Journey of inflation targeting in India

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October 25, 2024

Background

- It has been eight years since India adopted the inflation targeting (IT) framework for its monetary policy.
- This paper presents an analysis of the IT regime, discussing serveral critical aspects.
- The paper evaluates the performance of inflation over this period, analyze the voting patterns of the members of the two Monetary Policy Committees (MPCs) and evaluate the evolution of inflation expectations during this period.
- It identifies key challenges that persist and propose suggestions to improve the effectiveness of the IT framework.
- Earlier two papers on inflation targeting:
  - Moving to inflation targeting: NIPFP WP No. 316, August 2020
  - Four years of the inflation targeting framework: NIPFP WP No. 325, NOvember 2020

Outline

- Introduction and literature
- Monetary policy process
- Inflation performance during the tenure of the two MPCs
- Challenges in the conduct of the IT regime

Part I

Introduction and literature

Introduction of inflation targeting in India

- First introduced through the Monetary Policy Framework Agreement in 2015.
- The Amendment to the RBI Act (2016) laid the legal foundations of IT in India.
- Institutional mechansims were put in place to transition to an IT framework.
  - Constitution of a Monetary Policy Committee
  - Voting process to decide the policy interest rate
  - More transparent conduct of monetary policy such as timely and regular publication of monetary policy statements and MPC minutes of meetings, among other things.

Literature on the performance of inflation targeting regime

- Research by Schmidt-Hebbel and Carrasco, 2016 indicates that IT has contributed to better anchoring of inflation expectations in emerging and developing economies.
- Assessments of the IT regime in India suggests a broad consensus that its adoption has led to lower, less volatile, and more effectively anchored inflation (Eichengreen and Gupta, 2024; Patnaik and Pandey, 2020)
- Our paper contributes to this literature by providing a comprehensive analysis of various dimensions of India's IT regime.

Part II

Monetary policy process

MPC

- The first MPC was constituted on September 29, 2016 for a tenure of four years.
- The meetings of the first MPC were held under two RBI governors: Urjit Patel and Shaktikanta Das.
- Under Urjit Patel, 14 meetings of the MPC were held–from October, 2016 to December, 2018. Under Shaktikanta Das, 10 meetings of the MPC were held–from February 2019 to August 2020.

Decisions on the policy rate and stance: MPC-1

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[1]	Reduced by 75 basis points from 5.15% to 4.40%	Accommodative
22nd May, 2020[2]	Reduced by 40 basis points from 4.40% to 4%	Accommodative
6th August, 2020	Unchanged at 4%	Accommodative

[1] Unscheduled meeting

[2] Unscheduled meeting

Decisions on the policy rate and stance Contd...

- Between October 2016 and April 2018, the MPC mostly maintained status quo on the policy repo rate which was reduced only twice, by 25bps both times.
- Between June 2018 and December 2018, the repo rate was increased in two consecutive meetings (June 6, 2018 and August 1, 2018), by 25bps in each case. This is despite the fact that the average CPI inflation during Jan-August 2018 was a modet 4.5%.
- Rate increases were done arguably, to defend currency as the rupee was facing depreciation pressure.
- From October 2018 onwards the repo rate was kept unchanged till February 2019. Under Governor Patel's tenure, the policy rate was left unchanged implying that the emphasis was largely on maintaining the status quo.
- Trend of status quo got reversed under the chairmanship of Governor Das who took office from February 2019.
- Of the 10 meetings of the first MPC held during his tenure, the repo rate was reduced in 7 meetings and left unchanged in 3 meetings.
- During Covid pandemic, the policy repo rate was reduced from 5.15% to 4% in two consecutive unscheduled meetings.
- Stance was mostly neutral under Governor Patel. In two last meetings, the policy rate was left unchanged *even though the stance changed from neutral to calibrated tightening.*
- However under the chairmanship of Governor Das, the monetary policy stance was mostly accommodative (8 out of 10 meetings).

Decisions on the policy rate and stance: MPC-2

Meeting	Decision on policy rate	Stance
9th October, 2020	Unchanged at 4%	Accommodative
4th December, 2020	Unchanged at 4%	Accommodative
5th February, 2021	Unchanged at 4%	Accommodative
7th April, 2021	Unchanged at 4%	Accommodative
4th June, 2021	Unchanged at 4%	Accommodative
6th August, 2021	Unchanged at 4%	Accommodative
8th October, 2021	Unchanged at 4%	Accommodative
8th December, 2021	Unchanged at 4%	Accommodative
10th February, 2022	Unchanged at 4%	Accommodative
8th April, 2022	Unchanged at 4%	Accommodative
4th May, 2022[3]	Increase by 40 basis points from 4% to 4.40%	Accommodative[4]
8th June, 2022	Increase by 50 basis points from 4.40% to 4.90%	Withdrawal of accommodation
5th August, 2022	Increase by 50 basis points from 4.90% to 5.40%	Withdrawal of accommodation
30th September, 2022	Increase by 50 basis points from 5.40% to 5.90%	Withdrawal of accommodation
7th December, 2022	Increase by 35 basis points from 5.90% to 6.25%	Withdrawal of accommodation
8th February, 2023	Increase by 25 basis points from 6.25% to 6.50%	Withdrawal of accommodation
6th April, 2023	Unchanged at 6.50%	Withdrawal of accommodation
8th June, 2023	Unchanged at 6.50%	Withdrawal of accommodation
10th August, 2023	Unchanged at 6.50%	Withdrawal of accommodation
6th October, 2023	Unchanged at 6.50%	Withdrawal of accommodation
8th December, 2023	Unchanged at 6.50%	Withdrawal of accommodation
8th February, 2024	Unchanged at 6.50%	Withdrawal of accommodation
5th April, 2024	Unchanged at 6.50%	Withdrawal of accommodation
7th June 2024	Unchanged at 6.50%	Withdrawal of accommodation
8th August 2024	Unchanged at 6.50%	Withdrawal of accommodation

[3] Unscheduled meeting

[4] Remain accommodative while focusing on withdrawal of accommodation

Decisions on the policy rate and stance

- For more than half of the tenure of the second MPC, status quo was maintained on the repo rate, in two phases.
- First, between October 2020 and April 2022 when the repo rate was held steady at 4% in all the MPC meetings
- Second, between April 2023 and October 2024 when the repo rate was held constant at 6.5% in all the MPC meetings.
- There was no dissent on the policy rate decision during the entire time that status quo on the repo rate was maintained between October 2020 and April 2022.
- The first time a dissent happened in the second MPC was on September 30, 2022 when repo rate was raised by 50bps but 1 MPC member (Ashima Goyal) voted for a 35bps increase.
- The meetings on Decenber, 2022 and February 2023 saw a dissent
- February 2024 till August 2024, onwards every MPC meeting witnessed a dissent, with two external members voting to reduce the repo rate and change the stance to neutral.
- From September 2022 onwards the meetings of the second MPC saw a fair bit of diversity of opinion among the members, with some members being more "dovish" than the "hawkish" position of majority of the MPC.

Word count: MPC meetings

MPC-1

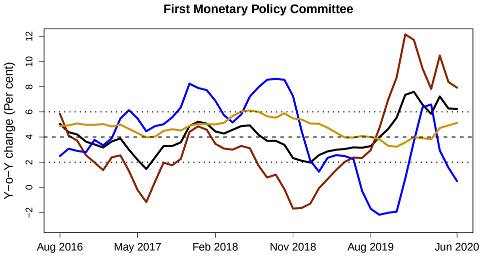
MPC-2

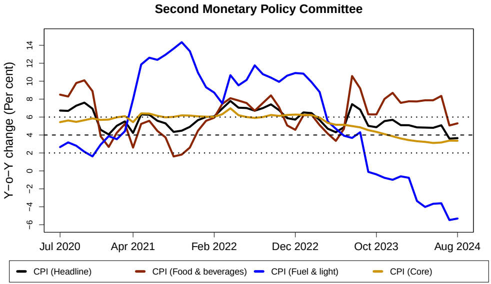
- While both MPCs prioritize discussions on inflation and economic growth, the second MPC exhibits a heightened focus on global developments and supply-side shocks relative to the first MPC.

Part III

Inflation performance

Inflation performance under the 2 MPCs





Inflation performance: Key highlights

1. First MPC
   - During the tenure of the first MPC, inflation remained broadly range-bound.
   - It was only in late 2019 and till June 2020, that inflation inched up and was above the upper threshold of 6 percent for most of the months in this period.
   - The average inflation during the tenure of the first MPC was 4.2%. However, the range was quite broad-the lowest inflation during this period was 1.5% in June 2017 and the highest was 7.6% in January 2020.
2. Second MPC
   - The first few months of the second MPC were marred by inflation breaching the upper threshold of 6% as a result of Covid-19 pandemic and lockdown related supply constraints.
   - After temporarily subsiding in 2021, inflation again became high and volatile from 2022 onwards.
   - Failure to achieve inflation target: Inflation was above 6 percent for three consecutive quarters in the first three quarters of the CY 2022.
   - As per the law, an additional MPC meeting was held on November 3, 2022 to discuss and draft the report to be sent to the government.

Stylised facts: in the pre and post IT regime

Inflation	Mean				Standard Deviation			
	Pre-IT	Post-IT			Pre-IT	Post-IT		
		Total	Pre-COVID	Post-COVID		Total	Pre-COVID	Post-COVID
Headline	7.26	4.95	3.88	5.82	2.39	1.53	1.33	1.06
Food & Beverage	8.49	4.89	2.9	6.44	3.4	3.21	3.15	2.26
Core	6.53	5.07	4.75	5.34	1.77	0.95	0.73	1.04

- The average inflation is lower in the post IT regime.
- In the post IT regime, on expected lines, the average inflation in the post Covid period is higher than the pre-Covid period.
- Even then, the average inflation during the post Covid period is lower than in the pre IT regime.
- Inflation has turned less volatile post the adoption of the inflation targeting framework.

Part IV

Challenges

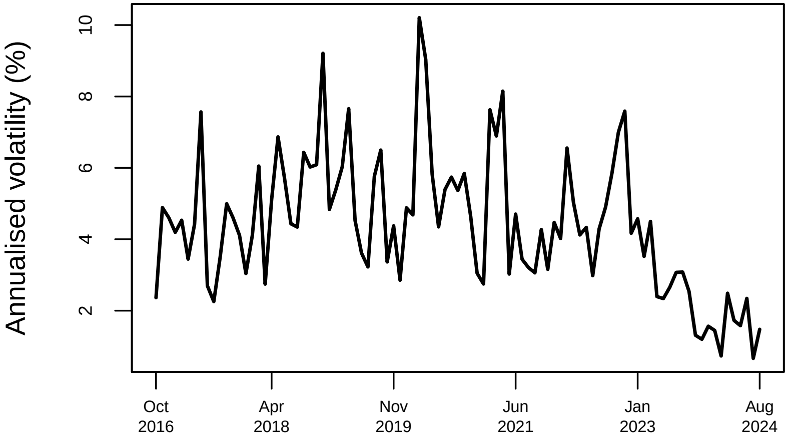
Challenges and steps to improve the effectiveness of the monetary policy

- Balancing the trade-offs between an independent monetary policy, a fixed exchange rate, and an open capital account (Impossible trinity).
- Conflict between monetary and debt management
- Scope for further improving the monetary policy transmission
- Need for a longer time series of inflation expectations

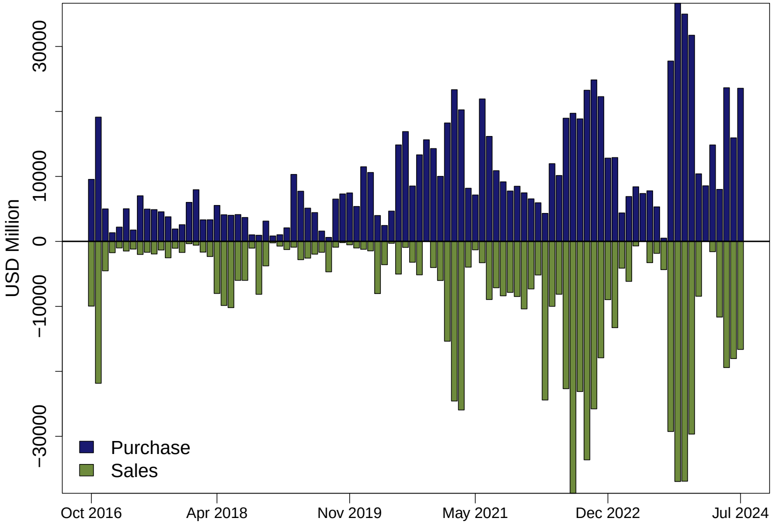
Navigating the impossible trinity

- RBI continues to grapple with the challenges posed by the Impossible Trilemma, which necessitates balancing the trade-offs between an independent monetary policy, a fixed exchange rate, and an open capital account.
- With IT as the legal mandate since 2015, the RBI needs to exercise monetary policy independence i.e. domestic macroeconomic considerations should play a greater role in guiding its conduct.
- There have been times when the RBI has actively focused on managing exchange rate fluctuations.
- For example, in the June and August 2018 meetings the MPC decided to raise the repo rate. These rate increases were likely implemented to mitigate depreciation pressures on the INR-USD exchange rate amidst a brief emerging market crisis triggered by economic instability in Turkey during the summer of 2018.
- The monetary tightening observed in 2018 was unlikely to have been driven by inflationary concerns, as the average inflation rate from January to August 2018 was a relatively moderate 4.5%.

Annualised volatility of the rupee dollar rate has decreased



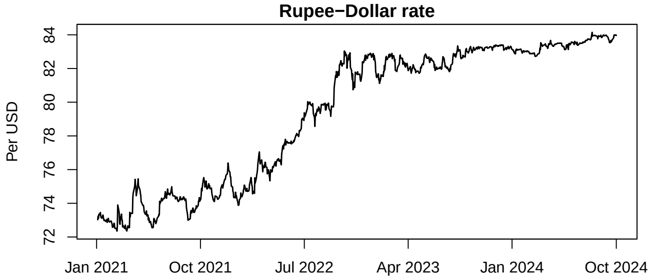
RBI's intervention in the currency market increased substantially since late 2022



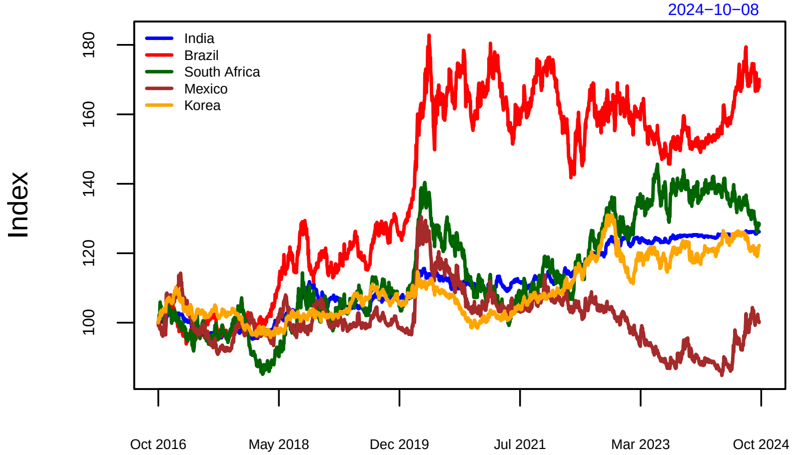
Exchange rate management

- Whenever the RBI buys or sells dollars, it also impacts the domestic money supply which in turn has consequences for inflation.
- Forex interventions by the RBI can introduce distortions in the domestic monetary base, thereby disrupting the effective operation of the IT framework.
- In the aftermath of the Covid-19 pandemic, the US Federal Reserve (Fed) raised interest rates to combat the surge in inflation.
- Specifically, between March 2022 and July 2023, the Fed raised interest rate 11 times, pushing the federal funds rate to above 5% from near zero.
- This sharp rise in the interest rates pushed up the value of the dollar compared to other currencies.
- In a flexible exchange rate setting, this would have led to a weakening of the rupee *But the rupee exhibited stability.*

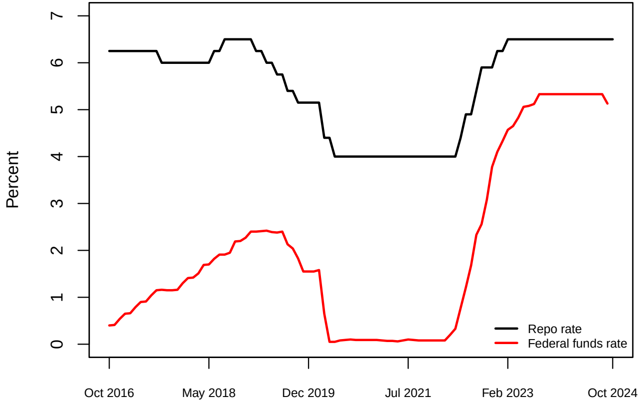
Fluctuations in the dollar index but rupee-dollar rate broadly stable



Rupee in comparison to its EM peers



Related implication: similarity between the trajectory of US Fed Funds rate and the repo rate



- Notably, the MPC's decision to raise the repo rate on May 4, 2022 after a prolonged period of status quo, represented the only unscheduled policy meeting during the IT regime, excluding the Covid-19 pandemic years.
- Interestingly this emergency meeting was called on the day the Federal Open Market Committee (FOMC) in the US was set to meet and all indications were that they would start raising the federal funds rate.

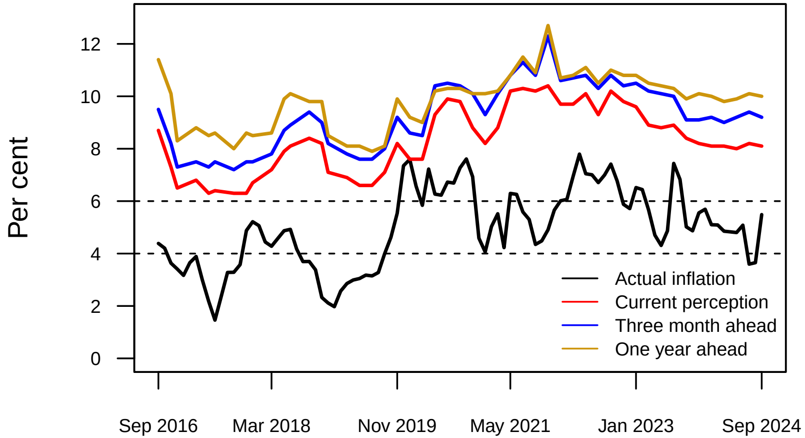
Possible conflict between monetary and debt management

- One of the key pillars of a sound public debt management framework is the separation of monetary management from debt management.
- In India, the RBI has been the debt manager to the government.
- In the pre-IT period, RBI did not have a clear objective, as was emphasised by the preamble of the RBI Act which described the agency as a 'temporary provision' (Pandey and Patnaik, 2017).
- The merits of freeing the RBI from its government debt management obligations strengthened after the adoption of an IT framework.

Possible conflict between monetary and debt management ..contd

- In principle, there is a conflict of interest between the RBI's objective as a central bank (to deliver a target rate of inflation) and the RBI's objective as a debt manager (to deliver a low cost of borrowing for the government).
- Steps taken by the central bank to lower the government's borrowing costs through interventions such as the open market purchase of G-Secs may run counter to a tight monetary policy stance and confuse the market participants.
- There have been periods when RBI has undertaken open market operations to bring down the G-Sec yield even though the weighted average call rate was closer to the repo rate.

Anchoring of inflation expecatations



Need to have a longer time series on households inflation expectations

- Periods of significant deviation of household expectations from the actual inflation. Example: the initial period of the inflation targeting regime and the period starting from May 2021 till March 2022.
- Inflation expectations can be considered to be meaningfully anchored when the long-term inflation expectations hold firm at the target rate.
- *A critical limitation is the lack of a series on long-term households' inflation expectations, for example 5 year or 10 year ahead.*

Monetary policy transmission

- Transmission through banking sector: Has improved in the recent years, particularly since the introduction of the external benchmark based lending rate (EBLR).
- Transmssion through the bond market: While short-term money market rates and yields on short-maturity government securities (G-Secs) react swiftly and almost in lockstep with changes in the repo rate, the transmission to medium- and long-term G-Sec yields has been considerably more muted and incomplete.
- A crucial metric to assess the transmission is the term permium:
- During the monetary easing cycle before the pandemic, the 1-year yield dropped by 120bps, while the 10-year yield fell by a more modest 93bps, resulting in a widening of the term premium

Conclusion

- The adoption of the IT framework was a crucial reform in India's financial sector.
- Inflation has become less volatile.
- India is becoming more financially integrated into the global economy which in turn is intensifying pressures on the INR-USD exchange rate owing to fluctuating capital flows.
- successful IT regime requires the RBI to step away from excessively frequentlyintervening in the currency markets and instead opt for a combination of open capital account, independent monetary policy and flexible exchange rate.
- Other suggestions include: need for more timely and better macroeconomic data and liquid market in government securities.

Thank you