



Inflation: A Monetarist viewpoint

The release of the minutes of the August 2021 Monetary Policy meeting revealed the thought process that led to a 5-1 majority in the Monetary Policy Committee (MPC) regarding the accommodative stance of monetary policy. One of the Committee members Prof. Jayanth Varma took a dissenting view compared to the rest of the Committee members, suggesting that the policy stance of the Reserve Bank of India (RBI) should not be accommodative any longer. The core of the argument made by Prof. Jayanth Varma can be summarized as follows:

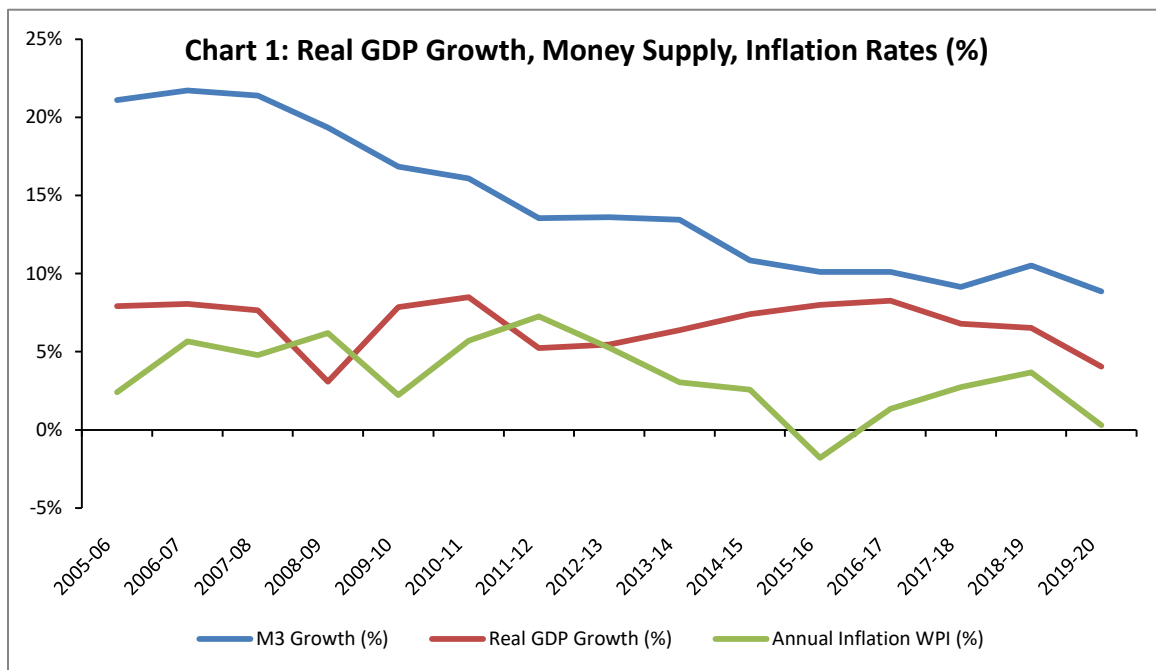
- *The ability of the monetary policy to mitigate a human tragedy of this nature is very limited as compared to its ability to contain an economic crisis;*
- *Keeping monetary policy highly accommodative for such a long horizon is very different from doing so for what was earlier expected to be a relatively short crisis;*
- *Monetary accommodation appears to be stimulating asset price inflation to a greater extent than it is mitigating the distress in the economy;*
- *There are indications that inflationary expectations may be becoming more widely entrenched.*

These can be considered the primary reasons for Prof. Varma to vote against the accommodative stance and suggest that the LAF Reverse Repo rate be gradually increased from the present level of 3.35%. On the other hand, Prof. Varma remains in favor of keeping the LAF Repo rate at 4% to support growth. In his view, persistent high inflation warrants a restrained monetary accommodation and a low policy rate is needed to prop up economic growth.

We think the view of Prof. Varma would be better explained by taking a brief detour into the monetarist way of looking at the dynamics of money and inflation. This article follows the monetarist model as laid out in Thomas Humphrey's paper titled "A Monetarist Model of the Inflationary Process" published in the research papers of Federal Reserve Bank of Richmond in 1975.



A view of the monetarist mind: The core principle guiding the monetarist is that inflation is a purely monetary phenomenon that can only be produced by expanding the money supply at a faster rate than the growth of capacity output. According to the monetarist theory, excessive monetary growth is the sole reason which can lead to inflation. This means that the inflation is caused by changes in the money stock per unit of output. In this class of models, the rates of change of economic variables and not the levels of these variables are tracked. This also implies that if the Central Bank can control the supply of money, it can control inflation in the economy, and it was indeed prescribed by the monetarists to increase the money supply by a fixed rate of 4% every year to keep inflation under control. The central assumption for the monetarist theory here is also that money is neutral in the long run (has no effect on other macroeconomic variables in the long run) and non-neutral in the short run (has an effect on other macroeconomic variables in the short run). For India, when we chart money growth since 2005-06 we can see that money supply or M3 growth has declined significantly during the past two decades.



Source: CMIE, RBI, MOSPI

The monetarist's model rests primarily on three economic relationships: monetary growth and output, price adjustment process, and finally the process of formation of expectations. Prof. Varma has emphasized in his commentary on the need of the Central Bank to act in a way where the economic stakeholders would be nudged to anchor their expectations of inflation near the mandated target.



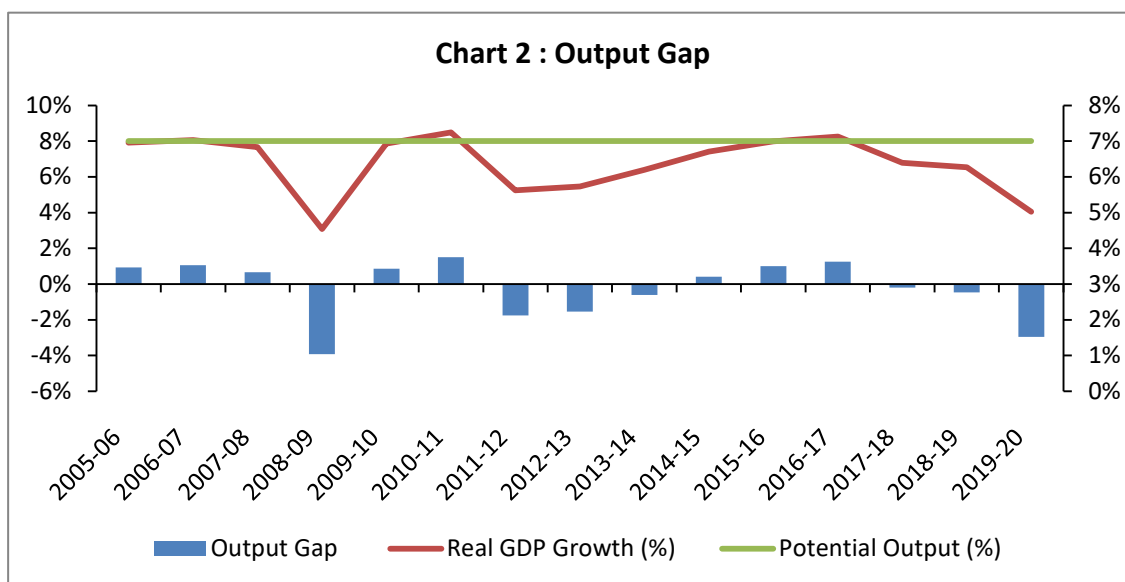
RBI's continued accommodative stance, as well as repeated statements, signals that the Central Bank is viewing the high inflation episodes as transitory. This provides impetus for the economic agents to perceive the RBI as being comfortable with higher levels of inflation. This in turn would lead to expectations of higher inflation being entrenched and, eventually could make them unanchored from the inflation target of 4%. This could lead to loss of valuable credibility for the RBI, which has assiduously guarded the credibility achieved from 2014-15 to 2019-20 with inflation remaining more or less within the band of 2-6%. In the minutes of the recent policy meeting, Prof. Varma has reiterated the fact that the RBI's mandate is to keep the inflation at 4% and the allowance of the band around the target is for errors of forecasting and extreme situations such as the one unfolding during the pandemic. For a major part of FY21, inflation printed above the upper tolerance band of 6%, which was viewed as transitory, and rightly so, as it was primarily caused by the major supply disruptions due to the pandemic and related lockdowns. As much as inflation may be transitory for now, the core problem remains of inflation expectations and expectation management on the part of RBI.

In the model i.e. the money growth, price-adjustment and expectations formation, the inflationary process is viewed as complete from a monetarist viewpoint. This posits an oversimplification of a dynamic and complex process but is also an inevitable part of building a model. It should be noted that the monetarist would assume the money supply as being exogenous to the economy, implying that the money supply is determined exogenously by an authority, in our case the RBI. Following this assumption, it would be natural to view a change in the money stock to cause perturbations in the steady state of the output path. This relationship also embodies the direct expenditure mechanism, indicating that monetary impulses are transmitted directly to income via a prior effect on the demand for goods. In the broader economic context this would translate to the changes in money stock proportionately affecting real income and that in turn creating an effect on the aggregate demand. This stands in contrast to the more well-known indirect interest rate mechanism which suggests that monetary changes influence income indirectly through changes in the rate of interest.

The second relationship is the point where Prof. Varma's comments might turn out to be ominous - the price adjustment mechanism, where the monetarist model postulates that change in prices (current rate of inflation) is a result of the sum effect of the excess /slack demand in the previous time period, and the expectations of current inflation made one period prior to the present time period. Excess demand is the gap between



the output and capacity or potential output. The definition of capacity output is one in which the output which is generated at the natural rate of unemployment is considered to be the potential output. The RBI has published research which indicates that post the Global Financial Crisis (GFC) in 2008, the potential output of India has decelerated from 8% to 7%.¹



Source: RBI, STCI PD Research

Taking the estimates of the RBI as published in the RBI paper in 2016, the potential output is assumed to be 7% for the purpose of simplicity. The trajectory of the real output had started declining post-demonetization as can be seen in the chart above, since FY17. Pre-COVID growth has been faltering and the last growth level was seen at around the 4% level just before the pandemic struck in FY2020. The RBI and the Government started supporting growth during the early part of 2019 with the RBI changing its stance to accommodative in June 2019 and the Government unveiling measures like the corporate tax cuts to bolster growth in September 2019. These measures should have bolstered growth in FY20, and had the pandemic and related lockdowns not hit the economy, the effects of these measures might have been clearly visible in subsequent quarters. Investment in the economy still remains weak and the output gap has widened to record levels, with the FY21 output now at -7.30% making the output gap a significantly wide -14.30%. In the context of the model, it is obvious that the present slack is not entirely caused due to excess demand created by excessive

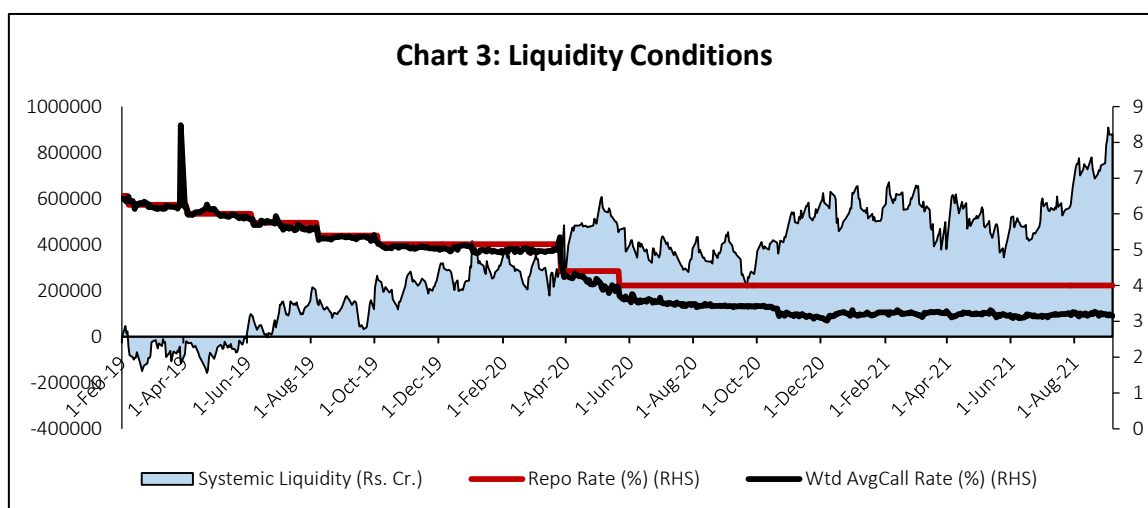
¹ India's Potential Output Revisited, Barendra Kumar Bhoi and Harendra Kumar Behera, RBI WPS (DEPR): 05/2016



money supply. In fact, as can be seen in the Chart 1, the money stock growth has in reality moderated over the years, and with that real income has also moderated and inflation had been inching downwards till the onset of the pandemic.

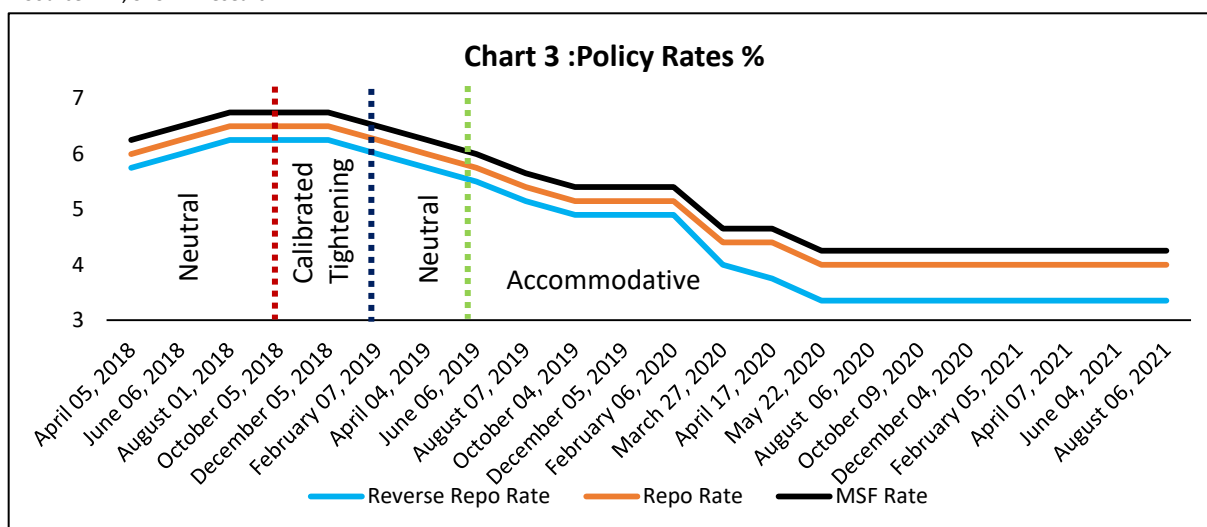
According to the monetarist viewpoint, the interaction between the excess demand a year ago and expectations of the inflation formed a year ago about the present day influence the current rate of inflation. This postulate holds true for the forward looking trajectory of inflation whereby the excess demand now and the expectations being made currently for inflation that would prevail a year hence would be the components to give rise to the actual inflation one year hence. This is on the basis of what is called the adaptive expectations hypothesis which suggests that people formulate expectations about the inflation rate by observing the discrepancy between the actual and the anticipated inflation rate and then revise the anticipated inflation rate by some fraction of the error between actual and the anticipated inflation rates. This is the third relationship in the monetarist model.

The relevance of the monetarist's view in the present context: The relevance of the Monetarist's view point is all the more prominent in the present economic scenario with the banking system liquidity hovering around Rs.6.5-7 trillion on average since July 2021. This is a record high level of systemic liquidity not seen since the days of the Demonetization where the deposits flowed into the banking system in a deluge which led to a similar high liquidity surplus in the system during FY2017. A huge surge in capital inflows have also aided in system liquidity being in such huge surplus. Most of the inflows have been unsterilized in the conventional sense so far, as the RBI has not resorted to any outright OMO sales, and sterilization, if any, is done largely through FX swaps.





Source: RBI, STCIPD Research



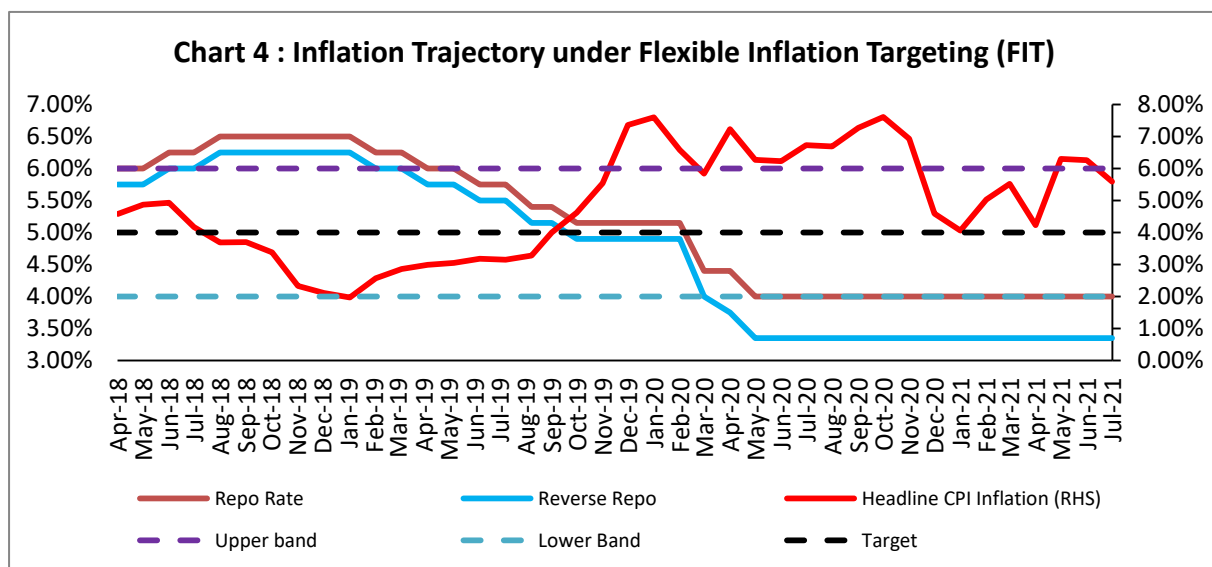
Source: RBI, STCIPD Research

Monetary policy embarked on an accommodative stance and the economy witnessed an interest rate cutting cycle from the beginning of 2019. The incidence of COVID-19 has to an extent deepened and extended the nature of the Central Bank's accommodation with rate cuts of 115 basis points since the onset of the pandemic. Prof. Varma's assessment of the situation is likely formed by the coincidence of the increasing inflation levels and significant lowering of interest rates that began at around the same time. Though it is well accepted that supply constraints have resulted in the headline inflation being above the upper tolerance band, the increased headline levels will be significant indicators for future inflation as they will influence 1-year ahead expectations irrespective of the cause by which inflation has increased.

The monetarist's view point appears validated in the face of the anecdotal evidence as seen in the charts. Retail inflation had increased during Q3FY20. The ground reality suggested that the level of retail inflation was rising due to the increase in vegetable prices, especially the price of onions which saw a sudden spike during the same period. Headline retail inflation remained uncomfortably above the upper tolerance band of the RBI. This steep inflation was attributed to major supply chain disruptions during the lockdowns, and it cooled off in the Q1FY21. The inflationary pressures built up again and inflation rose again over the 6% mark after the advent of the second wave and reinstating of localized but stringent lockdowns in Q1FY22. All these transgressions of



the headline inflation level have been monitored closely by the Central Bank but the MPC has refrained from taking any action in terms of changing the Policy Repo rate. The reason cited for seeing through this high level of inflation by the RBI was that most of the inflation was caused by supply side factors which lay outside the ambit of the Monetary Policy and correcting the supply side constraints fell in the domain of Fiscal policy.



Source: RBI, MoSPI, STCI PD Research

Process of Normalization: The surplus liquidity conditions along with lower policy interest rates are features that characterize monetary policy accommodation, and it is only natural for the financial markets and other stakeholders in the economy to begin asking when would the process of normalization begin? In this instance, normalization would mean the gradual and calibrated withdrawal of system liquidity and eventually the change of stance from accommodative and in the last step, the beginning of an interest rate hiking cycle. The business cycle is still recovering and, though the economic recovery appears broad based the central bank would need more assurance in terms of the growth resilience. The case for normalization has been gaining traction as the economy opens up and the high frequency indicators point to a strong recovery. Also, due to a prolonged regime of low interest rates, savers are being adversely affected due to negative real rates. The sequence in which the withdrawal may happen entails first allowing the 10 year G-sec yield to gradually drift higher, curb liquidity through longer tenor VRRRs, calibrated withdrawal of liquidity, and a reduction in the size of G-SAP purchases. These are relatively indirect measures as compared to a Reverse Repo hike, which would immediately signal to the market that the monetary policy stance is no



longer accommodative. The timing of the initiation of normalization would albeit depend on whether the sustainable growth impulses and expectations of high inflation are entrenched in the economy.

Conclusion: While one can safely say that excessive money stock growth has not been one of the primary causes of inflation, adaptive expectations will surely fuel a part of the inflation rate in the coming quarters and this is what has been squarely discussed in Prof. Varma's commentary. The expectation of the future inflation rate is where the danger lies, and which Prof. Jayanth Varma thought it right to point out and caution. Theoretically, expectations of inflation formed now would affect the real inflation rate a year ahead. RBI with a mix of sounding caution in its statements and choosing to look through the transitory forces acting on headline inflation in its actions has supported growth so far. The outcome could be that inflation expectations get reset on a higher level as compared to the 4% target that the RBI had guarded successfully in the pre-pandemic times. The worst of the crisis is hopefully over and as we look forward to normalcy, the question as to when the RBI will think it fit to align economic expectations to its monetary policy goal gains importance. There is always a scope for debate as to when the so called normalization process will start and there is no straight answer for that except with the benefit of hindsight.

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