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Four years of the inflation targeting framework

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Abstract

In 2016, India adopted a flexible inflation targeting framework. A six member MPC, with three internal and three external members was set up to determine the policy rate to achieve the inflation target. The CPI based inflation target was set by the Government at 4 percent with a tolerance band of plus/minus 2 percent for the period from August, 2016 to March, 2021. The review of the target is due in a few months. The tenure of the first MPC came to an end with the August, 2020 meeting. In this backdrop, this paper presents a review of the inflation targeting framework in India.

Contents

1 The setting

The move towards an inflation targeting framework was formalised through an agreement between the government and the RBI in February, 2015. The Finance Act of 2016 amended the RBI Act to provide price stability as the primary objective of monetary policy, CPI as the nominal anchor, an institutional framework in the form of a Monetary Policy Committee (MPC) to set the policy rate to achieve the inflation target. The amended RBI Act came into effect in June, 2016. In August, 2016, the Government notified an inflation target of 4 per cent within a band of $+/-2$ per cent, while supporting growth. This inflation target is applicable for the period from August 5, 2016 to March 31, 2021. The Government notified the factors that constitute a failure to achieve the inflation target on 27th June, 2016. According to the notification, if the average inflation rate is above the upper tolerance level of 6% or less than the lower tolerance level of 2%, for any three consecutive quarters, it would mean a failure to achieve the inflation target[1].

A six-member MPC was constituted through a notification dated 29th September, 2016 with the following composition:[2]

1. The Governor of the Bank: Chairperson, ex officio;
2. Deputy Governor of the Bank, in charge of Monetary Policy: Member, ex officio;
3. One officer of the Bank to be nominated by the Central Board: Member, ex officio;
4. Shri Chetan Ghate, Professor, Indian Statistical Institute (ISI) :Member
5. Professor Pami Dua, Director, Delhi School of Economics (DSE) : Member
6. Dr. Ravindra H. Dholakia, Professor, Indian Institute of Management (IIM), Ahmedabad: Member

The three external members are appointed for a period of four years and are not eligible for reappointment. The RBI is required to organise atleast four meetings of the MPC, the schedule of which is required to be published in advance. The MPC determines the policy rate required to achieve the inflation target through a majority decision by voting. Each member has one vote.

The RBI is required to publish the resolution adopted by the Committee at the conclusion of every MPC meeting. The minutes of the meeting are to published on the fourteenth day, including the vote of, and the statement of each member of the MPC. The RBI has to publish a Monetary Policy Report, every six months, explaining the sources of inflation. The report has to provide forecasts of inflation for a period between six to eighteen months from the date of

[1] Press Information Bureau, 2016b.
[2] Press Information Bureau, 2016a.

publication of the document. Finally, in the event of a failure to meet the inflation target, the RBI is required to submit a report mentioning the reasons for failure to achieve the inflation target, remedial actions it proposes to undertake and an estimate of the time within which inflation target is sought to be achieved.

The tenure of the three external members of the MPC comes to an end by September, 2020. In a few months, the Government in consultation with the RBI will decide on the inflation target to be achieved over the next five years from March 2021. In this backdrop, this paper presents a discussion on four years of inflation targeting regime in India. We find that inflation has been largely range-bound since the inception of the inflation targeting regime. In December, 2019 inflation breached the upper end of the target for the first time. The periods when inflation has been above target are periods of sharp rise in food inflation. Inflation expectations, while below the pre-inflation targeting regime have been significantly higher than the actual inflation. The weighted average call rate has largely followed the trajectory of the repo rate, though since the beginning of this year, it has drifted from the repo rate and moved closer to the reverse repo rate. In the first two years since the adoption of the inflation targeting regime, the MPC largely followed a status-quo on rates with two instances of rate cut and two instances of rate hike. In the period beginning 2019, which also coincides with the tenure of Shaktikanta Das, the MPC has largely been dovish on policy. The voting patterns show that not only the external members but the internal members have also dissented on the resolution. Since the onset of the pandemic, the MPC has cut the policy rate by 115 basis points till August, 2020. The LAF corridor has turned asymmetrical with a 65 basis points difference between the repo and the reverse repo rate and a 25 basis points difference between the repo rate and the MSF rate. The rest of the paper is structured as follows: Section 2 discusses the decisions of the 24 meetings of the MPC held till August, 2020. Section 3 presents the inflationary outcomes in the post inflation targeting regime. Section 4 examines the liquidity management framework since the inception of the inflation targeting regime. Section 5 discusses the voting patterns in the MPC meetings. Section 6 asks if in hindsight, the MPC was overcautious in deciding policy rates. This section also discusses the role of RBI's forecasts in shaping interest rate decisions. Section 7 discusses the response of the RBI's MPC to the two shocks it faced during its four year tenure: the demonetisation shock and the Covid-19 shock. Section 8 concludes the paper. Appendix A presents a brief overview of the decisions of the MPC meetings. Appendix B lists the notifications that operationalised the inflation targeting regime in India.

2 MPC meetings

MPC meetings are held once every two months. At the conclusion of each meeting, a statement on the policy rate (known as the monetary policy statement) is released. Each statement docu-

Table 1 Decisions at the MPC meetings

Meeting	Decision on policy rate	Stance
4th October, 2016	Reduce by 25 basis points from 6.5% to 6.25%	Accommodative
7th December 2016	Unchanged at 6.25%	Accommodative
8th February, 2017	Unchanged at 6.25%	Neutral
6th April, 2017	Unchanged at 6.25%	Neutral
7th June, 2017	Unchanged at 6.25%	Neutral
2nd August, 2017	Reduce by 25 basis points from 6.25% to 6.0%	Neutral
4th October, 2017	Unchanged at 6%	Neutral
6th December, 2017	Unchanged at 6%	Neutral
7th February, 2018	Unchanged at 6%	Neutral
5th April, 2018	Unchanged at 6%	Neutral
6th June, 2018	Increase by 25 basis points from 6% to 6.25%	Neutral
1st August, 2018	Increase by 25 basis points from 6.25% to 6.5%	Neutral
5th October, 2018	Unchanged at 6.5%	Calibrated tightening
5th December, 2018	Unchanged at 6.5%	Calibrated tightening
7th February, 2019	Reduce by 25 basis points from 6.5% to 6.25%	Neutral
4th April, 2019	Reduce by 25 basis points from 6.25% to 6%	Neutral
6th June, 2019	Reduce by 25 basis points from 6% to 5.75%	Accommodative
21st August, 2019	Reduced by 35 basis points from 5.75% to 5.40%	Accommodative
4th October, 2019	Reduced by 25 basis points from 5.40% to 5.15%	Accommodative
5th December, 2019	Unchanged at 5.15%	Accommodative
6th February, 2020	Unchanged at 5.15%	Accommodative
27th March, 2020	Reduced by 75 basis points from 5.15% to 4.40%	Accommodative
22nd May, 2020	Reduced by 40 basis points from 4.40% to 4%	Accommodative
6th August, 2020	Unchanged at 4%	Accommodative

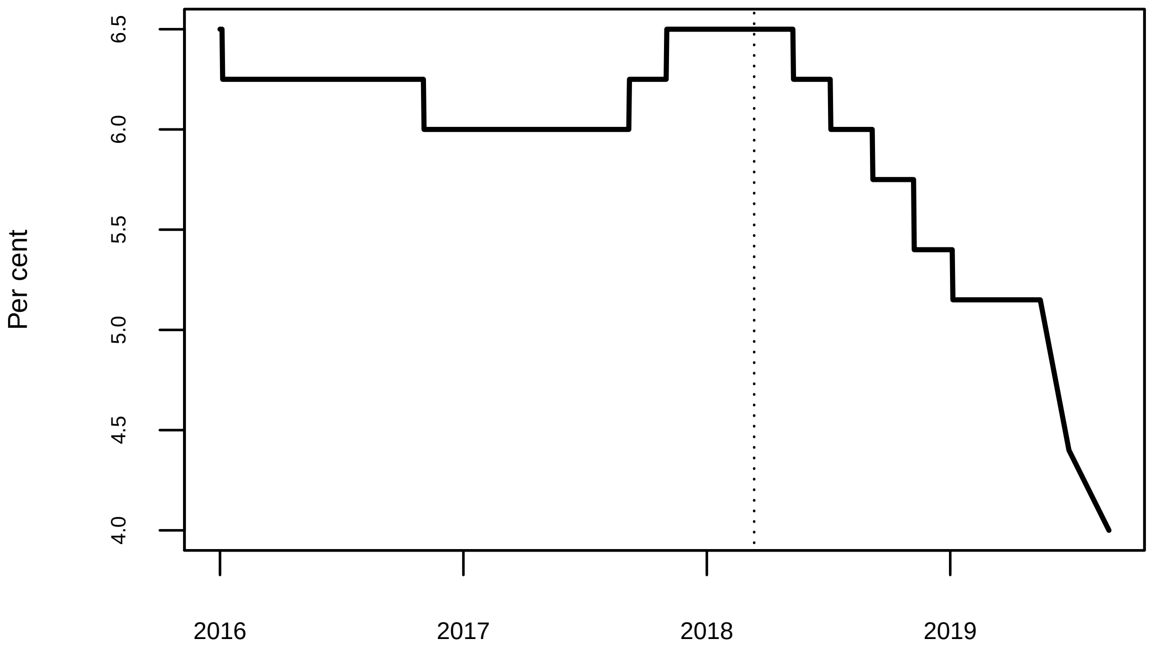
ment has two parts, the first being *"Assessment"* and the second being *"Outlook"*. A number of domestic and international variables are discussed in these statements. Till August 2020, 24 MPC meetings have been held. The MPC members decide the policy rate which is the repo rate required to achieve the inflation target.

Table 1 shows the MPC decisions on the policy rate and the stance of monetary policy in the meetings held so far.

Figure 1 shows the trajectory of the policy rate since the inception of the inflation-targeting framework. From October 2016 to December 2018, we see a U-shaped pattern in policy rate. Till April 2018, while the MPC reduced the policy rate on two occasions it was largely held status-quo. From June, 2018 to December, 2018, the policy rate was increased on two occasions and then left unchanged. Overall, the period from October 2016 to December 2018 is largely a period of status-quo in rates with two episodes each of rate cut and hike. The period from February, 2019 till August 2020 was largely a period of cut in interest rates. The MPC voted for a cut in policy rate in seven meetings and for a status-quo in three meetings.

The meetings of the MPC have been held under two governors: Urjit Patel and Shaktikanta Das. Under Urjit Patel, 14 meetings of the MPC were held–from October, 2016 to December, 2018. In 10 of the meetings, the policy rate was left unchanged. In two meetings, the policy rate was reduced by 25 basis points each (4th October, 2016 and 2nd August, 2017). In two meetings, the policy rate was increased by 25 basis points (6th June and 1st August, 2018). Under the

Figure 1 The policy rate



chairmanship of Shaktikanta Das, 10 meetings of the MPC have been held till August, 2020. In seven of these meetings, the policy rate was cut and in three meetings, it was left unchanged.

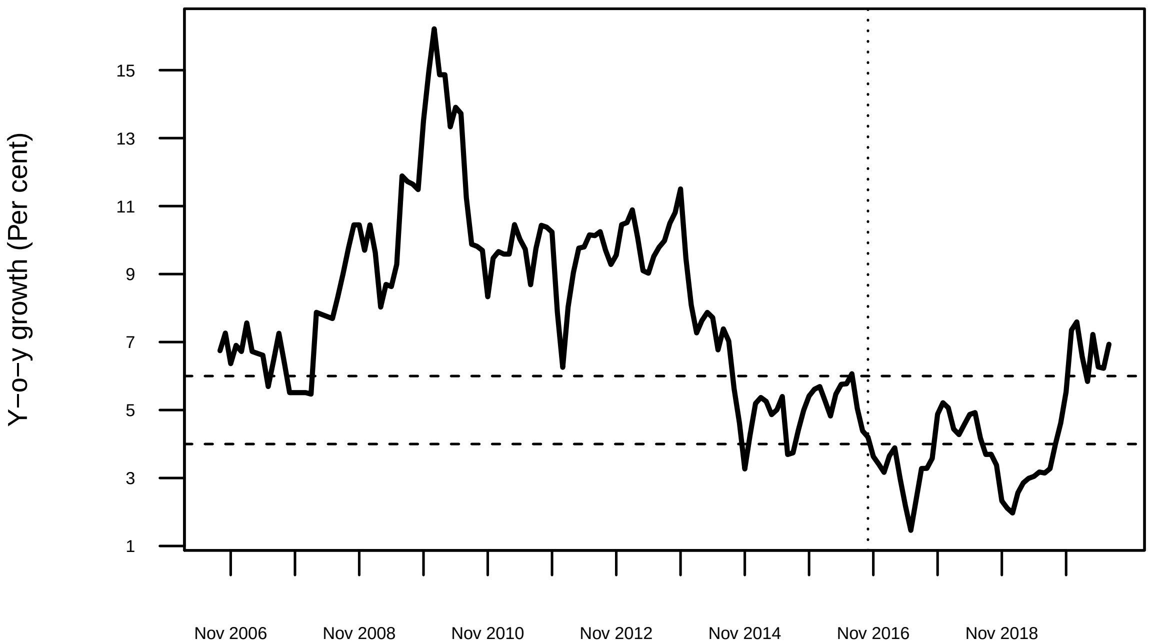
The stance of the policy had been largely neutral under the chairmanship of Urjit Patel (in 10 of the 14 instances). In two meetings, the stance was accommodative and in two meetings the stance was calibrated tightening (last two meetings of his tenure where the policy rate was left unchanged). Under the chairmanship of Shaktikanta Das, the stance of the policy has been largely accommodative. Out of the ten meeting held till August, 2020, in eight meetings the stance was accommodative and in two meetings, it was neutral.

3 Inflation in the post IT regime

Figure 2 shows the trajectory of the CPI inflation pre and post the adoption of the inflation targeting regime. Inspite of the policy shocks and external headwinds, inflation has been reasonably range bound within the $4 + -2\%$ since the adoption of the inflation targeting regime in October 2016 except for the last few months.[3] The average inflation rate between October 2016 to March 2020 was 3.93%. In December, 2019 CPI inflation breached the upper end of the target as it accelerated to 7.35% driven by a sharp rise in food inflation. The next two months also saw inflation above the upper end of the target band. In March, inflation eased

[3] In two readings, inflation was below the lower end of the target band.

Figure 2 CPI YoY inflation



to 5.84%. The National Statistical Office did not release the headline CPI inflation figures for the month of April and May in view of the nation-wide lockdown to contain the spread of the Covid-19 pandemic.[4] In June and July, inflation was more than 6 percent, again breaching the upper margin of the tolerance band.

The key components of CPI are Food and beverages (45.86%), Pan, tobacco and intoxicants (2.38%), Clothing and footwear (6.53%), Housing (10.07%), Fuel and light (6.84%), Miscellaneous (28.32%). Of these, the two largely exogeneous segments of food and beverages and fuel and light cover more than 50% of the weight in the All India CPI.

Figure 3 shows the headline inflation along with its two main components: CPI (Food and beverages) and CPI (Fuel & light). The graph shows that the trajectory of headline inflation is largely driven by food and beverages inflation. The period from December 2019 to February 2020 when the CPI inflation for the first time breached the upper end of the target was the period when food inflation registered double-digit growth in two of the three months and almost touched double-digit in the third month. After falling to 5.84% in the month of March, CPI inflation again breached the upper end of the target primarily driven by elevated food inflation. Fuel inflation has also influenced the headline inflation in a limited way.

Table 2 reports the mean and standard deviation for inflation in India in the pre and post IT

[4]Later, the National Statistics Office released the imputed index data for the month of April and May using the methodology recommended in *Business Continuity Guidelines*, brought out by a combined forum of ILO, EuroStat, OECD, World Bank and IMF.

Figure 3 Inflation of major components in CPI basket

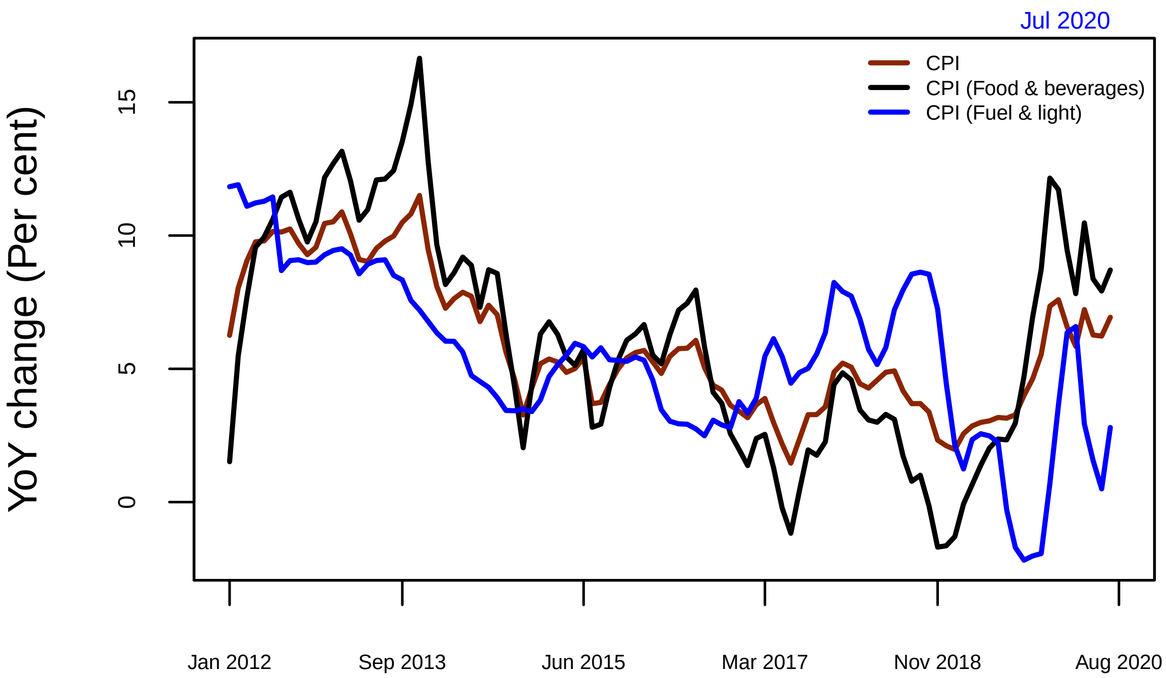


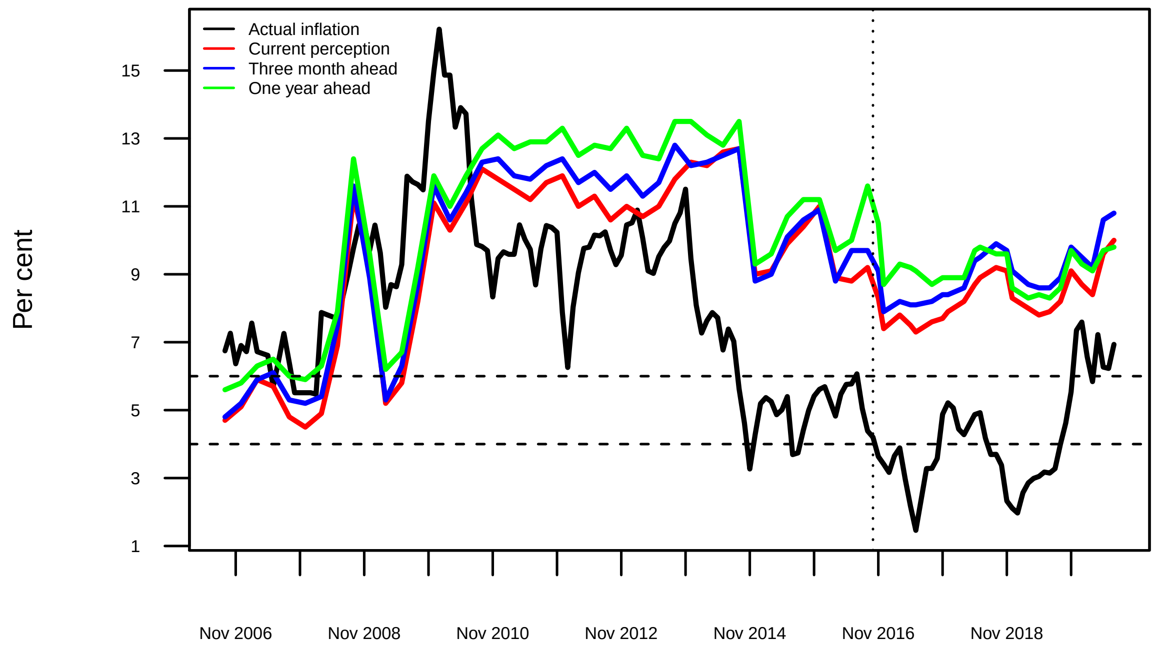
Table 2 Mean and standard deviation in the pre and post IT regime

	Mean		SD	
Inflation	Pre IT	Post IT	Pre IT	Post IT
Headline	7.26	4.15	2.39	1.5
Food	8.49	3.5	3.4	3.48
Core	6.53	4.76	1.77	0.72

regime. For the pre IT regime we take the four years prior to the adoption of the inflation targeting regime: July 2012-July 2016. For the post IT regime we take the period from August 2016 to July 2020. Table shows a broad-based decline in average inflation since the adoption of the IT regime in India. The average inflation has declined across headline inflation, food inflation and core inflation. The volatility in headline inflation has declined in the post IT regime in India. While there is a slight increase in the volatility of food inflation, the volatility of non-food inflation has declined. This implies that food continues to be the prime driver of inflation in India.

At the core of an inflation targeting regime is the task of managing inflation expectations. RBI periodically conducts the *Households' Inflation Expectations Survey*. This survey seeks qualitative responses from households on price changes in the coming three months, as well as in the next one year. The qualitative part of the survey contains questions not only about the general price level but also on the sub-components of inflation. For each sub-component of CPI and horizon, the respondents report their expectations as: (a) Decline in prices, (b) No change in prices (c) Prices increase less than the current rate (d) Price increase similar to

Figure 4 RBI's expectation survey of households and actual inflation



the current rate and (e) Price increase more than the current rate. The survey also captures quantitative responses on current perception on inflation, expectations on three-month ahead and one-year ahead inflation rates. The quantitative survey captures respondents' views on the headline inflation.

Figure 4 juxtaposes actual inflation with the findings from the survey, namely– the current perception, the three month ahead and one-year expectations on inflation. The vertical dashed line shows the date of the first MPC meeting. Figure shows that while households' current perception on inflation in the post IT regime has been relatively benign as compared to the pre IT regime, inflation expectations have been significantly higher than the actual inflation, lying outside the upper bound of the target range. Another way to assess if households' inflation expectations are better anchored than before is to look at the persistence of inflation. A recent study shows that the persistence of the core inflation in India has come down from the beginning of 2016. This finding is consistent with the experience of other countries that have adopted inflation targeting regimes[5]. A decline in persistence implies that any shock to core inflation will die down faster than before.

[5]Dholakia, 2018.

4 Liquidity management framework

Once the repo rate is announced by the MPC, the operating framework of monetary policy envisages liquidity management on a daily basis to anchor the operating target of monetary policy: the weighted average call rate within the LAF corridor. The MSF rate and reverse repo rate determine the corridor for the daily movement in the weighted average call money rate. The reverse repo rate constitutes the lower bound (floor) of the LAF corridor and the MSF/Bank Rate constitutes the upper bound (ceiling) of the LAF corridor. When the MPC changes the repo rate, the reverse repo and the MSF rate are recalibrated based on the width of the LAF corridor. Drawing on the recommendations of the *Report of the Expert Committee to Revise and Strengthen the Monetary Policy Framework, 2014* (2014) in April, 2016 the LAF corridor was narrowed from +-100 basis points to +-50 basis points. This was done to ensure better alignment of the operating target with the policy rate. Consequently, the reverse repo rate was calibrated at 50 basis points below the repo rate and the MSF rate at 50 basis points above the repo rate. In April, 2017 it was decided to further narrow the policy rate corridor around the policy repo rate to +-25 basis points from +-50 basis points[6]. An internal working group set up by the RBI to review the liquidity management framework also recommended that the difference of 25 basis points between the repo rate and the reverse repo rate and between the repo rate and the MSF rate should be retained at 25 basis points[7].

Figure 5 shows the LAF corridor with the MSF rate as the ceiling and the reverse repo rate as the floor. The first step in the transmission of policy rate change is the transmission of policy rate to the weighted average call rate (WACR) and then to the other interest rates. Figure 5 shows that the weighted average call money rate has broadly remained within the narrower corridor and has broadly moved in tandem with the repo rate reflecting orderly money market conditions (Mohan and Ray, 2019). However since the start of the year, the WACR has drifted from the policy rate and has moved closer to the reverse repo rate signifying surplus liquidity conditions in the system.

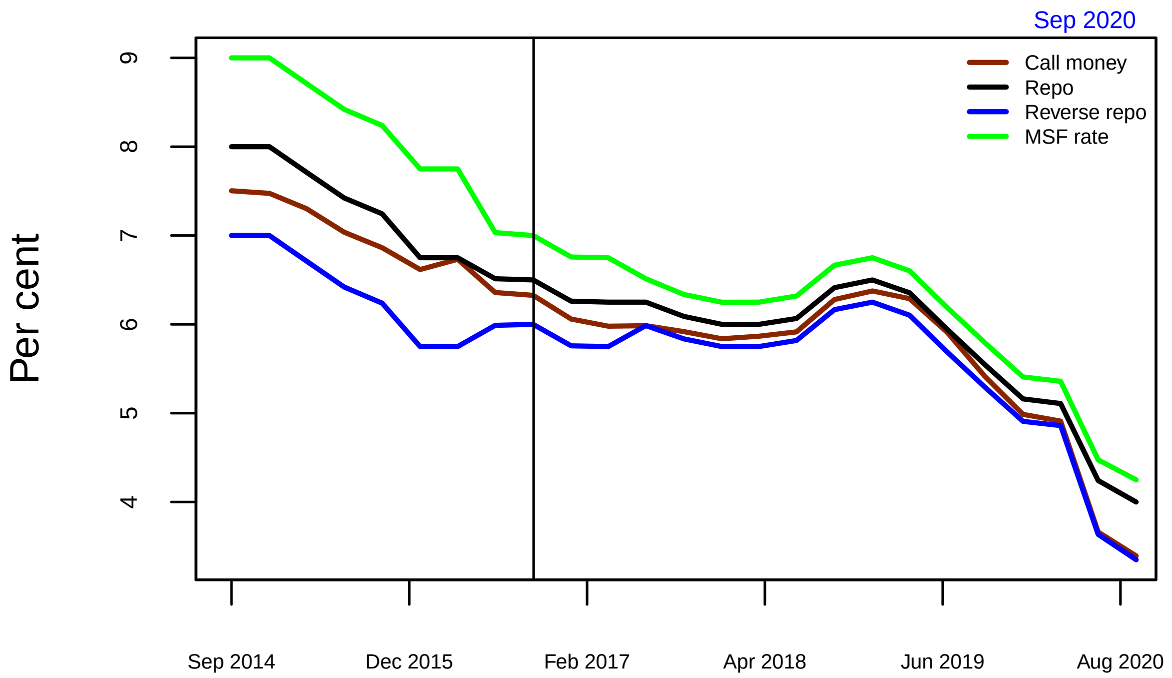
5 Voting patterns

The merit of a committee based approach when making monetary policy decisions is that it offers scope for diversity in views and perspectives. Initially, just after the MPC was established, there was mostly a consensus on policy rates. As the years progressed, we see diversity arising in voting. The first twelve meetings saw the dissent limited to two members of the MPC: one internal and one external. Subsequently other members also started voting against

[6] *Statement on Developmental and Regulatory Policies, Reserve Bank of India* 2017.

[7] *Report of the Internal Working Group to Review the Liquidity Management Framwork* 2019.

Figure 5 Call rate and the LAF corridor



the resolution.

Table 3 shows the voting patterns across the MPC meetings. The initial 4 meetings saw a uniform voting pattern. Diversity in views is seen to be emerging from the June 2017 policy statement, in which one external member: Dr Ravindra H. Dholakia voted against the resolution and voted for a 50 basis points rate cut from 6.25% to 5.75%.

In the August 2017 meeting, two members voted against the resolution. While the resolution was to reduce the repo rate by 25 basis points, one external member: Dr Ravindra H. Dholakia voted for a rate cut of 50 basis points while one internal member Dr Michael Debabrata Patra voted for status quo.

In the October and December 2017 the resolution was to keep the policy rate unchanged at 6%. In both the meetings one external member: Dr Ravindra H. Dholakia voted against the resolution and favoured a rate cut of 25 basis points. In the February and April, 2018 meeting of the MPC, while the resolution was to keep the policy rate unchanged at 6%, one internal member of the MPC: Dr Michael Debabrata Patra voted for an increase in policy rate by 25 basis points.

While the June 2018 meeting saw a unanimous decision to increase the policy rate by 25 basis points, in the next meeting held in August 2018, one external member Dr Ravindra H. Dholakia voted against the resolution to increase rate and instead voted for maintaining status quo on rates. In the October, 2018 meeting another external member: Dr Chetan Ghate voted against

Table 3 Voting patterns in MPC meetings

Meeting date	Voted in favour of the resolution	Vote against the decision of MPC
4th October, 2016	All members voted in favour of a rate cut from 6.5% to 6.25%	–
7th December 2016	All members voted in favour of status quo on policy rate	–
8th February, 2017	All members voted in favour of status quo on policy rates	–
6th April, 2017	All members voted in favour of status quo on policy rates	–
7th June, 2017	5 members voted in favour of status quo	1 member voted against the decision and instead voted for 50 basis points rate cut
2nd August, 2017	4 members voted in favour of a rate cut from 6.25% to 6%	1 member voted against the decision and instead voted for 50 bps reduction, While 1 member voted for status quo.
4th October, 2017	5 members voted in favour of keeping the rate unchanged at 6%	1 member voted against the decision and instead voted for at least 25 bps reduction
6th December, 2017	5 members voted in favour of keeping the rate unchanged at 6%	1 member voted against the decision and instead voted for 25 bps reduction
7th February, 2018	5 members voted in favour of keeping the rate unchanged at 6%	1 member voted against the decision and instead voted for 25 bps increase
5th April, 2018	5 members voted in favour of keeping the rate unchanged at 6%	1 member voted against the decision and instead voted for 25 bps increase
6th June, 2018	All members voted in favour of a rate increment from 6% to 6.25%	
1st August, 2018	5 members voted in favour of increasing the rate to 6.5%	1 member voted against the decision
5th October, 2018	5 members voted in favour of keeping the rate unchanged at 6.5%	1 member voted against the decision and instead voted for 25 bps increment
5th December,2018	All members voted in favour of status quo on policy rate	–
7th February, 2019	4 members voted in favour of a rate cut from 6.5% to 6.25%	2 member voted against the decision and instead voted for no change in rate
4th April, 2019	4 members voted in favour of a rate cut from 6.25% to 6%	2 member voted against the decision and instead voted for no change in rate
6th June, 2019	All members voted in favour of a rate cut from 6% to 5.75%	–
21st August, 2019	All members voted in favour of a rate cut from 5.75% to 5.40%	2 members voted against the decision and instead voted for 25 basis point reduction
4th October, 2019	All members voted in favour of a rate cut from 5.40% to 5.15%	1 member voted against the decision and instead voted for 40 basis point reduction
5th December, 2019	All members voted in favour of keeping the rate unchanged	
6th February, 2020	All members voted in favor of keeping the rate unchanged	
27th March, 2020	4 members voted in favour of a rate cut from 5.15% to 4.40%	2 members voted against the decision and instead voted for 50 basis point reduction
22nd May, 2020	5 members voted in favour of a rate cut from 4.40% to 4%	1 member voted against the decision and instead voted for 25 basis point reduction
6th August, 2020	All members voted in favour of keeping the rate unchanged	

the resolution. While the resolution was to keep the policy repo rate unchanged at 6.5%, Dr Ghate voted for an increase in the policy rate by 25 basis points. This meeting saw dissent on the policy stance. Dr Ravindra H. Dholakia voted to keep the stance unchanged at neutral while the majority voted in favour of changing the stance to calibrated tightening.

The meeting held in December, 2018 saw unanimous decision on keeping the policy rate steady. In the February, 2019 meeting while the decision to change the monetary policy stance from calibrated tightening to neutral was unanimous, two members voted against the resolution to reduce the policy repo rate by 25 basis points. Dr Viral Acharya (internal member) and Dr Chetan Ghate voted in favour of a status-quo on policy rate. The April, 2019 meeting of the MPC also saw these two members voting in favour of status quo on rates while the resolution was to reduce the policy rate by 25 basis points. In the June, 2019 meeting all members of the MPC were unanimous in their decision to cut policy rate by 25 basis points.

In the August, 2019 meeting the MPC for the first time decided to cut policy rate by 35 basis points. A look at the voting pattern shows that while all members were in favour of the rate cut, two members held different views regarding the magnitude of the rate cut. Two external members: Dr Chetan Ghate and Dr Pami Dua voted to reduce the policy rate by 25 basis points. The next meeting saw one member differing in his view on the magnitude of rate cut. While the resolution was to cut rate by 25 basis points, one external member Dr Ravindra H Dholakia voted in favour of a 40 basis points rate cut. In the December, 2019 and February, 2020 meeting all members voted in favour of maintaining the status quo on rate.

In the March meeting, the first after the lockdown was imposed due to the Covid-19 outbreak, while all the members were in favour of a rate cut, they differed on the magnitude of the rate cut. While the resolution was for a 75 basis points cut in the policy rate, two external members– Dr Chetan Ghate and Dr Pami Dua voted for a 50 basis points reduction in the policy rate. In the next meeting held on May 22nd, 2020, the resolution was to reduce the policy rate by 40 basis points. One external member–Dr Chetan Ghate voted for a 25 basis points reduction in policy rate. In the August meeting, all the members voted in favour of the resolution to keep the policy rate unchanged at 4%.

In summary, with more meetings we saw members expressing their views against the resolution. The dissent is seen not only on the direction of rate change but also in magnitude of rate change. Dissent is also seen on the stance of policy. Initial meetings saw dissent by external members, subsequently internal members also voted against the resolution. The minutes offer each member's perspective on the growth-inflation trade-off that has become more pronounced in the last few months. For example while Michael Patra was hawkish in his views, Ravindra Dholakia favoured deep interest rate cuts especially during the tenure of Urjit Patel. He countered RBI's inflation forecasts with his own forecasts to substantiate his stance.

6 Was the MPC overcautious in deciding policy rates?

Did the MPC err on the side of caution? Under the governorship of Urjit Patel, in ten out of the fourteen meetings the policy rate was left unchanged. In May, 2017 the then Chief Economic Adviser Arvind Subramanian criticised the MPC's decision to hold rates unchanged in the last three MPC meetings held in December 2016, February 2017 and April 2017. He held that immediately after demonetisation which adversely impacted demand, there was a consensus that RBI would cut interest rates but MPC chose to keep the policy rate unchanged. Inflation was on a declining trend since July-September quarter of 2016-17 and demonetisation impacted growth but the MPC did not cut rates in the three meetings post demonetisation. As an outcome, the real interest rate surged to 4.7% in June, 2017[8].

One of the external members also criticised the hawkish stance of the MPC when it voted in favour of keeping the policy rate unchanged in its June, 2017 meeting. One of the key factors in keeping rates constant was the upside risk posed by the 7th CPC House Rent Allowance. However Ravindra Dholakia questioned RBIs assessment of the impact of the implementation of HRA allowance by state and Union governments on the headline inflation. His statement in the minutes read: "The impact assessment on the headline CPI inflation of about 150 basis points by the RBI is highly overstated because it assumes simultaneous and instantaneous implementation by states and the Union governments"[9].

One of the reasons for the cautious stance could be that in many instances, particularly in the first two years, the MPC's inflation projections have been higher than the actual inflation. Consider for example, the projections for April-September 2017 (first half of 2017-18), in the February, 2017 meeting, inflation in this period was projected at 4–4.5%. In the April meeting, the projection was revised to 4.5%. It was in the June meeting, that the projection was significantly revised downwards to 2-3.5%. The actual inflation during this period was 2.6%. For the first half of the next year also we see similar trends. For the April-September, 2018 period, the first projection came in the February, 2018 meeting at 5.1-5.6%. In the April, 2018 meeting, the projection for the first half of 2018 was revised downwards to 4.7-5.1% and in the next meeting to 4.8-4.9%. The actual inflation during this period was 4.3%.

For the second half of the financial year (October-March), typically five to six forecasts are released. As an example, for the period October 2018- March 2019, a total of six forecasts were released. The latest forecast which was released in December 2018 with a range of 0.5%, was the closest to the actual inflation number for this period. There are a few instances where inflation projections underestimated the actual inflation. As an example, the five set of forecasts released for the second half of 2019-20, grossly underestimated the actual inflation which stood at 6.3%. While the first four set of forecasts projected inflation within a range of 3.5-3.8%, the

[8] *Economic Survey 2016-17* 2017.

[9] *Minutes of the Monetary Policy Committee Meeting, June 6-7* 2017.

most recent round of forecast in the December, 2019 meeting pegged inflation within the range of 4.7-5.1%.

Table 4 Actual inflation and forecasts

Period	Actual	Dec 07, 2016	Feb 08, 2017	Apr 06, 2017	Jun 07, 2017	Aug 02, 2017	Oct 04, 2017	Dec 06, 2017	Feb 07, 2018	Apr 05, 2018	Jun 06, 2018	Aug 01, 2018	Oct 05, 2018	Dec 05, 2018	Feb 06, 2019	Apr 04, 2019	Jun 06, 2019	Aug 07, 2019	Oct 04, 2019	Dec 05, 2019	Feb 06, 2020
Jan17-Mar17	3.6	5	<5	<5																	
Jul17-Sep17	3.0					3															
Apr17-Sep17	2.6		4-4.5	4.5	2.0-3.5																
Oct17-Dec17	4.6							4.3-4.7													
Jan18-Mar18	4.6							4.3-4.7	5.1	4.5											
Oct17-Mar18	4.6		4.5-5	5	3.5-4.5	4-4.5	4.2-4.6														
Jul18-Sep18	3.9											4.6	4								
Apr18-Sep18	4.3								5.1-5.6	4.7-5.1	4.8-4.9										
Jan19-Mar19	2.5														2.8	2.4					
Oct18-Mar19	2.5								4.5-4.6	4.4	4.7	4.8	3.9-4.5	2.7-3.2							
Apr19-Jun19	3.1											5.0	4.8								
Jul19-Sep19	3.5																	3.1	3.4		
Apr19-Sep19	3.3													3.8-4.2	3.2-3.4	2.9-3.0	3.0-3.1				
Oct19-Dec19	5.8														3.9						
Jan20-Mar20	6.7																				6.5
Oct19-Mar20	6.3															3.5-3.8	3.4-3.7	3.5-3.7	3.5-3.7	5.1-4.7	
Apr20-Jun20	6.6																	3.6	3.6		
Apr20-Sep20																				4.0-3.8	5.4-5.0
Oct20																					3.2

7 Response to shocks

In this section we discuss the response of the MPC to two shocks: the demonetisation shock and the Covid-19 shock.

7.1 Response to the demonetisation shock

A month after MPC's first meeting in October, the government announced the demonetisation of 86% of all currency in a bid to combat the problems of black money, corruption and fake currencies. Withdrawal of 86% currency in circulation dented demand. There were expectations that MPC would cut rates by 25 basis points or 50 basis points[10]. The MPC surprisingly did not consider demonetisation as deflationary. In the meeting held post the demonetisation announcement, the MPC decided to leave rates unchanged. The MPC members were of the view that the stance of US monetary and fiscal policy could result in bouts of high volatility in the financial markets. They were of the view that OPEC's decision to cut production could result in rise in crude prices. The MPC assessed the impact of demonetisation on growth to be transient which would ebb with the increase in circulation of new currency notes. The impact of demonetisation on inflation was also considered to be modest ranging between 10–15 basis points[11]. The MPCs decision to keep rates constant elicited widespread criticism. The RBIs assessment of the domestic and global conditions did not indicate why holding rates was the preferred option[12]. Financial market practitioners termed the decision as a missed opportunity and expected more steeper rate cut in the next policy meeting[13].

In the next meeting held in February, 2017, the MPC surprisingly shifted the policy stance from accommodative to neutral in addition to keeping the policy rate unchanged. While the MPC projected inflation to be in the range of 4-4.5% in the first half of 2017-18, it seemed to have been concerned about the rise in international crude oil prices, the inflationary impact of house rent allowance under the 7th Central Pay Commission. The MPC continued to maintain demonetisation as a transient phenomenon. The MPC was of the view that discretionary consumer demand held back by demonetisation will bounce back by the closing months of 2016-17. The disrupted economic activity in cash intensive sectors and in the unorganised sectors would also be rapidly restored.

MPC's decision sparked many strong reactions. Some media articles opined that the MPC acted in a hurry to change the stance from accommodative to neutral given that its own growth and inflation outlook was filled with uncertainty[14]. Some articles expressed concern that the

[10]Rangan and Das, 2016.
[11]*Minutes of the Monetary Policy Committee meeting, December 6-7* 2016.
[12]*RBI's economy assessment doesn't tell us why holding rates is the best option* 2016.
[13]*RBI Missed Opportunity, rate cut seen in next monetary policy review: Experts* 2016.
[14]Unnikrishnan, 2017.

Table 5 Slowdown in growth post demonetisation

Quarter	GVA (Per cent)	GDP (Per cent)
Jul-Sep 2016	8.29	9.67
Oct-Dec 2016	7.53	8.58
Jan-Mar 2017	6.82	6.29
Apr-Jun 2017	5.48	5.78
Jul-Sep 2017	6.11	6.47
Oct-Dec 2017	7.07	7.64

MPC was withholding support at a time when a paucity of cash has dented consumption growth forecasts are being slashed[15]

Table 5 shows that growth slowed down appreciably post the demonetisation and some signs of recovery were seen only in October-December quarter of 2017.

7.2 Response to the Covid-19 shock

Central banks around the world have responded to the Covid-19 shock by cutting interest rates and by engaging in a wide range of operations to infuse liquidity into the system. In contrast to the demonetisation episode, the MPC this time has been more proactive in taking measures to arrest the disruption in economic growth caused by Covid-19 induced lockdown.

The first meeting of the MPC after the outbreak of the Covid-19 pandemic was held between 24th-27th March, a week in advance of the scheduled meeting. In view of the adverse impact on growth due to the Covid-19 induced lockdowns, the MPC decided to cut the policy rate by 75 basis points. The reverse repo rate was reduced by 90 basis points to disincentivise banks to park their deposits with RBI and so that they lend to stimulate growth.

The MPC's next meeting was also advanced by about a fortnight. It was held between May 20 to May 22, 2020. The MPC decided to reduce the policy repo rate by 40 basis points from 4.40% to 4%. The MSF rate and the bank rate were reduced from 4.65% to 4.25%. The reverse repo rate was reduced from 3.75% to 3.35%. The MPC decided to continue with the accommodative stance.

The third meeting since the pandemic was held from August 4-6, 2020. The MPC decided to keep the policy repo rate unchanged at 4%. The reverse repo rate was left unchanged at 3.35% and the MSF and the bank rate were left unchanged at 4.25%. With all rates remaining unchanged, the width of the LAF corridor also remained unchanged.

[15] Nag and Marlow, 2017.

7.2.1 Key highlights of the MPC meetings held post Covid-19

Some of the key highlights of the meetings held post the Covid-19 outbreak are:

1. *Primacy to growth concerns:* In the three meetings held till August, 2020, the repo rate has been cut by 115 basis points. The stance of the policy was retained as accommodative even in the August policy when the rates were left unchanged. During this period inflation hovered between 6-7%. This shows that MPC attached primacy to reviving growth in an economy adversely impacted by the Covid-19 pandemic.

2. *Asymmetrical LAF corridor:* A 75 basis points cut in the repo rate and a 90 basis points cut in the reverse repo rate resulted in an asymmetrical corridor. While the reverse repo rate was lower than the repo rate by 40 basis points, the MSF was higher than the repo rate by 25 basis points. This move widened the width of the LAF corridor from 50 basis points to 65 basis points. With another 25 basis points cut in April, without a concomitant change in the repo rate, the difference between the repo rate and the reverse repo rate widened to 65 basis points as of August, 2020. The width of the corridor widened to 90 basis points.

3. *Unilateral decision to change the reverse repo rate by the Governor:* On April 17, 2020, the Governor in his statement announced a 25 basis points cut in the reverse repo rate without reference to MPC. The Governor pointed out that as on April 15, banks have parked Rs 6.9 trillion with the Reserve Bank under the reverse repo window. While the decision to cut reverse repo rate was made to encourage banks to invest and lend to productive sectors of the economy, the unilateral decision by the Governor raises questions on the relevance of the MPC[16].

4. *Reverse repo as the new effective policy rate:* During this period, the reverse repo rate has become the new effective policy rate. From March, 2020 to August, 2020 the reverse repo rate has been cut by 155 basis points. This is more than the 115 basis points cut in the repo rate during the same period. The transmission of repo rate cuts to other interest rates work if there is shortage of liquidity in the system. When banks are in need of liquidity, they borrow funds in the inter-bank market and hence repo rate cut changes will transmit into changes in the WACR. However when banks have excess liquidity, they will not borrow in the overnight market hence any amount of cuts in the repo rate will not get transmitted to other rates. Since RBI has been infusing liquidity through a number of unconventional monetary policy tools, banks are flush with liquidity (See Box 1 for a brief discussion on the unconventional monetary policy measures.).

   While RBI has been infusing liquidity, banks are not using these funds for lending as they find it risky to lend to small NBFCs and MFs who are facing an outflow of money. As an

[16] *Governor's Statement, April 17* 2020.

alternative, they are using the reverse repo window to park excess liquidity with the RBI. Figure 6 shows the daily reverse repo transactions by banks. Since there is no demand for funds in the interbank market, the WACR has drifted towards the reverse repo rate. With excess liquidity, the reverse repo rate has become the effective policy rate. This observation was also made by one of the external members of the MPC: Chetan Ghate in the minutes of the MPC meeting held in May[17].

5. *Staying away from publication of growth and inflation forecasts:* For three consecutive meetings since the outbreak of the Covid-19 pandemic, the RBI stayed away from providing growth and inflation forecasts. The MPC in its resolutions only provided guidance on the direction on inflation. One of the reasons for the lack of forecasts was that the Central Statistical Office (CSO) did not release the headline inflation data for April and May. Owing to the nationwide lockdown amid the Covid-19 pandemic, the field investigators could not visit specified outlets to collect price quotations. Transactions of products was also limited, hence prices of some groups were not available. To address the issue of missing data, the CSO released an imputed index for April and May along with the June data. However doubts have been raised on the credibility of the imputation method. One of the external members of the MPC expressed reservations on accepting the inflation numbers for April and May announced by the CSO[18] The MPC in its August Statement noted that: *"For the purpose of monetary formulation and conduct, therefore, the MPC is of the view that CPI prints for April and May can be regarded as a break in the CPI series."*

8 Conclusion

India moved to a flexible inflation targeting regime in 2016. The institutional framework supporting inflation targeting, the specification of the inflation target and the central bank's communication framework were put in place through notifications after amendments were made to the RBI Act through the Finance Act of 2016. The current MPC completes its four years tenure with the August meet. In this backdrop, this paper reviews the four years of the inflation targeting regime in India. The framework has been largely successful in keeping the headline inflation within the target range. Since December, 2019, inflation has been on an upward trajectory, driven primarily by a rise in food prices. The money market conditions have also been broadly orderly with the Weighted Average Call Rate (WACR) moving in tandem with the repo rate for most part of the four year period.

Diversity in views is an important feature of voting by monetary policy committees. While

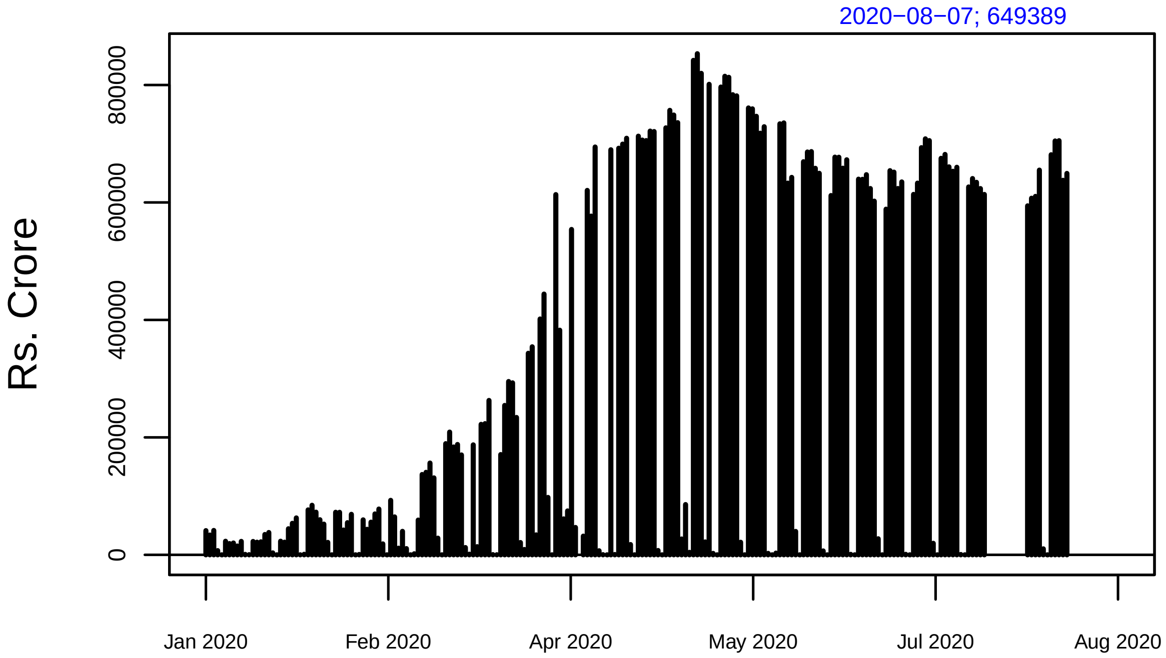
[17] *Minutes of the Monetary Policy Committee meeting, May 20 to 22, 2020* 2020.
[18] *Minutes of the Monetary Policy Committee meeting, August 4 to 6, 2020* 2020.

Box 1: Unconventional monetary policy measures

- Long term repo operations (LTRO): RBI announced to conduct term repos of one-year and three-year tenors of appropriate sizes for up to a total amount of Rs 1 lakh crore at the policy repo rate from the fortnight beginning on February 15, 2020. This was be conducted in four tranches of Rs 25,000 crore. Another round of LTRO was announced on March 16. The first tranche of the second round was conducted on March 18.
- Targeted long term repo operations (TLRO): As part of the Statement of Development and Regulatory Policies announced on March 27, RBI announced that it will conduct term repos of upto 3 years for an amount of Rs 1 lakh crore. Banks can borrow at a floating rate linked to the policy repo rate. Liquidity availed by banks has to be deployed in investment grade corporate bonds, Commercial Papers (CPs) and NCDs. Fifty percent of these investments have to be acquired via primary market issuances and the remaining fifty percent from the secondary market[a].
- Targeted long term repo operations 2.0
- CRR reduction: CRR was reduced by 100 basis points to 3 percent from the fortnight beginning March 28, 2020.
- Enhanced borrowing under the MSF window: Banks can borrow overnight by dipping upto 3% of their SLR holdings. Prior to this announcement, banks could borrow by dipping upto 2% of their SLR.
- Targeted Long Term Operations (2.0): A second round of TLTRO was announced by RBI Governor on April, 17. The intent of the scheme was to nudge banks to invest in the debt instruments of small and mid-sized NBFCs and MFIs. The funds availed by banks under TLTRO 2.0 were required to be invested in investment grade bonds, commercial paper, and non-convertible debentures of NBFCs, *with at least 50 per cent of the total amount availed going to small and mid-sized NBFCs and MFIs*[b].

[a]Reserve Bank of India, 2020.
[b]*Governor's Statement, April 17* 2020.

Figure 6 Reverse repo transactions by banks



Source: Weekly Statistical Statement, RBI

the initial four meetings of the MPC were characterised by consensus on policy rates, the subsequent meetings show diversity in voting patterns. Not only the external members but the internal members also dissented on the resolution. Dissent is seen not only on the direction of rate change but also on the magnitude of change. One meeting saw dissent on the stance of policy.

While the MPC sprang a surprise by not cutting rates in the two meetings held post the announcement of the demonetisation decision, the response of the MPC to the Covid-19 shock has been relatively more pro-active. In the three meetings since the outbreak of the Covid-19 pandemic, the MPC has cut the policy rate by 115 basis points.

Amidst the Covid-19 crisis, the RBI unilaterally decided to cut the reverse repo rate by 25 basis points. Moves such as these could raise questions on the relevance of the MPC. During this period, the reverse repo rate has been changed more frequently than the repo rate. Some members of the MPC raised question on whether the reverse repo rate has become the new effective policy rate.

A Decisions in the MPC meetings

In the first meeting, held on 4th October, 2016, the MPC reduced the policy rate by 25 basis points from 6.5% to 6.25%. The MPC adopted an accommodative stance of monetary policy. The MPC assessed that inflation would remain within 5% by March 2017. The projection of growth of real gross value added was kept at 7.6% for the year 2016-17. The next meeting of the MPC was held in December, 2016. This was the first meeting after the demonetisation measure was announced in November, 2016. The Committee was of the view that while prices of perishables might be affected by withdrawal of Special Bank Notes (SBNs), the prices of items that constitute the discretionary spending may not be affected as they are set according to pre-determined cycles. The MPC was of the view that prices of housing, fuel and light, health, transport and communication, pan, tobacco and intoxicants, and education accounting for 38 per cent of the CPI basket would remain largely unaffected due to the demonetisation move. The MPC was also concerned about the uncertain trajectory of fuel prices. Thus the MPC left the policy rate unchanged at 6.25%. The stance of monetary policy was retained as accommodative. On the growth front, the MPC revised downwards their projection of real GVA growth from 7.6% to 7.1% for 2016-17. The downward revision was shaped by the uncertain impact on growth due to the withdrawal of Special Bank Notes (SBNs).

The MPC left the policy rate unchanged in the following three meetings held in February, April and June of 2017. In addition to keeping the policy rate unchanged, the February, 2017 meeting marked a shift in the stance of monetary policy from accommodative to neutral. In the February meeting, the MPC marginally revised downwards their projection of real GVA growth to 6.9% for 2016-17. For 2017-18, the members expected growth to bounce back as the transitory impact of demonetisation fade. The initiatives announced in budget to boost capital expenditure and rural demand were also expected to contributed to growth. The real GVA growth for 2017-18 was projected at 7.4%.

While inflation was projected at 4.5% in the first half of 2017-18 and 5% in the second half in the April, 2017 meeting, the decision to leave the policy rate unchanged was driven by uncertainty due to upside risks to inflation on account of the impact of El-Nino on South-West monsoon, implementation of the allowances recommended by the seventh CPC, one-off effects of the GST and high general government deficit. In April, 2017, the LAF corridor was narrowed from +-50 basis points to +-25 basis points. Henceforth the reverse repo rate and the MSF rate were calibrated at 25 basis points below and above the policy rate respectively. The real GVA growth projection for 2017-18 was left unchanged at 7.4%.

In the June, 2017 meeting, the MPC sharply revised downwards their inflation projection to 2-3.5% in the first half of 2017-18 and 3.5-4.5% in the second half of the year. The revision in projection was due to signification moderation in inflation in April, 2017. The MPC however noted upside risks to inflation on account of fiscal slippages due to farm loan waivers, the impact of disbursements of allowances under the seventh CPC and global political and financial risks leading to imported inflation. The June 2017 resolution was also uncertain about the impact of demonetisation on the outlook for growth and inflation. On GVA, the MPC revised downwards its projection for 2017-18 by 10 basis points to 7.3%. The revision was on account of lower growth number for 2016-17 (as seen in the provisional estimates released in May 2017) as compared to the earlier released advance estimates. Going forward, the pace of remonetisation, reduction in bank lending rates and budget measures were expected to lead to a turnaround in growth in 2017-18.

In the August 2017 meeting, the MPC decided to reduce the policy rate by 25 basis points from 6.25 to 6%. The decision was shaped by a decline in CPI y-o-y inflation which fell from 3.9% in March, 2017 to a historic low of 1.46% in June 2017. The decline in CPI inflation was broad-based with major components such as food and beverages, fuel and inflation excluding food and fuel moderating in April-June, 2017. While the MPC cut the policy rate by 25 basis points, it retained a neutral stance of monetary policy on account of uncertainty around inflation trajectory. The factors posing upside risks included possible fiscal slippages due to the implementation of farm loan waivers by States, uncertainty around the implementation of salary and allowances by States and the uncertain trajectory of vegetables and animal proteins prices. The MPC observed that a segregation of transitory and structural factors driving the moderation in food inflation posed a challenge. The MPC noted that the decline in inflation was primarily driven by base effects and going forward, the favourable base effects would taper off. The projection for real GVA growth was retained at 7.3%.

The October and December MPC meetings kept the policy rate unchanged. The stance of policy was also kept unchanged as neutral. The decision was shaped by an uptick in inflation from July 2017 onwards. The October policy revised upwards the projection for inflation from 4%-4.5% to 4.2%-4.6% for the second half of 2017-18. The December further revised the projection marginally to 4.3%-4.7% for the second half of 2017-18. The MPC in its October and December meeting noted that inflation could rise further due to the award of HRA under the seventh CPC to central government employees, HRA increases by State governments and a sustained rise in fuel prices due to OPEC's decision to cut production. In the October meeting, the MPC sharply revised downwards their projection of real GVA growth from 7.3% to 6.7%. The key factors that led to a downward revision were the short-term disruptive impact of the GST and the stressed balance-sheets of banks and corporates that adversely impacted manufacturing and investment activity respectively. The December meeting retained the GVA growth projection at 6.7% for 2017-18.

The MPC in its February, 2018 meeting kept the rates unchanged. The decision to keep the rates unchanged was shaped by a consistent increase in CPI inflation beginning July, 2017. The Committee noted that the implementation of higher HRA under the seventh CPC led to an increase in housing inflation. The inflation outlook was shaped by a sustained increase in global crude oil prices and increase in input prices. The MPC projected CPI inflation to be in the range of 5.1-5.6% in the first half of 2018-19 and 4.5-4.6% in the second half of the year. The GVA growth was projected at 6.6% for 2017-18. GVA growth for 2018-19 was projected at 7.2 per cent overall: in the range of 7.3-7.4 per cent in the first half and 7.1-7.2 per cent in the second half of the year.

In the April, 2018 meeting the MPC left the rate unchanged and retained a neutral stance of monetary policy. The projection for CPI inflation was revised downwards to 4.7-5.1% for the first half of 2018-19 and 4.4% for the second half on account of moderation in CPI inflation to 4.4% in February and 4.3% in March, 2018. The moderation in CPI inflation was driven by a decline in food and fuel inflation. CPI inflation excluding food and fuel remained above 5% reflecting the HRA increase under the seventh CPC for Central Government employees. The MPC noted that the impact of increase in HRA is likely to continue till mid 2018 and dissipate thereafter. While the MPC revised the inflation projection downwards, it noted several uncertainties surrounding the projected inflation trajectory–chief among them were the staggered impact of HRA revisions by state, the second round impact of HRA revisions for the Central Government employees, fiscal slippages from the budget estimates of 2018-19 for both Central and State governments, uncertain impact of the monsoon on food inflation, volatility in crude prices and the expectation of higher input and output prices as reflected in the RBI's Industrial Outlook Survey.

From the April, 2018 MPC meeting, the growth outlook was expressed in terms of GDP rather than GVA. For 2018-19, the GDP growth was projected at 7.4% from 6.6% in 2017-18. The MPC decided to increase the policy rate by 25 basis points from 6% to 6.25% in its June meeting. In the August, 2018 meeting the policy rate was further increased by 25 basis points from 6.25% to 6.5%. The stance of monetary policy was retained as neutral. In the June, 2018 meeting, the MPC noted two countervailing trends influencing the headline inflation. On the one hand, CPI inflation excluding food and fuel rose sharply in April over March and the price of Indian basket of crude rose sharply from USD 66 to USD 74 a barrel. This along with increase in global commodity prices led to an increase in input price pressures. These developments led to higher projections for CPI for 2018-19. On the other hand, food inflation remained muted resulting in softening of projections. Taking into account the impact of these developments, projected CPI inflation for 2018-19 was revised to 4.8-4.9 per cent in the first half of 2018-19 and 4.7 per cent in the second half. GDP growth for 2018-19 was retained at 7.4 per cent as in the April policy.

While the divergent trends in food and non-food inflation continued when the MPC met in August 2018, the MPC was of the view that the announcement to fix the MSPs of Kharif crops to atleast 150 percent of the cost of production could weigh on food inflation and could have a second round impact on headline inflation. This, coupled with broad-based increase in inflation excluding food and fuel led the MPC to revise their CPI inflation projection to 4.8% for the second half of 2018-19. For the first quarter of 2019-20, CPI inflation was projected at 5%. The projection for GDP growth was retained at 7.4% for 2018-19. The possible boost in rural demand due to increase in MSPs, increase in FDI flows, improved activity in the manufacturing sector and buoyant domestic capital market conditions influenced the MPCs outlook for growth.

The increase in policy rate announced in the last two meetings was given a pause in the October and December, 2018 meeting. The MPC voted in favour of keeping the policy rate unchanged at 6.5% in both the meetings. The stance of monetary policy was, however changed for the first time from neutral to one of *calibrated tightening*. Inflation declined from 4.9% in June 2018 to 3.9% in August, 2018. The moderation in headline inflation was on account of decline in food inflation. While fuel inflation continued to rise, the MPC noted that there was softening in inflation in housing, personal care and transportation. The MPC noted that the impact of HRA increase was gradually dissipating in the second half of 2018. Taking these factors into account, the MPC projected inflation to remain in the range of 3.9%-4.5% in the second half of 2018-19. This was a moderation from 4.8% inflation projected for the second half in the August 2018 meeting. The MPC also revised downwards its projection for the first quarter of 2019-20 from 5% to 4.8%. Turning to the growth outlook, the MPC observed that private consumption, larger FDI flows, improved capacity utilisation augur well for growth while the pass-through of rising crude prices on input costs may drag down investment by impacting profitability. Based on thee factors, the MPC retained the projection for GDP growth at 7.4% for 2018-19 as in the August resolution.

The divergent trends in food and non-food inflation continued at the time of the December 2018 meeting of the MPC. The headline inflation declined from 3.7% in September to 3.3% in October. The decline was driven by a large fall in food prices resulting in food deflation. Inflation in fuel group remained elevated. CPI inflation excluding food and fuel surged to 6.1% in October. This time the surge was driven by transportation and communication due to higher petroleum prices. Inflation in housing moderated significantly due to waning of the HRA impact of Central government employees. Several developments since the October meeting shaped the outlook for inflation: deflation in food group, broad-based increase in inflation in non-food group, softening of international crude oil prices, financial market volatility, waning of the impact of HRA increase and normal monsoon. Taking into account these factors, the MPC revised downwards the projection for CPI inflation at 2.7%-3.2% for the second half of 2018-19. For the first half of 2019-20, inflation was projected at 3.8%-4.2% with risks tilted to the upside. The projection for GDP was retained at 7.4% for 2018-19.

The MPC decided to reduce the policy rate by 25 basis points from 6.5% to 6.25% in its February, 2019 meeting and by another 25 basis points in its April, 2019 meeting. The MPC decided to change the stance of monetary policy from calibrated tightening to neutral. The decision to cut the repo rate was made against the backdrop of a decline in CPI inflation from 3.4% in October 2018 to 2.2% in December, 2018. The decline was driven by continuing deflation in food items, sharp fall in fuel inflation and some moderation in inflation excluding food and fuel. Inflation expectations measured by the Reserve Bank's survey of households also softened. The decision to cut rates was also influenced by the weak growth scenario. The MPC noted slowdown in economic activity in advanced and emerging economies. Domestically, the indicators of investment and consumption demand witnessed a muted growth. The first advance estimates for the year 2018-19 estimated GDP growth at 7.2%. The MPC had projected a growth of 7.4% for the year. As compared to the December meeting, the MPC revised downwards its inflation projection for the first half of 2019-20 to 3.2-3.4%. For the October-December, 2019 quarter, the CPI inflation was projected at 3.9%. Some of the factors that shaped the benign inflation outlook were deflation across some items of food, moderation in fuel inflation and complete dissipation of the impact of HRA increase of Central Government employees. On the growth outlook, the MPC projected GDP growth for 2019-20 at 7.4%.

The cut in the policy rate by 25 basis points was also influenced by the weak growth momentum. The second advance estimates revised downwards the GDP growth for 2018-19 to 7.0% from 7.2% in the first advance estimate. Industrial activity, credit flow, indicators of industrial performance and services sector continued to witness tepid growth. On the inflation front, while the headline CPI inflation rose to 2.6%, major items of the food group continued to witness deflation. Inflation in the fuel group moderated significantly, some items within CPI excluding food and fuel showed moderation during the months of January and February. Inflation expectation as measured by the Reserve Bank's survey of households declined for the three months ahead and the one-year ahead horizon. The MPC revised downwards its projection for CPI inflation for the first half of 2019-20 to 2.9%-3%. For the second half, the CPI inflation was projected at 3.5%-3.8%. The downward revision was based on a broad-based softening of inflation across the major components of CPI. GDP growth for 2019-20 was revised downwards to 7.2% from 7.4% projected in the February meeting mainly due to weak domestic investment.

The trend of cut in the policy rate continued in the next two meetings as well. In the June, 2019 meeting, the MPC chose to cut the policy rate by another 25 basis points from 6% to 5.75%. The MPC decided to change the stance of the policy from neutral to accommodative. In the next meeting held in August, 2019, the MPC decided to cut rates by 35 basis points–bringing down the policy rate from 5.75% to 5.4%. The stance of the monetary policy was retained as accommodative. Weak growth as evidenced from 20 basis points lower Provisional Estimates of GDP for 2018-19 as compared to the Second Advance Estimates, sharp deceleration in January-March quarter GDP growth numbers and a broad-based weakening of investment, consumption and exports influenced the MPC's decision to cut rates. Retail inflation was 2.9% in March and April, 2019. During the February to April period, while food inflation showed an uptick, CPI inflation excluding food and fuel fell sharply. The projection for the first half and second half of 2019-20 was revised marginally to 3%-3.1% and 3.4-3.7% respectively. The

MPC noted that while some pick up in food inflation was visible, a broad-based decline in demand led to a decline in CPI excluding food and fuel. The MPC also revised downwards its projection for GDP growth from 7.2% to 7.0% for 2019-20 on account of a broad-based weakening of growth.

In the August meeting, while growth impulses remained weak, CPI inflation inched up to 3.2% from 3.0% in April-May. The uptick was driven by food inflation while fuel inflation and inflation excluding food and fuel moderated. The MPC noted that the actual inflation outcome for April-June 2019 was broadly in alignment with the projection for the first half of 2019-20. The MPC marginally revised its inflation projection for the second half of 2019-20 at 3.5%-3.7%. CPI inflation for April-June quarter of 2020-21 was projected at 3.6%. The GDP growth projection was marginally revised downwards from 7% to 6.9% on account of weak domestic and external demand conditions.

In the next meeting held in October, 2019 the MPC voted in favour of reducing the policy rate by 25 basis points from 5.4% to 5.15%. The MPC decided to retain the accommodative stance of monetary policy. The decision to cut rate was shaped by the sequential deceleration in quarterly GDP growth in addition to subdued global economic activity. The April-June quarter GDP growth slumped to 5%: driven by a decline in private consumption and investment demand. High frequency indicators of industrial and services sector remained sluggish. On inflation front, the CPI inflation remained in the range of 3.1%-3.2%, driven by a pick-up in food inflation while fuel inflation and inflation excluding food and fuel witnessed a moderation. Responding to a pick up in food prices, the RBI's Household Inflation Expectation Survey indicated a pick-up in inflation over a 3 month ahead horizon and over a one-year ahead horizon. The MPC retained its retained its projection at 3.5%-3.7% for the second half of 2019-20 and at 3.6% for the first quarter of 2020-21. On account of muted demand conditions and weak export prospects, the MPC sharply revised downwards its projection for GDP growth from 6.9% to 6.1% for 2019-20.

In the December 2019 meeting, the MPC voted in favour of keeping the policy rate unchanged at 5.15% and retaining the accommodative stance of monetary policy. The decision to keep the policy rates unchanged was driven by a sharp increase in retail inflation to 4.6% in October. While on the growth front, GDP growth slowed down to 4.5% due to a slowdown in manufacturing and services, the increase in retail inflation was propelled by a surge in food prices while fuel prices were in deflation and inflation excluding food and fuel continued to moderate. The Household's inflation expectations indicated a rise in inflation over the 3-month and one-year ahead horizon mainly due to a spike in food prices in recent months. The MPC sharply revised upwards its projection for inflation for the second half of 2019-20 to 5.1%-4.7%. The revision in inflation projection was on account of a sharp upsurge in vegetable prices which were expected to soften only from early February 2020. In addition, rise in prices of milk, pulses and sugar was expected to push the trajectory of food inflation upwards. For the first half of 2020-

21, the MPC projected CPI inflation at 4.0%-3.8%. On the growth outlook, the MPC revised its projection for GDP growth for 2019-20 to 5%. For the first half of 2020-21. the GDP growth was projected at 5.9%-6.3%.

In the February, 2020 meeting also, the MPC decided to keep the policy rate unchanged at 5.15% along with an accommodative stance. The first advance estimates for 2019-20 placed India's real GDP growth at 5%. The MPC noted that production and imports of capital goods: two key indicators of investment activity continued to contract in November and December. While Rabi sowing was higher by 9.5% upto January 31, 2020 compared with a year ago, several indicators of services activity pointed to a modest revival. Retail inflation inched to 5.5% in November and further to 7.4% in December, 2019. While food inflation rose to double digits primarily on account of sharp spike in onion prices, CPI excluding food and fuel also edged up. The MPC revised its CPI inflation projection to 6.5% for Q4:2019-20. For the first half of 2020-21, the CPI inflation was projected at 5.4-5% and for Q3 at 3.2%. The MPC noted that while onion prices would fall in the coming months, the prices of non-vegetable food items such as milk and pulses could see an uptick. Geo-political tensions impact uncertainty to crude oil prices, however the increase in customs duties on items of retail consumption could lead to a one-time marginal uptick in inflation. The GDP growth was projected at 6% for 2020-21: in the range of 5.5-6% in the first half and 6.2% in Q3.

The next meeting of the MPC was held between 24th-27th March, a week before the scheduled meeting. The MPC decided to reduce the policy rate by 75 basis points from 5.15% to 4.40%. The reverse repo rate (the lower end of the corridor) was reduced by 90 basis points from 4.90% to 4%. The MSF rate and the Bank Rate were reduced by 25 basis points. As a result the width of the LAF corridor widened to 65 basis points. On inflation outlook, the MPC noted that food prices may soften due to record foodgrains and horticulture production. The collapse in crude prices should ease crude and core inflation. The narrative focussed on the adverse impact on growth due to the onset of the Covid-19 pandemic and prolonged lockdowns. The MPC acknowledged that the need of the hour is to shield the domestic economy from the pandemic. The MPC also noted the fiscal measures announced by the government and the liquidity enhancing measures announced by the RBI.

On April 17, the RBI Governor announced a series of measures towards enhancing liquidity in the system. The Governor also announced a reduction in the reverse repo rate by 25 basis points to 3.75% from 4%.

The MPC advanced its next scheduled meeting of June 3-5, 2020 to May 20-22, 2020. The MPC decided to reduce the policy repo rate by 40 basis points to 4% from 4.4%. Accordingly, the Marginal Standing Facility (MSF) rate and the bank rate were reduced to 4.25% and the reverse repo rate was reduced to 3.35% from 3.75%. The MPC decided to continue with the accommodative stance to revive growth and mitigate the impact of Covid-19 on the economy.

The MPC noted that the inflation outlook is uncertain due to persisting supply dislocations. International crude oil prices are likely to remain low and soft global prices of metals and other industrial raw materials are likely to keep input costs low for domestic firms. Taking these factors into account, the MPC stated that inflation is expected to fall below target in Q3 and Q4 of 2020-21. On the growth front, the MPC stated that the macroeconomic impact of the pandemic is turning out to be more severe than initially anticipated and various sectors of the economy are severely impacted. The MPC also emphasised the need to facilitate the flow of funds at affordable rates to revive animal spirits.

The next meeting of the MPC was held between 4-6th August, 2020. The MPC decided to keep the policy rate unchanged at 4%. Consequently the reverse repo rate was left unchanged at 3.35% and the MSF rate and bank rate at 4.25%. The MPC decided to retain the accommodative stance to revive growth and mitigate the impact of Covid-19 on the economy.

B MPC related notifications

Date	Subject	Source
27th June, 2016	Procedure for selection of members of Monetary Policy Committee and Terms and Conditions of their Appointment Rules, 2016	Gazette Notification
27th June, 2016	Factors that constitute failure to achieve the inflation target	Gazette Notification
5th August, 2016	Determination and notification of inflation target	Gazette Notification
29th September, 2016	Constitution of the Monetary Policy Committee	Gazette Notification

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