# UNIT 14 CREDIT AND MONETARY POLICY IN INDIA

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## 14.0 OBJECTIVES

The purpose of this unit is to develop among learners an understanding of the framework and operating procedure of the Indian credit and monetary policy. After going through this unit, you will able to:

- identify the targets and indicators of monetary policy in India state the objectives of monetary policy in general and in Indian monetary policy in particular; and
- analyse the operating procedure and mechanism adopted by RBI in implementing monetary policy in India.

## 14.1 INTRODUCTION

In the economic literature, there seems to be near unanimity that monetary policy is a powerful instrument for improving the macro-economic position of a country. Monetary policy has been considered to be an important organ of economic policy. Hence, the objectives of monetary policy by and large coincide with the objectives of the overall economic policy. The three major objectives of economic policy in India have been growth, social justice and price stability. Though it is widely recognised that the objective of price stability is one that can be pursued most effectively by monetary policy, in practice, the monetary policy has contributed significantly to the attainment of other objectives as well. However, the successful design and implementation of monetary policy depends upon the prevailing economic situation and structural factors such as the proportion of currency in money supply, size of the public debt, size of the non monetised sector in the economy etc.

Since monetary policy influences the ultimate objectives through its instruments, the problem of identifying targets assumes relevance. A monetary policy target whether intermediate or final, carries important signals to the markets, conveys the monetary policy stance in unambiguous terms and helps anchoring inflationary expectations in the economy. Traditionally, money supply, bank credit and interest rates were considered as monetary policy targets. But in recent times, for aiming at intermediate target, viz, broad money, the overacting target has been reserve money, particularly the bank reserves, while the supplementary operating target is the short term interest rate. Again, against, the backdrop of the desired objectives of the monetary policy, it would be necessary to examine an array of instruments. The various major instruments of monetary policy are open market operation, statutory liquidity ratio, cash reserve ratio, bank rate policy, interest rate policy, refinancing facilities and money market measures. In this context, Balachandran (1998) suggests that monetary policy is conventionally understood to represent policies, objectives and instruments directed towards regulating money supply and the cost and availability of credit in the economy.

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Monetary policy is, by common agreement, the defining function of a central bank. Uniquely for a central bank, the Reserve Bank of India undertook a variety of developmental initiatives in independent India, though monetary policy remained its central preoccupation. Monetary policy is implemented which is popularly known as monetary policy framework that consists of the objectives of monetary policy, the target and goals of monetary policy and instruments of monetary policy directed towards regulating money supply and the cost and availability of credit in the economy. Therefore the Reserve Bank of India was prone to take a rather wider view of its monetary policy than more traditional central banks, including within its ambit the institutional responsibility for deepening the financial sector of the economy. In this section, we will discuss on these aspects in Indian context.

## 14.2.1 Theoretical Framework of Monetary Policy in India

Given the compulsions, for accelerated rate of development and peculiar monetary and financial structure, the principal question is whether monetary policy matters for the economy or not. The various schools of thoughts put their diversified thoughts to solve this question. Before the great depression of 1930s, the classical

theory, which is based on the assumption of laissez-faire economy, put more emphasis on the monetary policy. The classical theory did not plead for government intervention and also in classical tradition, 'money' was treated as a veil; determining the nominal values of macro-economic aggregates like output. But it does not have any effect on real economic activity, which has been determined by real factors like capital stock, productivity and technology. Thus money was regarded as a reflector of economic activity rather a regulator. The classical view of money is encapsulated in the well known equation of exchange.

$$MV = PY$$

Where, 'M' is the supply of money, 'P' is general price level, 'Y' is aggregate output and 'V' is income velocity of money. The equation of exchange is simply an identity, a tautology. It merely says that the total value of payments, i.e. money stock times the velocity (MV) must equal the total value of sales, i.e. output times price (PY). It was postulated that all variables in the equation of exchange except price level are determined elsewhere; output in the real sector by non monetary factors, money stock by policy makers, and velocity of money by institutional factors. Under these circumstances, with an increase in money stock, individual seek to dispose off their excess money balances. Since velocity of money is constant and output is found at full employment level in the short run, the entire effect of enlarged money supply is reflected in an upward movement of price level, leaving the real economic activity unaffected. In classical doctrine, interest rate is a non monetary phenomenon, which referred to as forces of 'productivity and thrift'. According to classical theory, the basic aim of economy, like the increase of output, employment, and the price stability can be attained only through varying the money supply. Hence the monetary policy is very effective.

After the great depression in the 1930s, the Keynesian theory made a great revolution in the economic history. Keynesian theory was based on the theory of effective demand. According to Keynesian theory, there is no full employment always in the economy. But equilibrium can be attained through different policies. Keynesian model conceded that wages and prices were not inflexible, but it was argued that, they did not move in such a manner to clear the labour market. The Keynesian school emphasised the 'stick-ness' of the money wage and the failure of market participants to perceive the real wage correctly. For that reason, labour market does not remain in continuous equilibrium at full employment. The key proposition of Keynes monetary theory is that changes in the demand or supply of money operate at the level of economic activity not directly, but indirectly through changes in the rate of interest and thereby through changes in real investment in the economy. According to Keynes, there is always less than full employment. So by merely changing the money supply, the output, employment, price stability are not be attained in the economy. Keynesian demand for money had significant implication for the conduct of monetary policy. Two important things for effectiveness of monetary policy in Keynesian framework are, "interest elasticity of demand for money" and "initial position of the economy". Moreover the Keynesian theory opposed to monetary policy and suggested fiscal policy, which would have dominant influence in real economy. The Keynesian paradigm had wider acceptability during post great depression period up to the 1950s.

In the late 1950s, the phillips curve relationship came into limelight, which provided a link between inflation and unemployment that reinforced credibility of the Keynesian demand management policies. The increasing pressure on inflation resulting from sustained high order of fiscal deficit had not accompanied by

commensurate gains on the employment situation during 1960s. This was demonstrated by Friedman, that, in the long run, there is no trade-off between inflation and output. So in the long run, it cannot be effective for policy making measures. Therefore, it cannot be used as an appropriate theory of monetary development.

In early 1970s, monetarist school came into limelight and suggests there exist an equilibrium level of output, and employment referred to as natural rate, determined by capital stock, technology, productivity and the institutional framework. Monetarist School believes that Phillip curve relationship is valid only in short run. The key proposition of monetarist school is stability of money demand function; which implies predictable velocity of money. If velocity of money stock is predictable, then a change in money stock would have predictable impact of money income. In post 1970s period, the new classical economists like Thomas Sergeant and Neilwallace (1975) showed that in a "rational expectation" framework, government intervention through acquiring seignorage in a systematic manner cannot have enduring impact on real output. In a real sense, it rejected the Keynesian theme. In rational expectation framework, money supply could influence output, only when monetary action is unanticipated. Therefore, there could be only a transitory short run trade off between money supply and output. But in medium to longer time horizon, all economic agents would have fully anticipated the government's action and thereby nullifying the trade-off completely. Therefore, money supply cannot influence real output in medium to longer time horizon.

During the 1980s New Keynesians emphasised the short run trade-off of money supply and output by identifying various factors causing price rigidities, like efficiency wage theory, insiders and outsiders in the context of wage bargaining, menu cost, monopolistic competition, etc. In a rational expectation framework with stronger micro foundation. For the development of the economy, the government intervention is needed according to this theory. Because in a world of imperfect competition, since output tends to be lower and prices higher compared to those under perfect competition social welfare thus adversely be affected through government intervention and such there exists a reasonable rationale for fiscal and monetary policies to play active role in the real world.

## 14.2.2 Basic Objectives of Monetary Policy

Monetary policy has an active role to play in an economy has been well recognised. There has been a considerable debate regarding its core objective, though there would be multiple objectives like, 'sustained growth of real output', 'higher productivity' and 'employment', 'equitable distribution' etc. Cross-country experiences shows that maintaining low and stable order of inflation should constitute the fundamental objective of monetary policy. In a broad sense, the objective of monetary policy can be no different from the overall objective of economic policy. The broad objectives of monetary policy in India have been:

- 1) To maintain a reasonable degree of price stability
- 2) To ensure adequate expansion in credit to assist growth.

The question of a dominant objective arises essentially in view of the multiplicity of objectives and the inherent conflict among such objectives. Jan Tinbergen had argued decades ago that, it was necessary to have at least one instrument for each target. In this regard it must be recognised that certain objectives are better suited or more easily achieved with certain instruments than with others. The "assignment

rule" favour monetary policy as the most appropriate instrument to achieve the objective of price stability.

In case of price stability as the objective of monetary policy rests on the assumption that volatility in prices creates uncertainty in decision making. Rising prices adversely affect savings, while they make speculative investments more attractive. A regime of rising prices vitiates the atmosphere for promotion of savings and allocation of investment. In India, the Chakravarthy committee' (1985) had presumed precisely the target of 4 per cent as the acceptable rise in prices purported to reflect changes in relative prices necessary to attract resources to growth sectors. In India fluctuations in agricultural output have an important bearing on the price situation. Nevertheless, a continuous increase in prices cannot occur unless it is sustained by a continuing increase in money supply. Control of money supply has thus to play an important role in any scheme aimed at controlling inflation. Then growth of economy can take place. Thus monetary policy is very much effective to achieve the objectives.

## 14.2.3 Operating Procedures of Monetary Policy during Early 1990's and in the Late 1990's Onwards

The operating procedure of monetary policy in India has evolved over the years from regulation and direction of credit to liquidity management in a market environment. Earlier monetary policy was conducted largely through direct instruments of monetary control such as prescribing deposit and lending rates of commercial banks, selective credit control over sensitive commodities, sectorspecific standing facilities, statutory liquidity ratio (SLR) and the cash reserve ratio (CRR), though the Bank Rate was used as a general instrument of interest rate policy. This is discussed in more details in the following section. By the mid-1980s, the monetary policy operating framework began to witness a noticeable shift with the introduction of flexible monetary targeting approach following the recommendations of the Chakravarty Committee (1985) and money market reforms following the recommendations of the Vaghul Committee (1987). This process was speeded up with the initiation of financial sector reforms in the early 1990s. The process of deregulation of interest rates, which began in the early 1990s, was largely completed by October 1997, except for a few categories. Similarly, the selective credit control operations were largely phased out by 1994 and most sector-specific refinance facilities were withdrawn by 2002. Also, the use of CRR as an instrument of monetary control was progressively de-emphasised and the liquidity management in the system was increasingly undertaken through open market operations (OMOs), both outright and repos. In this process, the Liquidity Adjustment Facility (LAF) introduced in June 2000 emerged as the principal operating instrument for modulating short-term liquidity. Consequently, the repo rate and the reverse repo rate emerged as the key instruments for signalling the monetary policy stance. These instruments, along with the CRR, OMOs and market stabilisation scheme (MSS) have served the Indian monetary and financial system well. Then there was a need to felt to revisit the operating procedure of monetary policy. Accordingly, as announced in the first Quarter Review of Monetary Policy for 2010-11 on July 27, 2010, the RBI constituted a Working Group to review the framework of the operating procedure of monetary policy under the chairmanship of Deepak Mohanty. The committee defined the operating procedure of the monetary policy in India into four phases viz.,(i) formative phase (1935-1950), (ii) development phase (1951-1990), (iii) early reform phase (1991-1997), and (iv) liquidity adjustment facility phase (1998 onwards). However, to define the

operating procedure of monetary policy in different phases is beyond the scope of this unit. The interested readers can refer the document in the RBI website for further in-depth analysis. Here in this unit, we just highlights the last phase viz, liquidity adjustment facility phase. In 1998, the Committee on Banking Sector Reforms (Narasimham Committee II) recommended the introduction of a Liquidity Adjustment Facility (LAF) under which the RBI should conduct auctions periodically. Accordingly, the RBI introduced an Interim Liquidity Adjustment Facility (ILAF) in April 1999 to minimise volatility in the money market by ensuring the movement of short-term interest rates within a reasonable range. Under the ILAF, the Bank Rate acted as the refinance rate (i.e., the rate at which the liquidity was to be injected) and liquidity absorption was done through the fixed reverse repo rate announced on a day-to-day basis. The transition from ILAF to a full-fledged LAF began in June 2000 and was undertaken in three stages. In the first stage, with effect from June 5,2000, fixed rate reverse repo gave way to variable rate reverse repo auctions. Then, subsequently, the LAF scheme was revised, taking into account the recommendations of the Internal Group on LAF and suggestions from market participants and experts. Accordingly, the 1-day reverse repo was phased out, and in its place the 7-day fixed rate reverse repo on a daily basis and the 14-day variable rate reverse repo on a fortnightly basis were introduced in March 2004. Repo operation was, however, retained on an overnight basis. Also, the repo rate was scaled down to 6 per cent and aligned with the Bank Rate under the revised LAF scheme. Accordingly, a single liquidity injection facility available at a single rate was introduced by merging the normal facility and backstop facility. In order to restore flexibility in liquidity management, the RBI reintroduced the 1-day fixed rate reverse repo in August 2004 while continuing with 7-day and 14-day reverse repos and overnight fixed rate repos. Eventually, in order to have greater flexibility in liquidity management, the 7-day fixed rate and the 14-day variable rate reverse repos were phased out and the LAF was operated through overnight fixed rate repo and reverse repo effective from November 1, 2004. With effect from October 29, 2004, the nomenclature of repo and reverse repo was interchanged as per international usage. The third stage of full-fledged LAF began with the full computerisation of the Public Debt Office (PDO) and the introduction of the Real Time Gross Settlement (RTGS) system enabling repo operations mainly through electronic transfers and the operation of LAF at different times of the same day. Around this time in 2005-06, the economy witnessed strong and sustained credit demand, lower accretion of forex reserves, build-up of the center's cash balances with the RBI and the redemption of India Millennium Deposits (IMDs). All these led to the injection of liquidity by the RBI. During this time, in order to fine-tune the management of day-to-day liquidity and in response to suggestions from market participants, the Second LAF (SLAF) was introduced on a daily basis in November 2005. SLAF is now used periodically, depending on liquidity conditions, rather than as a regular facility (Report of the Working Group on Operating Procedure of Monetary Policy, 2011 RBI).

### 14.2.3.1 Targets of Monetary Policy

One of the oldest debates in monetary economics concerns with the appropriate target of monetary policy. Target problem arises because monetary policy cannot directly and quietly affect the ultimate objectives through its instruments. In the economic literature, there seems to be near unanimity that monetary policy is a powerful instrument for stabilising output and prices in the short run, while long run output neutrality of money is beyond doubt. But the successful design and implementation of monetary policy necessitates an accurate assessment of timing

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and its effects on the economy or the goal variables of price stability and rate of growth of output, requiring the structure of the economy known and the goal variables are observable. In fact, policy has many different and competing hypothesis of the structure available to him. In addition, many of the important endogenous and exogenous variables are observable only after a lag. It is the union of these two problems that leads to the need for intermediate target. The conduct of monetary policy in India has traditionally proceeded with the help of an intermediate target, which the central bank would influence directly and which bears a close relationship with the ultimate objectives. The peculiar mode of the central bank intervention is the operating instrument. Macro economic variables, which post useful information about objectives of monetary policy, although they may not themselves be amenable to central bank targeting, are indicators or information variables.

There are two reasons for the use of target variable. First, since the structure is unknown, the exact of a policy cannot be obtained from the structure. However, lack of knowledge is not uniform throughout the structure. Thus the policy maker may be reasonably certain of the relationship between some observable endogenous variables and the goal variables, even if he is very uncertain about the exact effect of his instruments on goal variables. He may then also use these observable endogenous variables as a target variable reaching their desired level. Secondly, since the goal variables are observable only after considerable lag, the effect of policy will only be seen after the policy has been pursued for some time. During this period, exogenous changes may occur, making the effect of the policy chosen larger or smaller than of otherwise would have been. If a target variable is used, however, then these exogenous changes may simply affect the magnitude of the operation necessary to make the target variable reach the desired level. Thus the use of target variable can remove some of the uncertainties resulting from unobservable goal variables.

The target variables are endogenous variables, which the monetary authority tries to control or influence so as to influence the goal variable in the observed manner. To serve the target function well, a chosen target variable should passes the following four qualifications.

- 1) It should be closely related to goal variables and this relation should be well understood and reliably estimable.
- 2) Policy instruments should rapidly affect it.
- 3) Non policy influence on it should be relatively small i.e., small relative to policy influence.
- 4) It should be readily observable with little or no time lag.

A monetary policy target, whether intermediate or final, carries important signals to the market, conveys the monetary policy stance in unambiguous terms and helps anchoring inflation expectation in the economy. In the West, several countries have switched over from intermediate monetary target to final inflation target because of the observed instability of the demand function for money, leading to uncertain relation between monetary aggregates and inflation rate. But in case of India, intermediate target plays an important role because of reasonable stable demand function of money.

Traditionally, three variables have served as candidates for monetary policy targets.

They are "Money Supply", "Bank Credit" and "Interest Rate" in securities market. Money supply is both an economic and policy controlled variable. As an economic variable, it is determined by public and banks portfolio behaviour. As a policy controlled variable, its variation is influenced by what the monetary authority thinks the appropriate size of primary as well as secondary money should be.

With the above the Reserve Bank of India (RBI) sets broad money (M<sub>3</sub>) expansion target in line with the expected rate of growth of GDP and a tolerable level of inflation. Consistent with the target level of broad money expansion is a desirable rate of reserve money expansion. The order of reserve money expansion has to be consistent with the likely fiscal and external payments position, since the main sources of reserve money expansion are the Net RBI credit to the government, and net foreign exchange assets. The targeted (M<sub>3</sub>) expansion is publicly announced through governor's statement on monetary and credit policy. The broad money target is also supported by a number of other indicators such as movements in interest rate, exchange rate, and availability of credit to productive sectors of the economy.

On a macro level, the target of monetary policy in Indian conditions has been the "control of reserve money" because of the relative stability of the money multiplier over a medium term, whether it is related to narrow money or broad money concept.

Chakravarthy committee report (1985) suggests reserve money represents those liabilities of the central bank and the government, that are deemed to be eligible as reserves to be held by banks for the purpose of the deposit money creation in a system, where the fractional reserve ratio governs the creation of deposit money. Accordingly, reserve money in India is the sum total of currency with Reserve Bank, public, banker's deposit with RBI, which are liabilities of the RBI to the non bank sector and hence equivalent to currency with public. The main sources of reserve money in India are the assets acquired by the RBI; and by government's currency liabilities to the public.

Reserve Money = Net RBI Credit to Government + RBI Credit to Banks + RBI Credit to Commercial Sector + Net Foreign Exchange Assets of RBI + Government's Currency Liabilities to the Public (–) less Net Non-Monetary Liabilities of RBI.

In the literature, the alternative to monetary targeting is the "Interest Rate". This is more appropriate, when various segments of financial markets are closely integrated with interest rates in the various markets influencing one another. This is not the case in India, even one does see the last few years, the beginning of such financial market integration has not taken place. Under these circumstances, it is better to target money rather than interest rate, although the monetary authority watches the behaviour of interest rates in the various markets and intervenes appropriately.

With the above, monetary targeting, that we have been using is a flexible one, which takes into account the various feedback. In the Indian context, "Monetary Aggregates" as intermediate targets are appropriate because of the following two reasons:

1) First, since the money demand function for India has remained stable, it continues to predict price movements with reasonably accuracy at least over a period of time.

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2) Second, the money stock target is relatively well understood by public at large. With the money supply target, the stance of monetary policy is unambiguously defined and gives a clear signal to market participants.

In recent times, it must be recognised that, the emphasis has also been on closely monitoring different indicators apart from relying in the intermediate target. For aiming at intermediate target viz, broad money, the overacting target is reserve money, particularly the bank's reserves, while the supplementary operating target is short term interest rates proxied generally by "overnight call money rates".

| Ch | Check Your Progress 1                                                                 |  |
|----|---------------------------------------------------------------------------------------|--|
| 1) | What do you mean by the term monetary policy framework?                               |  |
|    |                                                                                       |  |
| 2) | In new Keynesian framework, how can money supply influence the output?                |  |
|    |                                                                                       |  |
|    |                                                                                       |  |
| 3) | State the operating procedures of monetary policy followed in the late 1990s onwards. |  |
|    |                                                                                       |  |
|    |                                                                                       |  |
| 4) | Identify the appropriate targets of monetary policy in Indian situation.              |  |
|    |                                                                                       |  |

## 14.2.3.2 Monetary Policy Instruments

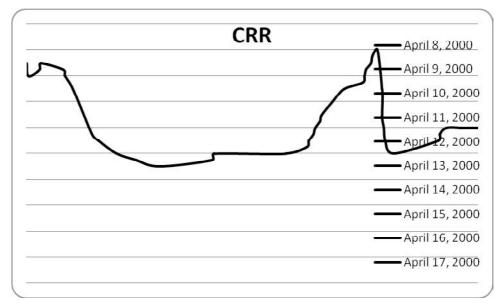
To maintain the financial and monetary stability on the one hand and to achieve ultimate objectives of Indian Economy on the other hand, the RBI put different policy measures by using direct and indirect instruments of monetary policy. The various major direct and indirect instruments during the 1980s and 1990s are Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR), directed credit, administered interest rates, Open Market Operation (OMO), refinance policy, selective credit controls and different measures for the development of the money market respectively.

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#### 14.2.3.2.1 Cash Reserve Ratio (CRR)

The cash reserve ratio refers to the cash which banks have to maintain with the Reserve Bank of India as a certain per centage of their demand and time liabilities. Under the provision of the Reserve Bank of India Act, the scheduled commercial banks were required to maintain with the Reserve Bank every week a minimum of average daily cash reserve equivalent to three per cent of their demand and time liabilities as an outstanding as on the Friday of the previous week. However, the Reserve Bank is empowered to vary the cash reserve ratio between three to fifteen per cent. The total cash reserves that are actually maintained by a scheduled commercial bank consists of the minimum statutory cash reserves of three per cent, additional reserves to meet the difference between CRR and statutory cash reserve of three per cent, the additional cash reserves relating to incremental demand and time liabilities as may be prescribed from time to time.

In 1980's the CRR was changed in different time periods as one of the important policy measures. During the beginning of the year 1987, there was a large increase in the overall liquidity. With a view to immobilising a part of the liquidity of the banking system without hindering the seasonal flow of credit to productive sectors, it was decided to raise CRR from 9 per cent to 9.5 per cent effective from the fortnight beginning February 28, 1987. In the period 1990-91, the Narasimham committee had recommended that the CRR should continue to be used as an instrument of monetary control. But it was recognised that the existing levels were high and needed to be brought down. In the first of 1991, a 10 per cent incremental CRR was introduced in May 1991. In view of the strongest expansionary impact of the large fiscal deficit in 1993-94 and the increase in net foreign exchange assets in the second half of 1993-94, it was necessary to raise the CRR. Accordingly, in the monetary policy announcement of May 14, 1994, it was indicated that the CRR would be raised by one per centage point from 14 per cent to 15 per cent in three phases. The year 1996-97 was significant in many ways in relation to the conduct of monetary policy in India. It was the first time the CRR was reduced sharply by 4 per cent points within a financial year in the five phases. A time series plot of CRR is presented below. The current rate of CRR is 6 per cent.



Thus CRR has been considered as the major instruments in 1980s. The trend of CRR in that period is very high. An increase in Cash Reserve Ratio (CRR) will make it mandatory on the part of the banks to hold a large proportion of their

deposits in the form of deposits with the RBI. This will reduce the size of their deposits and they will lend less, which has a adverse impact on the bank's profitability. However, this will in turn decrease the money supply. RBI uses this tool to increase or decrease the reserve requirement depending on whether it wants to affect a decrease or an increase in the money supply.

## 14.2.3.2.2 Statutory Liquidity Ratio

The Ratio of liquid assets to demand and time liabilities in India is known as the statutory liquidity ratio. Apart from the CRR, banks are required to maintain liquid assets in the form of gold, cash and approved securities. Higher liquidity ratio forces commercial banks to maintain a larger proportion of their resources in liquid form and thus reduces their capacity to grant loans and advances, thus it is an anti-inflationary impact. A higher liquidity ratio diverts the bank funds from loans and advances to investment in government and approved securities. Within the period of 1980's, with a view to regulating the liquidity and to provide resources for vital public sector investment within the framework of national priorities without generating reserve money, it was decided to increase the SLR. In the overall basis, in that particular period, the SLR was not that extent raised to regulate the liquidity position. Therefore, the price stability and the growth rate were not upto that level. That is why further deregulation of SLR was needed in the future period to achieve certain goals. In 1981, the SLR was raised from 34 per cent to 35 per cent in two phases to be effective from October 30, 1981. From the fortnight beginning April 25, 1987, the SLR was raised from 37 per cent to 37.5 per cent of net demand and time liabilities. With a large increase in reserve money by early December 1987 in addition with a sharp reduction in food credit consequent upon down of food grain stock with the public sector, an urgent need was felt to moderate the growth of overall liquidity of the banking system without affecting the credit requirements neccessary to support outputs. Accordingly from the fortnight beginning January 2, 1988, the SLR was raised to 38 per cent of net demand and time liabilities. With a view to moving towards the strong financial system, the SLR with effect from October 16, 1993, the incremental SLR for the increase in domestic net demand and time liabilities of scheduled commercial banks over the September 17, 1993 level has brought down from 30 per cent to 25 per cent. The base net demand and time liabilities for the purpose of mantaining SLR was brought forward from 3<sup>rd</sup> April 1992, 17<sup>th</sup> September 1993 and the SLR was fixed at 34.75 per cent. To ensure a uniform system of valuation of securities of SLR and balance sheet purposes, effective fortnight beginning October 14, 1995, all scheduled commercial banks were required to adopt the same system of valuation of securities as for the balancesheet. Effective fortnight beginning April 13, 1996, the SLR on outsatnding liabilities under the Non Resident (External) account (NRE) sceme was reduced from 30 per cent to 25 per cent in order to rationalise the overall SLR prescription. With a view to rationalising the multiple prescriptions of SLR by merging them into a single prescription effective fortnight beginning October 25, 1997, all scheduled commercial banks were required to mantain a uniform SLR of 25 per cent on their net demand and time liabilities, which is the minimum stipulated under Section 24 of Banking Regulation Act, 1949. The current SLR Rate stands at 24 per cent.

Thus the main objectives for mantaining the SLR are as follows. SLR is mantained in order to control the expansion of the bank credit; by changing the level of SLR, RBI can increase or decrease bank credit expansion; SLR ensures the solvency of commercial banks; by determining SLR, RBI in a way compels the commercial

banks to invest in government securities and government bonds. The RBI can increase the SLR to contain inflation, suck liquidity in the market to tighten the measures to safeguard the customers money.

## 14.2.3.2.3 Bank Rate Policy

The RBI act defines, the bank rate, the standard rate at which the Reserve Bank is prepared to buy or rediscounts bill of exchange or other commercial paper eligible for purchase under the provision act. According to the report of Chakaravarty committee, the RBI could be in a better postion to influence bank's operation through bank rate policy. The interest rates on Reserve Bank Credit to commercial sector could be specified only in relation to the bank rate. In the first half of the period in 1980s' in the very beginning, in July 1981, the bank rate was raised from 9 per cent to 10 per cent with consequential upward adjustment in the refinance rates for food and export credit and certain special facilities. Although, Chakravarty committee report put more emphasis on bank rate for the major policy measure, but it did not give any recommendation to increase or decrease the bank rate in the second half of 1980s. It remains 10 per cent till 1991-92. After the initiation of the financial sector reforms in the early 1990's, there was not much importance to the bank rate policy as the main instrument of the policy measure. In the mid 1990s, the bank rate has been reactivated by linking interest rates' significance to it. It is also the rate at which refinance would be accorded. This would fascilitate its emergence as the 'reference rate' for the entire financial syatem. During 1997-98, the bank rate was reactivated to serve as a refrerence rate a swell as an effective signalling mechanism to reflect the stance of monetary policy. Reflecting the prevailing liquidity conditions, the bank rate was reduced in three steps of one per cent point each in April, June and October 1997 to 9 per cent per annum, effective from October 22, 1997. Thus it is clear from the analysis that bank rate changed as many as five times during 1997-98. So it could be judged that bank rate is active instrument of policy making after the reform period of globalisation. The current bank rate in India stands at 6 per cent.

### 14.2.3.2.4 Interest Rate Policy

The interest rate structure in India is adminstered. It has been designed with a view to encouraging savings by providing savers an attractive enough rate of return on their funds, providing funds to priority or preferred sectors at concessional rates of interest and directing flow of credit to sectors in line with plan priorities. Interest rates have been changed from time to time taking into account the evolving economic situation as also societal interests. Thus in the lending side the maximum interest rate which was raised from 15 per cent in 1978 to an all time high of 19.5 per cent in 1981 in the light of the high inflation rate and the need to curb demand for credit was gradually brought down to 16.5 per cent by April 1987 reflecting moderation in Inflation.

In the period 1988-89, with a view of providing a better rate of return on short term surplus funds, the term deposits rate for 91 days, and above but less than six months was raised with effect from April 4, 1988 from 6.5 per cent to 6 per cent. As a result of this change, the deposit rate for 91 days and above but less than one year became 8 per cent. All other deposit rates remain unchanged. This change was not made applicable to FCNR / NRE deposits. In June 1988, the interest rates on deposits of the maturities of 6 months and above under foreign currency (Non Resident) Account (FCNR) scheme were revised. With effect from October 12, 1987, the interest rate on NRE deposits for 6 months and above but less than one year was raised from 8 per cent to 8.5 per cent.

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After liberalisation, on the basis of the report of the Narasimham committee (1991), the interest rate policy of India was changed in different direction. Both the lending rates and deposit rates were changed to get certain goals for the stabilisation of the economy. The minimum lending rates of scheduled commercial banks in response to the high inflation rate and the overall deterioration in the macro economic situation, to the high level of 20 per cent effective October 9, 1991. With the abatement of inflationary pressures, the minimum lending rates were reduced in four stages by one per centage point each from 20 per cent to 16 per cent effective June 24, 1993.

In view of the deceleartion in the inflation rate, a reduction in banks deposits rate was needed. This was effected in two stages enabling banks to mantain their economic viability. For the greater flexibility, schedule commercial banks were promoted effective from October 1, 1995 to fix their own interest rates on domestic term deposits with a maturity of over two years. The minimum period of term deposits has been reduced from 46 days to 30 days. Effective July 2, 1996 on domestic term deposits of 30 days and upto one year, the interest rate is prescribed at not exceeding 11 per cent per annum. In order to bring a better alignment of the maturity structure of domestic term deposits and Non Resident (External) rupee (NRE) term deposits, the interest rates and on NRE term deposits were raised twice during the year effectively by 4 per cent .

In April 1998, banks were provided greater flexibility in regard to certain aspects pertaining to deposits and lending. The minimum period of term deposits was reduced from 30 days to 15 days. Banks were permitted their own penal interest rates for premature withdrawal of domestic term deposits and NRE deposits as in the case of FCNR (B) deposits. In April 1999, it was decided to provide banks with freedom to operate different Prime Lending Rates (PLR) for different maturities. Jha (2002) explains that in India, interest rates are highly rigid due to the high public debt, high non-performing assets (which were underestimated) and Reserve Bank of India's (RBI) policy of continuous accumulation of foreign exchange reserves.

## 14.2.3.2.5 Money Market Measures

Money Market plays a pivotal role in the deployment of short term funds and in signalling trends in liquidity and interest rates. Money market is part of financial markets where instruments with high liquidity and very short term maturities are traded. Due to highly liquid nature of securities and thir short term maturities, money market is treated as a safe place. Therefore money market is a market where short term obligations such as treasury bills, commercial papers, certficate of deposits, and banker's accepatances are bought and sold.

Money markets exist to fascilitate efficient transfer of short term funds between holders and borrowers of cash assets. For the lender /investor, it provides a good return on their funds. One of the primary functions of the money market is to provide focal point for RBI's intervention for influencing liquidity and general levels of interest rates in the economy. RBI being the main constituent in the money market aims at ensuring that liquidity and short term interest rates are consistent with the monetary policy objectives. Investment in the money market is done through money market instruments. Money market instruments short term requirements of the borrowers and provide liquidity to the lenders. Common money market instruments are as follows:

a) *Treasury Bills*: Treasury bills, one of the safest money market instruments, are short term borrowing instruments of the Central Government of the country issued through the Central Bank of India. They are zero credit risk instruments and hence the returns are not so attractive. This is available in both primary and secondary markets. It is a promise to pay a said sum after a specified time period. Treasury bills are short term securities that mature in less than one year.

Following the recommendations of the committee to review the working of the monetary system to develop treasury bills as a monetary instrument with flexible rates, a schme for 182 days treasury bills, initially on a monthly auction basis, without any rediscounting fascilities with Reserve Bank was introduced and the first auction was held in November 1986. The new instrument was devised essentially to provide an alternative avaenue for short term investments and it was expected that over time, a wide array of maturities would emerge there by fascilitating the development of a secondary market. Then in view of the rise in the cut off yields in 182 day treasury bills in auctions effective March 28, 1989, the interest rate on refinance under this fascility was raised from 10.25 per cent to 10.75 per cent per annum, and in April 16, 1990, it was increased from 10.75 per cent to 11.25 per cent per annum. In order to discourage volatile movements in the treasury bills portfolio of the Reserve Bank, an additional fee on early rediscounting of 91 days treasury bills was introduced in November 1996. In the weekly auctions for 91 days treasury bills conducted since January 1993, a gross amount of ₹ 15,850 crore was raised in 1993-94 and 11,650 crore up to December 24, 1994 in 1994-95. In the fortnightly auctions for 364 days treasury bills, a gross amount of 20,323 crore was raised during 1993-94 and an amount (gross) of 16,469 crore during 1994-95. At present, the Government of India issues three types of treasury bills through auctions, namely, 91-day, 182-day and 364-day. There are no treasury bills issued by State Governments. Treasury bills are available for a minimum amount of Rs.25,000 and in multiples of Rs. 25,000. Treasury bills are issued at a discount and are redeemed at par. Treasury bills are also issued under the Market Stabilisation Scheme (MSS). T-bills auctions are held on the Negotiated Dealing System (NDS) and the members electronically submit their bids on the system. Non-competitive bids are routed through the respective custodians or any bank or Primary Dealers which is an NDS member.

- b) *Discount and Finace House of India*: The Discount Finanace House of India has been set up to promote a secondary market on various money market instruments. With the effect from July 28, 1988 the DFHI was allowed to participate in the call and notice money market both as a lender and borrower. As a step towards providing some flexibility to the money market, the operation of DFHI in the call or notice money market were exempted from the provisions of ceiling on the rate of interest set out by the Indian Bank's Association in October ,1988. This resulted in a limited freeing of the call money market rates and also enabled DFHI to effectively contribute to the overall stability of the money market. In April 2, 1992, the DFHI Ltd. has started dealing in dated government securities on a limited scale. This is a first step in the direction of developing a secondary market in government securities.
- c) *Certficate Deposits*: With a view to widening the range of money market instruments and to give investors greater flexibility in the deployment of their short term surplus fund, a new instrument has been introduced, that is Certificate of Deposits (CDs) in the first half of 1989-90. A certificate or deposit is a short-term borrowing note, like a promissory note, in the form of a certificate. It enables the

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bearer to receive interest. It has a maturity date, a fixed rate of interest and a fixed value. It usually has a term between 3 months and 5 years. The funds cannot be withdrawn on demand, but it can be liquidated on payment of a penalty. The returns are higher than T-bills as the risk is higher. Returns are based on an annual per centage yield (APY) or annual per centage rate (APR). However, in APR method, simple interest calculation is done to generate the return. Accordingly, if the interest is paid annually, equal return is generated by both APY and APR methods. However, if interest is paid more than once in a year, it is beneficial to opt APY over APR.

In the first half of financial year 1991-92, the outstanding amount of CDs issued by 46 major scheduled commercial banks as on February 22,1991 amounted to 3,035 crore and formed 69.2 per cent of the revised limits of 4,383 crore of these banks for issue of CDS. In 1992-93, with a view to enabling to raise resources at competitive rates of interest, scheduled commercial banks are permitted to raise CDs without any interest rate ceiling. To promote an orderly market for CDs, limits are prescribed for their issue, the new limits were introduced effective from April 17, 1993 being that CDs can be issued equivalent to 10 per cent of the fortnightly average outstanding aggregate deposits in 1991-92. Again in April 15, 1997, the minimum size of issue of certficate deposits to a single investor was reduced from Rs. 25 lakh to Rs. 10 lakh. Thus Certificates of Deposit (CDs) is a negotiable money market instrument and issued in dematerialised form or as a Usance Promissory Note, for funds deposited at a bank or other eligible financial institution for a specified time period. Guidelines for issue of CDs are presently governed by various directives issued by the Reserve Bank of India, as amended from time to time.

Commercial Paper: Commercial Paper (CP) is an unsecured money market d) instrument issued in the form of a promissory note. It was introduced in India in 1990 with a view to enabling highly rated corporate borrowers to diversify their sources of short-term borrowings and to provide an additional instrument to investors. Subsequently, primary dealers and satellite dealers were also permitted to issue CP to enable them to meet their short-term funding requirements for their operations. They are usually issued with fixed maturity between a minimum of fifteen days to one year from the date of issue. They are made for financing of accounts receivables, inventories and meeting short term liabilities. Say, for example, a company has receivables of Rs. 3 lacs with credit period 6 months. It will not be able to liquidate its receivables before 6 months. The company is in need of funds. It can issue commercial papers in form of unsecured promissory notes at discount of 10 per cent on face value of Rs. 3 lacs to be matured after 6 months. The company has strong credit rating and finds buyers easily. The company is able to liquidate its receivables immediately and the buyer is able to earn interest of Rs. 10K over a period of 6 months. They yield higher returns as compared to T-Bills as they are less secure in comparison to these bills; however chances of default are almost negligible but are not zero risk instruments. Commercial paper being an instrument not backed by any collateral, only firms with high quality credit ratings will find buyers easily without offering any substantial discounts. They are issued by corporate to impart flexibility in raising working capital resources at market determined rates.

The issue of commercial paer (CP) was relaxed to broad base the primary market and also to widen the scope for the secondary market. Some changes were made with effect from April 24, 1990. These are:

- The tangible net worth of the comapny issuing CP should not be less than Rs. 5 crore as per the latest audited balance sheet as against Rs. 10 crore as specified earlier.
- Working capital (fund based) limits of the comapny should not be less than Rs. 15 crore as instead of not less than Rs. 25 crore specified earlier.
- The denomination of CP would be in multiple of Rs.10 lakh instead of Rs. 25 lakh subject to the minimum size of an issue to a single investor being Rs. 50 lakh (face value) instead of Rs. 1 crore (face value).

Again on May 30,1991, a lot of changes were made in the operation of the instrument of commercial paper. These are:

- The working capital (fund based) limit of the issuing company was reduced to not less than Rs.10 crore instead at Rs.15 crore.
- The ceiling on the average amount to be raised by a company by issue of CP was raised from 20 per cent to 30 per cent of its working capital (fund based) limit.
- The denomination of CP could be in multiple of Rs. 5 lakh subject to the minimum size of an issue to a single investor being Rs. 25 lakh (face value) instead of Rs. 50 lakh (face value).

With effect from May 2, 1992, some significant relaxations were made in the guidelines relating to commercial paper, such as reduction in the working capital limit of a company for issue of CP to not less than Rs.5 crore instead of Rs.10 crore and the minimum credit rating requirement from the credit rating information services of India Ltd. (CRISIL) and Investment Information and Credit Rating Agency of India Ltd. (IICRA) kept as P2 and A2 instead of P1 and A1 respectively. Then in April 15, 1997, the minimum maturity of commercial paper was brought down from 3 months to 30 days.

**Repurchase Agreements:** Repurchase transactions, called Repo or Reverse Repo are transactions or short term loans in which two parties agree to sell and repurchase the same security. They are usually used for overnight borrowing. Repo/Reverse Repo transactions can be done only between the parties approved by RBI and in RBI approved securities viz. GOI and State Govt Securities, T-Bills, PSU Bonds, FI Bonds, Corporate Bonds etc. Under repurchase agreement, the seller sells specified securities with an agreement to repurchase the same at a mutually decided future date and price. Similarly, the buyer purchases the securities with an agreement to resell the same to the seller on an agreed date at a predetermined price. Such a transaction is called a Repo when viewed from the perspective of the seller of the securities and Reverse Repo when viewed from the perspective of the buyer of the securities. Thus, whether a given agreement is termed as a Repo or Reverse Repo depends on which party initiated the transaction. The lender or buyer in a Repo is entitled to receive compensation for use of funds provided to the counterparty. Effectively the seller of the security borrows money for a period of time (Repo period) at a particular rate of interest mutually agreed with the buyer of the security who has lent the funds to the seller. The rate of interest agreed upon is called the Repo rate.

The RBI has been using its Repo instrument effectively for absorbing excess liquidity and for infusing funds to ease the liquidity. The Repo rate set by the RBI

has also more recently become a sort of signalling rate along with the bank rate. The Repo rate currently, in a way, serves the purpose of a floor and the bank rate or refinance rate somewhat as a cap for the money market to operate within an interest rate corridor. The current Repo rate stands at 8.0 per cent and the Reverse Repo Rate stands at 7.0 per cent.

## f) Banker's Acceptance

It is a short term credit investment created by a non financial firm and guaranteed by a bank to make payment. It is simply a bill of exchange drawn by a person and accepted by a bank. It is a buyer's promise to pay to the seller a certain specified amount at certain date. The same is guaranteed by the banker of the buyer in exchange for a claim on the goods as collateral. The person drawing the bill must have a good credit rating otherwise the Banker's Acceptance will not be tradable. The most common term for these instruments is 90 days. However, they can very from 30 days to 180 days. For corporations, it acts as a negotiable time draft for financing imports, exports and other transactions in goods and is highly useful when the credit worthiness of the foreign trade party is unknown. The seller of goods need not hold it UNTIL MATURITY AND CAN SELL OFF THE SAME IN SECONDARY MARKET AT DISCOUNT FROM THE FACE VALUE to liquidate its receivables.

# 14.3 RBI'S INTERVENTION IN THE MONEY MARKET: REFINANCE, MARGINAL STANDING FACILITY AND LIQUIDITY ADJUSTMENT FASCILITY

In order to control the liquidity position in the financial system, RBI regularly intervenes in the market or to inject liquidity when there is a shortage of liquidity. There are two important ways in which RBI intervenes in the money market are through its standing facility or refinance and the Liquidity Adjustment Facility (LAF). The central bank provides liquidity to the banks when the banks face shortage of liquidity. This fascility is provided by the central bank through its discount window. Commercial banks can borrow from the discount window against the collateral of securities like commercial bills, government securities, treasury bills or any other eligible papers. In India, this type of support of the Central Bank earlier took the form of refinance of loans given by commercial banks to various sectors such as exports, agriculture etc. Under this fascility, commercial banks could borrow from the RBI certain per centage (as specified by the RBI from time to time) of the loans given by them to the specified sectors. RBI used the sector specific refianance facilities as an instrument of credit policy to encourage or discourage lending to particular sector by varying the terms and conditions of refinance.

The Reserve Bank of India (RBI) introduced a new Marginal Standing Facility (MSF) scheme on in its Monetary Policy for the year 2011-12. Under the new facility, banks will borrow overnight up to 1 per cent of net demand and time liabilities (NDTL) outstanding at the end of the second preceding fortnight. The MSF will be 100 basis points above the repo rate — the rate at which banks borrow from RBI. All scheduled commercial banks that have current account and subsidiary general ledger (SGL) account with RBI are eligible to participate in the MSF scheme. BI will receive requests for a minimum amount of Rs. 10 million and

in multiples of Rs. 10 million thereafter. The central bank has the right to accept or reject partially or fully, the request for funds under this facility. The Reserve Bank of India's new Marginal Standing Facility will help it to curb volatility in the overnight lending rates in the banking system.

In a quantity based monetary targeting framework, Reserve Money (RM) was used as the operating target and bank reserves as the operating instrument with broad money (M<sub>2</sub>) being the intermediate target. In the current monetary operating framework, reliance on direct instruments of monetary policy has been reduced and the liquidity management in the system is carried out through open market operations (OMO) in the form of outright purchases/sales of government securities and repo and reverse repo operations under Liquidity Adjustment Facility (LAF). The OMO are supplemented by access to the Reserve Bank's standing facilities combined with direct interest rate signals through changes in the Bank Rate/repo rate. In this direction, the LAF introduced in June 2000 has now emerged as the principal operating instrument of monetary policy. The LAF enables the Reserve Bank to modulate short-term liquidity under varied financial market conditions in order to ensure stable conditions in the overnight (call) money market. The LAF operates through daily repo and reverse repo auctions thereby setting a corridor for the short-term interest rate consistent with policy objectives. Although there is no formal targeting of overnight interest rates, LAF operation has enabled the Reserve Bank to deemphasise the targeting of bank reserves and focus increasingly on interest rates. This has also helped in reducing CRR without engendering liquidity pressure. On the recommendations of an RBI's Internal Group, RBI has revised the LAF scheme on March 25, 2004. Under the revised Scheme, RBI will continue to have the discretion to conduct overnight reverse repo or longer term reverse repo auctions at fixed rate or at variable rates depending on market conditions and other relevant factors. RBI has also had the discretion to change the spread between the repo rate and the reverse repo rate as and when appropriate.

## 14.4 RULES VERSUS DISCREATION

The basic framework for evaluating monetary policy showed that expectations about future inflation, and the manner in which those expectations are formed have a critical role to play in determining macro-economic outcomes in the economy. In other words, the current state of the economy depends on expectations of future inflation, which presumably would be affected by expected policy changes in the future.

Although the targets and instruments literature does not present a strong case for money supply targets another set of literature, i.e. literature on monetary rules suggests that the money supply should be controlled. The idea of monetary rules has two distinct elements. One is the idea that, all policy actions should be preannounced, so that the authorities are not allowed to carry out whatever policies they deem to be best at that time. The second element is that, monetary policy should not be activist. The next question essentially is one of whether or not they should incorporate feedback from economic events. Though these two issues are distinct, they are also linked in the sense that whether preannouncement is advisable is the extent to which rules incorporate feedback. At one extent, if a fixed rule (such as constant growth rate rule for the money supply) were being followed, nothing would be lost by announcing this policy to the public. At the other extreme, if policy rules incorporate very complicated feedback based on information that

may not be readily available to the public, preannouncement may be difficult and also pointless.

Two arguments of monetary rule suggests that the targets for money supply should play an important role. One of these arguments is a political one. According to this argument, discretionary power of any kind is liable to be abused, the power to control money supply being no exception. This power should therefore be limited by monetary constitution, an important part of which would be a rule for the growth rate of money supply. Upto this point the argument for a monetary target rested heavily on a rejection of the idea of a benevolent and independent policy maker and /or an assertion of the policy makers ignorance about the true model of the economy.

Broader developments in macro-economics, however, provided a new and more satisfactory defense. The natural rate hypothesis reduced the scope for policy to affect the real income and the rational expectations hypothesis in simple models appeared to eliminate it altogether. The second argument for money supply rules emerges from the rational expectation literature. With rational expectations, monetary policy affects real output only to the extent that it is unsystematic and thus unanticipated. Furthermore, unanticiapted policy while it does affect output, will on balance effect it in a detrimental way i.e. it will increase the variance of output. In addition, the Lucas critique and the time inconsistency problem suggest that finding optimal policy may not just be very difficult, it may not be a well defined optimisation problem. Thus, it has been argued that, it is preferable for the authorities to bind themselves to a monetary rule. Both arguments view the inroduction of a monetary rule as an alternative to discretion rather than announcement about the policies being implemented.

# 14.5 TRANSMISSION MECHANISM OF MONETARY POLICY

In recent years, economists have advocated that stabilisation of output and inflation be left to monetary policy. This is because Fiscal policy has lost its significance since 1960's partly because of concern over persistently large budget deficits, and partly because of doubts that the political system can make tax and spending decisions in a timely way to achieve desirable stabilisation outcomes. Meanwhile, monetary policy has been even more at the center of macro-economic policy making. Early in the history of dynamic economics, Ragner Frisch (1993) separated dynamic analysis of economic fluctuations into 'impulses' and 'propagation' process. Impulses occurs irregularly but when they occur, a propagation process distributes their effect through the economic system. Recent writers replace impulse with shock and propagation with transmission. Thus the transmission process describes how the economy responds to an impulse. Monetary policy is a powerful tool but one that sometimes has unexpected and unwanted consequences. Therefore, for the successful design and implementation of monetary policy, an accurate assessment of timing and effects of monetary policy on the economy is necessary. For that an understanding of mechanism through which monetary policy affects the economy is crucial.

Monetary policy acts through influencing the cost and availability of credit and money. The effectiveness of monetary policy essentially depends on the institutional framework available for transmitting impulses released by the central bank. Further, the interrelationship between money, output and prices, which constitutes the

fundamental buliding block in most of the macro-economic models lies at the core of monetary theory. One major concern of monetary authorities is to have a fairly accurate idea about the monetary transmission mechanism. Precisely, they are interested in the channels or routes through which the effects of monetary policy get transmitted to the economy in general and real sector in particular. Transmission channels are neither static nor uniform over time. Any chnages in the institutional set up must have bearing on the mecahnism and it is but natural for the transmission channels to undergo changes possibly making the earlier channels relatively less effective compared to the new ones. So, it is important to know the channels on regular basis, to enable the policy makers to get much needed insight about the channels on regular basis. The transmission mechanism includes the various channels through which the policy operates such as quantum channel, especially relating to money supply and credit rate channel such as interest rate channel, exchange rate channel and asset prices channel.

## 14.6 MONETARY POLICY LAGS

One of the most contentious issues in the moneyaty policy literature, are the lags in monetary policy. The impact of monetary policy categories lags into two major parts, viz (i) 'inside lag' and (ii) 'outside lag'. The inside lag referes to the lag within the central bank between the time action is needed and the time action is actually taken. The outside lag referes to the lag between the change in rate of interest and availability of credit and the initial impact on real variables such as output and employment.

In talking about the process of policy formulation in central banks, we are primarily concerened with the inside lag. Inside lag categorise into two parts such as recognition lag and the decision lag or action lag. The recognition lag measures the lag between the time action is needed and the time recognised by the central bank. This largely depends upon the efficiency of the central bank in collecting and interpreting data relating to economic conditions. The decision lag refers to the lapse of time between the recognition of the need for change and the taking of the action. Action lag is the lag between the policy decision and its implementation. The length of the inside and outside lags is one argument against the use of discretionary policies to stabilise business cycles.

## **Check Your Progress 2**

| 1) | What are the various direct and indirect instruments of monetary control? |
|----|---------------------------------------------------------------------------|
|    |                                                                           |
|    |                                                                           |
|    |                                                                           |
|    |                                                                           |
| 2) | Define how the Reserve Bank of India intervenes in the money market?      |
|    |                                                                           |
|    |                                                                           |
|    |                                                                           |
|    |                                                                           |

## 14.7 LET US SUM UP

The financial sector in India is still in a state of transition because of ongoing reforms and the growing integration between different segments. No doubt, the degree of operational freedom of the Reserve Bank has been enhanced with the elimination of the central government's automatic access to RBI credit. However, a major constraint in the conduct of monetary policy is the inadequate depth and liquidity in the secondary market for government securities and money market instruments. Therefore, Reserve Bank relies on the Cash Reserve Ratio as an important operating instrument. Thus, it has been the endeavour of the Reserve Bank to develop both depth and liquidity in money and government securities markets through institutional measures so that, eventually, the dependence on the CRR is reduced.

## 14.8 EXERCISES

- 1) Describe the objectives and indicators of monetary policy in an economy? Also explain the operational procedure of the monetary policy in India.
- 2) What are the various targets of monetary policy? What are the various criterions to define a good target variable.
- 3) Define the Transmission Mechanism and lags in Monetary policy framework?
- 4) Examine the role and significance of a well developed money market in the process of economic growth of a country.
- 5) What are the conditions for sustaining high economic growth rates and how can these be helped by monetary policy?

## 14.9 KEY WORDS

Cash Reserve Ratio (CRR):

The cash reserve ratio refers to the cash which banks have to maintain with the Reserve Bank of India as a certain per centage of their demand and time liabilities. Under the provision of the Reserve Bank of India act, the scheduled commercial banks were required to maintain with the Reserve Bank every week a minimum of average daily cash reserve equivalent to three per cent of their demand and time liabilities as an outstanding as on the Friday of the previous week.

**Statutory Liquidity Ratio (SLR) :** The Ratio of liquidity assets to demand and time liabilities in India is known as the statutory

Reserve Money

liquidity ratio. The main objectives for mantaining the SLR are as follows. SLR is mantained in order to control the expansion of the bank credit; by changing the level of SLR, RBI can increase or decrease bank credit expansion; SLR ensures the solvency of commercial banks; by determining SLR, RBI in a way compels the commercial banks to invest in government securities and government bonds. The RBI can increase the SLR to contain inflation, suck liquidity in the market to tighten the measures to safeguard the customers money.

: Reserve money represents those liabilities of the central bank and the government, that are deemed to be eligible as reserves to be held by banks for the purpose of the deposit money creation in a system, where the fractional reserve ratio governs the creation of deposit money. Accordingly, reserve money in India is the sum total of currency with Reserve Bank, public, banker's deposit with RBI, which are liabilities of the RBI to the non bank sector and hence equivalent to currency with public. The main sources of reserve money in India are the assets acquired by the RBI; and by government's currency liabilities to the public.

Reserve Money = Net RBI Credit to Government + RBI Credit to Banks + RBI Credit to Commercial Sector + Net Foreign Exchange Assets of RBI + Government's Currency Liabilities to the Public (–) less Net Non-Monetary Liabilities of RBI

**Marginal Standing Facility** (MSF)

The Reserve Bank of India (RBI) introduced a new Marginal Standing Facility (MSF) scheme on in its Monetary Policy for the year 2011-12. Under the new facility, banks will borrow overnight up to 1 per cent of net demand and time liabilities (NDTL) outstanding at the end of the second preceding fortnight. The MSF will be 100 basis points above the repo rate – the rate at which banks borrow from RBI. All scheduled commercial banks that have current account and subsidiary general ledger (SGL) account with RBI are eligible to participate in the MSF scheme.

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# 14.11 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

## **Check Your Progress 1**

- 1) See Section 14.2
- 2) See Section 14.2.1
- 3) See Sub-section 14.2.3
- 4) See Sub-section 14.2.3.1

## **Check Your Progress 2**

- 1) See Sub-section 14.2.3.2
- 2) See Section 14.3
- 3) See Section 14.5