	8.00	6.00 (-0.50)
November 3, 2008	6.00	7.50 (-0.50)	6.00
November 8, 2008	6.00	7.50	5.50 (-0.50)
December 8, 2008	5.00 (-1.00)	6.50 (-1.00)	5.50
January 5, 2009	4.00 (-1.00)	5.50 (-1.00)	5.50
January 17, 2009	4.00	5.50	5.00 (-0.50)
March 4, 2009	3.50 (-0.50)	5.00 (-0.50)	5.00
April 21, 2009	3.25 (-0.25)	4.75 (-0.25)	5.00
February 13, 2010	3.25	4.75	5.50 (+0.50)
February 27, 2010	3.25	4.75	5.75 (+0.25)
March 19, 2010	3.50 (+0.25)	5.00 (+0.25)	5.75
April 20, 2010	3.75 (+0.25)	5.25 (+0.25)	5.75
April 24, 2010	3.75	5.25	6.00 (+0.25)
July 2, 2010	4.00 (+0.25)	5.50 (+0.25)	6.00
July 27, 2010	4.50 (+0.50)	5.75 (+0.25)	6.00

Note: 1. Reverse repo indicates absorption of liquidity and repo indicates injection of liquidity.
2. Figures in parentheses indicate change in policy rates in per cent.

First Quarter Review 2009-10

III.15 By the time of the First Quarter Review in July 2009, some tentative lead signs of recovery in GDP growth were visible, which included positive growth in industrial production, optimism in business confidence surveys, rebound in stock prices, renewed activity in the primary capital market and improved external financing conditions. Simultaneously, several risks to the overall outlook had to be recognised for policy purposes, which included delayed and deficient monsoon, food price inflation, rebound in global commodity prices, continuing weak external demand and high fiscal deficit. Accordingly, the Review noted that an uptrend in the growth momentum was unlikely before the middle of 2009-10 and the growth projection for 2009-10 was placed at 6.0 per cent with an upward bias.

III.16 On the inflation front, pressures from global commodity prices, which had been abating markedly since August 2008, bottomed out in early 2009 and had rebounded ahead of global recovery. The Reserve Bank's inflation expectations survey showed that while inflation expectations remained well-anchored, a majority of the respondents expected inflation to rise over the next three months to one year. The Statement further pointed out that the base effect, which generated the negative WPI inflation prevailing then, would completely wear off by October 2009 and thereafter the WPI inflation would creep up even without any major supply shock. The WPI inflation for end-March 2010 was revised upward to around 5.0 per cent. Taking into consideration the high borrowing requirements of the government and to ensure that it was managed in a non-disruptive manner, the indicative trajectory of M_3 growth was increased to 18.0 per cent.

III.17 The First Quarter Review observed, in definitive terms, that the accommodative monetary stance prevailing then was not the steady state stance and going forward, the Reserve Bank would have to reverse the expansionary measures to anchor inflation expectations and subdue inflationary pressures while preserving the growth momentum. Consistent with the assessment of macroeconomic and monetary conditions, the repo rate, the reverse repo rate and the CRR were kept unchanged.

Second Quarter Review 2009-10

III.18 Tentative signs of recovery noticed in the first quarter became increasingly visible in the beginning of the second quarter of 2009-10. The Second Quarter Review noted in October 2009 that this, combined with the easing of international financing conditions, augured well for a pick-up in investment activity. The business confidence surveys also pointed to further improvement in the outlook. On the assumption of a modest decline in agricultural production due to the deficient monsoon, however, the baseline projection for GDP growth for 2009-10 was maintained at 6.0 per cent with an upside bias.

III.19 The WPI inflation after remaining negative during June-August 2009, turned positive beginning September 2009. The inflationary pressures emanated from domestic sources, reflecting increase in prices of food articles and food products on account of weak monsoon. As the upside risk to inflation in terms of the global trend in commodity prices and the domestic demand-supply balance had materialised, the baseline projection for WPI inflation at end-March 2010 was revised to 6.5 per cent with an upside bias.

III.20 On evidence of easing of access for corporates to non-bank sources of financing, both domestic and international, and taking into consideration the completion of around four-fifths of the government borrowing programme and the subdued credit offtake from banks in the first half of the year, the indicative trajectory of adjusted non-food credit and M_3 growth was revised downwards to 18.0 per cent and 17.0 per cent, respectively.

III.21 Around this time, an intense debate had started in many countries about the exit strategy from the expansionary monetary policy, especially the time and sequence of exit. In light of the build-up of domestic inflationary pressures, along with the definitive indications of the economy reverting to the growth track, the debate on the strategy for an appropriate exit from the accommodative monetary policy came to the forefront of policy deliberations in India also.

III.22 Arguments for beginning the reversal of monetary easing in India centered around two factors. First, the risk of fast-rising WPI inflation and persistently high CPI inflation worsening inflationary expectations and leading to generalised inflation. The lag with which monetary policy operates pointed to a case for tightening sooner rather than later. Second, the large overhang of liquidity could engender inflation expectations even if credit demand remained subdued. It could potentially result in an unsustainable asset price build-up. Capital inflows had resumed and there was already some evidence of excess liquidity

feeding through asset prices, with potential financial stability concerns.

III.23 Arguments for deferring reversal of monetary easing were that premature tightening could hurt the growth impulses and that the inflationary pressures were driven by supply-side constraints, particularly food prices, for which monetary policy is typically not an efficient instrument of control. Moreover, tightening ahead of other economies and consequent widening of interest rate differential with the rest of the world entailed the risk of incentivising larger capital flows, with attendant costs to the economy in terms of exchange rate appreciation, larger systemic liquidity and fiscal costs of sterilisation.

III.24 The precise challenge for the Reserve Bank was to support the recovery process without compromising price stability. The Reserve Bank began the first phase of exit in October 2009. Most of the non-conventional monetary policy measures were terminated, which included some sector-specific liquidity facilities provided during the crisis. The statutory liquidity ratio (SLR) of banks was restored to its pre-crisis level of 25 per cent of net demand and time liabilities (NDTL). Further, on account of growing evidence of excess liquidity feeding through asset prices, with potential financial stability concerns, the provisioning requirement for advances to the commercial real estate sector classified as 'standard assets' was increased from 0.4 per cent to 1.0 per cent.

Third Quarter Review 2009-10

III.25 By January 2010, there were clear signs of the global economy stabilising while the domestic growth signals pointed towards a consolidation of the recovery process. The indicators of real sector activity suggested that the upside bias to growth highlighted in the First/Second Quarter Reviews had materialised. Hence, the baseline projection for GDP growth for 2009-10 was revised upwards to 7.5 per cent, assuming a near zero growth in agricultural production and continued recovery in industrial production and services sector activity.

III.26 On the prices front, there were incipient signs of the sustained increase in food prices beginning to spill over to other commodities and services as well. The Review noted that with growth accelerating, capacity constraints could potentially reinforce supply-side inflationary pressures. It also highlighted the limited scope imports provided to contain domestic food prices as global commodity prices were showing signs of firming up, with prices of some being higher than the prices prevailing in India. The baseline projection for WPI inflation for March 2010 was raised to 8.5 per cent.

III.27 With the government borrowing programme almost completed and with adequate liquidity in the system to meet the anticipated increase in credit demand from the commercial sector, the indicative M_3 growth and adjusted non-food credit projections were revised downwards to 16.5 per cent and 16.0 per cent, respectively.

III.28 With clear signs that the recovery was consolidating, the policy stance changed from 'managing the recovery' to 'containing inflation and inflationary expectations'. In particular, it was felt that main policy instruments were at levels more consistent with a crisis situation than with a fast-recovering economy and it was imperative to carry forward the process of exit from an accommodative policy stance. Accordingly, the CRR was increased by 75 basis points to absorb a part of the excess liquidity from the system (about ₹36,000 crore).

Mid-cycle Measures in March 2010

III.29 Headline WPI inflation on a year-on-year basis overshoot the Reserve Bank's baseline projection for year-end inflation to reach 9.9 per cent (provisional) in February 2010. The rate of increase in the prices of non-food manufactured goods accelerated quite sharply. Furthermore, increasing capacity utilisation and rising commodity and energy prices were exerting pressure on the overall inflation. Taken together, these factors were seen to heighten the risks of supply-side pressures translating into a

generalised inflationary process. The Reserve Bank increased the repo rate and reverse repo rate under the LAF by 25 basis points each with effect from March 19, 2010, with a view to anchoring inflationary expectations and containing inflation. As liquidity in the banking system was adequate, credit expansion for sustaining the recovery was not expected to be affected.

Monetary Policy Statement 2010-11

III.30 By April 2010, available data suggested that the recovery was firmly in place. There was a sustained increase in bank credit and in the flow of financial resources to the commercial sector from non-bank sources. On balance, under the assumption of a normal monsoon and sustenance of good performance of the industrial and services sectors, the baseline projection of real GDP growth for 2010-11 was placed at 8.0 per cent with an upside bias.

III.31 The Reserve Bank's industrial outlook survey showed that the corporates were increasingly regaining their pricing power in many sectors, raising the possibility of accentuation of demand pressures as the recovery gained further momentum. Further, the inflation expectations of households continued to remain at an elevated level. There were three major uncertainties in formulating the outlook for inflation in 2010-11 – prospects of the monsoon in 2010-11 were not clear, crude prices continued to be volatile and there was evidence of demand side pressures building up. The baseline projection for WPI inflation for March 2011 was placed at 5.5 per cent.

III.32 There was surplus liquidity throughout the year, but the magnitude of the surplus declined towards the end of 2009-10, consistent with the policy stance. Keeping in view the need to balance the resource demand to meet credit offtake by the private sector and government borrowings, M_3 growth and non-food credit growth for 2010-11 were placed at 17.0 per cent and 20.0 per cent, respectively.

III.33 The monetary policy stance for 2010-11 was guided by the following three considerations. First, the need to move in a calibrated manner in the direction of normalising the policy instruments in a scenario where the real policy rates were still negative. Second, the need to ensure that demand side inflation did not become entrenched. Third, the need to balance the monetary policy imperative of absorbing liquidity while ensuring that credit was available to both the government and the private sector. Accordingly, both repo and reverse repo rates as well as CRR were increased by 25 basis points each.

Mid-Cycle Policy Measures in July 2010

III.34 Significant developments took place subsequent to the announcement of the Monetary Policy in April 2010. Though recovery was consolidating, developments on the inflation front raised several concerns. Overall, WPI inflation increased to 10.2 per cent (provisional) in May 2010, up from 9.6 per cent (provisional) in April 2010. Year-on-year WPI non-food manufacturing products inflation, which was (-) 0.4 per cent in November 2009 and 5.4 per cent in March 2010, rose further to 6.6 per cent in May 2010. Year-on-year fuel price inflation also surged. The upward revision in administered fuel prices on June 25, 2010 was also expected to influence inflation in months ahead. Accordingly, the repo rate and the reverse repo rate under the LAF were increased by 25 basis points each on July 2, 2010.

First Quarter Review 2010-11

III.35 The dominant concern that shaped the monetary policy stance in the First Quarter Review was high inflation. Even as food price inflation and, more generally, consumer price inflation showed some moderation, they were still in double digits. Non-food inflation rose and demand-side pressures were clearly evident. In view of consolidating and more broad-based domestic recovery, the First Quarter Review revised upward the baseline projection of real GDP growth for the year to 8.5

per cent. The baseline projection for WPI inflation for March 2011 was raised to 6.0 per cent. Consistent with this assessment, the repo rate was hiked by 25 basis points and the reverse repo rate by 50 basis points. The monetary policy actions were intended to moderate inflation by reining in demand pressures and inflationary expectations, maintain financial conditions conducive to sustaining growth, generate liquidity conditions consistent with more effective transmission of policy actions and reduce the volatility of short-term rates in a narrower corridor.

III.36 Given the context of the changing liquidity dynamics, particularly between surplus and deficit modes, it was proposed to set up a Working Group to review the current operating procedure of monetary policy of the Reserve Bank, including the LAF. It was also announced that mid-quarter reviews of Monetary Policy would be done in June, September, December and March.

Overall Assessment

III.37 The process of exit from monetary expansion in India has been relatively smooth on account of the fact that there was no undue expansion of the Reserve Bank's balance sheet or deterioration in its quality. The Reserve Bank's calibrated approach to exit since October 2009 ensured that there was adequate liquidity available in the system, so that even while it addressed concerns regarding price stability, the recovery process was not hampered. On balancing the policy priorities during the exit phase, it had become important to raise the policy rates to the neutral levels in a calibrated manner, in view of the altered growth-inflation mix by the end of 2009-10 (Box III.2).

LIQUIDITY MANAGEMENT

III.38 In 2009-10, the Reserve Bank continued its policy of maintaining appropriate liquidity in the system so that all legitimate credit requirements for productive purposes were met, consistent with

Box III.2 Neutral Policy Rate

“Neutral interest rate”, as a concept, generally refers to the level of interest rate at which monetary policy stance is neither expansionary nor contractionary. Policy stance can be deemed “neutral” when the real interest rate reaches a level that is consistent with full employment of resources over the medium-term, and hence full capacity output and price stability. The concept of natural rate of interest was first introduced into economics by the Swedish economist Knut Wicksell in 1898. This rate, theoretically, essentially relates to: (i) the rate of interest that equates saving with investment; (ii) the marginal productivity of capital, and (iii) the rate of interest that is consistent with aggregate price stability. Although natural and neutral rates of interest are used interchangeably, there are major conceptual differences between the two. Moreover, while the former emerges in the market and is not directly observable, the latter essentially is an empirical approximation used in practice for conduct of monetary policy. Thus, the neutral rate of interest is useful as an important benchmark for the actual conduct of monetary policy and also market analysis of monetary policy stance.

In recent years, the need for reliable estimates of the neutral rate has often been highlighted to guide the conduct of monetary policy. Since most central banks formulate monetary policy by setting a target for a short-term nominal interest rate (typically an overnight money market rate), the neutral rate provides a convenient benchmark against which policy rates can be measured. Moreover, the resurgence of interest in the neutral rate is also largely due to the significant progress that has been made in developing dynamic general equilibrium models, *i.e.*, new Keynesian models or the neo-Wicksellian framework with nominal rigidities based on the optimising behaviour of the private sector. In this class of models, the neutral rate plays a key role in output and inflation fluctuations. In the context of the global crisis, when policy rates were lowered significantly by the central banks and in the subsequent discussions on the time and speed of monetary exit, reference to the neutral rate has increased significantly.

It is important to recognise that the neutral rate of interest can change for several reasons. First, it could change in response to anything that affects long-term saving and investment patterns. Factors such as demography, fiscal situation, time preference of consumers between current

and future consumption and technological changes could raise or lower the neutral interest rate. Second, the neutral rate could be influenced by globalisation in many ways; domestic output and inflation conditions do get conditioned by global developments. After the global crisis, uncertainties about the potential output path in the advanced economies have increased, and some have even suggested higher inflation targets for these economies. In the absence of clarity about potential output and inflation rate that have bearing on the policy target, estimating a neutral rate could be even more challenging.

The neutral rate of interest, thus, as a theoretical construct, is often viewed as unobservable and difficult to estimate. Overall, neutral rate estimates are characterised by a significant extent of uncertainty. These estimates are sensitive to the choice of statistical methods, which further obscures the ability to measure the neutral rate of interest accurately. A few analysts have estimated repo rate of 6.5 per cent as a neutral rate for India. A recent study (Singh, 2010) used a Taylor rule type specification which suggests that the neutral weighted average call rate for India could be 7.0 per cent. The study covered the period 1989-2009, and hence used call rate rather than repo or reverse repo rates, data on which are available only from 2000. Since the call rate effectively is the operating target within the LAF corridor, and because the transmission from policy rate changes to call rates has been effective, a neutral rate approximated in terms of the call rate over a medium-term horizon provides a broad reference point for assessing the stance of monetary policy.

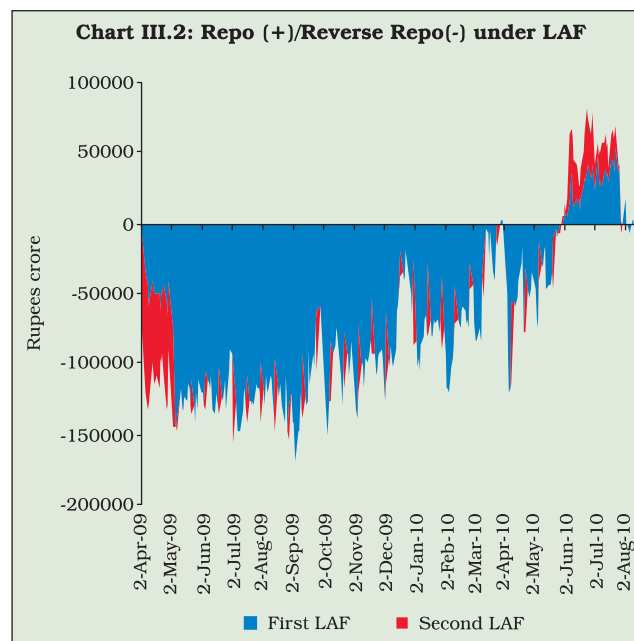
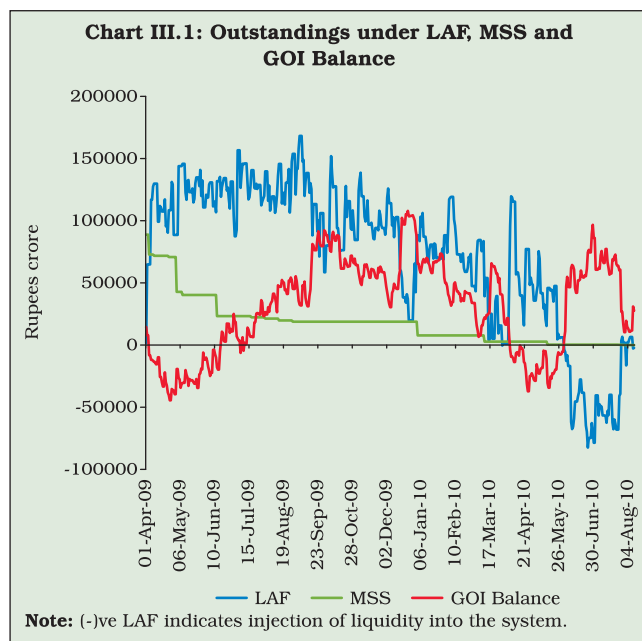
References

1. Humpage, O. F. (2005), “Have International Developments Lowered the Neutral Rate?”, *Economic Commentary*, Federal Reserve Bank of Cleveland, December.
2. Orphanides, A. and Williams, J.C. (2002), “Robust Monetary Policy Rules with Unknown Natural Rates”, *Brookings Papers on Economic Activity*, Vol.2002, No.2.
3. Singh, B. (2010), “Monetary Policy Behaviour in India: Evidence from Taylor-Type Policy Frameworks”, *Staff Study*, Reserve Bank of India, April.

the objective of price and financial stability. The management of liquidity was achieved through appropriate use of OMO, MSS, LAF and a slew of special facilities. The intra-year dynamics of liquidity conditions reflected the calibrated policy response to the evolving macroeconomic and

financial market environment, interspersed with the impact of quarterly advance tax outflows. The inter-bank liquidity conditions remained in the surplus mode, with average daily LAF absorption being around ₹1,00,000 crore during 2009-10 (Chart III.1).

MONETARY POLICY OPERATIONS



III.39 Liquidity conditions eased significantly during the first half of 2009-10, mainly reflecting the MSS unwinding and OMO. In order to ensure smooth government market borrowing, the Reserve Bank expressed its intention to purchase government securities amounting to ₹80,000 crore under the OMO programme for the first half of 2009-10. The surplus liquidity in the system was reflected in the large absorption through the LAF window. On a review of the liquidity conditions, it was decided to conduct only one LAF on a daily basis with effect from May 6, 2009, and conduct the second LAF (SLAF) only on reporting Fridays.

III.40 The daily absorption under the LAF which reached an intra-year peak (₹1,68,215 crore) on September 4, 2009, moderated somewhat during the second half of September 2009, reflecting significant outflows on account of advance tax payments (Chart III.2). The Reserve Bank purchased government securities amounting to ₹57,487 crore through the auction route during the first half of 2009-10, whereas MSS unwinding (including de-sequestering of ₹28,000 crore on May 2, 2009) was placed at around ₹70,000 crore over this period.

III.41 For the second half of 2009-10, the Reserve Bank decided to conduct OMO as and when

necessary. Keeping in view the pattern of actual utilisation of various special facilities and the liquidity conditions prevailing in the market, the special term repo facility and the forex swap facility for banks were discontinued. Reflecting these developments as well as the seasonal uptick in currency demand, the daily absorption under the LAF began moderating during the second half of 2009-10 even as liquidity conditions continued to remain comfortable. While MSS redemptions (₹11,036 crore) were relatively lower, no OMO auction was conducted during the second half of 2009-10. Following the CRR hike in February 2010, the surplus liquidity declined further. Moreover, quarterly advance tax outflows from the banking system more than offset the impact of de-sequestering of ₹5,000 crore of MSS balances on March 11, 2010. With a view to addressing the year-end liquidity requirements, the Reserve Bank conducted additional LAF operations on March 30 and 31, 2010.

III.42 The average daily liquidity absorption through the LAF increased to ₹57,150 crore in April 2010, mainly on account of decline in the cash balances of the Central Government. In 2010-11, liquidity conditions continued to remain in a surplus mode up to end-May 2010. Towards the end of

May, there were temporary liquidity pressures arising out of increase in government balances due to receipts from 3G spectrum auctions, and further increased in mid-June on account of quarterly advance tax payments and broadband wireless access auction receipts. On May 26, 2010, the Reserve Bank announced access to additional liquidity to SCBs under the LAF (to the extent of up to 0.5 per cent of their NDTL) and the SLAF on a daily basis. These *ad hoc* measures were made available up to July 16, 2010, and July 30, 2010, respectively.

III.43 In the second half of 2009-10 and thereafter, even though policy-driven moderation in the magnitude of surplus liquidity was undertaken for containing inflation, active liquidity management was necessary for avoiding disruptions in financial markets as also for meeting the growing demand for credit from the private sector in the face of a large government borrowing programme. The Reserve Bank's calibrated actions to absorb surplus liquidity from October 2009 onwards were reinforced by market conditions, which evolved in

early June 2010. The prevailing market conditions indicated that while liquidity pressures witnessed in June and July 2010 would ease, the system was likely to remain in deficit mode with the repo rate as the operating policy rate.

III.44 In sum, the monetary and liquidity management operations of the Reserve Bank during the year reflected the changing growth and inflation conditions as well as the need for non-disruptive financing of the government borrowing programme. The monetary policy stance remained accommodative in the first half of the year, pursuing the dominant goal of faster recovery. In the second half, the inflation outlook warranted beginning of the monetary policy exit, and calibrating of the actual conduct of policies aimed at balancing the concerns relating to self-sustaining recovery and high generalised inflation. The overall liquidity conditions remained in surplus throughout 2009-10, even though there was policy-driven moderation in the magnitude of the surplus by the end of the year, which was felt necessary for containing adverse inflationary expectations.