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A Critical Analysis of Monetary Policy in the context of India's current economic slowdown

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Abstract

In any economy, monetary policy is as essential as fiscal policy in driving growth and in India, it is no different. Our monetary policy is determined by the Reserve Bank of India in consultation with Monetary Policy Committee which is headed by the RBI Governor while Fiscal Policy is determined by the Government of India. We have been witnessing a slowdown in our economic growth since as early as 2017 and growth has fallen sharply from a high of 8% to 4% over the last three years. It is in this background that this paper discusses the role of the Reserve Bank and presses for a review of Monetary Policy that has been pursued so far. Like many countries in the West, we also adopted an Inflation Targeting Framework in 2016 by amending the RBI Act and went for explicit inflation targets till 2021.

However, this paper finds that experience in India and abroad show that IT is short sighted as there is a huge macroeconomic impact on account of such a policy – Slowed growth of manufacturing sector due to higher cost of capital. Given that India's already in a slowdown, it is clear that there needs to be a clear push from the Monetary Side as the Fiscal Side is constrained due to FRBM Act. This can be done by opening up more funds for credit and reducing Prime Lending Interest Rate while going for a temporary suspension of Inflation Targeting.

Keywords: *Monetary Policy, Inflation Targeting, FRBM Act, Prime Lending Interest Rate*

Introduction

In recent quarters we have seen that the Indian economy has been experiencing decline in economic growth owing to domestic as well as global factors. Issues such as US-China Trade war, extreme volatility in Crude Oil price and also slowdown in global growth are some of the widely acknowledged global factors. Domestic factors appear to be more structural in nature owing to policy problems of the past such as rising NPAs, reduction in savings, complicated web of taxes, disruptive measures like Demonetisation etc. When it comes to the present situation, latest figures from Ministry of Finance show that in fourth quarter of 2019, it grew at a low rate of 4.7 %. Estimates of the NSO put annual growth (real) in 2019 at 5%. A 3% drop-in rate of growth over 2 years is a reflection of the structural problems within the economy.

Fig 1 - Trends in Real GDP Growth of India (2017-2019)

Source : www.ceicdata.com

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As seen above, over successive quarters, India's GDP growth in real terms has been declining. This means India is in an *economic slowdown* and therefore the question that arises now is how one should undertake a course correction. To understand that we must look at what is the cause? Many economists are of the view that the *lack of adequate demand for goods and services* is the prime reason for accelerating the current decline. This is further evident from a sharp decline in the rate of private investment (as % of GDP) and sharp fall in the rate of savings (as % of GDP).

Conventional Keynesian theory tells us that in times like these it is better to adopt an expansionary fiscal policy indicating state going for capital spending and kickstarting the Keynesian multiplier process. However, the contours drawn by the FRBM Act, 2003[2] with respect to fiscal deficit poses a limitation on the fiscal front thus putting brakes on expansionary fiscal policy at the moment. At this juncture it is pertinent to note that even if India pursued a fiscal policy approach, it would require a shift from current trend of spending more on revenue expenditure (salaries, administration expenses) to spending on capital asset expenditure to boost the economy. Keeping this background in mind, this paper proposes to look at monetary policy as an alternative to tackle the problem of deficient demand and rising unemployment and put growth back on track.

Research Objective

This term paper has twin objectives:

1. It first intends to critically look at the Inflation Targeting Approach followed by the Reserve Bank of India in context of current slowdown.
2. It also seeks to look at the role of Monetary Policy in arresting India's current economic slowdown and putting growth back on track.

Literature Review

During the course of research on the above topics, the author referred to some publicly available research papers and articles published in various journals to get an idea about the discussions vis-à-vis Monetary Policy and related issues.

(Kannan, 1999) noted that inflation targeting was initially started in the 1990s and popularity of inflation targets can perhaps best be seen as a step in the evolution of monetary policy regimes in countries which have battled to achieve or at least to maintain monetary and price stability over a period of time. It also noted that there was a fundamental difference between price level target and inflation targeting and the latter would not always guarantee stable price in the long run. The literature suggested that there were three strategies - viz, inflation and GDP targeting, nominal GDP targeting and monetary targeting. It is pertinent to note that India was following monetary targeting until mid-1980s post which it was abandoned due to financial innovation which made targets difficult to measure. The author noted that for countries with supply shocks as driving factor for inflation, Nominal GDP Targeting was a better policy response. It went into detail about other countries' experiences and contrasted it with India while looking at the technicalities of an inflation target. Issues with a target were: type of the index or metric chosen, transmission mechanism, level of target, credibility, time lags and issues in forecasting.

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Insofar as India was concerned, the important takeaway in the paper was that multiple indicators approach was a better measure for India as it allowed for a set of variables to constantly monitored. It also mentioned the need to acknowledge *supply shocks* as the main cause for inflation in India and its factoring in models of inflation forecasting.

(Mahajan, Saha & Singh, 2014) explored the suitability of Inflation Targeting in India and contrasted it against the then followed Multi-Indicator approach. It also looked at the various indices used for measuring inflation and their cross-country comparisons found that CPI was common metric used. The authors went into various arguments for and against IT in international as well as national context and it notes at a point that IT works well if made in a flexible framework as opposed to an iron-clad policy rule. They noted that to target inflation, it is necessary to have the capability to build an inflation forecast and that India is yet to develop skills to forecast inflation over a range of 8 to 12 quarters. It quoted (D.,Subbarao,2011)'s findings to counter the proposals for IT that the Multi-Indicator Approach had dealt with the key parameters pretty well and had a number of quantity and rate variables, such as credit, output, inflation rate, exchange rate, interest rate etc. which were analysed for making the monetary policy. A point that is reiterated here as well is that in developing nations like India, supply shocks (for e.g. effect of monsoons on agriculture) rather than demand shocks are the major reason for inflationary pressures. Adding to the above, they opined strict IT policies will lead to a reduction in demand and thus make worse the recessionary effect on outputs. They remarked that there are lot of preconditions which were to be fulfilled before shifting to IT regime such as Floating Exchange Rate, Central Bank Independence, Strong and smooth transmission mechanism, Inflation Forecasting Models should capture impact on the real sector and not just financial sector. The complicated set of prerequisites needed to shift to IT formed their rationale to stick to Multiple Indicator Approach. An important finding, they share with (Subbarao,2011) is that India has been performing well with its Multiple Indicator Approach till date and suggested a new CPI that is more representative and includes services and hospitality sector, which is a must for a country like India that is booming in services.

Former Deputy Governor Dr Viral Acharya pointed out in (Acharya, 2017) that Monetary Transmission has not worked in India owing to various breakdowns in the mechanism. It is to be noted that Inflation Targeting can be successful only if the degree of responsiveness of changes in the real output to changes in policy rates is high enough implying the time lag being of a certain period. Insofar as India is concerned, it has, like many other countries in the West, adopted Inflation Targeting formally in 2016 (till 2021) with amendment to Reserve Bank of India, Act,1935 with a fixed target of 4 % with +/- 2% deviation band while a 6-member Monetary Policy Committee would determine the bi-monthly monetary policy. (Acharya, 2017) opines that while *interest rate channel* yielded the best result for a good transmission mechanism, the pass through of reduction in policy rates did not happen due to legacy loan issues of commercial banks (whose rates were fixed due to many deposits being term deposits) indicating a weak picture of the banks' balance sheets. Deterioration in Banking Sector health

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due to rising NPAs[4] has also contributed in impacting the mechanism. This explains the slow policy time-lags and it was observed that monetary policy transmission impact on output was having a lag of 2-3 quarters (6-9 months) while that on inflation was at least 8 quarters (more than 2 years). This gives us an insight into the multi-layered problems we encounter while understanding the policy transmission. Possible solutions to smoothen the mechanism include shift to an *external benchmark-based lending rate* such as policy repo rate or T-bill rate as MCLR regime seed to possess a factor arbitrariness. Freedom should be granted to commercial banks to take decisions on spread over external benchmark rate. It is to be kept in mind that a weak mechanism impacts inflation targeting as well as policies that are expected to make credit more available.

(Rajyadhyaksha, 2018) notes in his opinion editorial that flexible inflation targeting has been able to control inflation to some extent and that a committee set up by RBI recommended headline inflation should be focussed over core inflation which excludes food prices. This idea has come under criticism as directly controlling headline inflation would result in sharp reduction in prices for farmers far below remunerative prices. It refers to (Dholakia & Kadiyala, 2018) which make two main points – 1) Inflation persistence in India has come down over the last few years, 2) Sudden movements in food and fuel prices do not lead to permanent changes in headline inflation due to anchoring of expectations. The article also makes a case for RBI to target core inflation more given that food price movements are transient.

Another reference the author used was (Mahajan, Saha & Singh, 2014) which looked at effectiveness of monetary policy in controlling inflation with respect to India. It argues that while we have been targeting inflation with a Multi-Indicator approach post 2008 Global

$$WPI = C + \beta 1(M3) + \beta 2.\ (Exch.\ Rate) + \beta 3.\ (Int.\ Rate) + \beta 4(WPI\ t-1)$$

Recession, IT might not be a good option to look at. It used the logic of Phillips Curve to say that IT can only be adopted at the cost of higher unemployment. An interesting aspect of this paper was its critique of Taylor's rule which they felt was unsuited in the Indian context for the same reason as stated by (Mahajan, Saha & Singh, 2014) – Inflation in India is induced due to supply shocks rather than demand shocks. Since Taylor's Rule factors in output gap, which indirectly means demand gap and does not factor in supply shocks, it cannot be a good tool to combat inflation. Taylor's Rule also clashes with the very idea of IT as it does not accept a nominal anchor which is the basis for IT. It also argues that a high fiscal deficit is also an inflationary factor. The paper used the following CLRM model using time-series data and arrived at the following conclusions:

WPI was used as Inflation metric and treated as the dependent variable while money supply (M3), Exchange Rate ($/ ₹), interest rate and one-year lagged WPI were treated as exogenous or independent variables. The model was adjusted for stationarity and the conclusion drawn was that M3 did not impact WPI as much as projected often while the exchange rate showed a considerable positive relation indicating considerable influence. This meant that a deprecation

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of the rupee benefited exports while causing domestic inflation. It was found that even interest rate had a sizeable impact while the highest impact was found on past experience of inflation. The conclusion arrived at in the paper there is ample scope even for Monetary Policy in not only combating inflation but creating conducive economic environment in times of deflation (provided interest rate was of a certain level).

Methodology

This paper adopts an exploratory approach to the questions of effectiveness of monetary policy to boost growth and whether inflation targeting has been successful and is needed in the current situation.

The methods also used in the paper are graphical trends of relevant variables with data sources primarily being RBI, Government of India's Economic Survey documents and World Bank database. It also attempts correlation and basic data analysis to draw relevant conclusions.

Analysis & Findings

The analysis is divided into two parts so as to answer both the objectives properly. First part of the analysis deals with trends in Indian economy and relation to inflation and how things have been post Inflation Targeting. The second delves deeper into the role of monetary policy and looks at a possible alternative to Fiscal Policy to tackle the slowdown by smoothening the transmission mechanism.

Part 1 – Inflation Trends in India & Inflation Targeting

Since 2014 RBI has been using CPI to measure inflation in India. It had earlier been using WPI but since it did not factor in services which contributed in a big way to the economy, it abandoned it and began using CPI or the Cost of Living Index. We first thus look at what the trend has been since 2010 and the rationale for doing so is post 2010 the growth fell sharply and during the same period even the interest rates started rising.

The first graph, as shown below, plotting the annual rate of inflation which is given by CPI (Combined) shows that inflation was at double digits between 2009 and 2013. We see that the reduction only began in 2014 and continued post IT adoption in 2016 as well and spiked in 2018 and breached the 6 % mark which is the upper tolerance level.

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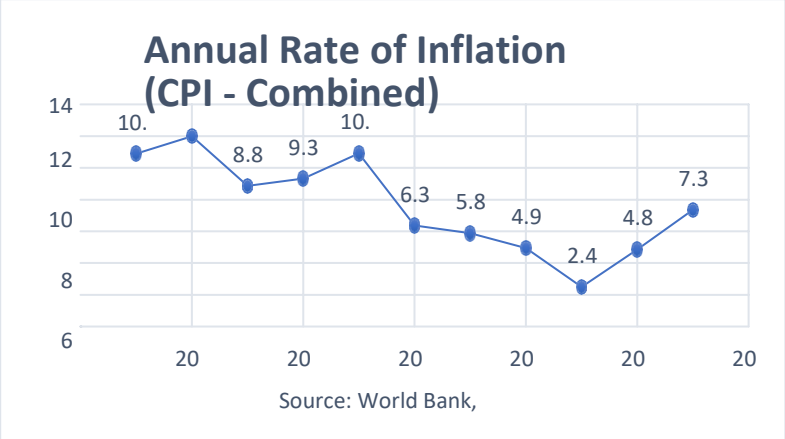
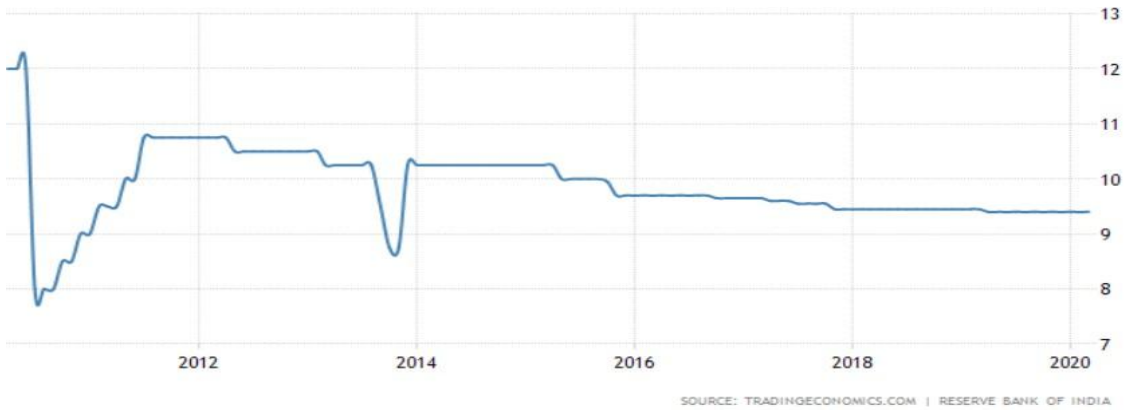


From the second graph we can see that from 2011 onwards, RBI had kickstarted a phase of monetary tightening given global circumstances and began contracting the amount of money supply in the economy by raising the prime lending interest rate to above 10 % and has kept it at that level except for in 2014.



Prime Lending Rate Data - 2010-2019

(Source – www.tradingeconomics.com ; RBI)

However, a consequence of this policy was a sharp drop in manufacturing sector's output within 2 years (2014-16). This is evident form the following graph which plots the manufacturing sector over the years.

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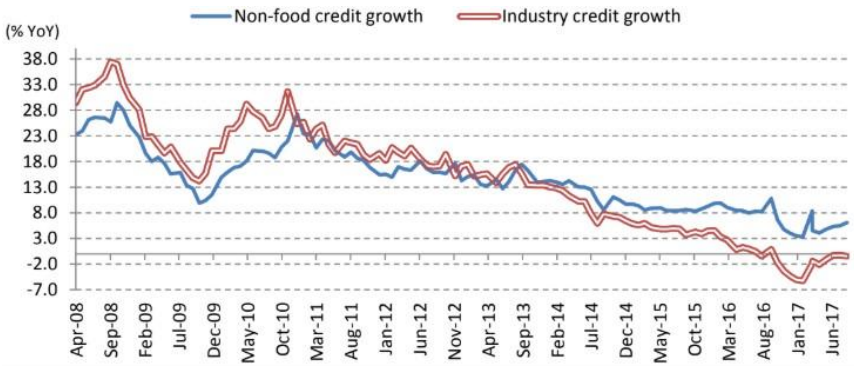

Credit growth trends in India

Source: World Bank

We find that the unacceptably high interest rate regime while controlling inflation led to a reduction in value added to the economy by the manufacturing sector indicating that cost of credit and thus reducing amount of money available for credit came down, making it hard for MSMEs (formally recognized) and industry to sustain in business and had to shut down units increasing the unemployment rate.

This particular fact is borne out of the data put out by World Bank and given in the following graph. We find that during the same period, manufacturing sector's contribution to India's GDP dropped by 2 % from 17 % to 15%.

Manufacturing as % of GDP

To get a more statistically sound answer in this context, a plotting of the relationship was done on a graph and later to add more weight, correlation analysis was done to ascertain the kind of relationship between annual inflation rate and annual rate of growth in manufacturing sector. The

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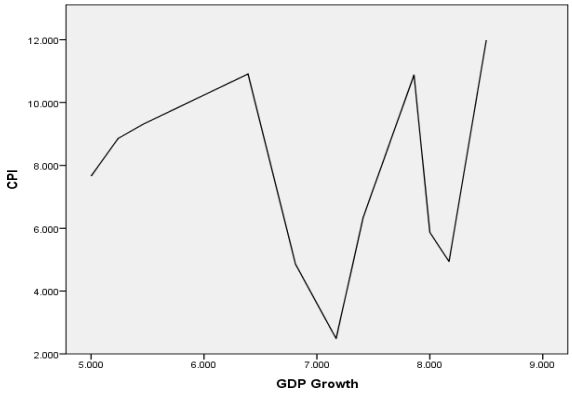
metric used was simple correlation (Karl Pearson Correlation Coefficient) and the value obtained was – 0. 326 which less than zero not very close to the lower bound which is – 1. This result indicated a mild but negative relationship between inflation and manufacturing growth.

	Annual Rate of Inflation	*Growth Rate of Manufacturing*
Annual Rate of Inflation	1	
Growth Rate of Manufacturing	***-0.32694***	1

(Result of Karl Pearson Correlation Analysis)

To actually know how inflation has been controlled via Inflation Targeting, we find that in 2016 when we adopted IT, the inflation was already on a downward trend (4.9 %) but the problem is it came at the cost of growth in form of reduced output and shutdown of plants in MSMEs (whose picture is not fully captured in the database) as per (Vaidyanathan.R, *India Uninc*, 2014. The following graph plots GDP growth and Inflation (it takes into account annual growth in GDP and rate of inflation from 2010-2019).



GDP growth (%) vs Inflation Rate (CPI- Combined)

Source: Economic Survey 2020

What we see is a very unstable inflation rate vis-à-vis GDP growth. The trend appears to be sort of a zig zag pattern implying inherent instability. However, to get a clearer idea on this relationship, the paper attempted a correlation analysis between Inflation Rate and GDP Growth. The results are as follows:

	GDP Gr	*Inflation (CPI)*
GDP Gr	1	
Inflation (CPI)	-0.08686	1

(Results of Karl Pearson Correlation between GDP and Inflation)

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What is very interesting from this relation is that GDP seems to have negligible negative correlation with Inflation. There can be two inferences drawn at this stage from the above finding:

1. Since inflation is majorly determined by supply shocks and food prices occupy a major chunk of the CPI Index, it might not be impacting GDP growth per se which is determined by a totally different set of factors. Hence when we try to draw correlation, we do not seem to be obtaining a clear picture.
2. Inflation however creates expectations and it is to anchor/ hold them that we have adopted IT approach. However, the data from 2016-2019 does not seem to be very encouraging vis-à-vis IT as annual inflation was controlled only for one year (2017) before spiking up in 2018 hitting 4.8 % and crossing the upper tolerance level of 6% as per IT framework in 2019. The fact that transmission mechanism has a lag of 8 quarters (2 years) to fully reflect the impact of changing policy rates adds to the problem which we see here wherein 2 years post IT, there is actually a rise in inflation.

The author also performed a t-test (two tailed, samples means) on average annual inflation data to see if there was any change due to IT with null hypothesis being that there was no impact of IT on inflation ($\mu = 0$). The data was split into average inflation pre and post IT periods for 3 years. The result showed that t-statistic calculated was less than t-critical value indicating acceptance of null hypothesis that IT was not impactful.

Data sourced from RBI split for t-test (sample means):

t-test result: t-stat < t-critical

Sample1		Sample 2	
2014	6.35	2017	2.49
2015	5.87	2018	4.86
2016	4.94	2019	7.66

t-Test: Paired Two Sample for Means

	Variable 1
Mean	5.72
Variance	0.5139
Observations	3
Pearson Correlatio	-0.991004102
Hypothesized Mea	0

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df	2
t Stat	0.376176053
P(T<=t) one-tail	0.371470962
t Critical one-tail	2.91998558
P(T<=t) two-tail	0.742941924
t Critical two-tail	4.30265273

We can conclude at this juncture that Inflation Targeting has been too narrow in its approach despite the flexibility targets. A few research studies too brought out the same conclusions. (Goyal, Ashima, 2018) correctly put out in their paper that a policy induced demand contraction affects output more than it affects inflation. The paper also added an important point that there was too much emphasis on a weak aggregate demand channel to reduce inflation and this caused output sacrifice to be higher than necessary. Another key point made was that although favourable commodity price shocks brought inflation down faster since 2014, the RBI, did not view the fall as sustainable, and did not bring interest rates down commensurately, thus imposing unnecessary growth sacrifice, while raising rather than lowering inflation expectations. Another view that the author took was that Multi-Indicator approach provided a multi-dimensional picture of the economic situation giving RBI adequate tools to factor in a 360-degree view before making policy changes. This was reflected in (Singh, Charan, 2014) wherein it stated that in view of the young population of India, probably priorities in India are higher employment and growth and not just low inflation.

Therefore, the author opines that keeping policy transmission lag in mind, IT framework should be altered first by raising the minimum inflation rate from 2% upwards to 3% and subsequently raise the upper tolerance level or to create much more flexibility than there is and reduce emphasis on inflation as even low inflation can be counterproductive signaling low demand for goods and services.

The other idea can be suspending the Inflation Targeting approach till the economy stabilizes as deficient demand can translate into excess supply of unsold goods rendering producers to cut down production for the time being and implies laying off workers in the short term and raising unemployment. The end impact would be a lack of demand again with less purchasing power which would then be a disastrous phenomenon which we have to avoid at any cost.

Part 2 – Monetary Policy - An Alternative to Fiscal Policy to battle current slowdown?

This question arises out of the limited fiscal space Government of India has owing to Fiscal Deficit concerns which are governed by the FRBM Act, 2003. However, the pattern observed in Government Spending in recent times makes a case for looking at Monetary Policy as an alternative. The Union Government has been spending more on revenue expenditure and marginally on capital expenditure. In the current budget of 2020-21, 26 Lakh Crore was marked

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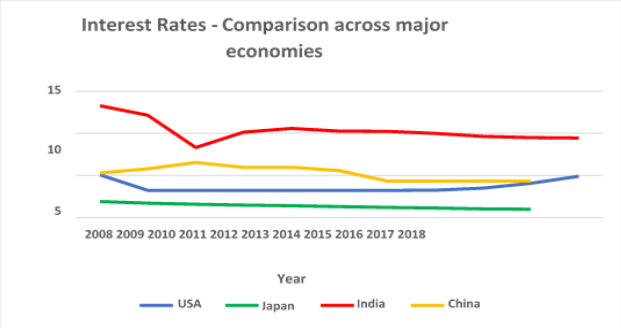
for revenue expenditure while only 4 Lakh Crore was marked for capital expenditure. It must be remembered that capital expenditure involves asset creation and goes on to act as a force multiplier in boosting growth and putting money in peoples' hands and boosting the demand side of the economy which is currently taking a beating due to a multitude of factors. The idea of Fiscal Deficit not going beyond 4 % of GDP thus puts a constraint and we shall look at monetary policy from that perspective.

Given that we have seen Inflation Targeting not being very successful in controlling inflation in the previous section, the idea that is put for discussion here is how expansionary can the monetary policy be at this juncture? Repo rate cut has been initiated quite a few times but it has not fully translated into credit growth owing to the NPA crisis and bad balance sheets of many banks. One problem is that we have our prime lending rate is still at a high of 9% despite our main policy repo rate being cut sharply in the last monetary policy briefing in March 2020. However, RBI's Annual Monetary Policy 2020 report states that monetary transmission has improved greatly with 36 banks adopting external benchmark system for floating rate loans. Another article by the RBI (*RBI*, 2020) states that under the MCLR system, the transmission from the policy rate to lending rates runs through deposit rates. But rigidity in deposit rates also has to change and the article makes a mention of the same upon shift to external benchmark system.Now given this backdrop, RBI's monetary policy should focus on monetary easing in two ways to boost growth in the absence of fiscal intervention:

1. Increasing stock of money supply in the country by printing more notes (keeping current economic slowdown in mind) and going for more purchase of government securities (more OMO purchases).
2. It is observed that India's MCLR is at 7.9 % while the Base Rate is at 9%. Savings Deposit Rate as mandated by RBI is at 3.5 %. The base rate should be reduced sharply as 9 % is too high for India when compared with the other top economies of the world, as seen below. This should be followed up with incentivising rates being offered for fixed deposits for more than 2 years to create adequate reserves to ensure sufficient lending. They should also order major banks like SBI not to cut down rates on savings deposits which would create a reduction in reserves available for lending while also reducing the lending rates rather raise them or keep them in line RBI's preferred band.



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Conclusion

The paper finds that given the limited fiscal space available with the Union Government and state governments and tendency to spend more on revenue expenditure than on asset creating capital expenditure, we must look at possible monetary solutions to arrest this slowdown and reverse the loss in demand. From the literature perused, on the subject of inflation targeting and monetary policy trends in India, it is clear that IT was *narrowly implemented* and would take a considerable amount of time before it would be a success and was needing a lot of pre requisites to be put in place before a full shift is made to the IT approach. We also find that independence of central bank is a necessity which of late in India has been questioned and debated upon. The author found that while Multi Indicator Framework was already in place, contractionary monetary policy already was able to control inflation to a significant extent while within two years of shifting to IT regime, inflation has actually seen an uptick implying that IT was not so successful. A series of correlation analysis between headline inflation (CPI-Combined), manufacturing growth and GDP growth revealed that there was an observable negative relationship vis-à-vis manufacturing and a negligible relationship with GDP growth. However, the t- test performed on inflation showed that the IT did not have any impact. The author believes the IT has to be significantly altered and made more flexible vis-à-vis targets or has to be suspended in the short term.

Coming to Monetary Policy and its role, it is immense and naturally should be in tandem with fiscal policy but in this case, monetary easing has a bigger role to play as now the transmission mechanism has improved. The RBI needs to reduce its focus on inflation and look at the growth objective by going for radical changes such as printing more notes and going for more Open Market Operations (purchases of securities) on one hand and on the other , raise fixed deposit rates for 2-3 years and reduce the base rate significantly, which is very high compared to other top global economies such as USA and China. This, the author believes would raise the amount of money held by banks to finance credit and kickstart investment cycle by first raising rate of savings and subsequently channelling it into productive projects and ultimately raising the rate of growth. Caution however should be exercised by banks at all times while lending by doing background checks of borrowers, in the light of recent rise in frauds leading to large scale NPAs.

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