ISSN: 2321-7782 (Online)
e-ISJN: A4372-3114
Impact Factor: 7.327

Volume 6, Issue 2, February 2018

International Journal of Advance Research in Computer Science and Management Studies

Research Article / Survey Paper / Case Study

Available online at: www.ijarcsms.com

Recent Evidence on Flexible Inflation Targeting in India

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Abstract: The purpose of this paper is to analyze the movements of some macroeconomics factors and indices in India since the adoption of flexible inflation targeting. The paper begins with studying the evolution of India's monetary policy framework since the inception of RBI. The revision of the Reserve Bank of India Act in May 2016, paved the way for implementation of flexible inflation targeting framework in India. As flexible inflation targeting (FIT) is a new concept in India, we don't have much empirical data to work with. The analysis highlights that the decision of flexible inflation targeting in India was flourishing until the last quarter of 2016. Since the first quarter of 2017, demonetization and implementation of GST have had an impact on CPI. In this context, the Indian experience with flexible inflation targeting is examined and implications are drawn, using graphical analysis since January 2014. The paper concludes by suggesting that the short-term inflation expectation of CPI should be targeted around 5 percent instead of 4 percent.

Keywords: Reserve Bank of India (RBI), monetary policy, flexible inflation targeting (FIT), consumer price index (CPI), Urjit Patel Committee.

I. INTRODUCTION

The Reserve Bank of India (RBI) in September 2013 set up a committee to provide suggestions on improvising its monetary policy framework. One of the purposes of this committee was to reconsider the objectives and implementation of monetary policy in a globalized environment. The committee also had to suggest what needed to be done to transform the monetary policy into a transparent and predictable one. A nominal anchor forms the core of a reliable framework. Whether fixed or flexible, a nominal anchor should define the objective of monetary policy in the medium to long-term.

Broadly, three types of nominal anchors have been observed and recorded, in recent history- exchange rate, multiple indicators, and inflation. The evolution of monetary policy framework in India can be summarised in the following phases (Table 1):

Table 1: Evolution of Monetary Policy Framework in India

Phase	Years	Objective	Tool
Formative	1935-1950	Regulate the supply of and demand for credit in the economy	Bank rate, reserve requirements and open market operations (OMO)
Development	1951-1970	Support plan financing and to contain consequent inflationary pressures, ensuring credit to preferred sectors (selective credit control, credit authorization scheme (CAS) and 'social control' measures)	Quantitative control measures, Bank rates
Pre-liberalization	1971-90	Credit planning, balance government financing and the attendant inflationary pressure, adoption of monetary targeting framework based on the recommendations of Chakravarty	Statutory liquidity ratio (SLR) and the cash reserve ratio (CRR), introduction of money

		Committee (1985)	market instruments
Early Reform and LAF Phase	1991-1998	Maintain liquidity, interest rates and exchange rates	Move away from direct instruments to indirect market-based instruments
Post Liberalization	1999 - 2014	Focus was on inflation and growth with multiple intermediate targets	Bank rate, Repo rate, Reverse repo rate, CRR and SLR
Inflation Targeting	2014 onwards	CPI (headline) target of 4% (with a tolerance level of 2% either ways) to ensure price stability in the economy	Repo rate

Several countries have adopted inflation as a nominal anchor for their monetary policy since the late 1980s. The first country to adopt inflation targeting in the modern era was New Zealand in 1989. Table 2 below summarizes the inflation targets and bands of some countries for 2018:

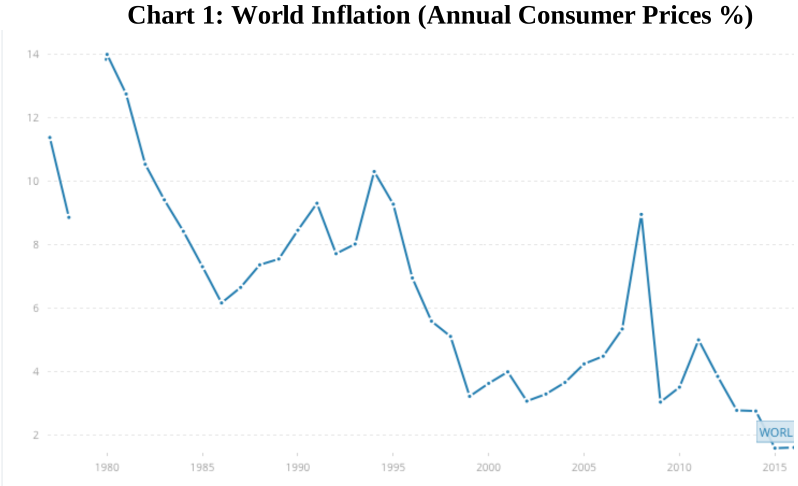
Table 2: Inflation Targets of Countries for 2018

Country	Central Bank	Inflation Target		Measure of Inflation
		Point	Range	
Australia	Reserve Bank of Australia	-	2 - 3 percent	Consumer Price Index
United Kingdom	The Bank of England	2 per cent	1 - 3 percent	Consumer Price Index
India	Reserve Bank of India	4 per cent	2 – 6 percent	Consumer Price Index
Japan	Bank of Japan	2 per cent	-	Consumer Price Index
United States of America	Federal Reserve	2 per cent	-	Personal Consumption Expenditures
Euro Area	European Central Bank	2% over medium term	< 2 percent (below, but close to)	Consumer Price Index
Mexico	Banco de México	3 percent	2 – 4 percent	Consumer Price Index
South Africa	South African Reserve Bank	-	3 - 6 percent	Consumer Price Index
Israel	Bank of Israel	-	1 – 3 percent	Consumer Price Index
Chile	Banco Central De Chile	3 percent	2 – 4 percent	Consumer Price Index

Source: Data from Central Bank News

Empirical evidence suggests that nations that have adopted inflation targeting have experienced lower average inflation rates than they did before its adoption. In the last three decades, ever since central banks in advanced and emerging nations adopted inflation targeting, there has been a substantial decline in the world's inflation rates (Chart 1).

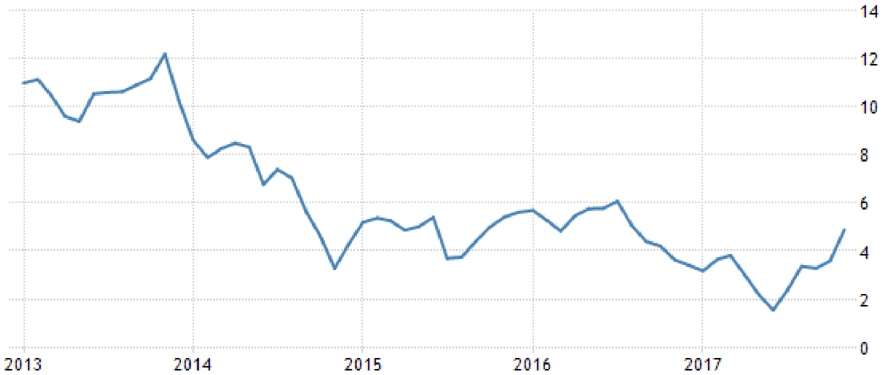
Chart 1: World Inflation (Annual Consumer Prices %)



Source: data.worldbank.org

India has had a history of high inflation. The Indian inflation was recorded at more than 11 percent about four years ago (Chart 2). Inflation levies an economic cost, especially if it is unanticipated, even partially. So, there was a case for bringing down India's inflation rate about four years ago.

Chart 2: India's Inflation Rate 2013-2017



Source: tradingeconomics.com

The Reserve Bank of India appointed an expert committee on September 12, 2013 to revisit and strengthen the monetary policy framework of India. The committee commenced its work from September 26, 2013 and presented a report on how to amend the Indian monetary policy framework in January 2014. There was a subsequent agreement on the proposed monetary policy framework by GoI and RBI on February 20, 2015. And then, the revision of the Reserve Bank of India Act in May 2016, paved the way for implementation of flexible inflation targeting framework in India.

The Urjit Patel Committee report was organized in six chapters, out of which chapter II revisited the nominal anchor for India's monetary policy. The Committee explained that inflation had a clear advantage over other nominal anchors as it was simple, easily communicated and hence, well understood by the public at large. The Committee recommended that RBI should adopt the new headline CPI (combined) as the measure of the nominal anchor for policy communication. It also advocated that this nominal anchor should be set at 4 per cent with a band of +/- 2 per cent around it.

Indian inflation was experiencing a dramatic collapse ever since RBI had switched over to flexible inflation targeting (informally from January 2014 and formally in June 2016). However, some key economic indicators saw a sudden dip after demonetisation and implementation of GST in the first quarter of 2017. Hence, let us study India's experience of flexible inflation targeting since its adoption.

II. Literature Review

A. Theoretical Framework

A considerable amount of literature on inflation targeting has evolved since its inception in the late eighties. Some of these provide the details as to how to structure the economic policies for inflation targeting, while some others bring out the merits and demerits of inflation targeting. Also discussed are the factors that are to be considered for the conduct of inflation targeting.

Proponents of inflation targeting reason that the most significant merit of having inflation targeting is the transparency to policy making that it brings along. The argument that inflation targeting positively affects macroeconomic performance has rendered inflation targeting the most preferred monetary policy strategy in recent years by developed and developing countries (Sakshi, 2014). It also increases the accountability since the central banks that follow inflation targeting have to publish regular monetary policy reports.

Flexible inflation targeting (which is a slight variation of inflation targeting) helps to observe other macroeconomic parameters too. Central banks may monitor other target variables such as the output gap with flexible inflation targeting. Believers of inflation targeting establish that it has helped to reduce the level of inflation and the unpredictability attached with it (Hammond, 2012). There is strong evidence that an explicit numerical target for inflation steadies the inflation expectations (Svensson, 2007).

Indapurkar (2015) believed that for an emerging market economy like India, which has been in a state of transition, inflation targeting as a policy posed certain risks. She found that non-inflation targeting countries have grown faster than those who have adopted inflation targeting in some form. She also quoted Mishkin (2004) saying that inflation targeting is more complex in EMEs but if done correctly, it can become a powerful tool to bring in macroeconomic stability provided the warning signs from other important economic variables are not ignored.

India's readiness to move towards a flexible inflation-targeting regime was evaluated by Sen Gupta and Sengupta (2014). They were of the view that with the central bank attaining more monetary freedom and exchange rate manageability, it was placed in a decent position to adopt flexible inflation targeting. However, their concerns included the effectiveness of using CPI as the nominal anchor. They believed that the inflation target point and band could prove conservative, considering the structure of the Indian economy. They brought out the fact that trying to achieve the target may result in considerable deflationary cost.

Subbarao (2012) opined that: "In an emerging economy like India, it is not practical for the central bank to focus exclusively on inflation oblivious of the larger development context. The Reserve Bank cannot escape from the difficult challenge of weighing the growth-inflation trade off in determining its monetary policy stance." He further said, "In India inflation is driven by supply side factors as food prices and monetary policy is ineffective in controlling inflation emanating from supply side factors. Monetary policy transmission in India has been improving but it is still a fair bit away from best practice".

According to Jha (2005) controlling inflation could not be the only focus of monetary policy in a country such as India, which suffers from intense poverty. He went on to say that higher economic growth should be the primary objective of the Indian monetary policy in the medium term.

For countries that have adopted inflation targeting, the policy interest rate should be consistent with the nominal anchor. However, if there is any deviation from the target, there are alternative interest rate approaches that would bring the inflation back in the medium term. Benes et al. (2016) suggested that different interest rate approaches could be created, which are in sync with the inflation target.

Mohanty et al. (2011) established that the 4% inflation target is in line with economic studies on the maximum rate of inflation and would not adversely affect growth in India. Although looking at the Indian history of high inflation, the target appeared quite ambitious to them.

III. APPROACH

An imperative responsibility of any central bank is to safeguard economic stability in the nation. For this, the central bank implements several actions to confirm that the target macroeconomic factors remain under control. The decision maker needs to know thoroughly the effect of these actions on the affected targeted variables. Therefore, the efficacy of such actions in maintaining economic stability needs to be tested.

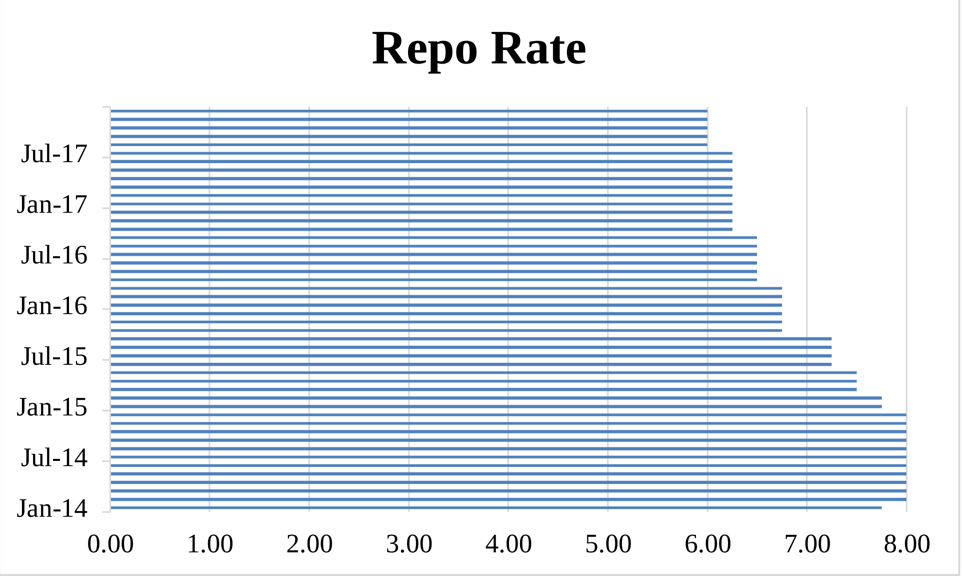
There is a regime shift in the conduct of monetary policy in India to place price stability as the primary objective of the monetary policy. The Monetary Policy Committee (MPC) has to maintain CPI within the 4 +/- 2 per cent band where a lack of ability to achieve the inflation target of 4 percent (+/- 2 percent) for three successive quarters would amount to failure. In this way, the framework is expected to anchor medium-term inflation expectations around the CPI midpoint and enhance the policy credibility.

However, there is no one individual relevant indicator that measures the effects of the underlying inflation in all situations and hence this article touches upon several different indicators. Data has been plotted on graphs and in charts since January 2014 to analyze the effect of this decision on some key economic parameters in India.

IV. ANALYSIS

The RBI has made nearly eight changes to the repo rate since January 2014. These changes mainly included rate cuts since January 2015 based on the estimates of inflation made by the RBI. The Monetary Policy Committee (MPC), headed by RBI Governor Urjit Patel had last reduced the benchmark lending rate by 25 basis points (bps) to 6 percent in August 2017, bringing it to a 6-year low (Chart 3).

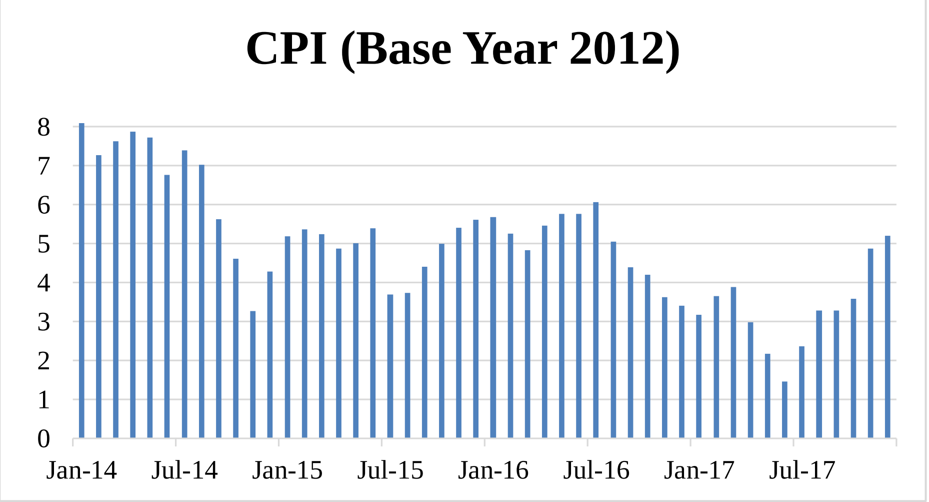
Chart 3- Repo Rate since January 2014



Source: Data from RBI website

The last few months of 2017 hinted that inflationary pressures are in the spotlight again. The CPI inflation climbed rapidly to 3.6% in October (over 200 bps higher than the lowest point of 1.5% seen in June). It crossed the RBI's comfort level and rose to 5.21% in December, up from 4.88% in November (Chart 4).

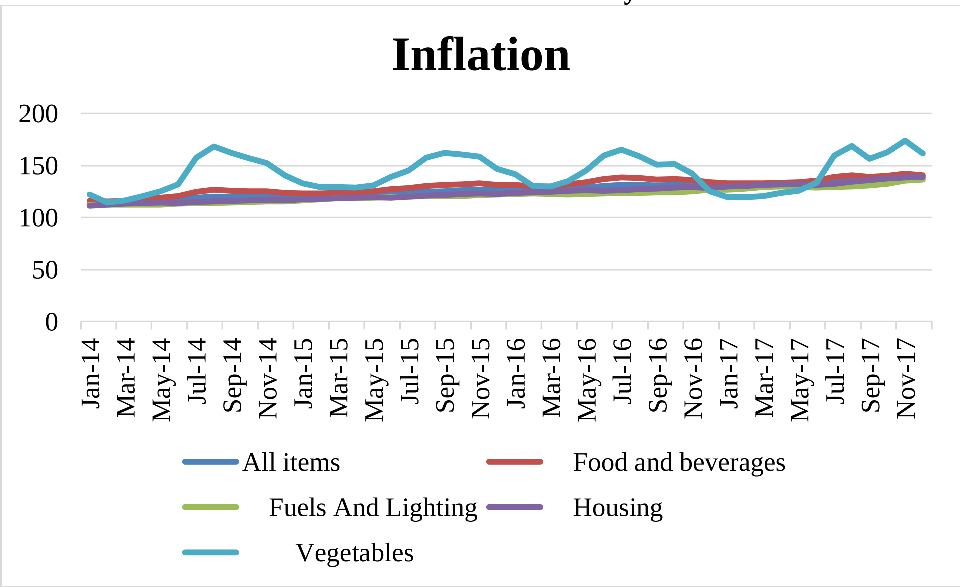
Chart 4- Consumer Price Index since January 2014



Source: Data from RBI's Website

December's CPI number had shot a 17-month high rate (despite a higher base) and was significantly higher than the RBI's target of 4 percent. The surge was primarily driven by higher inflation in housing and food (especially vegetables) (Chart 5). The steep rise in housing inflation clearly reflects the impact of higher house rent allowances paid to government employees.

Chart 5- Inflation since January 2014

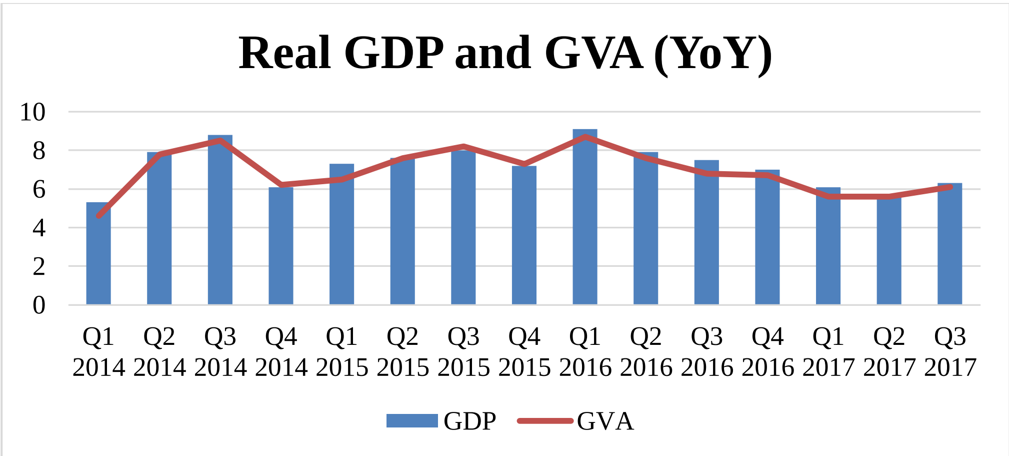


Source: Bloomberg and India Central Statistical Organisation

On February 7, 2018, the MPC kept the repo rate unchanged at 6%. This is substantiated by the fact that the Indian inflation rate forecasts show a continued increase in momentum, despite the base effect turning favourable. The MPC has forecasted the CPI inflation in the range of 5.1 – 5.6 percent for the H1FY19, factoring in the diminishing statistical HRA impact of central government employees. It has also projected 4.5 - 4.6 percent in H2FY19, with risks tilted to the upside. Two, the inflation has averaged to 3.25% for the fiscal 2017-18, which suggests that the last quarter is expected to see a steep rise in inflation.

India's economic growth slowed down in the second half of 2016-17 due to demonetisation (Chart 6). CRISIL's Chief Economist D. K. Joshi conveyed to Business Standard (December 2017) that India was not reaping the benefits of a global economic recovery due to the effects of demonetisation and the rollout of the goods and services tax (GST). Despite the GDP growth seeing a mild pick-up in the second quarter of fiscal 2018, the MPC has lowered its GVA projection at 6.6 percent for FY 2017-18. Also, it anticipates the GVA to grow at 7.2 percent for 2018-19 (7.3 - 7.4 percent in H1 and 7.1 - 7.2 per cent in H2).

Chart 6 - Real GDP and GVA



Source: Bloomberg and India Central Statistical Organisation

Table 3 gives a comparison of India's GDP Growth Projections for FY 2017-18 and 2018-19 as given by various agencies. As we can observe, the projections for FY 2017 were lowered by the agencies after the economic growth slowdown in India.

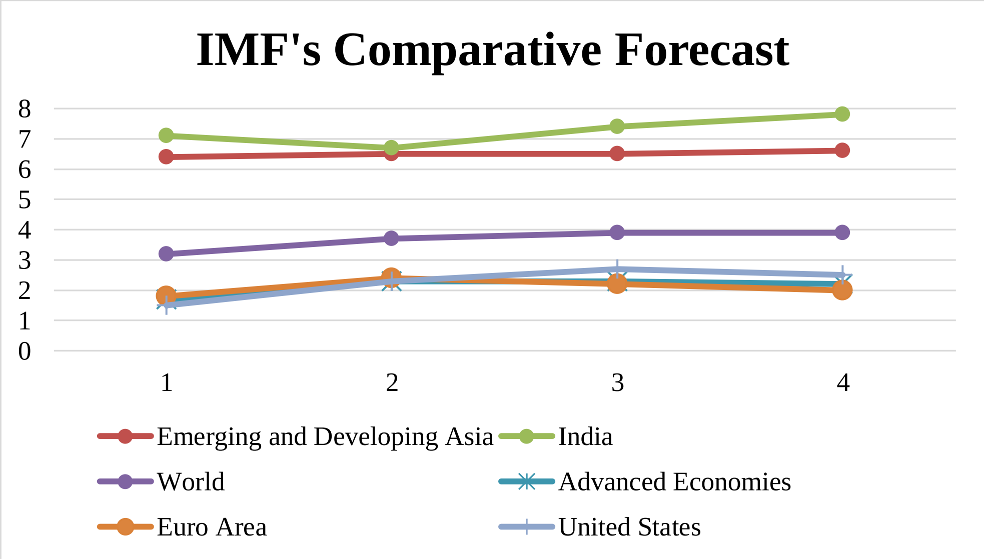
Table 3 - India's Real GDP Growth Projections for FY 2017-18 and 2018-19 (%)

	Earlier 2017	Latest 2017	2018
Asian Development Bank	7.0	6.5	6.2
World Bank	7.2	7.0	7.2
International Monetary Fund (IMF)	7.2	6.7	7.4
CRISIL	7.8	7.6	7.0

Source: Data from Respective Agencies' Websites

The IMF has projected that the world economy will grow 3.9 percent in 2018, up from 3.7 percent in 2017. Advanced economies are expected to grow 2.3 percent in 2018, while emerging market economies are expected to grow 4.9 percent, up from 4.7 percent in 2017. IMF's comparative forecast is depicted in chart 7.

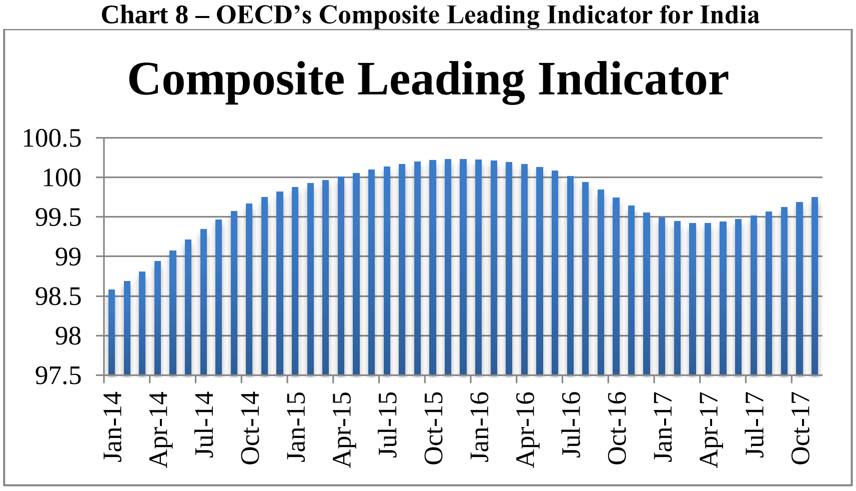
Chart 7- IMF's Comparative Forecast of Output for 2018



Source: imf.org

The Composite Leading Indicator (CLI) for India flaunted a coherent rise to 100.23 after the implementation of flexible inflation targeting. However, it witnessed a sharp plunge starting January 2017, which was after the demonetisation decision in November 2016 (Chart 8). According to the indicator, the economic growth is now gaining momentum since the month of May 2017. Although up from the preceding months, the CLI is still below where it was in 2016. The CLI numbers also showed a slowing of growth from the second quarter of FY 2016-17, which is in congruence with the gross domestic product data.

Chart 8 – OECD's Composite Leading Indicator for India

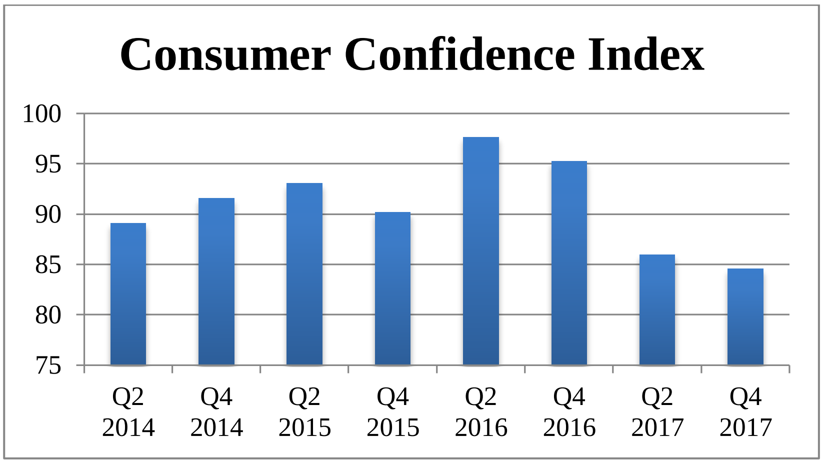


Source: Bloomberg and OECD

Just as the Composite Leading Indicator, India's Consumer Confidence Index has been knocked by demonetisation and GST. Chart 9 shows that the consumer confidence index was doing very well after the implication of flexible inflation targeting in India. But this lasted only until Q4 of 2016 when the consumers felt maximum intensity of demonetisation. India had witnessed the largest deterioration in confidence level across the Asia Pacific region. The Index declined for the first half of

2017 compared to the second half of 2016, as consumer outlook on the economy suffered. It recovered a bit in the mid of 2017, but slipped again, perhaps floored by the GST this time.

Chart 9 - India's Consumer Confidence Index since 2014



Source: Bloomberg and MasterCard Advisors

V. CONCLUSION

As flexible inflation targeting (FIT) is a new concept in India, we don't have much empirical data to work with. The data since 2014 indicates that the decision of flexible inflation targeting in India was flourishing until the last quarter of 2016. However, the impact of demonetization and GST implementation on CPI must also be factored in.

Now, transitioning again to the mid-point of the band over the medium term would require significant supply-side responses as well as a credible fiscal policy that complements monetary policy. The ongoing problem of non-performing assets in the banking sector takes a toll on the transmission mechanism for monetary policy.

Overall, the attainment of 4 percent target is challenging. Therefore, the near-term focus should rest on conditioning expectations of CPI closer to 5 per cent since 4 per cent seems aspirational currently.

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