

Impact of Monetary policy on Inflation in India

Anil Chouhan*

*Assistant Professor, SAM Global University, Raisen (M.P.) INDIA

Abstract : The objective of this paper is to analyze and discuss the impacts of monetary policy on India inflation, identify the major drawbacks of the policies in minimizing the inflation rate and suggest policy recommendations on some key issues of India inflation. To estimate the effects of the monetary policy in India, at first the impact of different monetary policy tools used by the "Reserve Bank of India" Next, the impact of the monetary policy of India's bank and government have been analyzed for which the data on money supply, growth of the GDP, changes in the price level, and changes in the unemployment rate have been quantitatively analyzed. We mainly used Consumer Price Index to determine the level on inflation in India. We have further analyzed whether there is any correlation between (a) inflation rates and money supply, and (b) inflation rates and growth of GDP. The conclusions drawn are grounded in the results of comprehensive qualitative and quantitative analyses. We have found the correlation, the impacts of monetary policy and inflation, their drawbacks and possible solutions such as independence of the monetary policy from the fiscal policy and enhancing the transparency, communication and signaling effect of policy moves, and control money supply through various open market operations. Due to limited access to comprehensive data, some of our analysis relies on hypotheses and models, resulting in variations depending on the model used. Recently, several attempts by the RBI to control inflation through restrictive monetary policies have led to a slowdown in economic growth, sparking ongoing debates among academics and policymakers regarding the effectiveness of monetary policy in India. In this context, the current study aims to assess the causal relationship between monetary policy and its primary objectives—economic growth and inflation control in India. The methodology employed is Granger Causality testing in the frequency domain, as developed by Lemmens et al. (2008), with the weighted average call money rate serving as a proxy for monetary policy. In view of the fact that output gap is one of the determinants of future inflation, an attempt has also been made to study the causal relationship between output gap and inflation. The results of empirical estimation show a bi-directional causality between policy rate and inflation and between policy rate and output, which implies that the monetary authorities in India. Policymakers are equally focused on both inflation and output growth when formulating policy. Moreover, efforts to control inflation often impact output to the same extent, or even more, than inflation itself, thereby hindering the growth process. Previous studies on India have also found a positive relationship between the output gap and inflation.. Furthermore, the output gap causes inflation only in the short-to medium-term

Keywords: Monetary Policy, Inflation, Output Gap, Granger Causality, Frequency Domain.

Introduction - Monetary policy in India is equally important as in developed countries. Monetary policy basically targets price stability. For any government, one of the most urgent economic issues is to stabilize the price and maintain a price level within the limits of purchasing power of the common people. The notion that monetary policy should affect inflation dynamics is an old one, dating at least to Friedman's dictum that inflation is always a monetary phenomenon (1970). In his famous "Critique," Lucas (1975) showed how changes in monetary policy could, in principle, affect inflation dynamics. However, Lucas considered only very stylized monetary policies. There are several ways in which monetary policy may have changed over time. Ball, Mankiw, and Romer (1988) have argued that changes in monetary policy may lead to changes in the frequency of

price adjustment. The New Open Economy Macroeconomics (NOEM) literature, pioneered by Obstfeld and Rogoff (1995), suggests that monetary policy affects the real economy through the interest rate and exchange rate channels. Monetary policy is concerned with the measures taken to control the supply of money, the cost and availability of credit. Like many developing countries, the primary focus of monetary policies in India is to obtain high sustainable growth. However, to achieve and maintain a higher growth rate, policy makers need to understand the determinants of growth as well as how policies affect growth. In a developing country like ours the monetary policy has been effectively used as a tool for overcoming depression and inflation. Along with economic growth monetary policy also has to ensure price stability, as

excessive inflation has an adverse distribution effect and hinders economic development.

Literature Review:

There are several theories and empirical studies have been conducted on monetary policy globally over the past decades. The management and control of money supply through the monetary policy implemented by a country's central bank can play a crucial role in managing inflation and promoting economic stability & controlling of inflation in that country. The monetarist approach, that money supply growth causes inflation, can be tested by observing the correlation between the rate of inflation and the rate of monetary growth. Causality can be established through statistical methods and institutional proof. The direction of causality can be detected by examining the timing of the relationship between changes in monetary growth and changes in inflation. Monetarists Cagan (1956) and Friedman (1956, 1975) explained money supply as one of the major causes of inflation. The economists began to believe that increasing the monetary supply at a low but constant rate is the best way of maintaining low inflation and growth of the economy. Sunkel (1960) said that from a structuralism viewpoint, budget deficits and consequent expansion in money supply are not autonomous while the necessity of the essential commodities in the domestic market goes up, import is a must. As a result, rising imports and devaluation generate domestic inflation, price level spirals and borrowing through central bank increases the money supply causing a further rise in the price level. However, a tight monetary policy in this context may lead to shortages of essential commodities in the domestic market. So, the some degree of control of monetary authorities is desirable. Friedman (1968) studied the role of monetary policy in the U.S economy and suggested that by setting a steady course, that course one of steady but moderate growth in the quantity of money, the monetary authority could make a major contribution to promoting economic stability with avoidance of either inflation or deflation of prices. It was found that in the developed nation's money supply changes precede price changes, which precede real production changes, lending support to the view that money supply changes are more likely to lead to inflation in this subsample (Cagan 1956; Deaver 1970; and Vogel 1974). He also mentioned that price changes are likely to be followed by money supply changes in less-developed economies. Another interesting finding was that generally the relationship between money supply changes and real production changes is positive for less advanced economies, but negative or negligible for the advanced. This subsequent finding suggests that mild inflation may stimulate real economic growth. The evidence on developing countries supports the argument that governments should not depend on expansionary monetary developments to induce growth. They will be retarding growth while at the same time reducing the welfare of the public by the deterioration of real balances by the induced

inflation. Evidence on the inflationary impact of deficits through their impact on money supply growth includes those by, for example, Aghevli and Khan (1978) in the case of Columbia, Indonesia, Dominican Republic, Brazil and Thailand. Rwegasira (1974), in a study which linked deficits with rising prices, concluded that government expansionary finance which characterized the economy from 1963-72, had been one of the sources of rising prices. He pointed that other important sources, like inelasticity in agriculture and falling import capacity, joined deficit financing in causing upward pressure on the general price level. A combination of declining productivity, declining production and inefficiency accompanied by excessive money supply in the economy seems to be important in the process of inflation according to Malima (1980), implying that an increase in the rate of growth of output and a reduction in the rate of money supply growth could be a solution to inflation.

Objectives: The objective of this paper is to analyze and discuss the impacts of monetary policy on India inflation. Identify the major drawbacks of the policies in minimizing the inflation rate and suggest policy recommendations on some key issues of the India inflation identify major challenges and suggest policy recommendations

The Objectives of the study are listed below:

1. Discussion on the correlation between monetary policy and inflation
2. Fluctuation of inflation rates over time in India and its present condition due to monetary policies
3. Impacts of monetary policy on inflation and the consequences
4. To determine appropriate policies to control inflation rates in India

Finding Objectives:

Correlation between monetary policy and inflation:Traditionally, it is believed that inflation is ultimately a monetary phenomenon, i.e., sustained inflation is the outcome of excessive money supply. Although it is the general wisdom that monetary policy tools are of immediate influence in controlling inflation. However, recent evidence clearly demonstrates that monetary policy alone may not effectively address the issue with the inflationary impacts of external shocks

Global economic slowdown- The covid-19 pandemic and the ongoing Russia-Ukraine conflict have led to a slowdown in global economic growth, affecting India's exports and overall economic performance

Supply Chain Disruptions- Disruptions in global supply chains, particularly, in the semiconductor and electronics sectors, have impacted India's manufacturing and export sectors.

Inflationary Pressures- Rising global commodity prices, particularly crude oil, have led to higher inflation in India, affecting the country's economic growth and stability.

Geopolitical Tensions- Escalating tensions between major global powers, such as the US & China, have created

uncertainty and volatility in global markets, affecting India's economy.

Impacts of monetary policy on inflation and the consequences: Monetary policy has positive and negative impacts on inflation. Middle class people are turning into lower middle class ones and the latter in turn joining the ranks of the poor. The poor are turning poorer from living costs outpacing earnings and buying powers of non-affluent sections of people decreasing dramatically from the lower purchasing power of the currency as such or the lowered value of their savings. We can say that inflation also directly lowers living standard. Because of inflation people enjoy same amount of product at higher price an increase in the general price level leads to a reduction in the purchasing power of currency. In other words, when prices rise, each unit of money buys fewer goods and services. The impact of inflation is not uniform across the economy, resulting in hidden costs for some and benefits for others due to the decline in money's purchasing power.

To Determine Appropriate Policies To Control Inflation Rates in India: There are a number of methods that have been suggested to control inflation. Central banks can affect inflation to a significant extent through setting interest rates and through other operations. High interest rates and slow growth of the money supply are the tradition always through which central banks fight or prevent inflation, though they have different approaches. Monetarists emphasize keeping the growth rate of money steady, and using monetary policy to control inflation (increasing interest rates, slowing the rise in the money supply). Keynesians emphasize reducing aggregate demand during economic expansions and increasing demand during recessions to keep inflation stable. Control of aggregate demand can be achieved using both monetary policy and fiscal policy (increased taxation or reduced government spending to reduce demand).

Conclusion: The purpose of this study has been to discuss the relative impact of monetary policies on economic activities in India. The growing importance of monetary policy and the diminishing role played by fiscal policy in economic stabilization efforts may reflect both political and economic realities of our country. Moreover, inflation acts as an important and key variable which influences other macro economic variables of a country. We have seen that, the central bank uses interest rates and the money supply and many other monetary tools to guide economic growth by controlling inflation and stabilizing currency. We have analyzed the consumer price index and several other indicators to understand the impact of monetary policy on inflation. We have found out that, the inflation rates are co-related with the growth rate of gross domestic product and money supply in India. There is positive co-relation between the rate of inflation and rate of change in GDP at constant prices in India. Furthermore, there is negative co-relation between rate of inflation and changes in money supply in India. India had favorable current account position for which it could keep its currency slightly stronger. However, it should

adopt some contractionary policy because of rising current account deficit. We believe that, the monetary policy should be contractionary at times, even if it reduces economic growth of the country because in the long run, it may bring about stability to our economy. Moreover, we find a lag in the policy response of India Bank to higher inflationary expectations. They don't have sufficient and reliable policies to cope with inflation and even if they do, they are not actively well-used. In today's environment of global finance, fixed exchange rates is often not a viable option for fighting inflation. Thus, governments must make important decisions about monetary policy.

References:-

1. Aleem, A. (2010). Transmission mechanism of monetary policy in India. *Journal of Asian Economics*, Volume 22, Issue 2, pp.186-197.
2. Bhalla, S. (1981). India's closed economy and world inflation. In R. Williams (Ed.), *World inflation, developing countries*. Washington, DC: Brookings Institute.
3. Bhattacharya, R., Patnaik I. and Shah, A. (2011). Monetary policy transmission in an emerging market setting. *IMF working paper*, WP /11/5.
4. Brahmananda, P. and Nagaraju, G. (2002). Inflation and growth in the world: Some simple empirics. In M. Ahluwalia, Y. Reddy, and S. Tarapore (Eds.), *Macroeconomics and monetary policy: Issues for a reforming economy*, pp.43-66. New Delhi: Oxford University Press.
5. Kapur, M. and Behera, H. (2012). Monetary Transmission Mechanism in India: A Quarterly Model. *RBI Working Paper Series*, WPS (DEPR) 09/2012.
6. Mohanty, D. (2014). Why is recent food inflation in India so persistent? A speech at St. Xavier's college, Mumbai, 13th Jan
7. Aghevli and Khan. 1978, "Government Deficits and the Inflationary Process in Developing Countries", *IMF, Staff Papers*, Vol. 25, No. 3, pp. 146-162
8. Andreas and Reschreiter, 2011 The effects of the monetary policy regime shift to inflation targeting on the real interest rate in the United Kingdom, *Economic modelling*. -Amsterdam [u.a.] : Elsevier, ISSN 0264-9993, ZDB-ID 868243. - Vol. 28, 1/2, pp. 754-759
9. Antonio, 2012, Money Growth and Inflation in the Euro Area: A Time Frequency View. *Oxford Bulletin of Economics and Statistics*, Vol. 74, Issue 6, pp. 875-885, 2012
10. Ball and Mankiw et al, 1988. "The New Keynesian Economics and the Output-Inflation Tradeoff," *Brookings Papers on Economic Activity*, Economic Studies Program, The Brookings Institution, vol. 19(1), pages 1-82.
11. Salunkhe bhavesh, Patnaik Anuradha The Impact Of Monetary Policy On Output And Inflation In India: A Frequency Domain Analysis.