CHAPTER - I

INTRODUCTION
CHAPTER - I

INTRODUCTION

By monetary policy, we mean policy concerned with changes in the supply of money. Issues connected with monetary policy are: objectives or goals of the policy, instruments of monetary control, its efficacy, implementation, intermediate target of the policy etc. India’s monetary policy since the first plan period was one of 'controlled expansion'- that is, a policy of adequate financing of economic growth ensuring reasonable price stability. Thus, RBI helped the economy to expand via expansion of money and credit and attempted to check rise in prices through monetary and other control measures.

A mild version of the liberalization process in the Indian economy was initiated in the mid 1980s. But, it lacked depth, coverage and self sustaining character. During the fag end of the 1980’s the economy suffered a big jolt with the eruption of a major macro-economic crisis. It manifested initially in the form of foreign exchange crisis, and then debt and interest payment problems. To meet the crisis India approached the World Bank and the International Monetary Fund (IMF) for a big loan. For granting the loan, World Bank and the IMF stipulated certain conditions. Since India was in a critical situation, she accepted the conditions of the World Bank and the IMF and then provided an immediate context for the realignment of the macro-economic fundamentals, through a programme of economic stabilization. With this end in view, India initiated the new economic policy in July 1991.

The package of economic reforms, which are expected to have long-term impact on the economy, includes fiscal, monetary, financial, and industrial and export-import (EXIM) sector reforms. The reforms in monetary and credit policies aimed at slowing down monetary expansion and thereby controlling inflation. The financial sector reforms were initiated on the recommendations of Narasimham Committee Report. The first phase of reform started with a reduction of Statutory Liquidity Ratio (SLR) and Cash Reserve Ratio (CRR) and permitted a degree of flexibility to the banks in the matter of deposit interest rates.
Money markets facilitate the conduct of monetary policy in a country. The development of money market in India in the last few years has been facilitated by some major factors. Firstly, it permitted a gradual de-emphasis on cash reserve ratio as a monetary policy instrument. Secondly, the development of an array of instruments of indirect monetary control, such as, the Bank Rate and the Liquidity Adjustment Facility (LAF). Thirdly, monetary policy is often, shaped by developments in the money and the foreign exchange markets.

Thus, in the post-reform period, the economy is dealing with a set of new programmes and policies for its own re-construction.

1.1. RESEARCH PROBLEM AND SIGNIFICANCE OF THE STUDY

The monetary policy strategy of a Central bank depends on a number of factors that are unique to the country and the context. Given the policy objectives, any good strategy depends on the macro economic and the institutional structure of the economy. An important factor in this context is the degree of openness in the economy. The second factor is the stage of development of markets, institutions and technological development. In such a set up, where these conditions are satisfactory, it is possible for the Central bank to signal its intention with one single instrument or a combination of instruments.

It is important to recognize that all the objectives cannot be effectively pursued by any single arm of economic policy. Hence, there is always the problem of assigning to each instrument the most appropriate target or objective. It is clear from both the theoretical literature and the empirical findings that, among various policy objectives, monetary policy is best suited to achieve the goal of price stability in the economy. In today’s altered economic context, a low and stable price environment is being increasingly regarded as an essential condition for bringing down the nominal interest rate and for improving the growth and productive potential of the economy.

In India, the emphasis of monetary policy shifted towards control of inflation in 1995-96. Ensuring price stability requires the pursuit of a consistent policy over a period of time.
A process of openness was initiated by Governor Rangarajan and has been widened, deepened and intensified by his successors Bimal Jalan, Y.V. Reddy and D. Subbarao. Now, the goals of monetary policy, in India, are not set out in specific terms and there is greater freedom in the use of instruments. Greater transparency in the setting of objectives of monetary policy and instrument freedom are expected to bring about greater rigor in the formulation of strategies and the choice of instruments.

In India, Money supply has been regarded as an appropriate intermediate target between the variables and objectives. Hence, it is also important to measure the structure of different economic variables that varies with respect to monetary policy decisions. To study the changing stages (transmission periods) of monetary policy is also considered, relevant.

Monetary policy is known to have both short and long term effects. While it generally affects the real sector with long and variable lags, monetary policy actions on financial markets, on the other hand, usually have important short-run implications.

It is necessary to recognize the existence of a large informal sector, the limited reach of financial markets relative to the growing sectors, especially services. This tends to constrain the effectiveness of monetary policy in India.

It is well recognized that monetary policy is conducted within a particular framework. The relationship among different segments of the market and sectors of the economy is also involved in this framework. As part of the ongoing process of reforms, it is necessary to improve standards, codes and practices in matters relating to financial system and bring them on par with international ones.

These are some items of significance for further research in the realm of monetary policy in India.

1.2. OBJECTIVES OF THE STUDY

1. To study the changing role and importance of selected monetary instruments in India
2. To examine the effectiveness of monetary policy in ensuring price stability in India

3. To find out to what extent monetary policy facilitated economic growth in India and its general impact in the post-reform period

1.3. DATA SOURCE AND METHODOLOGY


To examine the first objective, i.e. the changing role and importance of monetary weapons in India, the major monetary instruments used after the reform period were taken into account and changes in the relative importance of each monetary technique was marked and their efficacy in the Indian context was studied.

To study the major factors that determine the effectiveness of monetary policy in ensuring price stability, first, we analyzed the scope of Indian money market, its structure, and to study the relationship between the use of monetary weapons and relative changes in price level, we examined the general price index, inflation rate and money supply changes.

To find the general impact of monetary policy on the Indian economy and especially to find out the role of monetary policy in facilitating economic growth, we examined the different monetary intermediate targets and its impact on the real economic variables in India.

1.4. SCOPE OF THE STUDY

The study covers for a period of 18 financial years starting from 1991. Thus, the study is exclusively on the impact of monetary policy on the Indian Economy in the post-reform period.
1.5. SCHEME OF THE STUDY

The study is organized under seven chapters. The first chapter provides an introduction to this study. It includes the statement of the research problem, significance of the study, objectives, data source & methodology, scope and the scheme of the study. Along that a brief report on monetary policy and global financial crisis is given in this chapter. It also includes a detailed literature review.

The second chapter titled as ‘Monetary Theory and Policy’ includes role of money in economic activity, theoretical understanding of monetary phenomena, definition of monetary policy, objectives of monetary policy, targets of monetary policy, indicators of monetary policy and monetary policy and economic activity- an overview.

The third chapter, viz; ‘Significance of Monetary Policy’ discusses the role of monetary policy in developed countries, importance of monetary policy in developing economies, some monetary constraints, monetary policy and banking soundness and monetary policy implementation.


The fifth chapter deals with Money Market Instruments and Interest Rates. The issues discussed in this chapter are: lending rate, deposit rate, liquidity adjustment facility, call money market, certificate of deposits, commercial papers, money market mutual funds, changes in the refinance facility, export credit and other money market developments.

The sixth chapter is devoted for a discussion on ‘Monetary Policy in India’. This chapter is divided in to two parts. Part A focuses on instruments of monetary policy in India such as bank rate, cash reserve ratio, statutory liquidity ratio, open market operation, repo rate, reverse repo rate and selective credit control measures. Part B is on money prices and output. The major points discussed in this part are: reserve money, money multiplier, money supply in India, the price level and real output, inflation and economic growth, monetary policy and price stability and monetary policy and economic growth.
The last chapter provides the summary, findings, conclusion and recommendations of the study.

1.6. INDIA AND GLOBAL FINANCIAL CRISIS

In India, since the financial system did not face a crisis, the damage to the transmission channel was minimal, even though the pre-global crisis time structural rigidities continued to limit the effectiveness of Reserve Bank’s monetary policy actions. The recent switch over to the new ‘base rate’ system is expected to help in improving and enhancing the visibility of the transmission of monetary policy signals to credit markets. (1)

Reserve Bank of India has listed high inflation. Consumer price inflation and WPI inflation have been in double digits since February 2010. This suggests that inflation has become much more generalized.

The RBI’s decision to ‘narrow the liquidity corridor’ – the difference between the repo and reverse repo rates- is significant. The reverse repo has been hiked by a higher margin than the repo rate. Liquidity is tight at the moment. The reference point for banks would be the repo rate, the rate at which they can borrow.

The monetary authorities have taken an optimistic view of the outlook for the economy and revised their earlier estimate of 8 percent growth in GDP to 8.5 percent. It has actually been hinted by the monetary authorities done through a reduction in commercial investments of banks, better use of the facility provided by the RBI and distinct improvement in the ways and means position of the Central Exchequer. The monetary authorities should desist from raising key interest rates and contracting money supply.

Although Indian policymakers were in denial mode when the global crisis broke in the latter half of 2008, it became clear that there was a larger impact on the Indian economy than had been anticipated. The GDP growth rate fell by about two percentage points. This happened particularly because there was a decline in exports, which have come to account for nearly a quarter of GDP with India’s growing integration with the world economy after its economic reforms initiated in 1991. Similarly, a number of
financial channels of transmission between the global and the Indian economy led to further adverse impacts – a decline in stock market indices, outflows of portfolio investments, a squeeze on bank liquidity impacting outputs throughout the non-agricultural sector, a fall in foreign exchange remittances, and a slight decline in foreign exchange reserves. All of this in turn impacted employment, though not significantly. The government responded by putting in place fiscal stimuli, which had the consequence of raising the fiscal deficit to GDP ratio to over 10 per cent (for Centre and States combined), from a comfortable level of 6.5 per cent or so. (2)

It is clear, however, that the fundamentals of the Indian economy were, and remained strong. Savings and investment rates had risen sharply within a decade, and it has been domestic markets that were the main absorbers of Indian products and services – and thus driving growth. In addition, after the global crisis began, Indian policymakers responded with alacrity, and the central bank moved to loosen monetary policy. Not surprisingly, Indian growth is set to return to at least 8 per cent in financial year 2010-11, and during the 11th Plan period (2007-2012), it will average 8 per cent, not the 9 per cent that was target for the Plan, and this is primarily on account of the global economic crisis. The Indian economy, however, faces serious structural challenges which must be addressed rapidly if the demographic dividend is to be realized, and poverty reduced at a pace more rapid than the one realized so far. While India’s financial sector remained resilient in the face of global shocks, there are a number of areas where the reforms would be needed to promote stability and generate growth impulses for the real economy. An important challenge is to channelise more savings to the financial system, particularly in rural areas and from the urban informal sector. This would need further penetration of the banking system. The Reserve Bank’s emphasis on financial inclusion is important in attaining this objective over time. Further reduction in the cost of banking services may require greater competition among product lines, improved delivery mechanisms and increasing use of information technology.

With a view to ensure that domestic savings could finance long-term investment in projects having long gestation lags, the insurance and pension sectors, would be critical, due to the very nature of their liabilities, as well as a vibrant bond market. (3)
For sustaining the high growth path, improving the investment climate and enhancing the absorptive capacity would be critical. In this context, financial sector reforms have to emphasize promoting financial inclusion, ensuring wide and deep financial markets and facilitating the growth of strong, competitive and sound financial institutions. The major features are:

1. Since the initiation of the liberalization plan in the 1990s, the economic reforms have put emphasis on the open market economic policies. Foreign investments have come in various sectors and there has been a good growth in the standard of living, per capita income and Gross Domestic Product. \(^{(4)}\)

2. Strengthened monetary and fiscal policy frameworks, efforts at boosting domestic demand, and deepening trade and financial linkages with other economies have been the focus of reforms.

3. For sustaining the high growth path, improving the investment climate and enhancing the absorptive capacity would be critical. In this context, financial sector reforms have to emphasize promoting financial inclusion, ensuring wide and deep financial markets and facilitating the growth of strong, competitive and sound financial institutions.

4. A major near-term challenge for the Reserve Bank is to deal with the unpleasant combination of subdued growth with emerging risk of high inflation, which poses a complex dilemma on the appropriate stance of monetary policy.

5. Large borrowing programmes and high fiscal deficits complicate the challenge even further by accentuating inflationary expectations, which could worsen the actual inflation situation over time while also putting upward pressure on interest rates.

6. In fact, well-developed financial markets are the most secured way of financing the government deficits not causing to more inflation.

7. For any early signs of recovery to gain momentum, private sector credit must grow. Better monetary policy transmission that could enhance the demand for credit is a key challenge, notwithstanding the usual dynamics of any credit market which may not respond to monetary policy actions.
8. Swings in capital flows and sudden stops can have a significant impact on exchange rates, domestic monetary and liquidity conditions and overall macroeconomic and financial stability.

9. For the economy as a whole, the most critical challenge is to revert to the high growth path, which would be possible only with a faster recovery.

10. Overall, Indian growth continues to be driven by domestic demand and domestic saving, with foreign capital supplementing within the prudent approach to sustainable current account deficit. Thus, return to 9 per cent growth would largely be determined by the country’s structural fundamentals and the responsive macro policy environment.

11. Due to the global meltdown, the economy of India suffered as well. However, unlike other countries, India sustained the shock as an important part of its financial and banking sector is still under government regulation. Nevertheless, to cope with the present situation, the Indian government has taken a number of decisions like strengthening the banking and tertiary sectors, increasing the quantity of exports and lots more.

12. Half of the world’s population is ‘unbanked’. The result is that large portions of society cannot save or get credit, or are forced to access credit at inflated prices in informal markets-for example, through loan sharks-which can lead to inescapable debt spirals. Very similar is the case in India.

1.7. REVIEW OF LITERATURE

The contributions made by various scholars and experts in the field of Monetary Policy are really praiseworthy. Although various studies have been reviewed, only those works which are closely related to the present study are included here.

Gupta and Srinivasan (1984) attempt to assess the impact of changes in administered prices on sectoral and overall price movements using a simple inter-sectoral model. The results of the study clearly show that, the impact of administered price changes on relative and absolute prices cannot be assessed without taking into consideration their mutual interactions. The success of administered price revisions as
an instrument to generate additional resource mobilization in the public sector cannot be assessed in a partial equilibrium model. And the inflating potential of changes in administered prices is significantly high and the potential for generating additional saving is much less than the nominal effects.

Paulson (1989)\(^7\), examines the impact of monetary policy on Indian economy in the pre-reform period. The study reveals that the single important factor that influences the money supply in the economy is the reserve money. He points out a positive correlation between inflationary pressures and administered prices, and what is required, he suggests, to achieve price stability, is a cordial and symbiotic relationship between monetary policy and fiscal policy.

Inflation is a monetary phenomenon (which is) fuelled by the excessive creation of money. In an article ‘Inflation, Monetary Policy, and Financial Sector Reform,’ published in Southern Economist, Tarapore (1993)\(^8\) mentions inflation as a tax on the weaker sections of society. “The need for a monetary relaxation is often argued as being helpful to the weakest sections of society. Nothing could be farther from the truth. The curtailment of inflation is the best anti-poverty programme and therefore a strong anti-inflationary monetary policy is in consonance with societal concerns.” He also predicts that the imminent developments in the securities market in the foreseeable future call for development of entirely new skills in the Reserve Bank, the commercial banks and financial institutions.

Our present policy-makers appear to be believers in shock therapy (Arun Ghosh, 1994)\(^9\). According to him, the objection to interest rates does not imply that all interest rates should suddenly and precipitately be brought down. Rather, two steps are necessary. First is a gradual lowering of the interest rate structure. Second, and more important, putting in place an institutional structure which would make adequate and timely credit available to small farmers, small industries, artisans etc… The ongoing reform of the financial sector is thus wholly misdirected, the reform has to be differently designed and implemented. The policy of imposing high interest rates on a stagnant economy is the direct result of the obsession of the present policy-makers with success in the financial markets rather than in the matter of growth of the real economy.
Unusual conditions leading up to the business cycle of 1989-93, made it difficult to recognize inflationary pressures. Several industrial countries pursued expansionary policies that caused their economies to overheat; policy corrections then led to asset-price deflation and severe recessions. Valuable lessons can be drawn from this experience (Garry Schinasi, 1995)\(^{(10)}\). The most important question is whether future business cycles, in a liberalized global financial environment, are likely to have a similar profile. Uncertainty about this issue reinforces the need for monetary policy to remain flexible in the future and for the development of more reliable tools for monitoring cyclical developments – including tools making it possible to assess asset-market conditions with greater accuracy.

Assessment of the money multiplier in the context of monetary control is given primary importance in the paper, Money Multiplier and Monetary Control, published in October 1995 (Nuran Gokbudak, 1995)\(^{(11)}\). Thus, the objective of this paper is to discuss the significance of the money multiplier and the monetary aggregate in terms of monetary control and to determine the reasons behind their variation. The importance of the money multiplier in terms of monetary policy is analyzed and along with the calculation of the money multipliers (k1 and k2), and their parameters, the components of Central Bank Money (CBM), which has been used as monetary aggregate, and their relative contributions are analyzed. The absolute and relative contributions of its components to a change in money supply (M2) are investigated by the author. This paper aims at revealing the importance of the control of both the monetary aggregate and the money multiplier in achieving the targeted level of money supply. This, in turn, will enable the Central Bank to provide price stability and high powered money is found to be the major contributor to the change in M2.

Sinha (1995)\(^{(12)}\), remarks that it is very urgent to keep the finance sector in sound health. This calls for great vigilance on the part of the regulatory authorities- the RBI, SEBI and the Central Government. The rate of monetary expansion should be brought down drastically. That is the real test of success of central banking policy. For all this, we need a truly independent central bank, whose most important quality must be to be able to say ‘No’ to excessive credit demand, be it from Government or the
commercial sector. Otherwise, inflation will become worse, contrary to the complacency one observes in this regard, on the part of Government and the RBI.

Monetary policy has now moved to the center stage of economic policy making, commends Rangarajan, (1996)\(^{(13)}\) while delivering a lecture on ‘Some Issues on Monetary Policy’, conducted by the ASCI. In fact, many writers feel that inflation is endemic in the process of economic growth and inflation is treated more as a consequence of structural imbalance than as a monetary phenomenon, he remarked. The issue of objective has become important because of the need to provide clear guidance to monetary policy makers.

The finance minister has described his move to replace ad hoc treasury bills with ways and means advances as a “bold and radical change” which will “strengthen fiscal discipline” and provide “greater autonomy to the RBI in the conduct of monetary policy”. EPW Research Foundation (1997)\(^{(14)}\) has some commends on it. According to them, it is time the RBI takes a fresh look at various instruments it has deployed or seeks to deploy which have an inherent tendency to prevent the banking and financial system from rendering their traditional role. They quote Nicholas Kaldor’s words: “Bank credit should expand at the right rate, neither more nor less. This is neither ensured nor prevented by attempts to control the vagaries of the money supply”.

The monetary-policy environment over the past decade in industrial countries has been increasingly characterized by low and stable inflation and often large movements in the prices of equities, bonds and foreign exchange, or financial assets more broadly. While volatility in part reflects the nature of asset prices, driven primarily by revisions in expectations of future returns, large movements raise questions about the appropriate response of monetary policy. In the past years, for instance, several central banks have expressed concern about such changes. In many formerly high yielding bond markets such as in Italy and Spain, yields fell by several percentage points, often putting pressure on the respective central banks to relax policy rates (Frank Smets, 1997)\(^{(15)}\).

The case of price stability as the objective of monetary policy rests on the fact that volatility in prices creates uncertainty in decision making. Rising prices affect
savings adversely while making speculative investments more attractive. The most important contribution of the financial system to an economy is its ability to augment savings and allocate resources more efficiently. A regime of rising prices initiates the atmosphere for promotion of savings and allocation of investment. While concluding his article, Rangarajan (1997)\(^{(16)}\) suggests that Monetary growth should be so moderated that while meeting the objective of growth it does not push inflation rate beyond six percent.

What should be the objectives of monetary policy? Can monetary policy by itself ensure price stability? What are the respective roles of direct and indirect instruments of monetary control? Rangarajan (1997)\(^{(17)}\) addresses these issues against the backdrop of theoretical developments as well as empirical evidence on the impact of monetary policy in India and elsewhere in the world. As the role of monetary policy is considered, the stress has been laid on monetary management. What the policy has been seeking to do is to modulate money supply growth consistent with expected real growth. Ensuring price stability requires the pursuit of a consistent policy over a period of time. This may at times make the central bankers unpopular. The need to take a view which is not short-term has indeed been one of the arguments advanced for greater autonomy for central banks.

Partha Ray \textit{et al.} (1998)\(^{(18)}\) explores new dimensions in the monetary transmission mechanism in the environment of liberalization initiated in the early 1990s and in the context of growing integration of financial markets. An examination of the Chakrabarty committee paradigm in this changed milieu is what motivated the author. The article tries to examine the role of two key variables in the conduct of monetary policy, viz., interest rates and exchange rates. The long-run relationship between money, prices, output, and exchange rate is examined and the impact of money market disequilibrium on interest rate is traced by testing the joint significance of the lags of disequilibrium errors. Interest rates and exchange rates are seen to be endogenously determined in the liberalized regime beginning 1992-93, raising the possibility of the change in transmission mechanism following the advent of financial reforms.
Ranjanendra Narayan Nag and Mallinath Mukhopadhyay (1998)\(^{(19)}\) published an article about ‘Macro-Economic Effects of stabilization under Financial Repression’. The upshot of their analysis is that exchange rate flexibility increases the likelihood that monetary stabilization and financial liberalization can succeed in bringing down the inflation rate and in improving performance of the real sector specifically in the context of ever-increasing exposure of developing countries to the globalization process. The broad message of the paper is that light monetary policy and financial liberalization should be integrated with other components of stabilization, particularly exchange rate flexibility. One can also study about the nature of exchange rate dynamics in a financially repressed economy.

The amount of research efforts that has gone in to prove or disprove the basic premises of monetary economics, depending on one’s predilections, is phenomenal. Fortunately, it has given rise to rich, innovative ideas, and influenced the thinking of those who wield considerable power in policy-making and decision-taking. In the process, it has enriched the Keynesian logic and framework and has brought about a sharp change in the processes that form part of the operating procedures of central banking (Reddy, 1998)\(^{(20)}\).

An objective analysis of the past few years suggests that a number of unhealthy developments have surfaced in the monetary and banking scene, resulting in starving production activities of bank credit (EPW research Foundation, 1999)\(^{(21)}\). The overall monetary policy stance projected by the RBI in recent policy statements belies the promise of providing a new perspective. The focus of these policy pronouncements has been overwhelmingly on promoting and developing further the money and government securities markets; the importance of bank credit remains neglected.

Manohar Rao (1999)\(^{(22)}\) discusses the real and monetary aspects of short-run structural adjustment using a flow-of-funds methodology. Based upon such a framework, he then specifies an analytical basis which is capable of integrating the financial programming model of the Fund with the financial requirements approach of the Bank in a manner which removes the existing dichotomies between the real and financial sectors of the economy. The merged model, which defines monetary,
external, real and financial sector equilibrium, is then used to prescribe feasible stabilization policy options for the Indian Economy over the current fiscal year. The twin issues of interest rate and exchange rate determination, is becoming increasingly important. Only when its behavior is well understood, it will be possible to predict their effects on key macro-economic variables such as GDP, inflation, savings, investment and, above all, economic growth.

Rajwade (1999) (23) noted in his commentary on ‘Perspectives on Monetary Policy’ that: “The explosive growth of information technology could erode the power of central banks- noted in their monopoly over the creation of money”.

Money at the basic level is anything generally accepted as a medium of exchange. The difficulties in quantifying money supply have been there, for sometime. Historically, barter was found inefficient because of different exchange rates. Now, these constraints can be removed, as E-cash replaces the currency. Thus the conventional ’money world’ ceases to be the only medium of exchange, eroding the power of central banks.

As part of financial sector reforms, a number of steps have been taken to enhance the effectiveness of monetary policy and these include improvement in the payment and settlement systems, development of secondary market in government securities with a diversification of investor base, reduction in non-performing assets and reduction in the overall transactions costs. In particular, the recent initiatives of RBI to develop money market and debt markets should contribute to improving the transmission mechanisms of monetary policy. All the reforms in the monetary and financial sectors may not have the desired results with creditable fiscal adjustment (Reddy, 1999) (24).

Despite the unfavorable fiscal environment, the Reserve Bank has been able, through a combination of measures, to bring down interest rates to realistic and relatively stable levels (EPW Research Foundation, 2000)(25). For achieving, such a downward trend in interest rates, the RBI has adopted multiple strategies, the broad thrust of which is based on a refreshing change in perspectives on monetary policy. Therefore, stability or the minimization of volatility in the money market is pursued as
the allowed objective of policy. Effective checks and balances are put in place so that
the market operates within a reasonable range. Such checks and balances are embedded
in the strategies adopted which in turn encompass an active and stern application of all
possible instruments in the RBI armory.

Development on the exchange rate front and the RBI’s response to them has
raised the issue of the basic approach to exchange rate management. The RBI seems to
be falling between the two stools of liberalization and of fighting expectations and
curbing speculation (EPW research Foundation, 2000)\(^{(26)}\). If the measures taken by the
RBI have been able to generally curb destabilizing speculative activities to its
satisfaction, then there is reason to believe that the evolving changes in the exchange
rate of the rupee is based on certain fundamentals and that such changes should not be
curbed by extraneous monetary policy measures. At the same time, the RBI ought to
have tolerated some measured depreciation of the currency in effective trade-weighted
terms as the current and prospective situation warrants it.

The article by Manohar Rao (2000)\(^{(27)}\), explores two main issues. First, it
attempts to assess the two-way interactions between business cycles and exchange
rates: initially by examining some of the main factors that influence exchange rates, and
then by considering the role of exchange rates in stabilizing business cycles. Secondly,
the paper provides an analytical framework which, by formalizing the nature of the
relationships between key macro-economic variables, helps to forecast the exchange
rate inter alia in the Indian context. The plausibility of all these forecasts implies that
there is considerable basis for using the model not only for prediction but also for
designing growth-oriented stabilization programmes as well as policy co-ordination
strategies.

The relationship between budget deficits, money creation and debt financing
suggests that interest rate targeting and inflation control are both monetary and fiscal
policy issues. Manohar Rao (2000)\(^{(28)}\) formalized these links within two analytical
frameworks, static as well as dynamic. By highlighting the concepts of the ‘high
interest trap’ and the ‘tight money paradox’, respectively, he suggests that, for any
given deficit, there exist optimal levels of monetization and market borrowings. By
ensuring this optimal split between monetization and borrowings in the present, it would be possible to balance the future needs of the economy *vis-a-vis* the needs of the government and thereby avoid the high interest/inflation trap and the subsequent specter of an economic slowdown.

Drawing from recent experiences in India and abroad, Michael Debabrata Patra and Sunando Roy (2000) \(^{29}\) assess the Indian approach to reinforcing financial stability. In the context of macroeconomic, macro and micro-prudential policies undertaken in India, the paper empirically evaluates the responses of various constituents of the banking system and finds differential responses.

Renu Kohli (2000) \(^{30}\) analyzes the exchange rate behavior and its management in India. A scrutiny of the exchange rate management strategy of the RBI reveals a strong commitment to exchange rate stability and keeping the exchange rate aligned to one of its fundamentals, i.e., the price level. It was found a positive response of direct intervention activity, to a rise in exchange rate volatility. It was also found that intervention activity adjustments appear to be tied to the price level. The implications for intervention activity are even more significant in a situation where the capital account is liberalized. A rise in the scale of future intervention would therefore imply a significant build-up of reserves.

In the aftermath of the currency crises around the world, the role of the Central Bank’s interventions in the foreign exchange market has gained an importance. It is obvious that such intervention affects the exchange rate in two ways; first, by affecting the extent of excess demand in the foreign exchange market, and thereafter through a complex interplay of the macro-economic variables. The literature has addressed this issue by estimating the so-called offset coefficients, a method that is ad hoc and that is marked by the conspicuous absence of an underlying macro-model. In this paper, Sumon Kumar Bhaumik and Hiranya Mukhopadhyay (2000) \(^{31}\) build on the stylized Mundell-Fleming model, and derive an estimable reduced form of expression that allows us to link exchange rate movements with the RBI’S interventions. The model itself, the subsequent empirical results indicate that the effect on RBI’s interventions in
the foreign exchange market is at best unclear. Specifically, given the time span of the data, the RBI’s interventions in the market seem to have been ineffective.

The arguments for linking interest rates on small saving (SS) schemes to market rates and rationalizing the tax benefits available to them rest on removing the governments’ arbitrary powers in a liberalized interest rate environment. If SS schemes become relatively unattractive as a result of the suggested measures, the government would need to borrow more from alternative sources. If total government borrowing is not kept in check, yields on government securities would go up and with it the interest rates on SS schemes would also warrant upward revision (Datar, 2001)\(^{(32)}\).

There have been significant financial sector reforms through 1990s. One of the major policy changes affecting the financial markets has been the reduction in government’s recourse to claims on loanable funds through statutory liquidity ratio as well as high levels of cash Reserve Ratios. There is a general move towards market determined rates and flows in the financial sector. One area where administered rates are still important is the small saving instruments. If the overall balance of demand and supply of loanable funds is such that interest rates can be lower, the small saving rates do not let that emerge. Further, as interest rates decline, there would be significant gains in economic growth. Deepak Lal et al. (2001)\(^{(33)}\) made an attempt to examine this viewpoint. They develop a monetarist model of the economy and assess the implications of alternative methods of financing the fiscal deficit of the government, central and states combined. The results support the view that overall interest rates would decline if the small saving rates were to be liberalized but the gains in economic growth would not be dramatic.

When the economy is in a crisis the Reserve Bank cannot sit back and say it has done enough by reducing interest rates and supplying liquidity to the market. It needs to operate on many fronts interest rates, general refinance, sector-specific refinance, directed credit norms and moral suasion to introduce dynamism into the bank’s credit delivery system, commends EPW Research Foundation (2001)\(^{(34)}\).

In the recent past, the RBI has been using open market operations to sterilize the inflows of foreign capital so as to contain domestic monetary expansion. Due to a rise
in the income velocity of base money this has created an incentive for the government to resort more to market borrowings from banks which has raised real interest rates and which exerts a depressing impact on the growth of economic activity along with creating pressures for the inflation rate to increase. The changed environment calls for a reduction in government expenditures which, while reducing interest rates and enhancing the level of economic activity, will also help nudge the economy to a lower inflation level (Errol D’Souza, 2001).  

Kangasabapathy (2001) captures the historical perspective in respect of monetary policy underpinnings with particular reference to India. He also points out the limitations and constraints in pursuing monetary policy objectives and throws light on current mainstream economic thinking and perspective in the context of the changing economic environment world wide. In the recent times, due to the emergence of interest rate as an efficient variable in the transmission mechanism, the RBI has begun placing greater reliance on indirect instruments such as Repo, Bank rate, OMO etc., rather than the earlier practice of greater dependence on CRR alone. Another issue debated in the context of Central Bank autonomy is the separation of debt management and monetary management functions. At the same time, it would require a co-ordinated operation with monetary management to achieve a stable interest rate environment and market condition.

There are continuing debates on several issues connected with monetary policy. Questions have been raised on the objectives, instruments and impact of monetary policy. Monetary management in the 1980s and more particularly in the 1990s in India offers interesting insights on the role of monetary policy as an instrument of economic policy. The paper written by Rangarajan (2001) draws some important lessons from this experience. Assigning to each instrument the most appropriate objective favours monetary policy as the most appropriate instrument to achieve the objective of price stability. It is this line of reasoning which has led to the single objective approach. A considerable part of the relevant research effort has been devoted to the trade-off between economic growth and price stability. According to the author, the efforts aimed at strengthening the institutional structure are a necessary part of the functions of a central bank.
Banking and stock market systems are compared, in an article ‘Macro economic Policy and asset Markets’ by Romar Correa (2001)\(^{(38)}\) from the viewpoint of macro economic policy. The author suggests that the former has desirable properties with reference to the objective of increasing output and employment. It is indeed welcome that the interest rate has emerged as the control variable in the hands of the monetary authorities. The goal variable remains uncertain and the adherence to multiple indicators does not provide any indication of the weights in the utility function of the authorities. Since inflation is not a problem, it is suggested that credit be the sole indicator of policy and the objective be full employment.

According to Sitikantha Pattnaik and Arghya Kusum Mitra (2001)\(^{(39)}\), while the rationale for raising the interest rate to defend an exchange rate under speculative attack is well-grounded on economic and financial theories, empirical validation of the effectiveness of such a policy stance has generally been difficult and is shrouded with conflicting findings. Assignment of Monetary Policy to the exchange rate objective in a regime of managed flexibility may involve a temporary loss of monetary independence and some sacrifice on other objectives of monetary policy, particularly growth and stability of the banking system. However, when monetary measures succeeded in ensuring an orderly condition in the foreign exchange market, the benefits may outweigh the potential costs stemming from an interest rate defense of the exchange rate. In India, such an interest rate defense seems to have worked in stemming speculation during the times when the rupee comes under pressure.

In the pursuit of non-inflationary growth and stability and efficiency of the financial system and in the context of the recent moderation in economic activity in India, the current policy preference is towards softer interest rates while imparting greater flexibility to the interest rate structure in the medium term (Barman, 2002)\(^{(40)}\). Model estimated forecasts of output, inflation and liquidity comprise important elements of the information set used by the policy makers in the conduct of monetary policy. These forecasts are generated by using structural models, time series models and industrial outlook surveys. The short-term liquidity forecast is a more complex area and the appropriate approach and method for generating liquidity forecasts is being
explored in India. The paper discusses these issues and highlights the problems that often warrant methodological refinements.

Bimal Jalan (2002)\(^{(41)}\) is of the opinion that there has been progressive intensification of financial sector reforms, and the financial sector as a whole is more sensitized than before to the need for internal strength and effective management as well as to the overall concerns for financial stability. At the same time, in view of greater disclosure and with tougher prudential norms, the weaknesses in our financial system are more apparent than before. The structure of the financial system is changing and in a fundamental sense regulators and supervisors are under the greatest pressures of change and bear the larger responsibility for the future. For both the regulators and the regulated eternal vigilance is the price of growth with financial stability.

Mere expansionary signals from the RBI through reduction of the repo rate and the Bank rate and through money market instruments will not be enough (EPW Research Foundation, 2002)\(^{(42)}\). The RBI will need to address structural disabilities and distorted commercial banking behavior in response to financial sector reforms.

With a series of monetary measures undertaken by the Reserve Bank of India in the recent period combined with somewhat sharp reductions of nominal interest rates on small savings, the overall structure of interest rates in the economy has attained a state of relative stability and it can also be characterized as generally well-balanced. EPW Research Foundation (2002)\(^{(43)}\) commends that with alround downward movement of rates of all types and maturities in the past three years, near-stability in the interest rates profile has been achieved. RBI policies of low Bank rate, active management of liquidity and signaling its preference for softening of interest rates have contributed to this development.

George Macesich (2002)\(^{(44)}\) discusses the role of money and the performance of monetary regimes within a national economy. Power and authority in monetary matters are shared between the Finance Ministry and the Central bank. The inter-linkage between political power structures and policy introduces an element of discretion in monetary policy. The exercise of such discretion, according to the author, affects the
conduct of monetary policy. The efficacy of monetary policy can be substantially enhanced through imposition of constraints on the use of discretionary authority in monetary affairs by bureaucracy and political elites. The author also provides interesting historical accounts of the rules versus discretion debate.

Nachane et al. (2002) examine whether monetary policy has similar effects across major states in the Indian Polity. Impulse response functions from an estimated Structural Vector Auto Regression (SVAR) reveal two sets of states: a core of states that respond to monetary policy in a significant fashion vis-à-vis others whose response is less significant. The authors attempt to trace the reasons for the differential response of these two sets of states in terms of financial deepening and differential industry mix. Further investigation is, of course, necessary to confirm the presence and extent of such asymmetries as well as examine in detail their sources. While it may be premature to speculate on the nature of the required changes, there is no gainsaying that in view of severe resource constraints faced by several Indian states, monetary policy would need to take regional perspective into account.

The process of financial change 1991 exerts significant influences on the empirical definition of money, the money supply process and its transmission and on the demand for money. This not only raises issues about the instability of the relationship between monetary aggregates and the aspects of the macro-economy but also brings into question the potency of monetary policy. If financial change is indeed invoking fundamental alterations along these lines, then they would be manifested in at least certain quantifiable dimensions. Nachane and Lakshmi (2002), identifies two such dimensions, viz., monetary policy lag and the causal associations of money with important macro economic magnitudes (specifically output and prices).

The financial markets and systems in India have become more dynamic and ever changing/ expanding (Prabhakara Rao, 2002). According to him, it is really challenging to update ourselves in the dynamic financial environment and to visualize the future.

Even as banks have come to possess a growing share of the community’s financial resources, it is the absence of dynamism shown by them in expanding their
credit base regionally, functionally and by the size of borrowers, that continues to hurt the process of domestic investment and growth (Prasanth and Shetty, 2002). It is necessary for them in a competitive environment to introduce more dynamic instruments of lending and enhance organizational capabilities to shoulder more nuanced lending practices, both of which are missing in the current banking scenario. The RBI has bestowed vast attention on strengthening money market activities of banks but has done precious little in monitoring the performance of banks in the above areas.

Raghbendra Jha (2002) tries to assess why lowering interest rates is proving to be hard in India. He highlights the role of three factors, namely, high public debt and its structure, the overhang of non-performing assets and the policy being pursued with respect to accumulation of foreign exchange reserves. These three factors are causally linked to each other and should not be looked upon as mutually exclusive contributors. While it is good to have the benefits of the policy of high foreign exchange reserves, this is levying a cost on the economy in terms of interest rates and debt service payments that are higher than they need be and lead to partial loss of control over money supply. However, as the Thai experience in 1977 vividly illustrates, high foreign exchange reserves alone cannot provide security against macro-economic downturns and it is important to design an appropriate foreign exchange reserve policy.

Reddy (2002) opines that central bank has a developmental role but it is a different type of role, namely, not directly financing development but help to develop systems, institutions and procedures to enable a paradigm shift in public policy and the process enhance corporate governance also in PSBS, in particular.

Reddy (2002) remarks that in order to gain greater effectiveness in money market operations of the Reserve Bank through Liquidity Adjustment Facility, the automatic access of refinance facility from the RBI to banks also have to be reassessed. Thus, as CRR gets lowered and repo market develops, the refinance facilities may be lowered or altogether removed and the access to the non-collateralized call money market restricted with the objective of imparting greater efficacy to the conduct of monetary policy.
Monetary policy is increasingly focused on efficient discharge of its objective including price stability and this, no doubt, will lead to poverty alleviation, indirectly; while the more direct attack on poverty alleviation would rightfully be the preserve of fiscal policy. Monetary and financial sector policies in India should perhaps be focusing increasingly on what Dreze and Sen Call “growth mediated security” (Reddy, 2002)\(^{(52)}\).

According to Shankar Acharya (2002)\(^{(53)}\), conceptualization and practice of monetary policy has clearly undergone a sea change during the nineties. According to him, monetary policy at the end of the decade was a far more sophisticated operation than at its beginning. However, some of the old problems and dilemmas remain. In particular, the efficacy of monetary policy continued to be constrained by an excessively loose fiscal policy as well as an insufficiently responsive financial system.

The paper, ‘Evolving Monetary Policy in India’ (Vasudevan, 2002)\(^{(54)}\), reviews the process of monetary policy formulation, with some stylized facts that monetary policy pursued. The author discusses the issues concerning the objectives and conduct with reference to targets and the indicators. The RBI has been cautiously adopting a ‘Just do it’ approach and not any rule-based regime. This is not because of any given policy strategy but because of indefiniteness about the market behaviour and market developments in the context of financial development and the related uncertainties. In general, the bank has signaled its intention, towards the end of the twentieth century, to move away from monetary targeting. Although not clearly specified, the policies pursued so far indicate their focus on interest and exchange rates with a view to achieve a better allocative efficiency of resources over the medium term.

In India, along with other apex organizations, the RBI has also initiated various measures to identify, implement and supervise good corporate governance practices in the financial sector. Implementation of international best practices in the financial sector is being increasingly viewed as an important corner-stone for protection of the interests of the stockholder of financial companies. And, in a broader sense, it is one of the important preconditions for the maintenance of financial stability (Vepa Kamesam, 2002)\(^{(55)}\).
The modern central banker needs to be open to the reality of the ongoing structural changes around him and to keep an open mind as to how monetary policy might best be used to enhance the welfare of the citizens for whom he is responsible (William, 2002)\(^{(56)}\). According to him, a longer-term commitment to price stability, supplemented by concerns as to how financial instability might impede the pursuit of this objective, should be the principal objective for monetary policy today.

Some commentators have recently argued that an exclusive focus of monetary policy on achieving price stability is inappropriate in a world where asset price misalignments and financial imbalances are increasingly prevalent. Bank for International Settlements (2003)\(^{(57)}\) reviews the argument that monetary policy should react to asset price movements and/or financial imbalances over and above their impact on the inflation outlook. It concludes that, while monetary policy makers probably should take note of such developments, the macroeconomic implications can be adequately embraced within an appropriately flexible and forward-looking concept of inflation targets. In a simple New Keynesian model, modified to allow for capital and debt accumulation, the author then shows that the possibility of credit crunches may affect the design of the optimal policy in subtle and unexpected ways.

The RBI has been using open market operations to sterilize the inflows of foreign capital so as to contain domestic monetary expansion. At the same time, it is intervening in foreign exchange markets. With downward price rigidity and shocks such as declining foreign interest rates and declining import tariffs as the economy integrates into the world economy, it is imperative to revise the money supply target so as to enable the economy to adjust to these shocks better (Errol D’Souza, 2003)\(^{(58)}\). The current policy of sterilization and containment of the money supply restricts the process of income generation and macroeconomic adjustment in the force of these shocks.

The management of liquidity poses a major challenge to the conduct of monetary policy in an environment of financial liberalization. Indranil Sen Gupta et al. (2003)\(^{(59)}\) has attempted to assess liquidity conditions in the market for bank reserves in terms of central bank balance sheet flows. They construct the concepts of autonomous liquidity (AL) and discretionary liquidity (DL) in the Indian context and finds that there
is a systematic response in the Reserve Bank's discretionary operations to offset 'autonomous' shocks to the market for bank reserves.

Kannan et al. (2003)\(^{(60)}\), in an article ‘Liquidity Measures as Monetary Policy Instruments,’ attempts to build a framework to quantify the developments in the money markets in quantum terms through autonomous and discretionary liquidity measures. The concepts of discretionary and autonomous liquidity measures make LAF a powerful instrument of monetary policy and the development of the money market is necessary for its efficient management. He also points out that, an active open market operation was pursued by the RBI as an indirect instrument of Monetary Policy in the last three-four years.

Manohar Rao (2003)\(^{(61)}\) exposit the problems of monetary policy design within the limits of an empirical framework for the Indian Economy by examining four main issues. The paper first looks at the main features of business cycles in the Indian economy over the past 50 years. Second, it empirically measures the threshold rate of inflation within the framework of growth-inflation trade-offs and derives the optimal rate of monetary expansion needed to smooth out fluctuations and stabilize the inflation rate at its threshold level. Third, it specifies a theoretical model (linking growth, inflation, interest rates and money supply) capable of deriving an optimal fiscal deficit which maximizes the real growth rate; and applies it within the Indian context to measure the desired amount of fiscal consolidation. Finally, it provides estimates of a comprehensive macroeconomic conditions index which can very effectively be incorporated into a simple Taylor-type interest rate rule (reaction function) for monetary policy. Ever since liberalization, there has been an upsurge of interest in streamlining the operational framework of monetary policy. According to the author, monetary policy can be directed also towards revitalizing output growth in the short-run.

The objective of the study, ‘Exchange Rate Policy and Management-The Indian Experience’ written by Pattnaik et al. (2003)\(^{(62)}\), is to present the Indian experience of exchange rate management against the backdrop of international developments both at the theoretical and empirical levels. Monetary policy has been successful in ensuring
orderly conditions in the foreign exchange market and containing the impact of exchange rate pass-through effect on domestic inflation. Real shocks are predominantly responsible for movements in real as well as nominal exchange rate, monetary policy shocks have been relatively unimportant. A policy of benign neglect of the exchange rate is impractical and unrealistic since movements in exchange rate influence the monetary transmission. Overall, the analysis indicates that exchange rate management in India has been consistent with macroeconomic stability.

Philip Arestis and Malcolm Sawyer, (2003) in their paper discuss the following: When the level of aggregate demand is stable and only effected by random shocks and the rate of interest, then monetary policy (in the form of varying the rate of interest) may be an effective way of offsetting those shocks. This, however, is predicated on the rate of interest that would equate aggregate demand with supply-side equilibrium, being achievable (that is positive and consistent with exchange rate requirements). But the power of monetary policy needs to be compared with the power of fiscal policy. In this paper, it is argued that shifts in the level of aggregate demand (arising from shifts in confidence and world demand) cannot be readily offset by monetary policy. Further, fiscal policy remains a potent tool for offsetting major changes in the level of aggregate demand.

Robert Nobay and David Peel (2003) consider optimal monetary policy in the context of the central bank adopting an asymmetric objective function. The results show that under asymmetric preferences, many of the extent results on the time consistency problem need no longer hold. In this paper, they have investigated the implications for optimal discretionary policy of assuming that the central bank has an asymmetric loss function. The results presented in this paper underline the fact that even limited realism beyond the conventional approach to modeling the authorities’ preferences can deliver results that are substantively at variance with the results obtained under quadratic preferences.

The working paper published by The Levy Economics Institute of Bard College (2003) considers the nature and role of monetary policy when money is envisaged as credit money endogenously created within the private sector, i.e., by the
banking system. Monetary policy is now based in many countries on the setting or targeting of a key interest rate, such as the Central Bank discount rate. The amount of money in existence then arises from the interaction of the private sector and the banks, based on the demand to hold money and the willingness of banks to provide loans. Monetary policy has become closely linked with the targeting of the rate of inflation. This paper considers whether monetary policy is well-equipped to act as a counter-inflation policy and discuss the more general role of monetary policy in the context of the treatment of money as endogenous. Currently, two schools of thought view money as endogenous. One school has been labeled the "new consensus" and the other the Keynesian endogenous (bank) money approach. Significant differences exist between the two approaches; the most important of these, is in the way in which the endogeneity of money is viewed. Although monetary policy is essentially interest rate policy and it appears to be the same in both schools of thought, it is not. This paper investigates the differing roles of monetary policy as per these two schools.

A central tenet of the so-called new consensus view in macroeconomics is that there is no long-run trade-off between inflation and unemployment. The main policy implication of this principle is that all monetary policy can aim for is modest, short-run output stabilization and long-run price stability, i.e., monetary policy is neutral with respect to output and employment in the long run. However, some research on this suggests that persistent but nevertheless transitory changes in aggregate demand may have a permanent effect on output and employment. If this is the case, then, the monetary policy have long-run effects on real variables. Giuseppe Fontana and Alfonso Palacio-Vera (2005) (66) provides an overview of this research and explore how monetary policy should be implemented once these long-run effects are acknowledged.

Kannan et al. (2006)(67) attempt to construct a monetary conditions index (MCI) for India in order to take both interest rate and exchange rate channels simultaneously into consideration, while evaluating the stance of monetary policy and evolving monetary conditions. A “broad” MCI has also been constructed which incorporates credit growth as an additional indicator of monetary conditions. Their results reveal interest rate to be more important than exchange rate in influencing monetary conditions in India. In the Indian context, MCI has been effective to put together more
than one indicator in order to provide a better assessment of the stance of monetary policy and reveals its role as a leading indicator of economic activity and inflation. Accordingly, the findings underscore the potential of MCI as a valuable indicator of monetary policy in India supplementing the existing set of multiple indicators adopted by the monetary authority.

Deepak Mohanty (2010) discusses the global financial crisis and monetary policy response in India. At present, the focus around the world and also in India has shifted from managing the crisis to managing the recovery. The key challenge relates to the exit strategy that needs to be designed, considering that the recovery is as yet fragile but there is an uptake in inflation, though largely from the supply side, which could engender inflationary expectations. Now, the RBI’s measures should help anchor inflationary expectations, he opines, by reducing the overhang of liquidity without jeopardizing the growth process as market liquidity remains comfortable.

Santosh Mehrotra (2010) discusses the role of policy makers in ensuring sustained economic growth, especially in an atmosphere of global economic crisis. The global economic crisis hit the Indian economy at a time when it was riding a wave of unprecedented high growth. He argues that while the global crisis has particularly impacted exports, and hence growth, and worsened the fiscal balance, India is already returning to an 8 per cent per annual growth. This limited impact, has been driven by the fact that both savings and investments have risen sharply in the first decade of the millennium, and are likely to remain high. It is domestic savings/investment as well as domestic markets that are driving the growth. The paper also highlights a series of long-term challenges that policy-makers must address if rapid growth is to be sustained, and poverty be reduced sharply.
References

2. India and the Global Economic Crisis, PDF File, www.iamrindia.gov.in
4. India Economic Reform, Business Maps of India, business.mapsofindia.com


69. Mehrotra, Santosh, 2010, India and the Global Economic Crisis, (This paper was presented at UK Development Studies Association Conference, U.K), www.iamrindia.gov.in