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

III MONETARY POLICY OPERATIONS

A Monetary Policy Framework Agreement (MPFA) was signed between the Government of India and the Reserve Bank on February 20, 2015. The policy rate was reduced by 75 bps during 2015-16 and 25 bps during 2016-17 so far; in support of an accommodative policy stance. The target for CPI inflation below 6 per cent by January 2016 was met and the focus has shifted to attaining the inflation target of 5 per cent by the end of 2016-17. Effective liquidity management kept the weighted average call rate (WACR) tightly around the policy repo rate during 2015-16. In April 2016, the liquidity management framework was revised to progressively move to a position closer to neutrality. The policy rate corridor around the repo rate was narrowed to +/- 50 bps. The Reserve Bank introduced the Marginal Cost of Funds based Lending Rate (MCLR) system effective April 1, 2016. The Union Budget 2016-17 announced the constitution of a Monetary Policy Committee (MPC) by amending the RBI Act, 1934. The amendment to the Act was notified in the Gazette of India on May 14, 2016 and came into force on June 27, 2016.

III.1 The conduct of monetary policy during 2015-16 was steered by the MPFA signed between the Government of India and the Reserve Bank on February 20, 2015 (Box III.1). Empowered by the MPFA, the Reserve Bank set out an agenda for its monetary policy operations: entrenching a durable disinflationary process to take consumer price index (CPI) inflation to the targets set for January 2016 and March 2017; improving transmission of the policy rate to bank lending rates by ensuring appropriate liquidity management consistent with the monetary policy stance; and dampening volatility of the WACR and other money market rates around the repo rate, *i.e.,* securing the first leg of monetary transmission.

Agenda for 2015-16: Implementation Status

Disinflation

III.2 The first bi-monthly policy statement of the Reserve Bank for 2015-16 maintained accommodative stance for monetary policy while keeping focus on a gradual and durable disinflation path that would take the CPI inflation below 6 per cent by January 2016. The assessment at that time was that inflation would be at 5.8 per cent by the end of the year. Upside risks to the forecast such as less than normal rainfall, large administered price revisions, faster closing of the output gap and possible geo-political spill-overs were expected to be largely offset by downside risks originating from global deflationary/disinflationary tendencies and a soft outlook on global commodity prices. Accordingly, the policy rate was kept unchanged while awaiting transmission of past rate reductions into banks' lending rates, policy efforts to improve food supply management and the unravelling of global developments including the normalisation of the US monetary policy. In June 2015, even as concerns about a sub-normal south west monsoon and its implications for food inflation remained, the Reserve Bank reduced the policy repo rate by

Box III.1
Monetary Policy Framework Agreement (MPFA)

With the signing of the MPFA between the Government of India and the Reserve Bank on February 20, 2015, flexible inflation targeting (FIT) has been formally adopted in India. Under the MPFA, the objective of monetary policy is to primarily maintain price stability while keeping in view the objective of growth. The Reserve Bank was to bring CPI inflation below 6 per cent by January 2016. The target for 2016-17 and all subsequent years was set at 4 per cent with a band of +/- 2 per cent. The MPFA also requires the Reserve Bank to establish an operating target and an operating procedure for monetary policy through which the operating target is to be achieved. The Reserve Bank shall be seen to have failed to meet the target if inflation remains above 6 per cent or below 2 per cent for three consecutive quarters. In such circumstances, the Reserve Bank is required to provide the reasons for the failure, and propose remedial measures and the expected time to return inflation to the target. The Reserve Bank shall publish a document explaining the sources of inflation as well as forecasts of inflation for the next six to eighteen months.

The Reserve Bank has been publishing a bi-annual Monetary Policy Report (MPR) since September 2014, which provides forecasts of inflation and growth as well as an assessment of the overall macroeconomic conditions. The MPR also sets out the operating target and gives details of the operating procedure of monetary policy and any changes thereto.

With the amendment to the RBI Act on May 14, 2016, several provisions of MPFA were subsumed in the amended Act. The Central Government, in consultation with the Reserve Bank, has notified the inflation target of 4.0 per cent (with 6.0 per cent and 2.0 per cent as the upper and lower tolerance levels, respectively) in the Official Gazette on August 5, 2016. This inflation target is applicable for the period from August 5, 2016 to March 31, 2021. Moreover, factors that constitute a failure to achieve the inflation target – *i.e.,* if the average inflation is more/less than the upper/lower tolerance level for three consecutive quarters – have also been defined and notified in the Official Gazette on June 27, 2016.

References:

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

Government of India (2015), "Agreement on Monetary Policy Framework between the Government of India and the Reserve Bank of India", February.

25 bps, considering the weak investment climate and the need to mitigate supply constraints. In August 2015, the policy rate was kept unchanged while awaiting clarity on domestic and global developments and further transmission by banks.

III.3 By September 2015, the receding inflationary pressure emanating from benign cereal prices and moderation in international crude oil prices opened up space for monetary policy action. The Reserve Bank front-loaded the policy action by effecting a 50 bps cut in the policy repo rate to boost domestic demand and stimulate investment.

III.4 From September onwards, inflation began rising prompting status quo on the policy rate in December 2015. In February 2016, with a softening in food and fuel inflation, it became clear that the January 2016 disinflation target would be met and the subsequent data release which placed CPI inflation for January 2016 at 5.7 per cent confirmed this. With the target for January 2016 achieved, the focus of monetary policy shifted to attaining the inflation target of 5 per cent by the end of fiscal year 2016-17. Based on an assessment that the target of 5 per cent inflation by March 2017 was achievable, particularly when the Union Budget 2016-17 adhered to fiscal consolidation and announced measures to re-invigorate the rural economy, upgrade the social and physical infrastructure, deepen institutional reforms and improve the environment for business, the policy rate was reduced further by 25 bps to 6.5 per cent in April 2016, the lowest since March 2011. The policy rate was kept unchanged in June 2016 in view of uncertainties due to larger than seasonal inflationary pressures emanating from food items and reversal in commodity prices. Continuing with the accommodative stance, a status quo on the policy repo rate was maintained in August 2016 as a sharper-than-anticipated increase in food prices pushed up the projected trajectory of inflation over the rest of the year.

Operating Framework

III.5 The goal of the operating framework of monetary policy is to modulate liquidity conditions in order to align the operating target – the WACR – closely with the policy repo rate. During 2015-16, a considerable flux in autonomous liquidity flows necessitated a pro-active assessment of liquidity conditions and nimble responses through a combination of regular facilities and fine-tuning operations in the form of variable rate repo/reverse repo auctions, drawing upon the revised liquidity framework instituted in September 2014 (Chart III.1). Liquidity conditions generally remained tight during the second half of the year due to festival related currency requirements and advance tax outflows in Q3, followed by balance sheet considerations and restraint in government spending in Q4. Accordingly, the daily recourse to the Reserve Bank for liquidity which averaged ₹1.2 trillion during the second half of 2015-16 through all liquidity windows, peaked at ₹3 trillion at end-March 2016. The end-year spike in WACR was due to the usual build-up of cash balances by banks and the government. Effective liquidity management, however, kept the WACR within +/- 10 bps and +/- 20 bps of the repo rate for 36 per cent and 79 per cent of the total number of trading days, respectively, during 2015-16.

III.6 With the institution of the revised liquidity management framework, the role of term repo auctions under the liquidity adjustment facility (LAF) has become significant. Normal 14-day and fine tuning term repos of varying tenors ranging from 2 to 56-day accounted for about 90 per cent of the average net liquidity injection under the LAF during the year (Chart III.2). Since July 22, 2015, the Financial Benchmark India Private Limited (FBIL) has started compiling the Mumbai Inter-Bank Offer Rate (MIBOR) based on actual data of the interbank call market transactions covering a one hour time span – from 9.00 a.m. to

Chart III.1: Liquidity Management and WACR

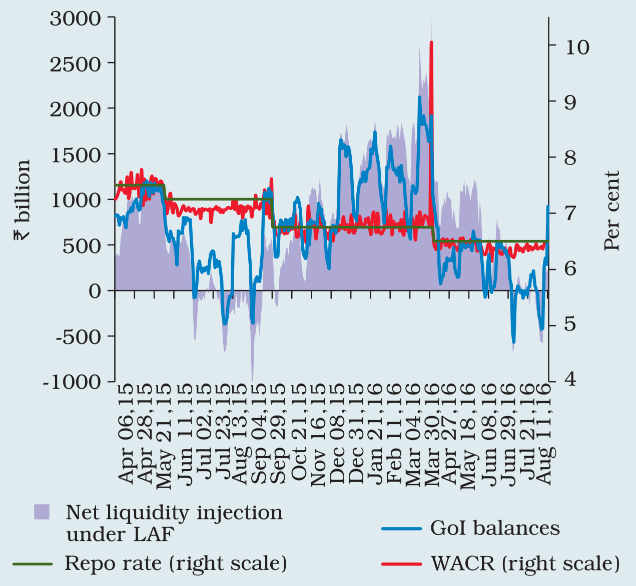


Chart III.2: Liquidity Management: Various Instruments

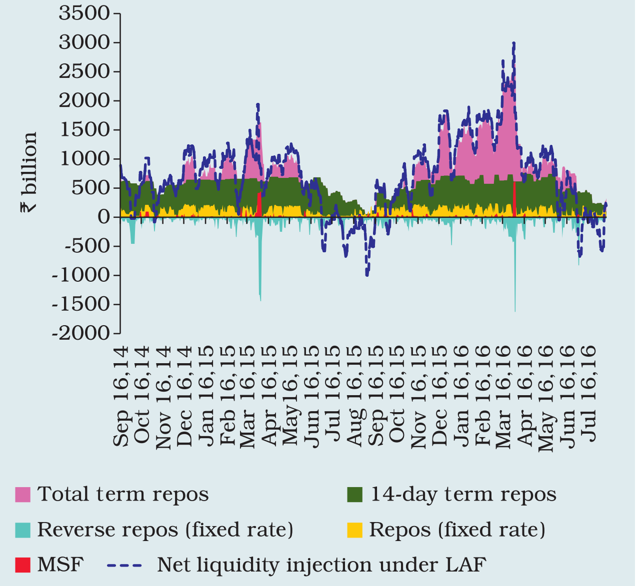
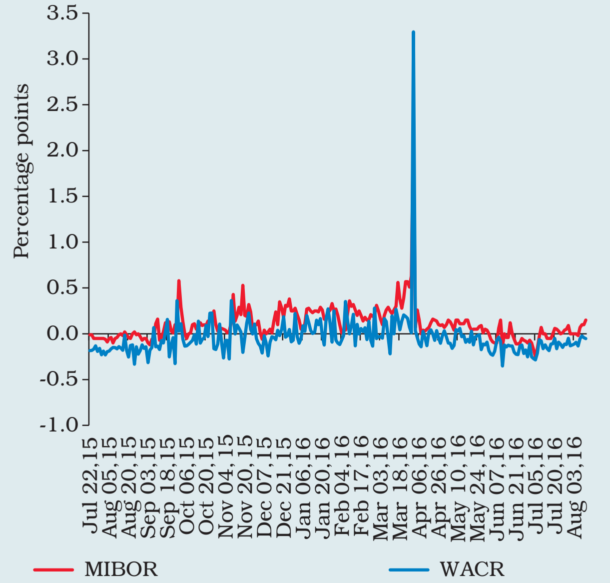


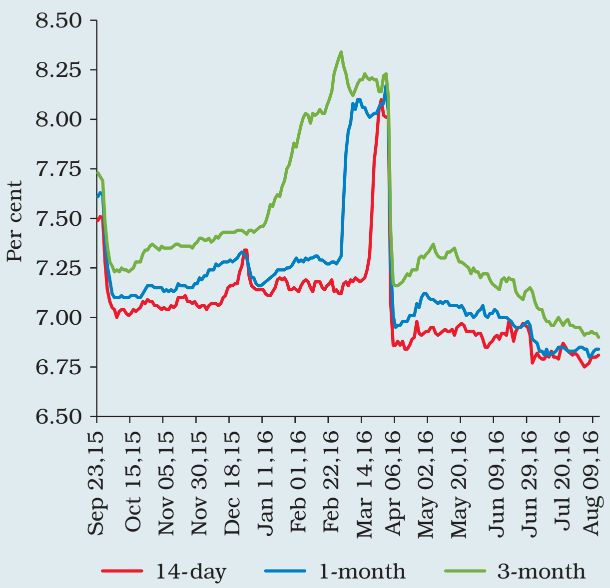
Chart III.3: Deviation from Policy Repo Rate



10.00 a.m. Given the market microstructure, thick trading in the first hour usually elevates MIBOR above WACR (Chart III.3). The FBIL has started generating quote-based term benchmarks, but their use in pricing of financial products and transactions is yet to pick up (Chart III.4).

III.7 In April 2016, the liquidity management framework was revised in a move to progressively

Chart III.4: FBIL Term Benchmarks



lower the average *ex ante* liquidity deficit to a position closer to neutrality. The Reserve Bank assured the market of meeting the requirements of durable liquidity and then using its fine-tuning operations to make short-term liquidity conditions consistent with the stated policy stance. Accordingly, in Q1 of 2016-17 the Reserve Bank injected permanent liquidity of ₹805 billion through open market operations (outright), more than offsetting the impact of currency leakage of ₹696 billion during the same period. For ensuring non-disruptive FCNR(B) redemptions, the Reserve Bank pro-actively injected ₹100 billion through open market purchase auction on August 11, 2016. With a view to further minimising volatility in WACR, as also easing liquidity management for banks without abandoning liquidity discipline, the minimum daily maintenance of the cash reserve ratio (CRR) was lowered from 95 per cent of the requirement to 90 per cent effective April 16, 2016. Furthermore, the policy rate corridor around the repo rate was narrowed from +/-100 bps to +/- 50 bps.

III.8 During 2015-16, as a part of the phased implementation of the liquidity coverage ratio (LCR), the minimum required high quality liquid assets (HQLA) was raised from 60 per cent to 70 per cent of the total net cash outflow over the next 30 calendar days under the stress scenario effective January 01, 2016, which correspondingly limited the capacity of banks to use the excess statutory liquidity ratio (SLR) securities to access collateralised liquidity from money markets and the Reserve Bank. Recognising the scope for providing greater flexibility to banks within the prescribed SLR, effective February 11, 2016, the Reserve Bank allowed banks to reckon additional government securities held by them up to three per cent of their NDTL within the mandatory SLR requirement as level 1 HQLA for the purpose of computing their LCR on top of the five per cent permitted in November 2014. On July 21, 2016, additional headroom equivalent to 1 per cent of NDTL was provided within the prescribed SLR. Together, the total carve-out from SLR available to banks stands at 11 per cent of their NDTL, including 2 per cent of NDTL available under MSF.

Monetary Policy Transmission

III.9 In response to the reduction in the policy repo rate by 150 bps during January 15, 2015 through April 05, 2016, the median base rate of banks declined by 60 bps as against a higher decline of 92 bps in median term deposit rates, reflecting banks' preference to protect profitability in the wake of deteriorating asset quality and higher provisioning (Table III.1). The weighted average lending rate (WALR) on fresh rupee loans declined by 100 bps (up to June 2016), significantly more than the decline of 65 bps in WALR on outstanding rupee loans.

Sectoral Lending Rates

III.10 Since December 2014, lending rates across various sectors (except credit card) have declined in the range of 16-110 bps, reflecting the varied credit conditions and risk appetite of banks (Table III.2). Interest rates on fresh rupee loans sanctioned for housing – personal and commercial – declined more than that of the respective categories of vehicle loans (Table III.3).

Table III.1: Deposit and Lending Rates of SCBs (Excluding RRBs)

(Per cent)

End-Month	Repo Rate	Term Deposit Rates		Lending Rates		
		Median Term Deposit Rate	WADTDR	Median Base Rate	WALR - Out-standing Rupee Loans	WALR - Fresh Rupee Loans
1	2	3	4	5	6	7
Dec-14	8.00	7.55	8.64	10.25	11.84	11.45
Mar-15	7.50	7.50	8.57	10.20	11.76	11.07
Jun-15	7.25	7.22	8.43	9.95	11.61	11.03
Sep-15	6.75	7.02	8.03	9.90	11.53	10.77
Dec-15	6.75	6.77	7.83	9.65	11.31	10.59
Mar-16	6.75	6.77	7.73	9.65	11.20	10.47
Jun-16	6.50	6.63	7.52	9.65	11.19	10.45
Variation (Percentage Points) (Jun-16 over Dec-14)	**-1.50**	**-0.92**	**-1.12**	**-0.60**	**-0.65**	**-1.00**

WADTDR: Weighted average domestic term deposit rate.

Table III.2: Sector-wise WALR of SCBs (Excluding RRBs) - Outstanding Rupee Loans
(at which 60 per cent or more business is contracted)

(Per cent)

End-Month	Agriculture	Industry (Large)	MSMEs	Infra-structure	Trade	Profes-sional Services	Personal Loans					Rupee Export Credit
							Housing	Vehicle	Education	Credit Card	Other	
1	2	3	4	5	6	7	8	9	10	11	12	13
Dec-14	10.93	12.95	13.05	13.05	13.09	12.39	10.76	11.83	12.90	37.86	14.24	12.16
Mar-15	10.96	12.80	12.91	12.89	13.07	12.46	10.99	11.62	12.87	37.88	13.94	12.04
Jun-15	10.76	12.62	12.36	12.24	12.52	12.03	10.81	11.39	12.58	37.87	13.75	11.63
Sep-15	10.73	12.39	12.43	12.18	12.51	12.17	10.63	11.49	12.51	37.34	13.24	11.89
Dec-15	10.51	12.47	12.34	12.25	12.72	12.74	10.36	11.00	12.35	34.04	13.86	11.60
Mar-16	10.74	12.36	12.25	12.06	12.50	11.81	10.56	11.65	12.48	38.00	13.90	11.46
Jun-16	10.77	12.17	12.08	12.20	11.99	11.64	10.50	11.39	12.32	38.26	13.96	11.17
Variation (Percent-age Points) (Jun-16 over Dec-14)	**-0.16**	**-0.78**	**-0.97**	**-0.85**	**-1.10**	**-0.75**	**-0.26**	**-0.44**	**-0.58**	**0.40**	**-0.28**	**-0.99**

MSMEs: Micro, Small and Medium Enterprises.

Table III.3: WALR of Select Sectors of SCBs (Excluding RRBs) - Fresh Rupee Loans Sanctioned

(Per cent)

End-Month	Personal		Commercial	
	Housing	Vehicle	Housing	Vehicle
1	2	3	4	5
Dec-14	10.53	12.29	11.74	12.53
Mar-15	10.47	12.42	12.05	12.30
Jun-15	10.10	12.53	12.06	12.29
Sep-15	10.22	12.24	11.79	11.90
Dec-15	10.02	11.97	11.08	11.64
Mar-16	9.79	11.99	11.15	11.21
Jun-16	9.64	11.80	10.53	11.49
Variation (Percentage Points) (June-16 over Dec-14)	**-0.89**	**-0.49**	**-1.21**	**-1.04**

Experience of the MCLR System

III.11 As set out in the agenda for 2015-16, the Reserve Bank introduced the Marginal Cost of Funds based Lending Rate (MCLR) system for scheduled commercial banks (excluding RRBs), effective April 1, 2016 whereby all new rupee loans sanctioned and credit limits renewed would be priced with reference to the MCLR.

III.12 Under the MCLR system, banks determine their benchmark lending rates linked to marginal cost of funds which is more sensitive to changes in the policy rate, unlike the earlier base rate system where banks adopted different methodologies (average/marginal/blended principles) for computing their cost of funds. MCLR consists of four components: (a) marginal cost of funds (marginal cost of borrowings comprising deposits and other borrowings, and return on net worth), (b) negative carry on account of CRR, (c) operating costs and (d) term premium. The MCLR *plus* spread is the actual lending rates for borrowers. The spread comprises of only two components, *viz.*, business strategy and credit risk premium.

III.13 Under the MCLR system, transmission to WALR is expected to improve on the assumption that the marginal cost of funds is more sensitive to changes in the policy rate than the average cost of funds. As expected, the MCLR for the overnight segment, one year segment and up to three-year segment (as on July 31, 2016) was lower by 70 bps, 25 bps and 36 bps, respectively, than the base rate of 9.65 per cent (Table III.4).

III.14 There has hardly been any transmission of a reduction in the policy rate to the actual lending rates charged to customers during 2016-17 so far (up to June). While the cost of funding by banks has declined somewhat leading to a decline in shorter maturity MCLR, there has been an increase in the term premia in respect of term loans of one year and above, thereby

Table III.4: MCLR and Base Rate of SCBs (Excl. RRBs)

(Per cent)

Tenor	Median MCLR		Variation [col. 3-col. 2] (Percentage Points)
	April 04, 2016	July 31, 2016	
1	2	3	4
Overnight	9.05	8.95	-0.10
1-Month	9.20	9.03	-0.17
3-Month	9.30	9.20	-0.10
6-Month	9.40	9.28	-0.12
1-Yr	9.45	9.40	-0.05
2-Yr	9.60	9.55	-0.05
3-Yr	9.65	9.63	-0.02
4-Yr	9.65	9.68	0.03
5-Yr	9.70	9.70	0.00
6-Yr	9.73	9.73	0.00
7-Yr	9.73	9.73	0.00
8-Yr	9.73	9.73	0.00
9-Yr	9.73	9.73	0.00
10-Yr	9.73	9.73	0.00
Up to 3-yrs	9.38	9.29	-0.09
Median Base Rate			
	9.65	9.65	0.00
Variation (MCLR over Base Rate) (Percentage Points)			
As on	Overnight	1-Yr	Up to 3-Yrs
April 04, 2016	-0.60	-0.20	-0.27
July 31, 2016	-0.70	-0.25	-0.36

attenuating the transmission to actual lending rates charged to customers. Moreover, banks may have been loading (i) a higher credit risk premia on their new customers in order to attain their desired return on net worth in a rising NPA environment; and/or (ii) a higher strategic risk premia on their riskier loans as part of their business strategy to reorient their lending operations towards less risky activities. The consequent rise in the spread is reflected in a near unchanged WALR in respect of both outstanding and fresh rupee loans during 2016-17 so far (up to June).

III.15 In a competitive environment, it is expected that the return on net worth of banks would vary in a narrow range. Data for the month of June 2016, however, show wide variations in the expected return on net worth – between 0.33 per cent and 26.44 per cent (Table III.5).

Agenda for 2016-17

III.16 In the first bi-monthly policy statement for 2016-17, the Reserve Bank set a target for CPI inflation at 5 per cent by March 2017. The eventual aim is to move towards 4 per cent CPI inflation by the end of 2017-18.

III.17 To strengthen the monetary policy framework, the Union Budget 2016-17 announced the formal constitution of a Monetary Policy Committee (MPC) by amending the RBI Act, 1934, which will be vested with the responsibility of setting the policy rate. With the introduction of MPC, the decision making process will imbue diversity of views, specialised experience and independence of opinion, which will bring transparency to the overall decision-making process. In this context, as the cross-country experience shows, there is an increasing recognition of the merit in following a collegial approach to monetary policy decision making, irrespective of whether the countries are following inflation targeting or not (Box III.2).

III.18 The amended RBI Act, which was notified in the Gazette of India on May 14, 2016 mandates a Monetary Policy Committee to determine the policy interest rate to achieve the inflation target set by the Government. MPC is a new institutional structure. The MPC shall consist of the Governor of the Reserve Bank, the Deputy Governor-in-charge of monetary policy, one officer of the Bank to be nominated by the Central Board of the Reserve Bank and three members to be appointed by the Central Government. Each member shall have one vote, and in the event of a tie, the Governor can exercise a casting or second vote. The institution of the MPC is the culmination of several preceding processes and draws on the recommendations of technical committees including the Committee on Fuller Capital Account Convertibility, 2006 (Chairman: Shri S.S. Tarapore); the Committee on Financial Sector Reforms, 2009 (Chairman: Dr. Raghuram G. Rajan); the Committee on Financial Sector Assessment, 2009 (Chairman: Dr. Rakesh Mohan); the Financial Sector Legislative Reforms Commission (FSLRC), 2013 (Chairman: Shri B.N. Srikrishna) and the Expert Committee to Revise and Strengthen the Monetary Policy Framework, 2014 (Chairman: Dr. Urjit R. Patel). It also represents a progressive graduation of the initial efforts towards collegial decision making under the aegis of the Technical Advisory Committee on Monetary Policy. The learning experience gained

Table III.5: Return on Net Worth Expected by Banks - June 2016

(Per cent)

Bank Group	Min	Max	Median
Public Sector Banks	2.00	25.00	16.00
Private Sector Banks	2.81	22.00	16.50
Old	2.81	22.00	15.25
New	6.25	20.00	18.00
Foreign Banks	0.33	26.44	10.00
SCBs	0.33	26.44	14.00

Box III.2
Committee Approach to Monetary Policy: International Experience

A committee approach to monetary policy decisions has emerged as the preferred framework across the globe. Several advantages have been cited for this: enabling a confluence of specialised knowledge and expertise on the subject domain; bringing together different stakeholders and diverse opinion and improving representativeness; and collective wisdom making the whole greater than the sum of the parts (Blinder and Morgan, 2005 and Maier, 2010). Even for countries like Canada, Israel and New Zealand where the Governor is responsible for decision making *de jure*, she/he is typically supported by an advisory committee *de facto*. Within this committee approach, there are several variants in terms of size and composition of the committee, representation of the government, the manner in which the members are appointed, the frequency of committee meetings and how a decision is arrived at, *i.e.*, by voting or consensus, and whether there are external members or not and if so full time or part time, all of which impact policy outcomes (Table 1).

Table 1: Structure of MPC in Select Countries

Country	Started	Internal Members	External Members	Government Representative (s)	External Members	Decision Making	
					Full time/ part time	Voting	Consensus
1	2	3	4	5	6	7	8
Australia	1959	3	6	Yes	Part time	✓	
Brazil	1996	8	0	No	NA		✓
Chile	1990	5	0	No	NA	✓	
Czech Republic	1998	7	0	No	NA	✓	
ECB	–	6	19	No	Full time*		✓
Hungary	1993	4-6	1-3	No	Full time	✓	
Indonesia	2005	6	0	No	NA		✓
Japan	1998	3	6	Yes – no voting rights	Full time	✓	
Mexico	1994	5	0	No	NA	✓	
Norway	2001	2	5	No	Part time	✓	
Poland	1998	1	9	No	Full time	✓	
South Africa	1999	8	0	No	NA	✓	
South Korea	1997	2	5	No	Full time	✓	
Sweden	1999	6	0	No	NA	✓	
Thailand	2001	3	4	No	Full time		✓
Turkey	2001	6	1	Yes – no voting rights	Full time		✓
UK	1997	5	4	Yes – no voting rights	Part time	✓	
US	1935	12	0	No	NA	✓	

NA: Not applicable.
*: External members are governors of member central banks.
Sources: Central bank websites and CCBS Handbook No. 29, February 2012.

References:

Blinder A. and J. Morgan (2005), 'Are Two Heads Better than One? An Experimental Analysis of Group versus Individual Decision-making', *Journal of Money, Credit and Banking* 35(5).

Maier, P. (2010), 'How Central Banks Take Decisions: An Analysis of Monetary Policy Meetings' in P.L. Siklos, M.T. Bohl and M.E. Woher (eds), *Challenges in Central Banking: The Current Institutional Environment and Forces Affecting Monetary Policy*, Cambridge University Press, Cambridge.

by the Reserve Bank will help refine and entrench decision making under MPC with the passage of time.

III.19 The revised liquidity management framework being implemented since April 2016 is expected to smoothen the supply of durable liquidity over the year and progressively lower the average *ex ante* liquidity deficit in the system to a position closer to neutrality. This warrants continuous monitoring and preparedness to calibrate instruments to unforeseen liquidity developments in pursuit of this objective. In particular, the risk of easy liquidity conditions either driving WACR below the repo rate or the associated lower term repo auction volumes dampening the prospect of development of a term money market will have to be avoided. The Reserve Bank will objectively assess the efficacy of MCLR *vis-à-vis* the earlier base rate system in terms of monetary policy transmission.