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



### **MONETARY POLICY OPERATIONS**

The monetary policy stance changed significantly over three distinct phases during 2013-14. The monetary easing that started in 2012-13 continued up to mid-July 2013, which was the first phase. The second phase, from mid-July to September 2013, was a period when exceptional monetary measures were taken for addressing exchange market pressures. These were, however, normalised quickly by end-November 2013. Alongside normalisation, monetary policy also turned increasingly anti-inflationary in the third phase starting in September 2013, with CPI inflation and inflation expectations persisting at elevated levels. The monetary policy framework witnessed key changes during the year reflecting implementation of some of the recommendations of the Expert Committee to Revise and Strengthen the Monetary Policy Framework, particularly adopting the CPI (combined) as the key metric of inflation for conducting monetary policy, explicit communication of a glide path for disinflation, transition to a bi-monthly monetary policy cycle beginning 2014-15, progressive reduction in access to overnight liquidity under LAF at the fixed repo rate and a corresponding increase in access to liquidity through term repos and introduction of variable tenor term repos.

## Monetary policy operations: context and rationale

III.1 In 2013-14, concerns about the slowdown in growth significantly weighed on monetary policy. However, the unprecedented shock to the external sector following the announcement of the tapering of the unconventional monetary policy in the US warranted a mid-course adjustment in the policy stance and exceptional measures to curb market volatility. Even as external pressures abated and stability returned to the foreign exchange market which enabled normalisation of these measures, unrelenting inflationary pressures driven by persisting food inflation necessitated a tightening of the policy stance with a clear focus on containing second round effects and stabilising inflation expectations.

III.2 In the monetary policy statement of May 3, 2013 the Reserve Bank reduced the key policy rate by 25 basis points (bps) to 7.25 per cent, carrying

forward the process of policy easing set in place in January 2012. However, it noted that monetary easing by itself without addressing the supply bottlenecks in the economy may not be sufficient for revival of growth. While sluggishness in growth was expected to persist through 2013-14, risks to inflation were seen as mounting from multiple fronts with little space for further monetary easing going forward.

III.3 By the mid-quarter review of June 17, 2013, external sector vulnerabilities had become a key variable in determining the monetary policy stance. Given the evolving uncertainties on the external front and rising risks to the inflation path, the Reserve Bank kept the key policy rate unchanged in the First Quarter Review of July 2013 as well but undertook a number of exceptional measures to address exchange market pressures (see Box III.1).

III.4 The mid-quarter review of September 20, 2013 brought a reversal of the monetary policy

stance as upside risks to the inflation trajectory materialised with the pass-through of fuel price increases, which were compounded by a sharp depreciation of the rupee and rising international commodity prices alongside highly elevated food inflation. With the inflation trajectory showing signs of inching upwards over the rest of the year beyond what was initially projected, the key policy repo rate was increased by 25 bps from 7.25 per cent to 7.5 per cent.

111.5 By the Second Quarter Review of October 29, 2013, there were strong indications that consumer price inflation was likely to remain elevated in the months ahead and was likely to exceed 9 per cent even after accounting for seasonal moderation in food inflation. In such a context, monetary policy action was considered necessary to break the spiral of rising price pressures, and thereby curb the erosion of financial savings and strengthen the foundations of growth. The key policy repo rate was increased by 25 bps from 7.5 per cent to 7.75 per cent. This monetary policy stance was expected to strengthen the environment for growth by fostering macroeconomic and financial stability.

III.6 In the mid-quarter review of December 18, 2013 the Reserve Bank kept key policy rates unchanged. The decision to pause, even as inflation remained above the Reserve Bank's comfort level, was guided by a concern for preventing an overly reactive policy action and waiting for more data to gauge the direction of the inflation trajectory.

III.7 The Expert Committee to Revise and Strengthen the Monetary Policy Framework, which submitted its report on January 21, 2014 had recommended a 'glide path' for disinflation that set an objective of 8 per cent consumer price index (CPI) inflation by January 2015 and 6 per cent CPI inflation by January 2016. With the Reserve Bank's baseline projections indicating upside risks to 8 per cent CPI inflation by January 2015, an increase in the policy rate by 25 bps to 8 per cent was necessitated in the Third Quarter Review of January 28, 2014 to set the economy securely on the recommended disinflationary path. Following the

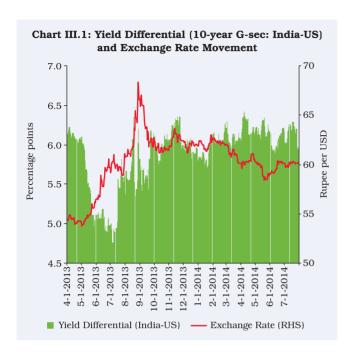
recommendation of the committee, it was also announced that thereafter monetary policy reviews would be undertaken in a bi-monthly cycle.

The first bi-monthly monetary policy statement announced on April 1, 2014 re-affirmed that the monetary policy stance was focused on keeping the economy on the disinflationary glide path recommended by the committee. With the inflation trajectory evolving along the intended glide path it was decided to keep the key interest rates unchanged, while allowing the rate increases undertaken during September 2013 through January 2014 to work their way through the economy. The policy statement noted a number of risks to the central forecast, primarily the risks to food inflation emanating from a less-than-normal monsoon due to possible El Nino effects. The policy statement also anticipated a baseline real GDP growth projection of 5 to 6 per cent in 2014-15, up from a little below 5 per cent in 2013-14, with downside risks to the central estimate of 5.5 per cent. The bi-monthly monetary policy statements on June 3, 2014 and August 5, 2014 maintained the stance. To give banks more freedom to expand credit to the non-government sector, while balancing the financing needs of the government given the medium-term fiscal consolidation roadmap, the statutory liquidity ratio (SLR) was reduced by 50 bps each in the second and third bi-monthly policy reviews of 2014-15.

### Monetary policy response to spillovers from the Fed's taper talk

III.9 The Fed's taper talk in May/June 2013 altered global monetary and financial conditions dramatically with spillovers in the Indian markets bringing to the fore the challenge of conducting monetary policy in a globalised world. With unexpectedly significant hardening of long-term yields in the US, the yield differential (between 10-year G-sec yields in India and the US) fell from more than 6.2 percentage points before May 2013 to less than 5 percentage points in June and July 2013 (Chart III.1).

III.10 Given India's large current account deficit (CAD) and concerns about its financing in the event



of an earlier than expected normalisation of the US monetary policy, a sudden reversal of capital flows led by interest rate differential sensitive debt flows triggered unidirectional expectations and herding in the exchange market. Heightened risks from large depreciation posed threats to both price and financial stability. The policy response was multipronged: i) curbing exchange market speculation and volatility through both administrative measures and tightening monetary conditions; ii) bolstering self-insurance through reserve accumulation and access to swap lines so as to reverse unidirectional expectations and instil confidence; and iii) containing the current account deficit so as to economise on external financing. This calibrated policy response was anchored by the monetary policy stance (Box III.1 and III.2).

## Box III.1 Monetary Policy Response to Exchange Market Pressures

The monetary approach to the exchange rate highlights the role of money as a key determinant of the exchange rate. Excess money supply in the economy relative to what may be necessary for sustainable non-inflationary growth can cause either higher inflation (if prices are flexible) or a lower interest rate (if the asset market is flexible), both of which can in turn cause the exchange rate to depreciate. Exchange rate depreciation, therefore, can be the result of an easy monetary policy stance adopted in the past. Accordingly, a tighter monetary policy may be warranted to manage a condition of intense exchange market pressure.

Uncovered interest parity (UIP) holds that if a country has a higher interest rate relative to the rest of the world, its exchange rate is expected to depreciate. In practice, however, higher interest rates can lead to currency appreciation, and hence the UIP puzzle. The UIP puzzle has several explanations such as imperfect asset substitutability, non-rational expectations, time varying risk premium and the peso problem (that is, when market prices reflect the low possibility of a large change). Moreover, UIP assumes perfect capital mobility, besides domestic and foreign bonds being perfect substitutes. As a result, risk premium is also assumed to be zero. In reality, however, risk premium is both non-zero and time varying, that is, foreign investors in EMEs would expect a risk premium, and their 'risk on-risk off' behaviour can make

the risk premium time varying, which in turn could be influenced by both domestic and external macro-financial developments, including monetary policy settings. Unconventional monetary policies (UMPs) of advanced economies, and the Fed's taper talk in May 2013 altered the risk premiums in both advanced and emerging economies, in turn impacting exchange rate expectations and capital flows.

In India, the monetary policy response to exchange market pressures was manifested in the form of increase in effective money market interest rates by 300 bps, besides tighter access to central bank liquidity. Other supportive policy measures including foreign exchange market interventions. two swap schemes to bolster foreign exchange reserves, the special swap arrangement for oil marketing companies (OMCs) and revised guidelines on gold imports contributed to the effectiveness of exceptional monetary measures. The experience with managing exchange market pressures in 2013-14 underscores the relevance of monetary policy as an instrument of exchange rate stabilisation, even though in normal times, monetary policy may not pursue any exchange rate objective and allow market fundamentals in terms of interest rate differentials and inflation differentials to condition the path of exchange rate.

### RBI's exceptional monetary measures to address exchange market pressures

III.11 After the Fed's announcement on May 22, 2013 of a possible beginning of the end of quantitative easing (QE) and the upsurge in US longer term treasury yields, the exchange rate of the Indian rupee came under intense pressure as portfolio debt investments reversed on flight to safety. On June 19, 2013 the Fed provided more explicit forward guidance on moderating its asset purchases in measured steps starting later in the year, and unwinding QE by mid-2014. The rupee, which had already depreciated from ₹55.04 (RBI

reference rate) on May 21, 2013 to ₹58.74 by then, crossed the market's psychological resistance level of ₹60 per US dollar in the first week of July. On July 15, 2013, three specific monetary measures were announced to tighten liquidity conditions: (a) the marginal standing facility (MSF) rate was fixed at 300 bps above the repo rate, as against the normal spread of 100 bps; (b) access to overnight liquidity from the RBI at the repo rate under the liquidity adjustment facility (LAF) was restricted to 1 per cent of net demand and time liabilities (NDTL) of the banking system; and (c) announcement of open market sales of ₹120 billion (Box III.2).

## Box III.2 Changes in Monetary Policy Operating Framework

Over the last two decades, central banks have veered round to conducting monetary policy through a single short-term interest rate as a policy rate that it controls through open market operations (OMOs). These OMOs are conducted under an operating framework that typically includes liquidity infusion/absorption through repurchase agreements (repos) or outright transactions in eligible securities between the central bank and the market participants. The operating procedures, however, vary across countries and over time and evolve with financial market development, macroeconomic and market conditions.

Since May 2011, the Reserve Bank of India has shifted to a single signaling policy rate – the repo rate. Under the operating framework, the Reserve Bank sought to align the call money rate, which is its operating target, with its policy rate. It used LAF as a principal instrument for this objective. Banks, in practice, had an unlimited access to liquidity under the LAF repo window subject to collateral availability. Like other central banks, the Reserve Bank aimed at keeping

liquidity in a small deficit, as cross-country experience suggested that this strengthens transmission. Empirical findings for India also indicated that a liquidity deficit of around one per cent of NDTL improves policy transmission across the interest rate spectrum. Along with the adoption of repo as the single policy rate in the middle of the interest rate corridor of 200 bps, a new marginal standing facility (MSF) was instituted from which scheduled commercial banks could borrow overnight at 100 bps above the repo rate. The Reserve Bank also used outright OMOs to bring about enduring changes in liquidity.

Since 2013-14, further changes have been made in the operating procedures from time to time in conjunction with other measures, especially in the backdrop of exchange rate volatility following the Fed's tapering indication on May 22, 2013 and the recommendations of the Expert Committee to Revise and Strengthen the Monetary Policy Framework in January 2014 (see Table 1 for chronology of events).

Table 1: Major Monetary Measures by the Reserve Bank: July 2013 onwards							
Monetary Policy Tigh	tening to Address Exchange Rate Volatility						
July 15, 2013	The MSF rate (and the Bank Rate) was re-calibrated to 300 bps above the repo rate to 10.25 per cent.  The overall allocation of funds under the LAF limited to 1.0 per cent of the NDTL of the banking system with effect from July 17, 2013. The allocation to individual banks to be made in proportion to their bids, subject to the overall ceiling.  Announcement of OMO sales of ₹120 billion						
July 17, 2013	• As a contingency measure and in anticipation of redemption pressures on mutual funds, the Reserve Bank opened a dedicated Special Repo window for a notified amount of ₹250 billion for liquidity support to mutual funds at the Bank Rate.						
July 18, 2013	OMO sales of ₹25 billion.						
July 23, 2013	<ul> <li>Minimum daily CRR balances to be maintained by SCBs increased from 70 per cent to 99 per cent of the requirement, effective from the fortnight beginning July 27, 2013.</li> <li>Capping of primary dealers' access to LAF at 100 per cent of their individual net owned funds.</li> </ul>						

(Contd....)

#### **MONETARY POLICY OPERATIONS**

July 24, 2013	Overall limit for access to LAF by each individual bank was capped at 0.5 per cent of its own NDTL outstanding as on the last Friday of the second preceding fortnight.
August 14, 2013	Deregulation of interest rates on Non-Resident (External) Rupee (NRE) deposits and Non-Resident Ordinary (NRO) accounts. Banks had the freedom to offer interest rates on such deposits without any ceiling up to February 28, 2014.
	The interest rate ceiling on deposits held in foreign currency non-resident (banks) {FCNR(B)} of maturity 3-5 years was enhanced by 100 bps to LIBOR/SWAP plus 400 bps. The ceiling was restored to LIBOR/SWAP plus 300 bps after February 28, 2014.
	Banks were advised that with effect from fortnight beginning August 24, 2013, incremental FCNR (B) deposits as also NRE deposits with reference base date of July 26, 2013, and having maturity of three years and above, mobilised by banks was exempted from maintenance of CRR and SLR. This facility was available for deposits mobilized up to March 7, 2014.
August 20, 2013	<ul> <li>Extant regulations required banks to bring down their SLR securities in held to maturity (HTM) category from 25 per cent to 23 per cent of their NDTL in a progressive manner in a prescribed time frame. The requirement stood at 24.5 per cent as at end-June 2013. It was decided to relax this requirement by allowing banks to retain SLR holdings in HTM category at 24.5 per cent until further instructions.</li> <li>In addition, banks were allowed to spread over the net depreciation, if any, on account of mark to market (MTM) valuation</li> </ul>
	of securities held under available for sale (AFS)/held for trading (HFT) categories over the remaining period of the financial year in equal installments.
August 23, 2013	OMO purchase of ₹62.3 billion.
August 28, 2013	A forex swap window to meet the entire daily dollar requirements of three public sector oil marketing companies (IOC, HPCL and BPCL) was opened with effect from August 28, 2013. Under the swap facility, Reserve Bank undertook sell/bu USD-INR forex swaps for fixed tenor with the oil marketing companies through a designated bank.
August 30, 2013	OMO purchase of ₹62.3 billion.
July/August/September 2013	RBI auctioned Government of India Cash Management Bills.
September 4, 2013	The RBI offered a window to the banks to swap fresh FCNR(B) dollar funds, mobilised for a minimum tenor of three years and over at a fixed rate of 3.5 per cent per annum for the tenor of the deposit. Also, the extant overseas borrowing limit of 50 per cent of the unimpaired Tier I capital was raised to 100 per cent and borrowings mobilised under this provision can be swapped with the RBI at a concessional rate of 100 bps below the ongoing swap rate prevailing in the market. The scheme
	was open up to November 30, 2013.
Normalisation of the Moneta	
Normalisation of the Monetal	The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.
	<ul> <li>The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.</li> <li>The minimum daily maintenance of the CRR was reduced from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.</li> </ul>
	<ul> <li>The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.</li> <li>The minimum daily maintenance of the CRR was reduced from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.</li> </ul>
	<ul> <li>The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.</li> <li>The minimum daily maintenance of the CRR was reduced from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.</li> <li>The policy repo rate under the LAF was increased by 25 basis points from 7.25 per cent to 7.5 per cent with immediate</li> </ul>
September 20, 2013	<ul> <li>The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.</li> <li>The minimum daily maintenance of the CRR was reduced from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.</li> <li>The policy repo rate under the LAF was increased by 25 basis points from 7.25 per cent to 7.5 per cent with immediate effect.</li> <li>The MSF rate was reduced by 50 bps from 9.5 per cent to 9.0 per cent.</li> <li>Additional liquidity was provided through term repos of 7-day and 14-day tenor for a notified amount equivalent to 0.25 per cent of NDTL of the banking system through variable rate auctions on every Friday beginning October 11, 2013.</li> </ul>
September 20, 2013  October 7, 2013	<ul> <li>The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.</li> <li>The minimum daily maintenance of the CRR was reduced from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.</li> <li>The policy repo rate under the LAF was increased by 25 basis points from 7.25 per cent to 7.5 per cent with immediate effect.</li> <li>The MSF rate was reduced by 50 bps from 9.5 per cent to 9.0 per cent.</li> <li>Additional liquidity was provided through term repos of 7-day and 14-day tenor for a notified amount equivalent to 0.25 per cent of NDTL of the banking system through variable rate auctions on every Friday beginning October 11, 2013.</li> <li>OMO purchase of ₹99.7 billion.</li> </ul>
September 20, 2013	<ul> <li>The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.</li> <li>The minimum daily maintenance of the CRR was reduced from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.</li> <li>The policy repo rate under the LAF was increased by 25 basis points from 7.25 per cent to 7.5 per cent with immediate effect.</li> <li>The MSF rate was reduced by 50 bps from 9.5 per cent to 9.0 per cent.</li> <li>Additional liquidity was provided through term repos of 7-day and 14-day tenor for a notified amount equivalent to 0.25 per cent of NDTL of the banking system through variable rate auctions on every Friday beginning October 11, 2013.</li> </ul>
September 20, 2013 October 7, 2013	<ul> <li>The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.</li> <li>The minimum daily maintenance of the CRR was reduced from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.</li> <li>The policy repo rate under the LAF was increased by 25 basis points from 7.25 per cent to 7.5 per cent with immediate effect.</li> <li>The MSF rate was reduced by 50 bps from 9.5 per cent to 9.0 per cent.</li> <li>Additional liquidity was provided through term repos of 7-day and 14-day tenor for a notified amount equivalent to 0.25 per cent of NDTL of the banking system through variable rate auctions on every Friday beginning October 11, 2013.</li> <li>OMO purchase of ₹99.7 billion.</li> <li>The MSF rate was reduced by 25 bps from 9.0 per cent to 8.75 per cent.</li> </ul>
September 20, 2013 October 7, 2013	<ul> <li>The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.</li> <li>The minimum daily maintenance of the CRR was reduced from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.</li> <li>The policy repo rate under the LAF was increased by 25 basis points from 7.25 per cent to 7.5 per cent with immediate effect.</li> <li>The MSF rate was reduced by 50 bps from 9.5 per cent to 9.0 per cent.</li> <li>Additional liquidity was provided through term repos of 7-day and 14-day tenor for a notified amount equivalent to 0.25 per cent of NDTL of the banking system through variable rate auctions on every Friday beginning October 11, 2013.</li> <li>OMO purchase of ₹99.7 billion.</li> <li>The MSF rate was reduced by 25 bps from 9.0 per cent to 8.75 per cent.</li> <li>The policy repo rate under the LAF was increased by 25 bps from 7.5 per cent to 7.75 per cent.</li> <li>As a result, the corridor between the MSF and reverse repo rates was restored to (+/-) 1 per cent of repo rate.</li> </ul>
October 7, 2013  October 29, 2013	<ul> <li>The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.</li> <li>The minimum daily maintenance of the CRR was reduced from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.</li> <li>The policy repo rate under the LAF was increased by 25 basis points from 7.25 per cent to 7.5 per cent with immediate effect.</li> <li>The MSF rate was reduced by 50 bps from 9.5 per cent to 9.0 per cent.</li> <li>Additional liquidity was provided through term repos of 7-day and 14-day tenor for a notified amount equivalent to 0.25 per cent of NDTL of the banking system through variable rate auctions on every Friday beginning October 11, 2013.</li> <li>OMO purchase of ₹99.7 billion.</li> <li>The MSF rate was reduced by 25 bps from 9.0 per cent to 8.75 per cent.</li> <li>The policy repo rate under the LAF was increased by 25 bps from 7.5 per cent to 7.75 per cent.</li> <li>As a result, the corridor between the MSF and reverse repo rates was restored to (+/-) 1 per cent of repo rate.</li> <li>Liquidity provided through term repos of 7-day and 14-day tenor increased from 0.25 per cent of NDTL of the banking</li> </ul>
October 7, 2013  October 29, 2013	<ul> <li>The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.</li> <li>The minimum daily maintenance of the CRR was reduced from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.</li> <li>The policy repo rate under the LAF was increased by 25 basis points from 7.25 per cent to 7.5 per cent with immediate effect.</li> <li>The MSF rate was reduced by 50 bps from 9.5 per cent to 9.0 per cent.</li> <li>Additional liquidity was provided through term repos of 7-day and 14-day tenor for a notified amount equivalent to 0.25 per cent of NDTL of the banking system through variable rate auctions on every Friday beginning October 11, 2013.</li> <li>OMO purchase of ₹99.7 billion.</li> <li>The MSF rate was reduced by 25 bps from 9.0 per cent to 8.75 per cent.</li> <li>The policy repo rate under the LAF was increased by 25 bps from 7.5 per cent to 7.75 per cent.</li> <li>As a result, the corridor between the MSF and reverse repo rates was restored to (+/-) 1 per cent of repo rate.</li> <li>Liquidity provided through term repos of 7-day and 14-day tenor increased from 0.25 per cent of NDTL of the banking system to 0.5 per cent.</li> <li>OMO purchase of ₹61.6 billion.</li> <li>To ease the liquidity stress to Micro and Small Enterprises (MSE) sector, refinance of an amount of ₹50 billion made available to the Small Industries Development Bank of India (SIDBI) under the provisions of Section 17(4H) of the RBI Act, 1934. The refinance is available against receivables, including export receivables, outstanding as on November 14, 2013</li> </ul>
October 7, 2013  October 29, 2013	<ul> <li>The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.</li> <li>The minimum daily maintenance of the CRR was reduced from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.</li> <li>The policy repo rate under the LAF was increased by 25 basis points from 7.25 per cent to 7.5 per cent with immediate effect.</li> <li>The MSF rate was reduced by 50 bps from 9.5 per cent to 9.0 per cent.</li> <li>Additional liquidity was provided through term repos of 7-day and 14-day tenor for a notified amount equivalent to 0.25 per cent of NDTL of the banking system through variable rate auctions on every Friday beginning October 11, 2013.</li> <li>OMO purchase of ₹99.7 billion.</li> <li>The MSF rate was reduced by 25 bps from 9.0 per cent to 8.75 per cent.</li> <li>The policy repo rate under the LAF was increased by 25 bps from 7.5 per cent to 7.75 per cent.</li> <li>As a result, the corridor between the MSF and reverse repo rates was restored to (+/-) 1 per cent of repo rate.</li> <li>Liquidity provided through term repos of 7-day and 14-day tenor increased from 0.25 per cent of NDTL of the banking system to 0.5 per cent.</li> <li>OMO purchase of ₹61.6 billion.</li> <li>To ease the liquidity stress to Micro and Small Enterprises (MSE) sector, refinance of an amount of ₹50 billion made available to the Small Industries Development Bank of India (SIDBI) under the provisions of Section 17(4H) of the RBI Act, 1934. The refinance is available against receivables, including export receivables, outstanding as on November 14, 2013 onwards. The facility is available at the prevailing 14-day term repo rate for a period of 90 days. The refinance facility is</li> </ul>
September 20, 2013 October 7, 2013	<ul> <li>The MSF rate was reduced by 75 bps from 10.25 per cent to 9.5 per cent.</li> <li>The minimum daily maintenance of the CRR was reduced from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.</li> <li>The policy repo rate under the LAF was increased by 25 basis points from 7.25 per cent to 7.5 per cent with immediate effect.</li> <li>The MSF rate was reduced by 50 bps from 9.5 per cent to 9.0 per cent.</li> <li>Additional liquidity was provided through term repos of 7-day and 14-day tenor for a notified amount equivalent to 0.25 per cent of NDTL of the banking system through variable rate auctions on every Friday beginning October 11, 2013.</li> <li>OMO purchase of ₹99.7 billion.</li> <li>The MSF rate was reduced by 25 bps from 9.0 per cent to 8.75 per cent.</li> <li>As a result, the corridor between the MSF and reverse repo rates was restored to (+/-) 1 per cent of repo rate.</li> <li>Liquidity provided through term repos of 7-day and 14-day tenor increased from 0.25 per cent of NDTL of the banking system to 0.5 per cent.</li> <li>OMO purchase of ₹61.6 billion.</li> <li>To ease the liquidity stress to Micro and Small Enterprises (MSE) sector, refinance of an amount of ₹50 billion made available to the Small Industries Development Bank of India (SIDBI) under the provisions of Section 17(4H) of the RBI Act, 1934. The refinance is available against receivables, including export receivables, outstanding as on November 14, 2013 onwards. The facility is available at the prevailing 14-day term repo rate for a period of 90 days. The refinance facility is available for a period of one year up to November 13, 2014.</li> <li>In order to enhance credit delivery to the medium sector, incremental credit including export credit extended to the medium enterprises, has been included as eligible priority sector lending by the scheduled commercial banks (excluding RRBs) over the outstanding credit as on November 13, 2013</li></ul>

(Contd....)

#### ANNUAL REPORT

January 28, 2014	<ul> <li>The policy repo rate under LAF was increased by 25 bps from 7.75 per cent to 8.0 per cent. Consequently, the reverse reprate stood adjusted at 7.0 per cent, and the MSF rate and the Bank Rate at 9.0 per cent. CRR was kept unchanged.</li> <li>Enunciation of the "glide path" for disinflation that sets an objective of 8 per cent CPI inflation by January 2015 and 6 per cent CPI inflation by January 2016, as indicated by the Expert Committee to Revise and Strengthen the Monetary Policy Framework.</li> <li>Monetary policy reviews to be undertaken in a bi-monthly cycle going forward.</li> </ul>				
April 1, 2014	Liquidity provided under 7-day and 14-day term repos was increased from 0.5 per cent of NDTL of the banking system to 0.75 per cent of NDTL, and liquidity provided under overnight repos under the LAF was reduced from 0.5 per cent of bank wise NDTL to 0.25 per cent.				
June 3, 2014	<ul> <li>The liquidity provided under the export credit refinance (ECR) facility was reduced from 50 per cent of eligible export cred outstanding to 32 per cent. Commensurately, a special term repo of 0.25 per cent of NDTL of banks was done.</li> <li>The SLR of scheduled commercial banks was reduced by 50 bps from 23.0 per cent to 22.5 per cent of their NDTL with effect from the fortnight beginning June 14, 2014.</li> </ul>				
August 5, 2014	<ul> <li>The SLR of scheduled commercial banks was reduced by 50 bps from 22.5 per cent to 22.0 per cent of their NDTL with effect from the fortnight beginning August 9, 2014.</li> <li>In order to enable banks greater participation in financial markets, the HTM ceiling reduced to 24 per cent of NDTL with effect from the fortnight beginning August 9, 2014.</li> </ul>				

The primary objective of the increased reliance on term repos is to improve the transmission of policy impulses across the interest rate spectrum. The term repo has evolved as a useful indicator of underlying liquidity conditions. It also allows market participants to hold liquidity for a longer period, thereby providing the impetus for engaging in term transactions in the

market, evolving market-based benchmarks for pricing various financial products and also improving efficiency in cash/ treasury management. This has also helped to move away from sector-specific refinance towards a more generalised provision of system liquidity without preferential access to any particular sector or entity.

On July 23, 2013, a review of domestic III.12 liquidity conditions suggested that these conditions were not tight enough to have the desired impact on the foreign exchange market. Accordingly, further tightening measures were announced: (a) the overnight limit for access to liquidity from RBI at the reporate under LAF was restricted to 0.5 per cent of NDTL of each bank; and (b) banks were required to maintain a minimum daily CRR balance of 99 per cent of the requirement, as against the earlier flexibility of dropping to 70 per cent of the requirement on any single day while meeting the CRR requirement on average over the fortnight. On August 8, 2013, the RBI, in consultation with the government, announced the auction of cash management bills (CMBs) of ₹220 billion every week, aimed at draining out liquidity in the short-end of the market spectrum. These measures helped in keeping the money market conditions tight, with

money market rates rising to around the MSF rate (that is, 300 bps higher than the repo rate). Thus, the MSF rate became the effective policy rate during this period. Besides exceptional monetary measures, other policy measures were also used for addressing exchange market pressures such as three swap windows for NRI deposits, banks and oil marketing companies (OMCs) respectively, restrictions on gold imports and revising interest rates on NRI deposits.

### Calibrated withdrawal of exceptional measures

III.13 With a view to facilitating an adequate flow of credit to the productive sectors of the economy, it became necessary to contain the upward pressure on G-sec yields transmitted by the exceptional measures through open market purchases of ₹80 billion announced on August 20, 2013. As stability returned to the exchange market,

RBI started a calibrated normalisation of the exceptional monetary measures in its mid-quarter review of September 20, 2013. External risks also eased somewhat when the Fed surprised markets by holding off tapering on September 18, 2013. Normalisation of the exceptional measures in terms of restoring the normal spread of 100 bps above the repo rate for MSF was achieved by the end of October 2013 through cumulative reduction in the MSF rate by 150 bps in three steps alongside an increase in the repo rate by 50 bps in two steps of 25 bps each to reinforcing the anti-inflation stance of the monetary policy.

# New monetary policy framework and operating procedure

III.14 In India, the monetary policy framework has evolved over time in consonance with the structure of the economy. The large panel of indicators under the multiple indicator approach was perceived to be inadequate for providing a clearly defined nominal anchor for monetary policy creating uncertainty about what guided RBI's policy decisions. In light of this, the Expert Committee to

Revise and Strengthen the Monetary Policy Framework, with a mandate for revising and strengthening the monetary policy framework and making it transparent and predictable, recommended the adoption of the CPI (combined) as the measure of inflation and as the nominal anchor for monetary policy in India. The current operating framework is premised on a target for borrowed reserves (relative to NDTL of banks), and the call rate close to the policy rate and bound between the reverse repo rate and the MSF rate. By virtue of being synchronised with the reserve maintenance cycle, term repo is gaining market acceptability and has turned out to be a useful indicator of underlying liquidity conditions, as variable rate auctions enable price discovery of the term premium.

### Monetary policy transmission

III.15 Though the impact of the change in policy rate is still unfolding, transmission of policy rate to deposit and lending rates of banks is relatively less pronounced as compared to money market rates reflecting the presence of structural rigidities in the credit market (Box III.3, Table III.1).

# Box III.3 Factors Impeding Smooth Monetary Policy Transmission

The efficacy of monetary policy depends on the nature of development and market integration, which affects the transmission. It is also characterised by long and variable lags and asymmetry in response to policy impulses, making it difficult to predict the effect of monetary policy. In the wake of the global crisis, the efficacy and credibility of the framework increasingly came under the spotlight, especially due to the coexistence of high inflation and low growth. Issues relating to factors impeding smooth monetary policy transmission were extensively analysed in the Report of the Expert Committee to Revise and Strengthen the Monetary Policy Framework.

While the monetary policy transmission channels could be broadly classified as interest rate, credit, exchange rate and asset prices, empirical evidence for India indicates that the impacts are feeble for the asset price channel and the exchange rate channel. While the interest rate channel is the major source of monetary policy transmission, medium to long term rates such as bank deposit and lending rates exhibit asymmetrical responses to policy rate changes under varied

market conditions, responding relatively faster in liquidity deficit conditions than in surplus conditions.

The factors impeding smooth monetary policy transmission to the credit market include rigidities in re-pricing for fixed deposits, the large size of government borrowings, practice of yearly resetting of interest rates on small savings linked to G-sec yields, interest rate subventions that break the link between monetary policy and lending rates, preferential tax benefits on fixed maturity plans of debt mutual funds of tenor one year or more *vis-a-vis* fixed deposits of corresponding maturities, high level of NPAs, an oligopolistic credit market and a significant presence of informal finance. These factors effectively dampen the policy rate transmission to the final outcome, by making alternate investment vehicles more attractive, especially during periods of monetary easing.

#### Reference:

RBI (2014). Report of the Expert Committee to Revise and Strengthen the Monetary Policy Framework (Chairman: Dr. Urjit R. Patel), January.

Table III.1: Asymmetry in Transmission in Different Phases of Monetary Policy Cycles (To Deposit and Lending Rates of Banks)

(Per cent)

Items	Mar 10	Mar 12	Mar 13	Jun 13	Sept 13	Dec 13	Mar 14	Jun 14	Variation (Percentage Points)		
									Tightening Phase (March 19, 2010 to April 16, 2012)	Easing Phase (April 17, 2012 to July 15, 2013)	Tightening Phase** (Since July 16, 2013)
1	2	3	4	5	6	7	8	9	10	11	12
Policy Rate (Repo Rate)	5.00	8.50	7.50	7.25	7.50	7.75	8.00	8.00	3.75	-1.25	0.75
CRR	5.75	4.75	4.00	4.00	4.00	4.00	4.00	4.00	-1.00 @	-0.75	0.00
Call Rate	3.83	9.02	7.58	7.10	11.41	7.51	7.64	7.43	4.98	-1.51	0.59
CBLO Rate	3.01	8.12	7.51	6.34	8.67	7.38	7.75	7.51	5.43	-2.34	1.60
Market Repo Rate	2.65	7.63	7.75	6.75	10.03	7.85	8.22	8.18	6.12	-1.49	1.23
91-Days Treasury Bill	4.27	8.97	8.06	7.41	10.32	8.63	8.99	8.51	4.53	-1.29	1.05
3-Month CP Rate	6.10	11.61	9.61	8.50	10.85	9.10	10.01	8.88	4.24	-2.17	0.52
3-Month CD Rate@	5.48	11.06	9.14	8.11	10.40	8.74	9.55	8.57	4.36	-2.08	0.65
5-Year Corporate Debt Yield	8.61	9.47	8.96	8.55	9.90	8.75	9.73	9.23	0.93	-0.71	0.38
10-Year Corporate Debt Yield	6.61	9.77	9.01	8.66	10.84	9.77	9.75	9.00	3.13	-1.02	0.22
2-Year G-Sec Yield	6.16	8.04	7.76	7.45	8.89	8.54	8.67	8.33	1.87	-0.35	0.64
3-Year G-Sec Yield	6.82	8.27	7.85	7.51	8.87	8.49	8.73	8.37	1.34	-0.57	0.72
5-Year G-Sec Yield	7.54	8.46	7.94	7.52	8.95	8.78	8.92	8.52	1.05	-0.84	0.74
10- Year G-Sec Yield	7.92	8.36	7.91	7.34	8.57	8.85	8.80	8.64	0.64	-1.10	1.13
Median Deposit Rate	5.15	7.46	7.42	7.48	7.78	7.75	7.74	7.74	2.31	0.00	0.28
Median Base Rate *	7.75	10.50	10.20	10.20	10.25	10.25	10.25	10.25	2.75	-0.35	0.25
WALR (Outstanding Rupee Loans)	10.53	12.64	12.27	12.20	12.31	12.25	12.19	12.20	2.13	-0.44	0.00
WALR (Fresh Rupee Loans)	-	_	11.54	11.46	12.03	11.73	11.64	11.67	_	_	0.13

<sup>\*:</sup> Base Rate system was introduced from July 1, 2010.

Note: Policy rate, deposit and base rates are at end-month while money and bond market rates are monthly average.

Sources: Bloomberg and the Reserve Bank of India.

During the downward phase of the interest rate cycle, fixed rate high cost outstanding deposits prevent banks from reducing loan rates as they want to maintain their net interest margins (NIMs). This is in contrast to what is experienced during the upward phase of the interest rate cycle when banks are prompt in raising their lending rates. The current tightening phase has been an exception in that there has been a muted response in lending rates, which appears to reflect the sharp deceleration in economic activity and the consequential sluggishness in credit demand. However, based on data collated from January 2013 on fresh rupee loans sanctioned by banks, the transmission of policy signals appears to be more pronounced (Tables III.1 and III.2).

Table III.2: Deposit and Lending Rates of SCBs (Excluding RRBs)

(Per cent)

Month-end	Repo Rate	Median Term	Weighted Average Lending Rate (WALR)			
		Deposit Rate	Outstanding Rupee Loans	Fresh Rupee Loans		
1	2	3	4	5		
Mar-13	7.50	7.42	12.27	11.54		
Jun-13	7.25	7.48	12.20	11.46		
Sep-13	7.50	7.78	12.31	12.03		
Dec-13	7.75	7.75	12.25	11.73		
Mar-14	8.00	7.74	12.19	11.64		
Jun-14	8.00	7.74	12.20	11.67		
Variation (Percentage Points) (March-14 over March-13)	0.50	0.32	-0.08	0.10		

<sup>\*\*:</sup> Data are till end-June 2014. WALR: Weighted Average Lending Rate.

<sup>@:</sup> CRR was cut to create the desirable liquidity conditions ahead of the repo rate cuts in next easing phase. - : Not available.

Table III.3: Sectoral Median Lending Rates of SCBs (Excluding RRBs)

(at which 60 per cent business is contracted)

(per cent)

Month-end	Home	Vehicle	Agriculture	SME	Credit Card	Education
1	2	3	4	5	6	7
Mar-13	11.25	12.71	11.63	12.99	27.07	13.00
Jun-13	11.20	12.50	11.50	12.98	24.12	13.06
Sep-13	11.20	12.30	11.86	13.00	24.74	13.13
Dec-13	11.24	12.25	11.81	12.90	25.24	13.13
Mar-14	11.27	12.19	11.70	12.73	25.00	12.88
Jun-14	11.13	12.13	11.63	12.71	27.34	12.88
Variation (Percentage Points) (March-14 over March-13)	0.02	-0.52	0.07	-0.26	-2.07	-0.12

#### Deposit and lending rates

III.17 The transmission of monetary easing during 2012-13 and 2013-14:Q1 enabled the weighted average lending rate (WALR) on the outstanding rupee loans extended by scheduled commercial banks (excluding RRBs) to decline by 37 bps during 2012-13 and further by 7 bps during 2013-14:Q1. The median term deposit rate of the banks declined by 4 bps to 7.42 per cent during 2012-13 while it increased by 6 bps during 2013-14:Q1. Following the exceptional measures taken by the Reserve Bank in Q2 of 2013-14, both deposit and lending rates had firmed up by September 2013 (Table III.2). With the ebbing of pressures on the exchange rate, the Reserve Bank rolled back these measures in a calibrated manner and, therefore, lending rates softened in H2 of 2013-14. On balance, while lending rates were by and large sticky during the year, SCBs' median term deposit rate rose by 32 bps over the year, although it remained almost unchanged in the second half.

#### Sectoral lending rates

III.18 The pass-through of the cumulative monetary policy actions during the tightening phase of the monetary policy cycle was not visible in the lending rates of most of the select sectors, reflecting

the banks' weak pricing power on account of subdued economic activity (Table III.3).

### Improving monetary policy transmission

III.19 In order to address the structural impediments to monetary policy transmission, the Expert Committee to Revise and Strengthen the Monetary Policy Framework recommended several measures which, inter alia, include reduction in SLR to a level consonant with the requirements of the liquidity coverage ratio (LCR) prescribed under the Basel III framework; the government eschewing suasion and directives to banks on interest rates: more frequent intra-vear resets of interest rates on small saving instruments, with built-in automaticity linked to benchmark G-sec yields; treating all fixed income financial products on par with bank deposits for the purposes of taxation and tax deducted at source (TDS); reducing subventions on the interest rate for lending to certain sectors; developing a culture of establishing external benchmarks for setting interest rates for pricing of financial products; consistency of the Reserve Bank's liquidity management operations with the stance of monetary policy signaled through a change in the policy rate; close coordination between the settings of monetary policy and macro-prudential policies; and linking of OMOs solely to liquidity management.