Economic Reforms and Price Stability : Changing role of RBI

Shrestha Hazra, Ex-student, *Post Graduate Student, Department of Economics, University of Calcutta.*

Dr. Satarupa Bandyopadhyay, *Assistant Professor, Department of Economics, Bethune College.*

Abstract.

Reserve Bank of India is the controlling authority of monetary policy in India. It has moved from direct methods in pre reform period to the indirect methods in the post reform period. One of the criteria of effectiveness of monetary policy is price stability. This paper tries to compare the effectiveness of monetary policy of RBI of the post reform period with that of the pre reform periods with respect to price stability. It is found that barring the recent upshot on the whole the inflation rate was better controlled and prices were more stable in the post reform period.'

Keywords. Reserve Bank of India, effectiveness of monetary policy, pre-reform period, post reform period, inflation, price stability.

1.Introduction

Monetary policy can be defined as an instrument or rather process in which the money supply of the economy is controlled by the corresponding authority or entity with a view to maintain price stability as well as to control the flow of credit to various productive sectors of the economy (Wikipedia, 2014). In India the controlling monetary authority is the Reserve Bank of India (RBI). An important factor that determines the degree to which monetary policy is effective, is the monetary transmission mechanism. It determines how output and inflation are affected by the actions of monetary policy. The various transmission channels are quantum channel (which is related to money supply and credit), interest rate channel, exchange rate channel and asset price channel. However, the functions of these channels depends upon the stage of development of the economy (Basu and Maertens, 2010). The RBI implements the monetary policies by setting interest rates like Repo rate and Reverse Repo rate as well as by determining the cash reserve ratio (CRR) and statutory liquidity ratio (SLR).

1.1 Objectives of monetary policy and RBI

The main aim of monetary policy in India is to maintain a balance between price stability (i.e. inflation) and economic growth in the country (Basu and Maertens, 2010). If the interest rate is too high, it controls inflation but affects economic activity by the slowing down of GDP growth. On the other hand, a low interest rate helps in economic growth but leads to a rise in inflation.

The other important objectives include full employment situation in the economy and maintaining BoP equilibrium in the country. The BoP equilibrium had gained importance as the objective from 1950 onwards (Smitha.T.H, 2010).

Reserve Bank of India, which lies with the sole responsibility of carrying out the process of monetary policy in India has the objective of currency and reserves(in all forms) so as to maintain the monetary stability in the country, thereby providing the system with the fullest advantage possible (Basu and Maertens,2010).

In the recent times, the objective of financial stability has assumed more importance. In the context of Indian economy, financial stability implies ensuring smooth and uninterrupted payments; maintaining a certain confidence level among the participants of the financial system; absence of excessive volatility so that it does not affect adversely the real economic activity(Basu and Maertens,2010).

However, the relative emphasis on these objectives varies from time to time in accordance with the circumstances of the country.

1.2 Monetary instruments of RBI

For the implementation of the monetary policy the RBI uses certain tools/instruments which are known as operating procedures. They are categorised into direct and indirect instruments. While the direct instruments include CRR, SLR, credit ceiling and administered interest rates, indirect instruments include the various open market transactions(OMOs), bank rate, liquidity adjustment facilities(LAF) and standing facilities(Basu and Maertens,2010).

Cash reserve ratios determine the amount of bank deposits which the banks need to hold against their deposit facilities (Wikipedia, 2014). Higher CRR implies lower liquidity in the system. It has varied between a minimum of 4% to a maximum of 11% (RBI Bulletin). A major policy involves maintaining the SLR, which is the ratio of liquid assets to total time and demand liabilities (Wikipedia, 2014). Variation in SLR leads to a variation in the demand for bank reserves. The SLR in the Indian context has varied between 23% and 24% (RBI Bulletin). Another important instrument of RBI is the credit policy in which the government would be willing to pay loans to the commercial bank till a certain limit. However, this policy had not been used in the Indian economy till date (Wikipedia, 2014).

The indirect instruments of RBI "operate through price channels which cover repurchase transactions(repos),outright transactions in securities(OMOs), standing facilities, market based discount window."(Basu and Maertens, 2010). The government carries these open market operations through buying or selling of government securities from or to the public banks. It simply does this to control the money supply in the economy (Mishra & Puri,1983). The standing facilities on the other hand "make available limited liquidity which could be accessed by eligible market participants at their discretion", being classified into uncollateralized deposit facility and marginal collateralized lending facility. This scheme is recent in origin being introduced on 9th May, 2011.

Above all, the key element of the monetary policy framework is the Liquidity Adjustment Facility (LAF) which was introduced in June, 2000.Until this period, CRR and SLR were heavily used instruments of the RBI. But, RBI targeted to control the liquidity mismatches of the banks via the repo and reverse repo rates under LAF. This is because the LAF operations are particularly effective in transmitting interest rate signals to the market (Basu and Maertens, 2010). While repo is the rate at which the commercial banks take loans from the RBI against government securities, reverse repo is the rate at which the RBI takes loans from the commercial banks. So, repo signifies the rate at which liquidity is credited in the banking system by the RBI, while reverse repo signifies the rate at which central bank absorbs liquidity from the banks (Wikipedia, 2014). As on 29th October, 2013 the repo is 7.75% and the reverse repo is 6.75% (RBI Bulletin). The RBI used the bank rate i.e. the rate at which it gives loans or funds to the bank as a contractionary policy, since it is related inversely with the money supply in the economy. It is basically the discount rate of the central bank and is also known as the base rate or the Minimum Lending Rate (Smitha T.H., 2010). As of 29th October, 2013 the bank rate is 8.72%. It attained a lowest of 8.25% 0n 3rd May, 2013 and a highest of 10.25% on 15th July,2013 (RBI Bulletin). The LAF and open market operations were able to control the capital inflow into the country until the year 2003-04. As the economy became more open and began to be based on market determined exchange rate, the capital inflows posed a major challenge for the conduction of monetary policy in India. With the LAF operations, which include the buying and selling of government securities, led to the gradual decline of the stock of government securities with the RBI. The burden of sterilization fell on LAF operations. Sterilization is the process by which the RBI takes away money from the banking system. Under the Market Stabilisation Scheme (MSS), RBI signed a MoU with the government on March, 2004 for the issue of treasury bills and government securities. This has reduced the burden of sterilization on the LAF. The bills and securities issued under MSS are matched by an equivalent cash balance held by the government in a separated cash account and it is maintained and operated only by the RBI (Basu and Maertens, 2010).

There have been a number of reforms in India in order to improve the political as well as economic conditions in the country. Of all these, reforms in the monetary sector has been more effective for the country as compared to the fiscal initiatives.

There have been gradual changes in the targets/objectives and implementation of monetary policy in India in the post reform period as compared to the pre reform period. This paper tries to assess the effectiveness of the changed policies compared to the policies used in pre reform period. Since one major objective of monetary policy is stabilisation of prices, this paper measures the effectiveness of monetary policy by the stability of prices. Stability of prices means lesser fluctuations in inflation rate. So, the main aim of the paper is:

- To compare the effectiveness of monetary policy in India of the post reform period with that of the pre reform period with respect to price stability.

Section 2 of the paper reviews the existing literature related to this paper. Section 3 gives the data source and methodology applied in doing the paper. Section 4 analyses the findings during the course of study of the paper. Section 5 concludes the paper and gives some suitable policy recommendations.

2.Literature Review

In the context of monetary policy of India, many economists have made several studies and have given their opinions and views in different respects. The literature on their opinions can be reviewed by dividing the time period into four phases namely: (a) before independence (b) 1947-85 (c) 1985-91 (d) 1991 onwards.

Before independence: The Reserve Bank of India Act was introduced in 1934 and its objective was stated as "...to regulate the issue of Bank Notes and keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage."(Bhattacharya, accessed on the 20th of February, 2014 at 1 pm). Hence, before independence, the broad objectives of monetary policy in India could be classified as: issue of notes, acting in national interest by curtailing excessive money supply and to overcome stringency where it mitigated production activities; public debt management, and maintaining exchange value of the Rupee (Samantaraya,2011). The monetary policy evolved in 1935 with the Proportional Reserve System.

During 1947-85: With the formation of Planning Commission in 1950, there was a change in economic management and the monetary authority played a complementary role. During the First Five Year Plan the money supply was 10.3% only. In the next two Five Year Plans, RBI faced many challenges and its freedom was reduced. 'Selective Credit Control' was adopted to control inflation in the economy. During the period 1964-84, there were radical changes in the method of conducting monetary policy. Initially, it was thought that the expansion of output was the cause of rising inflation and not monetary expansion. In September, 1964 a policy was introduced to control deposit as well as credit rates. The Credit Authorisation Scheme (CAS) was introduced in 1965. It had two objectives-to mobilise financial resources and to control the system of credit (Samantaraya,2011). In December 1967, the government introduced "social control" in order to increase the flow of credit to priority sectors such as agriculture, small scale industries so as to facilitate an increase in savings. In July 1969, commercial banks were nationalised with a view to expand banks and for better control of bank credit. Bank credit began to be used for social development purposes. During 1983-84, bank credit increased from an annual average of 10.9% to 18.2%. During this period the main focus of the monetary policy of RBI was on bank credit. As the scheduled commercial banks had high bank deposits, the monetary policy of RBI provided greater attention towards it. Reserve money was no more considered to be the main source of credit for the RBI since it was difficult to be controlled. As a result bank credit gained increasing importance and began to be considered as an indicator as well as the intermediate target (Samantaraya, 2011). SLR was heavily used as an instrument. The level of SLR increased from 25% in 1970 to 36% in 1984. Funds were provided to the bank through the 'standing facilities' for developmental purpose. CRR was another heavily used instrument for neutralising the inflationary impact of deficit financing. It increased from 3% in 1962 to 5% in 1973 and to 9% in 1984. Therefore, bank rate played a crucial role in the operations of monetary policy.

During 1985-1991: The policy framework underwent a change at the beginning of 1985. The new policy was "monetary targeting with feedback". The change was made because of the recommendation of the *Report of the Committee to Review the Working of the Monetary System* (Bhattacharya). This committee was more commonly known as the Chakravarty Commitee, under the chairmanship of Professor Sukhomoy Chakravarty (Rangarajan, 1998). The objective of monetary policy was price stability along with economic growth i.e. an interaction between monetary policy and fiscal policy (Samantaraya, 2011). The committee recommended bank reserves to be used as the main operating target of monetary policy. So, the emergence of this committee in a way attempted to transform the conduct of monetary policy in India (Bhattacharya).

<u>*Post reform period (1991 onwards):*</u> India's economic reform began in 1991, when a newly elected government, facing an exceptionally severe Bop crisis undertook a program of short term stabilisation along with long term structural reforms. The twin crisis were reflected through: firstly, an unmanageable Bop crisis, due to which the current account deficit as percentage of GDP rose to a height of 3.1% compared to an average level of 1.4% in the early 1980s ; secondly an intolerably high inflation that was gradually building up in the 1980s and climaxed in 1990-91 to a rate of 12.1% (Uma Kapila, 2011). The financial sector was focused owing to the recommendations of Narasimham Commitee I (1991) and II (1998). With the financial reforms coming into existence, the appropriateness of the monetary policy framework was being doubted. A memorandum of understanding (MoU) was signed between the government and RBI in 1994. As a result, the issuance of ad-hoc bills were eliminated from April 1, 1997 onwards. Now, the amount credited by the RBI to the government declined to 50%. With the new reforms, the economy became more open and hence, the new problem of increasing inflow of capital arised. The proportion of net foreign assets to reserve money increased from 9.1% in 1990-91 to 38.1% in 1995-96 and 78.1% in 2001-02 (Samantaraya,2011). The Working Group on Money Supply (1998) observed that the interest rate channel of transmission was assuming greater importance. Until 1997-98, broad money (M_3) was considered to be the intermediate target for achieving the final objectives of monetary policy. But, with the cropping up of certain issues, the RBI switched on to the Multiple-indicator Approach. According to this approach "interest rates or rates of return in different markets(money, capital and government securities), along with such data on currency, credit extended by banks and financial institutions, fiscal positions, trade, capital flows, inflation rate, exchange rate, refinancing and transactions in foreign exchange available on high frequency basis, are juxtaposed with output data for drawing policy perspectives"(Basu and Maertens,2010).Unlike the pre-reform period, in the post reform period the use of CRR and SLR were reduced to a large extent. CRR was reduced from 15% of NDTL in November, 1997 and then to 6%. Currently, it is 4%. SLR was reduced from 25% in Oct, 1997 and then to 24% in 2010(Smitha T.H., 2010). According to the recommendations of the Narasimham Commitee, the RBI introduced Liquidity Adjustment Facility (LAF) in June, 2000 in order to maintain liquidity in the money market as well as the transmission of the change in interest rates to the market, along with the control of capital inflows from abroad. The LAF along with open market operations (OMOs) emerged as the most important instrument to determine the framework of monetary policy. Although CRR continued to be an important instrument its use was less compared to the previous periods (Basu and Maertens, 2010). The call money market was converted to a pure inter-bank market by 2005. The process of "automatic monetization" that aimed to combine monetary policy along with fiscal policy, ceased to exist as an instrument from 1994 onwards (Mohanty,2010). The combined venture of LAF and OMO were able to manage the increasing liquidity in the system (due to huge capital inflows) till 2002-03. After a certain period, the government fell short of securities and hence, the effects of sterilization began to fall on the operations of LAF. So, the Government of India signed a memorandum of understanding (MoU) with the RBI on March, 2004 for the issue of Treasury Bills and government securities under the Market Stabilisation Scheme (MSS) (Basu and Maertens, 2010).

3.Data and Methodology

Data

The data used in this paper is the annual Wholesale Price Index (WPI) of India during the period 1971-72 to 2012-13. The data source is RBI Bulletin (accessed on 24th February,2014 at 8.30 a.m.). The data is secondary in nature.

Methodology

Base adjustment= (WPI of corresponding year× Value of adjusted WPI of previous year)/100

For data presentation simple diagrams and tables have been used. For the construction of the average rate of inflation, the bases of Wholesale Price Index (WPI) has been adjusted, and the rate of inflation for the corresponding years have been calculated using the following formula:

Rate of Inflation =

{(Adjusted WPI of present year – Adjusted WPI of previous year)/Adjusted WPI of previous year}×100

The data has been divided into two sets-one consisting of the period from 1971-72 to 1991-92; and, the other set from 1991-92 to 2012-13. The arithmetic mean, standard deviation, variance and coefficient of variation of has been calculated separately for the two data sets by using the following formulas:

Arithmetic mean (A.M.) = $\left(\sum_{i=1}^{n} x_i\right) \Big/ n$

Where x_t=rate of inflation for the t-th year ; n = number of years in the given data set

Standard Deviation (S.D.) = $\left[\sum_{i=1}^{n} \left(x_i - A.M.\right)^2\right] \Big/ n$

Variance = $(S.D.)^2$

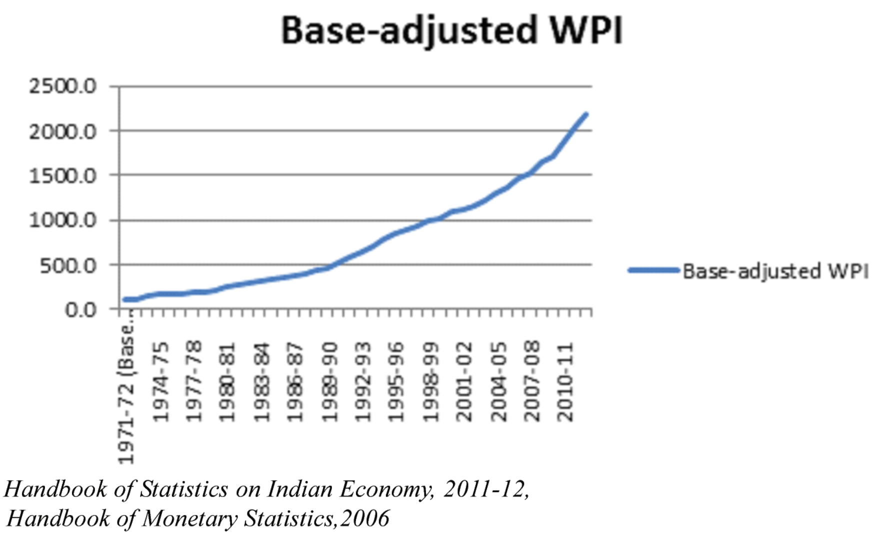
Coefficient of Variation (C.V.) = (S.D./A.M.)×100

4.Analysis

One of the principle aims or objectives of the monetary policy of RBI is to maintain price stability, i.e.control inflation in the economy. It has used various instruments from time to time in order to achieve its objectives. So, this paper attempts to analyse the degree of efficiency of the monetary instruments of RBI taken in the pre reform and post reform periods respectively. Inflation is basically a rise in the general price level in the country over a long span of time. It is opposite to that of price stability. If the price level rises by 2% to 3% per annum it is not harmful, but if it keeps on increasing over a long period, it is termed as inflation. Here. Inflation has been considered as the criteria for analysing the effects of monetary policy of RBI, because inflation has dominated the Indian economy more or less for a long period of time (Mishra,1983).

Firstly, the Wholesale Price Indices were base adjusted (base year 1971-72) using the base adjustment formula mentioned in section 3. After that the rate of inflation for each year were calculated using the formula for inflation rate stated in the same section.

Figure 1: Base adjusted Wholesale Price Index during 1971-2012

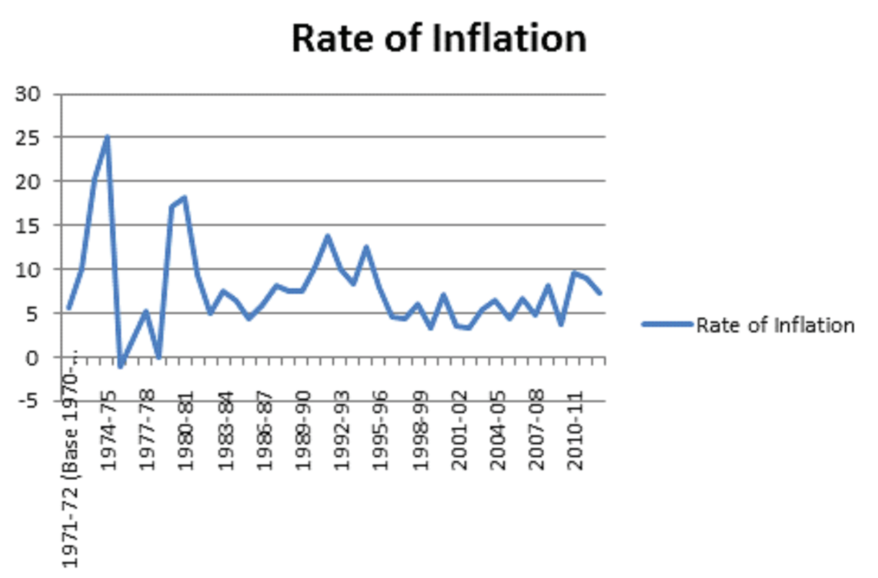


Source: i) RBI, Handbook of Statistics on Indian Economy, 2011-12,
ii) RBI, Handbook of Monetary Statistics,2006

Figure 1 shows that the Base Adjusted Wholesale Price Index (WPI) always had a tendency to rise starting from the period 1971-72 to 2011-12.

The rate of inflation which has been calculated from the Base Adjusted WPI shows a fluctuating trend. In 1974-75 it reached a peak of 25.2% while in the very next year, i.e. , 1975-76 it declined to -1.1%. However on the whole, the inflation rate has been positive in all the other years. Figure 2 also indicates that the inflation rate shows lesser fluctuations in the post reform years. It reached a peak of 13.7% in 1991-92 and the lowest was 3.4% in 2002-03.

Figure 2: Annual Rate of Inflation during 1971-2012



Source: i) RBI, Handbook of Statistics on Indian Economy, 2011-12,

ii) RBI, Handbook of Monetary Statistics, 2006

In the third step, the average and the coefficient of variation of the annual inflation rates were calculated for both pre reform period and post reform period separately. The results are compared to reach the conclusion.

5.Results

It was found that the mean and coefficient of variation of the inflation rates in India in the pre reform period were 9% respectively. Whereas, those in the post reform priod were 6.5% and 38.63% respectively.

This implies that the average rate of inflation was lower in the post reform period (6.5% as compared to 9%) and the co-efficient of variation too was lower, indicating lesser fluctuations, in the post reform period (38.63 as compared to 74.18).

6 .Conclusion and Policy recommendations

The above results regarding the performance of the monetary policy of RBI leads to the conclusion that the inflation has been controlled in a better way in the post reform period , and the fluctuations in inflation rate has been reduced to a great extent. There can be many possible reasons for the resulting conclusion, but the change in the instruments (i.e. , from direct to indirect) of the monetary policy of RBI may be one possible reason of the result.

The RBI owing to the change in the policies of the economy with the advent of reforms, changed its instruments from direct to indirect. The use of indirect instruments was based on the idea that since reform had transformed the structure of Indian economy towards a market oriented approach, indirect instrument would give more opportunity for the market to operate on its own for determining the price level of commodities. And probably this policy has a positive effect on the inflationary situation of the country. This also suggests that the recent upshot of the inflation rate may not be the effect of the reform policy, rather it may be caused by some other factors. Hence, the RBI should give more stress on the use of indirect instruments and modify them, if necessary, to deliver a better outcome for the Indian economy.

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