

# VII

## ISSUES IN MONETARY AND FISCAL INTERFACE

7.1 Central banking is an evolving process responding to political and economic forces over a period of time. In principle, effective coordination between the central bank, which formulates monetary policy, and the Government, which is responsible for fiscal policy, is required for achieving the common set of macroeconomic objectives.

7.2 In operationalising monetary-fiscal coordination, Governments in a number of countries in recent years have increasingly disciplined themselves by enacting fiscal responsibility legislations encompassing, *inter alia*, restrictions on central bank accommodation and setting of borrowing limits while making monetary policy more flexible and independent for stabilising inflation. This has been further supported by explicit articulation of the role of an independent central bank. Importantly, some countries that have had a history of hyper-inflation have often enacted legislations on central bank autonomy.

7.3 The Reserve Bank of India, although established as a privately owned and managed entity, was virtually subservient to the directives of the Government. In this regard, while the members of the Central Board of the Reserve Bank represented domestic interests, the Governor was appointed by the British Government to look after the interests of the Crown and ensure that the Reserve Bank's policies did not conflict with those of the Bank of England. In fact, the Reserve Bank's Board had to perforce tune its decisions on monetary and exchange rate policies in accordance with the requirements of the British Government.

7.4 The monetary fiscal interface in post-Independence India since nationalisation of the Reserve Bank in 1949 has followed a sequence typical of a developing country. With the onset of development planning, fiscal policy assumed the responsibility of triggering a process of economic growth through large public investment, facilitated by accommodative monetary and conducive debt management policies. In this context, it may be noted that fiscal, monetary and debt management policies have been inextricably interrelated in the determination of the level, composition and cost of public debt. The rationale of financing public debt at sub-market rates was that public sector projects having long gestation lag require

low interest rates, which the Government should be able to get by virtue of being a sovereign borrower. While this enabled the Government to reduce the cost of financing, it often constrained monetary policy instrument-independence in pursuing macroeconomic policy objectives. By the end of the 1980s a fiscal-monetary-inflation nexus was becoming increasingly evident whereby excessive monetary expansion on account of monetisation of fiscal deficits fed into inflation, which in turn, led to a greater increase in the expenditures of the Government than its revenue mobilisation thereby further widening the budgetary gaps. As a rearguard action, the Reserve Bank endeavoured to restrict the monetary impact of budgetary imbalances by raising the reserve ratios to be maintained by banks thereby adversely affecting their profitability *vis-à-vis* non-banks. As the growth of pre-empted resources was inadequate to meet the Government's requirements, it had to perforce borrow funds from outside the captive market by offering fiscal privileges. The unsustainability of this development process necessitated a multi-pronged reform strategy in fiscal, monetary and debt management policies during the 1990s so as to usher in greater instrument-independence for the Reserve Bank.

7.5 Against the above backdrop, the remainder of the chapter is organised as follows. Section I presents the evolution, theory and analytical framework of monetary fiscal interface. Section II discusses cross-country practices in this regard emphasising that though monetary fiscal interface differ on the modalities, a common realisation is that consistency and complementarity of monetary and fiscal policies are required to engender market confidence and ensure monetary stability. The evolutionary process of monetary fiscal interface in India during the period 1935-2003, sequenced into three phases, is discussed in Section III. The first phase covers the formative years (1935-1950), the second phase discusses the period of fiscal activism and monetary accommodation (1950-1991) and the third phase depicts the macroeconomic crisis followed by fiscal and financial sector reforms (1991-2003). A critical link between the monetary and fiscal policies in India has been the management of public debt by the Reserve Bank. Accordingly, Section IV presents the evolving public debt management of the Reserve

Bank, tracing the shift from a passive to a more active debt management strategy. Section V discusses the fiscal legislation, monetary management and debt management covering the period 2003-2005. The monetary-fiscal coordination in the context of the Fiscal Responsibility and Budget Management (FRBM) Act is set out in Section VI. Section VII presents an assessment of monetary fiscal interface in India while Section VIII puts forth some issues by way of concluding observations.

## I. MONETARY FISCAL INTERFACE: EVOLUTION, THEORY AND ANALYTICAL FRAMEWORK

### Evolution

7.6 Central banks have a distinct historical origin which influences not only the tasks that these banks perform at present, but also the way in which they operate. Although central banks may differ in terms of their operating procedure, they are universally responsible for the conduct of monetary policy. In this regard, the refinements in monetary theory have greatly contributed towards developing a theory of central banking.

7.7 The early central banks (like in Sweden and England) were not intended to undertake the functions of a modern central bank but were set up to support the Governments in financing their budgetary gaps. This was facilitated by the legislations granting monopoly rights of issuing currency to the central banks. Such delegation of the power to the central bank for money creation entails with it the responsibility to preserve the value of currency. Over a period of time, the privileged position of the central bank, being the monopoly issuer of currency and simultaneously acting as the banker to the Government, resulted in a situation where the owner of the central bank (*i.e.*, the Government) became its principal debtor. As a stakeholder, Governments became prone to leveraging their central bank indebtedness for their financing purposes. However, such unmitigated access to central bank credit often resulted in erosion of the value of the currency issued by the central banks. While the lower value of currency mitigated the real burden of Government debt, it also created an uncertain macroeconomic environment in terms of lower purchasing power of the currency. Thus, the role of the central bank being the banker to the Government hindered its principal objective of maintaining monetary stability. Therein lay the genesis of the conflict of monetary policy objectives of the central bank with its role of being the banker to the Government.

7.8 Evidence suggests that Governments utilised their unlimited access to central bank credit for financing colonial expansion, wars and for building up the war ravaged economies post-World War II (Jadhav, 2003). During this period, the pressures of deficit financing of Governments did not fuel inflationary expectations as economies operated below their existing capacities. However, with progressively higher capacity utilisation, the fiscal policy-led recovery process quickly hit a roadblock in the wake of supply shocks such as spiralling international oil prices and real productivity shocks. This resulted in economic stagnation while stoking inflationary pressures across countries leading to stagflation in the 1970s. Accordingly, a reassessment of the role and objectives of central banks was made, both in academic circles and by policy makers, whereby primacy was accorded to the objective of price stability *vis-à-vis* the pursuit of an accommodative monetary policy stance in financing Governments. There was a realignment of policy priorities by various Governments and central banks with the former being bestowed with the responsibility of enhancing economic growth while the latter was mandated to ensure monetary stability. However, as both these objectives are desirable from a societal perspective, better coordination between the two arms of economic policy (fiscal and monetary) has been emphasised since the mid-1980s for realising stabilisation objectives.

### Macroeconomic Theory

7.9 Keynes revolutionised macroeconomic thinking by constructing a monetary theory that revolved around a fully developed financial system with the central bank at its centre (Keynes, 1936). The Keynesian vision of the economic system was not that of a self-regulating entity, but of a complex set of causal linkages that a policy maker seeks to guide. In this context, whereas fiscal policy measures were recognised as the prerogative of national Governments, the levers of monetary policy lay with the central bank for steering the economy in the desired direction.

7.10 Deviating from the classical economists view that money is just a *veil*, Keynes integrated the monetary and the real sectors of the economy by emphasising the interlinkage between the rate of interest and the level of investment in the economy. He argued that central banks, by creating money, could precipitate a change in the rate of interest, which in turn, may alter the incentives for firms to make long-

term investments, and therefore influence the level of real economic activity. Since money can be created by the central bank by directly financing developmental expenditure or indirectly through funding of Government deficits, the genesis of monetary-fiscal nexus was embedded in Keynesian monetary theory. Keynes, however, suggested that the relationship between money demand, interest rates and the level of economic activity was volatile, subject to sharp changes depending on the expectation of wealth holders and their fears about the future.

7.11 In the first two decades after World War II, the Keynesian orthodoxy took the position that spending decisions of consumers and firms move largely independent of asset rates of return and is more responsive to expectational variables. This extreme non-monetary interpretation of Keynes became the conventional wisdom for central bankers. As a result, fiscal policy came to the centre stage of policy affairs while monetary policy was relegated to the background. The ascendancy of fiscal policy during this period was partly due to the Depression of 1930s and the process of post-World War II reconstruction besides the acceptance of the Keynesian policy prescription that deficiency of aggregate demand could be resolved by expansionary fiscal policy.

7.12 The Keynesian orthodoxy was called into question by a series of events in the early 1970s: breakdown of the fixed exchange rate system, the first OPEC oil shock, bad harvests and crop failure combined with the aftermath of the Vietnam War led to acceleration in inflation and high unemployment in the USA. The economies of several other countries also faltered simultaneously. This phenomenon of 'stagflation' seemed at odds with the conventional wisdom of the short-run Phillips curve trade-off of achieving lower unemployment rate at the cost of higher inflation. Subsequent analysis showed that there is essentially no long-run trade-off between inflation and unemployment, which paved the way for a more determined fight against inflation.

7.13 During the 1970s the new-classical economists, assuming rational expectations of market participants and a market-clearing approach without rigidity, argued that anticipated policy measures do not matter and only unanticipated policy can have any real, but temporary, impact. In order to avoid generating such surprises on market participants, it was argued

that stabilisation policy should not be discretionary as it leads to market distortions. Hence, rule based monetary and fiscal policy, which helps in avoiding expectational mismatches and uncertainty of outcomes, were recommended for policy purposes.

7.14 The rational expectations paradigm substantially influenced the theory and the conduct of future monetary policy. Economists of Keynesian persuasion demonstrated that, even with the assumption of rational expectations, anticipated policy measures could have real effects provided the market clearing assumption was relaxed (Fischer, 1977 and Phelps & Taylor, 1977). Further research underscored the view that fiscal policy is not sufficiently agile to be effective in a stabilisation role as it is heavily influenced by exogenous political considerations (Dornbusch and Fischer, 1990). Thus, the role of macroeconomic stabilisation was largely left to the central bank; fiscal policy represents merely another demand shock to be countered by monetary policy. As a result, monetary policy gained ascendancy necessitating, in many cases, institutional changes like the creation of independent central banks to counter fiscally profligate governments. Such thinking largely influenced the functioning of the erstwhile German Bundesbank and laid the foundation for the European Central Bank.

7.15 During the 1980s, the theory of stabilisation policy received a further boost through the application of game theory. In this set-up, non-cooperative behaviour in the form of frictions between the two arms of economic policy (fiscal and monetary) resulted in sub-optimal outcomes for society involving losses in social welfare. As a result, greater monetary fiscal coordination has been emphasised upon since the mid-1980s in order to achieve the socially desirable objectives of growth along with price stability.

### **Monetary Fiscal Coordination: Theoretical Underpinnings**

7.16 The traditional targets and instruments approach of Tinbergen provides a useful framework for monetary-fiscal coordination, as the coordination problem is basically one of an effective shortage of instruments (Tinbergen, 1952)<sup>1</sup>. If the number of fiscal instruments is adequate, it is not necessary for the Government to coordinate its actions with those of

<sup>1</sup> Stabilisation policy suffers from difficulties arising out of the interrelationship between instruments and targets as the pursuit of one target could drive another off course. In this context, Tinbergen advocated the choice of one single instrument for the pursuit of one specific target, *i.e.* the number of targets and instruments should be identical.

the central bank. In this regard, it is important to know the number of independent instruments at the disposal of both the Government and the central bank, and this depends on both the choice of appropriate model of the economy and the precise list of targets. If the fiscal instruments are potent, they may be adequate, provided monetary policy is perfectly coordinated with fiscal policy as lack of coordination more often results in a sub-optimal outcome (Box VII.1). There is a perverse case, however, in the Latin American context (*viz.*, Argentina) where a hyper-inflationary situation warranted fiscal measures such as indexation of wages and salaries to protect real consumption levels. This resulted in a wage-price spiral with the economy getting permanently saddled with higher inflation. Thus, monetary-fiscal coordination, in terms of greater accommodation of inflation from the fisc, resulted in an inferior outcome.

7.17 Another strand of research, however, suggests that monetary-fiscal coordination is not important<sup>2</sup>. In the forward-looking New-Keynesian models, the fiscal stance is relevant to monetary policy only to

the extent that it represents a demand shock, to be offset by the monetary authority. Over a longer horizon, fiscal consolidation will result in a lower equilibrium real interest rate (Taylor, 1995). In such an environment, keeping inflation near a target will require a reduction in nominal interest rates. Fiscal policy shifts will, therefore, require monetary policy adjustments, but the mix between fiscal and monetary policy remains irrelevant to macroeconomic outcomes.

7.18 The irrelevance of the policy mix, however, is not conclusive as there are three distinct, but interrelated, issues in favour of policy coordination (Kuttner, 2002). First, the most obvious impact of the monetary-fiscal policy mix on economic outcomes is on the composition of output. In a closed economy, any increase in real Government expenditure leads to some crowding out of investment demand. By reducing the real interest rate, expansionary monetary policy can offset some of the crowding out, although presumably at the cost of higher inflation. Moreover, a related dimension concerns the effect of the

#### Box VII.1

##### Issues in Monetary and Fiscal Coordination

There are several merits in coordinating fiscal and monetary policies. First, they interact to affect aggregate demand and determine output and interest rates in the short run. Second, in an open economy context, while higher interest rates arising out of tight monetary policy can adversely influence the cost of production of tradable goods, fiscal policy measures through tariffs, quotas and customs duties can alleviate the burden of producers of such goods. Third, monetary-fiscal coordination ensures the optimal mix of bond and money financing of Government deficits as open market operations of the central bank determines the extent of money/bond financing. Fourth, political pressures may impose coordination as Governments, in a democracy, enjoy popular mandate in setting economic policy objectives, which the monetary authority has to adhere to. Fifth, timing considerations and variable lags with which fiscal and monetary policy instruments impact upon targets in the short and long run also necessitate some coordination between the two arms of economic policy. Finally, uncertainty about uncoordinated policy outcomes may be minimised through active coordination as coordination failures often result in large losses of social welfare.

The moot question, however, is whether more coordination is necessarily better. If the central bank and the

Government agree on what needs to be done, but a coordinated approach cannot be put in effect because of errant behaviour by one of the two authorities, then coordination must improve things whereby the sensible policy maker must dominate the perverse one. In reality, however, fiscal and monetary policies are often poorly coordinated. If both authorities take consistent and credible actions, then the lack of coordination can stem from one of three causes, *viz.*, (i) the fiscal and monetary authorities might have different objectives, *i.e.*, different conceptions of what is best for society; (ii) the two authorities might have different opinions about the likely effects of fiscal and/or monetary policy actions on the economy, *i.e.*, they might adhere to different economic theories; and (iii) the two authorities might make different forecasts of the likely state of the economy in the absence of policy intervention (Blinder, 1982). The coordination problem can be solved by vesting the powers of decision making in the hands of the authority with the proper objective or correct theory or accurate forecast, if it is known which of the two authorities is correct. In reality, this is rarely known in advance. The best strategy, therefore, is to give some power to each authority and also to give each some ability to cancel out the actions of the other, although this may result in a conflict of interest in the worst case or, more often, end in a stalemate.

<sup>2</sup> In the Mundell-Flemming framework, the issue of coordination between monetary and fiscal policies does not exist in a world of perfect capital mobility, as fiscal policy is only effective if the exchange rate is fixed while monetary policy is effective when exchange rate is flexible.



monetary-fiscal policy mix on the current account of the balance of payments. Any fiscal expansion would tend to increase the domestic interest rate and the resulting interest rate differential will induce an inflow of foreign capital thus limiting the crowding out. However, the capital inflows imply a current account deficit brought about by an appreciation of the domestic currency. This was the conventional explanation on 'twin deficits' of the USA in the 1980s. More recently, the opposite problem, *i.e.*, tight fiscal policy and loose monetary policy was responsible for the weakness of the euro immediately after its launch in 1999 (Cohen and Loisel, 2001).

7.19 A second set of monetary-fiscal interactions stems from the implications of the view that every fiscal policy action involving an increase in the current budget deficit must be financed either through an increase in future tax revenues or through erosion in the value of nominally denominated Government liabilities, such as money which may involve overtly resorting to seignorage to finance the deficit. Even without an explicit monetary response, the intertemporal fiscal balance could be restored through an increase in the price level thereby reducing the value of outstanding Government liabilities. While the conventional view is that fiscal deficit leads to excessive monetary expansion resulting in inflation, the 'Fiscal Theory of the Price Level' (FTPL) argues that fiscal imbalances lead to an increase in inflation and it is the money supply that subsequently adjusts to higher prices (Woodford, 2001).

7.20 A third set of considerations arises with the non-cooperative behaviour between the monetary and fiscal authorities. The behaviour of the fiscal authority can affect the monetary authority's ability to attain its inflation objective. However, the underlying source of conflict in these situations stems from differences between the authorities' goals. While the monetary authority aims to reduce output and inflation below the fiscal authority's desired level, fiscal policy aims to raise output and inflation above the comfort zone of the monetary authority. The non-cooperative outcome is an inflationary fiscal policy, which is offset by a contractionary monetary policy (Nordhaus, 1994). Moreover, pre-commitment on the part of the monetary authority is not useful as the value of the commitment gets completely negated by discretionary fiscal policy actions (Dixit and Lambertini, 2003).

### Analytical Framework of Monetary Fiscal Interface

7.21 Fiscal and monetary policies are the two arms of overall macroeconomic policy and share the basic objectives of economic stabilisation. While fiscal policy determines the size of public debt, monetary policy determines the extent of its financing from the central bank and debt management policy decides the cost and composition of public debt. The objectives of these policies may not always be in harmony; moreover, these policies may have inherent advantages in achieving certain objectives which call for policy coordination. In this regard, several issues can be addressed within a broad common framework of monetary-fiscal coordination.

7.22 The relationship between fiscal and monetary policies can be analysed in the context of the choice between bond financing and money financing of fiscal deficit. Bond financing entails net placement of government debt in domestic or foreign markets. Money financing<sup>3</sup>, on the other hand, arises out of changes in central bank accommodation to government in the forms of central bank's subscription to primary issuance of Government paper, open market operations and clean advances. A high proportion of bond financing adversely impacts on economic growth through upward pressure on interest rates. Money financing, with consequent impact on the monetary-base, fuels inflationary pressures which in turn leads to a larger deficit, thereby, resulting in a vicious circle of high deficit, high money financing and high inflation<sup>4</sup>. Monetisation of government deficit need not necessarily have an adverse effect, especially under conditions of excess capacity.

7.23 Money financing of the fiscal deficit is seldom voluntary on the part of the central bank. A central bank may be obligated to extend credit to Government through subscription to Government paper in the primary market auctions. Similarly, stipulated provisions in the charter of central banks about mandatory transfer of annual profits due to government ownership of central banks are further examples of non-voluntary financing. Moreover, the financing of fiscal deficit may be at market related rates or at highly concessional rates, the latter being a derivative of non-voluntary financing. Furthermore, exchange guarantees, deposit insurance, contingent liabilities and directed credit are some quasi-fiscal

<sup>3</sup> A distinction also needs to be made between direct monetisation and monetisation through operations in the secondary market.

<sup>4</sup> The "Unpleasant Monetarist Arithmetic" proposition of Sargent and Wallace (1981) demonstrated that bond financing could also lead to greater inflationary pressures, which gives a fiscal causation to inflation.

activities undertaken by the central bank on behalf of the Government, whose costs do not get reflected directly in the Government's budget. In contrast, central bank purchase of Government paper in the secondary market, governed by liquidity management considerations, is an example of voluntary financing.

7.24 In the above context, it is pertinent to note that each form of financing of fiscal deficit has a different impact on monetary policy. While reliance on domestic credit has implications for credit availability for the commercial sector, interest rates and monetary base, reliance on foreign borrowing additionally impinges on management of the external sector. Financing deficit through Government bonds in a non-voluntary manner may also result in crowding out of the private investment. The analytics of monetary-fiscal policy interface is thus not confined only to the quantum of monetisation of fiscal deficit, but extends to optimal financing mix for the fiscal deficit that stabilises inflation, interest rates and exchange rates at levels conducive for macroeconomic stability (Reddy, 2000a).

7.25 Successful stabilisation policy requires that fiscal and monetary policies are perfectly coordinated, both for expansion and contraction of economic activity. In advanced economies, the need for coordination is relatively less as each policy pursues its own path and objective and adjustments are made through market forces. In developing countries, however, there is a greater requirement for closer coordination since the market mechanism is not perfect. Moreover, conflicts of interest may arise between the policy authorities and the sub-targets assigned to each policy, which necessitate closer coordination. It is important to recognise, however, that the instrumentality of coordination has to be tailored to suit country specific circumstances and requirements.

## II. MONETARY AND FISCAL INTERFACE: CROSS COUNTRY EXPERIENCE

7.26 Although there seems to be an emerging consensus, in principle, with regard to the benefits of a coordinated approach in policy formulation, in practice, however, the institutional setting and operational arrangements for the coordination of monetary and fiscal policies differ widely among

various countries. The exact scope and content of coordination varies depending on the country's history, socio-political considerations, the stage of financial market development and the objectives set for these policies. However, a common thread seems to be the imposition of formal restrictions on Government access to central bank credit. In this regard, greater autonomy for the central bank is suggested, as an institutional mechanism, to limit the flow of resources from the central bank to the Government (Alesina, 1988). Typically, arrangements have been made to restrict (i) direct credit; (ii) profit transfers; (iii) *quasi*-fiscal activities; and (iv) separate debt management from monetary policy functions. The following paragraphs enumerate, in brief, the various country practices and international experience on these issues.

### Central Bank Credit to Government

7.27 A starting point to evaluate the nature of coordination between monetary and fiscal authorities is to see the extent of accommodation to the fiscal authority by the central bank. A survey conducted by the Bank of England comparing 122 developing countries with 20 OECD (Organisation for Economic Cooperation and Development) countries shows that although there was not much to choose between the two groups in terms of growth rates, inflation was three times higher in developing countries (Fry *et al*, 1999). Furthermore, developing countries relied heavily on reserve requirements (bank reserves held with the central bank were five times higher than in developed countries) to neutralise the monetary impact of Government borrowing (Governments borrowed twice the amount from central banks in developing countries than that in the OECD countries). These findings suggest that fiscal forbearance has been practiced to a great extent in developing countries in the presence of a subservient monetary authority<sup>5</sup>.

7.28 Central bank credit to Government is the most visible form of revenue transfers and has attracted the maximum attention of policy authorities seeking monetary-fiscal coordination. The general approach has been to set limits to the access of Governments to credit from the central bank<sup>6</sup>. Usually, constraints are binding on direct forms of credit. A

<sup>5</sup> Fiscal forbearance is attributed to four factors, viz., (i) Government ownership of central banks; (ii) Governments are entitled to seignorage profits from central banks currency issuance; (iii) central banks act as bankers to the Governments and (iv) central banks manage the public debt of Governments for a commission (Pringle and Courtis, 1999).

<sup>6</sup> A study conducted by the IMF showed that at end-December 1992, more than half of the countries surveyed prohibited overdrafts on current account to Governments. 44 per cent of developed countries and 22 per cent of developing countries prohibited loans and advances (Cottarelli, 1993).

cross-country survey on the monetary policy frameworks of 94 economies conducted by the Bank of England in 2000 reveals a strong preference for prohibition of any form of central bank financing to the Government (Table 7.1).

7.29 Many countries prohibit central bank purchase of Government securities in the primary market through fiscal responsibility legislation. On the other hand, secondary market purchases and Government deposits with the central bank are relatively unconstrained. Examples of countries with binding constraints on Government's access to central bank credit are Germany, USA, Japan and France among developed countries, and Chile, Peru, Argentina and Brazil among developing countries. Countries with weak constraints are UK, Spain, Ireland and Italy among developed countries and India, Indonesia and Malaysia among developing countries. In countries where financial markets are underdeveloped, there is no viable alternative to allowing Governments to access credit from the central bank. Even if ideal conditions do not exist, all credit to Government by central banks should be at market rates, securitised and credit arrangements such as ceilings and limits should be clearly specified. Compliance criteria should be set out with the consequence of non-compliance stated explicitly. At the same time, there should be limits in place on indirect forms of credit from the central bank to the Government, such as through financial institutions and public sector enterprises.

### Central Bank Profits

7.30 Another form of revenue transfer is profits of central banks<sup>7</sup>. In fact, Governments may consciously limit credit taken from central banks in

the interest of credibility and maximise profit transfers, which do not carry a cost in the form of interest rate charge and help to bridge the revenue account of the budget. In this regard, an effective mechanism for ensuring higher profit transfers from the central bank is to ensure a higher level of indebtedness of the Government to the central bank. A larger amount of subscription to Government securities by the central bank would augment its interest income, which can then be passed on to the Government as higher profits<sup>8</sup>. Calculations show that profit transfers were as high as 4 to 5 per cent of GDP in some countries (Fry *et al, op cit*). In several cases, independent calculations of seignorage were higher than transferred profit. This indicates that central bank transfers are often more hidden than actual (Fry *et al, op cit*).

### Quasi-Fiscal Activities and Central Bank Losses

7.31 Another way of monetisation is to transfer some activities, which are fiscal in character, from the Government to the central bank. Debt management, exchange rate management when the exchange rate regime is determined by the fiscal authority, financial sector strengthening, exchange guarantees, deposit insurance and contingent liabilities, directed credit and financial repression are all *quasi-fiscal* activities which are often conducted by the central bank on behalf of the Government. They are not a charge on the budget and, therefore, remain hidden. The costs, and more importantly, the losses arising out of these activities, show up in the balance sheet of the central bank and hence on a lower transfer of profits to the Government. In particular, *quasi-fiscal* activities resulted in central bank losses in Latin American countries such as Chile in the late 1980s. In the Philippines during the 1990s,

**Table 7.1: Central Bank Credit to Government**

Limits on Central Bank Financing of Fiscal Deficit	(Number of Countries)			
	Industrialised	Transitional	Developing	All
1	2	3	4	5
(i) Prohibited, never used, very small amounts	26	11	9	46
(ii) Narrow, well enforced limits	1	5	9	15
(iii) Limits exist that are usually enforced	1	4	20	25
(iv) Wide limits exist and some procedures exist when limits are missed	0	2	5	7
(v) No limits or little enforcement	0	0	1	1

**Source:** Mahadeva. L. and G.Sterne (ed.): *Monetary Policy Frameworks in a Global Context*, Routledge, 2000.

<sup>7</sup> For example, the Bank of England passes the entire profits from issuance of currency to the Treasury.

<sup>8</sup> This further necessitates the prohibition on central banks from participating in primary market auctions.

these losses led to considerable financial meltdown for the central bank (Dalton and Dziobek, 1999).

### Debt Management

7.32 In view of the imperatives to limit *quasi*-fiscal activities of central banks, several industrial countries have taken initiatives in separating debt management from monetary policy and introduced appropriate mechanisms for sharing information between debt managers and the central bank. This is most evident for those countries that are members of the European Monetary Union (EMU), since monetary policy is conducted by the European System of Central Banks (ESCB), while debt management is conducted by the national authorities, thereby minimising the risk of possible conflicts of interest between debt management and monetary policy (IMF, 2002). Reinforcing the separation of debt management from monetary policy in the EMU are provisions in the Maastricht Treaty, which prevent Governments from borrowing from their national central banks, and set debt limits, which foster debt sustainability. In Italy, debt managers continuously monitor and formulate projections of expected Government cash flows, taking into account the usual annual cyclical and extraordinary patterns of revenues and expenditures. In addition, debt managers and the Bank of Italy regularly exchange information on the movements of cash that the Treasury holds with the central bank, through which most Government cash flows are channelled. Only the Treasury is authorised to transact through this account in order to ensure proper financial control over the Government's finances.

7.33 Industrialised countries have also taken steps to ensure that debt managers and central banks coordinate their activities in financial markets so that they are not operating at cross-purposes. In the U.K., the Debt Management Office (DMO) avoids holding auctions at times when the Bank of England is conducting money market operations, and does not hold reverse repo tenders of 14-day maturity. It also does not conduct any *ad hoc* tenders on days when the Bank's Monetary Policy Committee is announcing its interest rate settings.<sup>9</sup>

7.34 Industrial countries have also found ways to deal with the potential conflicts that can arise between central banks and debt managers when central banks seek to use Government securities in their open market operations. This issue is especially important

when Government borrowing requirements are modest or non-existent, but the central bank needs a large volume of low-risk assets for use in implementing monetary policy. In the EMU, the ESCB has developed a broad list of public and private securities that it is willing to use in its open market operations so as to avoid the need to rely strictly on Government securities. Similar steps have also been taken by central banks in the other industrial countries.

7.35 The coordination challenges are more acute for emerging market and developing countries that do not have well-developed financial markets. The lack of central bank independence and the absence of well-developed domestic markets make it difficult for them to wean Governments off central bank credit. It also makes the task of separating debt management and monetary policy objectives more difficult because both activities often need to rely on the same market instruments and are forced to operate at the short end of the yield curve. An IMF-World Bank survey documented debt management practices of 18 countries (including India) in varying stages of economic development, which clearly brings out the differences in objectives for debt management and coordination between fiscal and monetary policies through certain critical parameters (IMF, 2002) (Table 7.2).

**Table 7.2: Survey of Debt Management Practices**

(Number of Countries)

Debt Management Practices	Yes	No
1	2	3
<b>I. Institutional Framework</b>		
(i) Annual borrowing authority	14	4
(ii) Debt ceiling limit	10	8
(iii) Separate debt agency	4	14
<b>II. Portfolio Management</b>		
(i) Government cash balances managed separately from debt	11	6
<b>III. Primary Market Structure for Government Debt</b>		
(i) Central bank participates in the primary market	6	12
(ii) Central bank participates only on a non-competitive basis	6	8
<b>Note</b>	: Total does not necessarily add up to 18 as it is based on the number of respondents.	
<b>Source</b>	: Guidelines for Public Debt Management (IMF-World Bank, 2002).	

<sup>9</sup> However, these restrictions do not apply to bilateral operations conducted by the DMO owing to their relatively low market profile compared to auctions.



7.36 Many countries, such as Poland, have experienced difficulties in projecting Government revenues and expenditures and in establishing appropriate coordination mechanisms and information sharing arrangements between the Ministry of Finance and the central bank (Ugolini, 1996). Nonetheless, some have taken important steps towards ensuring proper coordination between debt management and monetary policy activities. In Brazil and Colombia, debt managers and central bankers meet regularly to share information and construct projections of the Government's current and future liquidity needs. In Brazil, the central bank also has an opportunity to comment on the annual financing programme, and the Government is legally prevented from borrowing directly from the central bank. In Mexico, debt management, fiscal policy, and monetary policy are formulated using a common set of economic and fiscal assumptions. Moreover, the Mexican central bank acts as the financial agent of the Government in many transactions. This helps to cement a continuous working relationship in Mexico between fiscal, debt management, and monetary policy authorities, and foster appropriate sharing of information. In Slovenia, the central bank comments on the annual financing program contained in the fiscal documents, and the Government is legally prohibited from borrowing directly from the central bank.

7.37 Among other emerging market countries, Jamaica has allowed for a more clearly defined set of debt management objectives that are determined independently of monetary policy consideration. There are also regular meetings between senior officials of the planning authorities and the Bank of Jamaica to ensure consistency in Government's economic and financial programmes. In Morocco, the Treasury and External Finance Department participate actively in defining the orientations of the budget law, particularly the level of the budget deficit and the resources to bridge the gap (IMF *op cit*). In India, the requisite coordination among debt management, fiscal, and monetary policies is achieved through regular meetings within the central bank, as well as through regular discussions between the central bank and Ministry of Finance on the implications of borrowing requirements. In addition, an annual pre-budget exercise ensures consistency between the monetary and fiscal objectives.

7.38 Fiscal and monetary coordination is still evolving. While country practices differ, a definite consensus seems to be emerging. Consistency and complementarity of monetary and fiscal policies build confidence, which is a major factor in ensuring

stability. The various country experiences clearly show that even modern safeguards like stated objectives and accountability cannot prevent fiscal profligacy. This realisation has gained momentum in the 1990s, provoking efforts in various countries to limit access to central bank credit. Typically, reforms have focused on the central banks since the burden of fiscal adjustment is reflected in the activities of the monetary authority. Several countries have attempted to legislate institutional arrangements for an independent central bank so as to insulate it from political pressure and allow autonomy in the operation of monetary policy. Countries have also attempted to make their central banks more accountable through increased transparency and disclosure practices and openness in the formulation and setting of monetary policy. The experience of the developed countries shows that separation of debt management function from monetary policy operation is contingent upon the development of financial markets. A well-functioning Government securities market ensures progressively greater mobilisation of resources by the Government from the market rather than from the central bank, thereby providing greater manoeuvrability for monetary policy operations. Furthermore, a clear articulation of monetary policy objectives through firm commitment to price stability in the developed economies has anchored inflation expectations, thereby facilitating the emergence of a smooth term structure of interest rates. This has been instrumental in the progress of financial market development, particularly the debt market, paving the way for the ultimate separation of monetary and debt management functions of the central banks in the developed economies. At the same time, developing countries have made efforts to broaden and deepen financial markets, which provide an effective environment for coordination through adjustments brought about by market forces. In a few countries, monetary fiscal coordination is being subjected to clearly specified rules for both monetary and fiscal policies.

### III. EVOLUTION OF THE MONETARY FISCAL INTERFACE IN INDIA

7.39 Fiscal and monetary policies have been formulated over the years in India, in a typical developing economy context, to pursue a common set of objectives such as high and sustainable economic growth (accompanied with equity); a reasonable degree of price stability; and a viable balance of payments situation. In principle, coordination between fiscal and monetary policies in India is enshrined in the Reserve Bank of India Act,

1934, whereby the Reserve Bank manages the public debt of the Central and the State Governments and also acts as a banker to them<sup>10</sup>, and in turn, the respective Governments are obliged to maintain minimum balances with the Reserve Bank without receiving any interest. The process of coordination of these two policies has, however, evolved in India with the effective dominance of the Government over the Reserve Bank historically. The colonial setting during the inception of the Reserve Bank prompted the erstwhile British Government to adopt a stance of fiscal neutrality while restricting the Reserve Bank's role only to day-to-day management of the financial system. The financing requirements of the World War II necessitated the Government to take recourse to primary accommodation from the Reserve Bank. Post-Independence, the Indian Government took the lead role in pursuing the desirable objectives of a developing economy, with the Reserve Bank adopting an accommodative monetary policy stance. After nationalisation of banks, the Government could additionally garner resources through captive contributions from a rapidly spreading government owned banking system. As the unbridled fiscal accommodation eventuated into a macroeconomic crisis in the early 1990s, the proactive role by the Government and the Reserve Bank relaxed fiscal dominance in the monetary policy formulation process, thereby imparting greater balance to the coordination between the two arms of macroeconomic policy formulation.

7.40 Monetary fiscal interface in India has been based on how budgetary imbalances have been financed by the Reserve Bank's net accommodation to the Government and other modes of deficit financing<sup>11</sup> and how monetary policy operating procedures have been adapted in the wake of extant fiscal exigencies, on the one hand, and the evolving macroeconomic conditions on the other. Within this framework, up to the 1990s, the fiscal deficit entailed overall monetary expansion and the Reserve Bank had to reactively cross subsidise the increased banking sector's accommodation of the Government and other preferred sectors by rationing credit to the commercial sector. Recognition of the detrimental effects of fiscal dominance in the 1980s prompted its

formal assessment in monetary policy formulation in a money-output-prices framework with the help of the money multiplier in explaining money supply-reserve money relationship, whereby considerable emphasis was paid to reduce the monetisation of fiscal deficit. Post macroeconomic crisis, as the fisc's recourse to the central bank was disciplined, a phase of low monetisation and high share of bond financing of fiscal deficits followed amidst liberalisation of interest rates and development of the Government securities market. The Reserve Bank, in this phase, has been pursuing an active public debt management policy so that the rising debt levels of the Government and the high proportion of bond financing do not impact economic growth adversely through upward pressure on interest rates. Concomitantly, as the source of monetisation became more varied, being essentially driven by external factors, as markets became freer and institutions became operationally independent, the Reserve Bank adopted the framework of a multiple indicator approach in its assessment of all these factors in the monetary policy formulation.

7.41 Against the above background, three important phases of the monetary fiscal interface are discussed in this section. The first phase relates to the period 1935-1950, the second phase covers the period 1950-1991, mostly indicating the fiscal dominance and monetary accommodation and the third phase includes the period 1991-2003, broadly presenting the macroeconomic crisis, and subsequent fiscal and financial sector reforms.

#### **First Phase: Formative Years (1935 to 1950)**

7.42 The monetary fiscal interface evolved in the formative years in the context of the Reserve Bank's endeavour to adapt central banking functions and techniques amidst a practically non-existent modern banking system; the need to shoulder special responsibilities with the outbreak of World War II; the Reserve Bank's new role with the advent of Independence in India; and its transformation from being privately owned to a nationalised undertaking (RBI, 1970). The Reserve Bank had to grapple with a recession in the Indian economy in the initial years of its existence in the 1930s followed by high inflation during World

<sup>10</sup> While these functions are mandatory for the Central Government (under Sections 20 and 21), the Reserve Bank undertakes similar functions for the State Governments, with the exception of Jammu and Kashmir and Sikkim, through separate agreements with the respective States (under Section 21 A).

<sup>11</sup> As per the analytical framework set out by Rangarajan, Basu and Jadhav (1989), the gap between the Government expenditure (non-interest and interest) and its revenue receipts is financed through domestic debt liabilities held outside the Reserve Bank and within the Reserve Bank.

War II. It had to bolster stability in the macroeconomic policy formulation amidst the frequently changing stances of fiscal policy during post World War II period (1945-1951) prompted by a prolonged political crisis leading to Independence, social upheavals concomitant with India's partition and the Korean war boom.

*Fiscal Conservatism and Early Monetary Operations*

7.43 During the 1930s, the Government of India pursued a policy of *laissez faire*, focusing on balanced budget and pegged exchange rate, in sharp contrast to the proactive fiscal and exchange rate policies adopted during that period in the United States, United Kingdom and France to drive out recession. In fact, achievement of budgetary equilibrium was regarded as a pre-condition for the setting up of the Reserve Bank. With the Government's borrowings being minimal during the first four years of the Bank's existence reflecting the fiscal neutrality stance, the Reserve Bank was not required to provide any persistent support to the Government's borrowing programme or for stabilising prices of Government securities. Monetary policy, therefore, focused on day-to-day management of money and foreign exchange markets, which itself required a degree of skill in view of the limited flexibility in operation of monetary policy instruments.

*War Financing and Monetary Expansion*

7.44 With the outbreak of World War II Government expenditure, which was modest during the first two years of the War, had nearly doubled in 1942-43 and continued to rise. War expenditure accounted for over 77 per cent of the aggregate Government expenditure in 1945-46. As a result, the Reserve Bank shouldered added responsibility of financing war expenditures of the United Kingdom and her allies to the extent that the Government of India fell short of meeting them despite increased

tax mobilisation and borrowing efforts and recording overall budgetary surpluses. During 1940-1946, the Reserve Bank financed 45 per cent of the combined outlay of the Government of India and Allies. Furthermore, unlike pre-war years, during the 1940s the Reserve Bank had to deal with the abundantly cumulating sterling balances reflecting the Recoverable War Expenditure which were not usable immediately and also had to finance substantial Government expenditure through issuances of currency. The resultant monetary expansion fuelled high levels of inflation in the War years which have not been witnessed thereafter (Table 7.3).

7.45 Fiscal policy fluctuated during the post-War years, reflecting the rapidly changing political, social and economic conditions. The initial fiscal relaxation anticipating a post-War deflation had to be quickly reversed as inflationary pressures resurfaced, and heavy direct taxation resulted to correct budget deficits and restrict the private demand. During the post-War period as a whole, there was a retreat from the cheap money policy. Monetary expansion was moderate as the expansionary effects of budget deficit and bank credit expansion were almost neutralised by deficits in the balance of payments.

*Instruments of Monetary Policy in Formative Years*

7.46 During the formative years, the Reserve Bank could neither vary the cash reserve ratio (CRR) nor did it feel its necessity, as banks, in view of low credit off-take, invested a major portion of their deposit accretion in Government securities<sup>12</sup>. As the Bank Rate was kept constant (except for 50 basis point reduction in 1935), the only instruments at the disposal of the monetary authority during the formative years of the mid-1930s and the 1940s were undertaking sterling purchases from banks, modulating weekly Treasury Bill tenders and resorting

**Table 7.3: Macroeconomic and Monetary Indicators: 1930s and 1940s**

(Per cent)

Period (Average)	Growth Rates			Ratio of RBI's Foreign Assets to Domestic Assets	Currency to GDP
	Real GDP	WPI	Money Supply		
1	2	3	4	5	6
1936-40	1.3	4.3	9.6	39.1	8.0
1941-45	1.0	18.1	37.8	95.4	12.5

Source: Jadhav *et al*, 2003.

<sup>12</sup> Reserve requirements were initially conceived as a means to safeguard the interest of depositors. Thus, originally, under Section 42(1) of the Reserve Bank of India Act, 1934, scheduled banks were required to maintain with the Reserve Bank a minimum cash reserve of five per cent of their demand liabilities and two per cent of their time liabilities.

to open market operations (OMO) to enable banks to switch from long-dated Government securities to short and medium dated ones. Notably, the operations of these instruments were mainly triggered by Government's requirements, with the needs of the market being subsidiary. In fact, the need to keep stable interest rates also had to facilitate the pegged exchange rate regime and promote sterling inflows. The Reserve Bank also advised commercial banks to observe restraint in lending for speculative purposes such as advances against shares, bullion and foodgrains since World War II.

### **Second Phase: Fiscal Dominance and Monetary Accommodation (1950 to 1991)**

7.47 During the post-Independence period, the Reserve Bank was nationalised and it assumed comprehensive and effective powers of control of the entire banking system after the passage of the Banking Companies Act, 1949 (renamed as Banking Regulation Act, 1949 in 1966). In the foundation phase of central banking in India the monetary fiscal interface evolved in the context of the emerging role of the Reserve Bank in four different aspects. First, was the reactivation of the Reserve Bank's monetary policy, particularly from the mid-1950s, which while anticipating or reacting to short-term pressures, had to be sensitive to the needs of the planning process. Second was the regulation of commercial banks and the promotion of their orderly development. Third and fourth were the Reserve Bank's involvement in promoting the institutionalisation of credit to agriculture and industry in the 1960s and 1970s, respectively (Balachandran, 1998). The emergence of inflationary pressures in the 1970s in the context of supply shocks elicited a coordinated monetary fiscal policy response. The appearance of deficit in the revenue account of the Government for the first time in 1979-80 and widening of the same phenomenon during the subsequent period coupled with the increased reliance on money financing necessitated a re-evaluation of the monetary fiscal coordination framework in the mid-1980s.

#### *Fiscal Activism and Plan Financing*

7.48 With the gradual abatement of political and economic uncertainty after Independence, fiscal policy played a major role in the socio-economic development process through successive Five-Year Plans since 1950-51. In a nascent economy, where the income levels and, *ipso facto* financial savings were low, the fisc assumed the responsibility to

create the capital base in the form of infrastructure and promote rural development. Financing of capital formation had to be undertaken on non-commercial terms in view of the long gestation periods and high capital-output ratios associated with such projects. The State apparatus was, therefore, used to gain commensurate command over the resources of the economy. The overall investment target set out in the plans provided the backdrop for monetary policy formulation, which was increasingly viewed as an instrument to achieve certain national goals, including the responsibility to deepen the financial system. The First Five Year Plan document envisaged 'judicious credit creation somewhat in anticipation of the increase in production and availability of genuine savings' (Gol, 1951). Monetary growth was moderate in the early 1950s. There was no undue pressure on monetary policy to maintain price stability since the large foreign exchange reserves enabled any adverse impact of inflation to be countered through heavy imports and better capacity utilisation in the industrial sector.

7.49 Doubling of the plan outlay in the Second Plan and subsequent increases in successive Plans necessitated generation of resources both internally as well as from sources outside the Government to meet the financing needs. Deficit financing was used by the Government as a means to cover the gap between ambitious investment plans and the low levels of savings in an underdeveloped economy for fuller utilisation of productive capacities which was consistent with the prevailing Keynesian orthodoxy. With increasing dependence on market borrowings and deficit financing to meet the financing requirement of successive plans since the mid-1950s, the conduct of monetary policy came to be governed by the size and mode of financing the fiscal deficit. Thus, monetary policy had to reconcile the objective of price stability within the broader context of deficit-financed growth envisaged under the plans.

#### *Deficit financing – Impact on Monetary Policy*

7.50 While the provisions of the Reserve Bank of India Act, 1934 authorises the Reserve Bank to grant advances repayable not later than three months from the date of advance, these provisions are enabling and not mandatory. These advances, in principle, were to bridge the temporary mismatches in the Government's receipts and expenditures and were really intended as tools for Government's cash management. However, in practice, the tool of deficit financing became a permanent source of financing



the Government budget deficit through automatic creation of *ad hoc* Treasury Bills whenever Government's balances with the Reserve Bank fell below the minimum stipulations (Box VII.2). Thus, although the *ad hoc* Treasury Bills had a 91-day tenor and were meant to finance Government's temporary needs, the practice of replacing maturing bills with fresh creation of *ad hoc* Treasury Bills resulted in deficit financing becoming a tool of permanent and virtually unlimited source of financing for the Government. This led to the Reserve Bank's loss of control over base money creation.

7.51 The availability of unlimited resources by way of credit from the Reserve Bank through the issuance of *ad hoc* Treasury Bills undermined the financial discipline of the Central Government (Table 7.4). Easy recourse to credit from the Reserve Bank not only eroded fiscal prudence at the Centre, but also enabled State Governments to run overdrafts (ODs), a substantial part of which was taken over by the Centre against fresh loans from the Reserve Bank (Balachandran, 1998).

7.52 Apart from the routine credit to top the Central Government's stipulated minimum balances, the

**Table 7.4: Reserve Bank's Financing of Budget Deficit**

(Rupees crore)

Period	<i>Ad hocs</i> created	<i>Ad hocs</i> Cancelled	Net <i>ad hocs</i> Created	<i>Ad hocs</i> Funded	Net after funding
1	2	3	4	5	6
I Plan	350	10	250	0	250
II Plan	1,975	1,030	945	500	445
III Plan	2,430	1,630	800	275	525

**Source:** G.Balachandran, 'The Reserve Bank of India, 1951-67', 1998.

Reserve Bank also created additional *ad hoc* Treasury Bills at the instance of the Government whenever the latter was required to hold larger cash balances. As there was unbridled expansion of budget deficits and the Government was not in a position to redeem the *ad hoc* Treasury Bills, the Reserve Bank was saddled with a large volume of these Treasury Bills in its Issue Department balance sheet. Hence, the *ad hoc* Treasury Bills were periodically funded into dated securities from July 1958 under the condition that the Reserve Bank would transfer higher profits earned on account of additional interest income from such conversions.

### Box VII.2 *Ad hoc* Treasury Bills

The origin of *ad hoc* Treasury Bills in India dated back to World War II when they were issued by the Government of India to the Reserve Bank mainly in connection with the temporary financing of sterling debt repatriation. Since the Government's receipts through rupee loans did not always coincide with the repatriation of sterling debt, *ad hocs* were issued to provide the Reserve Bank with alternative eligible rupee assets. The *ad hocs* were retired when the Government's dated securities programme was subsequently undertaken. *Ad hocs* were also created in 1948-49 to replace sterling securities transferred to the U.K. Government in terms of the sterling balance agreement of 1948.

The origins of *ad hoc* Treasury Bills to finance Government deficit can be traced to the First Five Year Plan, although their volume was to be limited to the extent that it was non-inflationary. However, an operational arrangement in early 1955, which was reached between the Government of India and the Reserve Bank of India, enabled automatic creation of *ad hoc* Treasury Bills to restore Central Government's cash balance to the minimum stipulated level whenever there was excess cash drawn down. Thus, *ad hoc* Treasury Bills were being automatically created when the Central Government's actual balances fell short of the stipulated minimum level (Rs.50 crore on Fridays and Rs.4 crore on other days at that time) but were cancelled on replenishment of the balances up to the stipulated level.

Although this was deemed to be a temporary arrangement, from 1958 the *ad hoc* Treasury Bill financing as well as their funding into dated securities had become a regular feature. 'Funding', in general, refers to the consolidation of public debt by issue of 'funded' debt, *i.e.*, long-dated or undated securities' in place of 'floating' debt, *i.e.*, Treasury Bills and ways and means advances (RBI, 1983). The problem of automatic monetisation was compounded as large amounts of *ad hocs* were rolled over and from 1982 were converted to undated non-marketable special securities carrying a discount rate of 4.6 per cent. Initially, the Government's conversion of the outstanding *ad hocs* into dated securities was in the range of Rs.50-100 crore a year till 1981. Since 1982 there was not only a spurt in such conversions but also a fundamental change in the basic characteristics. While the earlier conversions were in the form of Government dated securities with specific maturities at varying interest rates, after 1982 the conversions were into 4.6 per cent special securities with no specific date for redemption and which were exclusively taken up by the Reserve Bank. As at end-March 1994, the outstanding amount of special securities held by the Reserve Bank under such conversions was Rs.71,000 crore (RBI, 1994). The outstanding amount of *ad hoc* Treasury Bills converted to special securities was Rs. 1,21,818 crore as at end-March 1997 (RBI, 2005a).

7.53 Monetisation of deficits was not restricted to the amounts raised by the Government through *ad hoc* Treasury Bills but also through subscription to primary issuances of Government securities. Plan financing targets for market borrowings increased from the Second Plan requiring the Reserve Bank to step in to subscribe to the issuances of Government securities not absorbed by the market. The Reserve Bank preferred to support the Government's primary issuance rather than accommodate the Government through deficit financing. Accommodating the Government through subscription to primary issuances, however, constrained the operation of monetary policy as it entailed postponement of increases in the Bank Rate in order to control cost of Government borrowings. Use of open market operations, the other general instrument of credit control available with the Reserve Bank during this period, was also limited in the absence of a broad-based market for Government securities. As signs of a credit boom in the private sector surfaced during the mid-1950s, the Reserve Bank had to arm itself with an additional tool of monetary control. The Reserve Bank of India (Amendment) Act, 1956, thus, empowered the Reserve Bank to vary the cash reserve ratio (stipulated proportion of balances to be maintained by banks with the Reserve Bank relative to their net demand and time liabilities), thereby enabling flexibility in the operation of this monetary policy instrument. Prior to this amendment, the Reserve Bank had no power to vary commercial banks' reserve requirements which were fixed at five per cent of demand liabilities and two per cent of time liabilities. The adoption of variable reserve requirements assumes importance in the light of the simultaneous switch to a minimum reserve system from a proportional reserve system<sup>13</sup>. Although the Reserve Bank was vested with adequate powers to employ Selective Credit Control as an instrument in 1949 it operated this tool systematically only after 1956 for regulating the bank advances to essential commodities,

thereby curbing inflationary pressures. Despite these measures, the manoeuvrability in monetary policy was constrained by the depletion of reserves and the unconstrained recourse of deficit financing.

#### *Economic Shocks and Credit Rationing to Banks*

7.54 The Reserve Bank, which initially played a passive role in the resource assumptions of the plans, increasingly became proactive in the 1960s, urging the planners to adopt more realistic growth and resource mobilisation targets. This resulted in the formulation of a monetary budget for the Third Plan. The spurt in Government expenditure in the first half of the 1960s to meet defence and developmental needs, the emergence of food imbalances which was only partially offset by imports, and price-indexation of wages resulted in a sharp rise in inflationary pressures. The task of monetary policy formulation was, therefore, rendered more difficult. The Reserve Bank had to adopt a suitable strategy for tightening monetary policy without compromising on accommodation to the Government. Accordingly, the Reserve Bank tightened monetary policy during the first half of 1960s through a series of hikes in the Bank Rate and made refinance support to banks for extending credit to the private sector more restrictive so as to neutralise the monetary impact of Reserve Bank's credit to the Government. The Reserve Bank, therefore, imposed a 'quota-slab' system<sup>14</sup> in 1960 which progressively raised the cost of banks' borrowing from the Reserve Bank. The increased cost of refinance under the quota-slab system, however, prompted the banks to obtain funds by undertaking outright sale of Government securities which did not affect their quota of refinance available at the Bank Rate.

7.55 In order to ensure that banks continue to hold Government securities, the Reserve Bank replaced the quota slab system with a system of net liquidity ratio (NLR)-based lending to the banks in 1964<sup>15</sup>.

<sup>13</sup> Under the erstwhile proportional reserve system, for the purpose of note issue, gold coin, bullion and foreign securities were to constitute not less than 40 per cent of the total assets. Under the Reserve Bank of India (Amendment) Act, 1956 and the Reserve Bank of India (Second Amendment) Act, 1957, there is no ceiling on the amount of notes that can be issued by the Reserve Bank. However, the aggregate value of gold coin, bullion and foreign securities held with the Issue Department of the Reserve Bank should not at any time be less than Rs.200 crore, of which a minimum of Rs.115 crore should be in the form of gold.

<sup>14</sup> 'Quota slab' was a system of graded lending rates on the Reserve Bank's refinance to the banks whereby borrowings within the quota were at Bank Rate and those above were charged different grades of penal rates. The 'quota' was linked to CRR balances maintained by the banks with the Reserve Bank.

<sup>15</sup> Net Liquidity Ratio = [(Banks' Cash balances + Current Account Deposits with other banks + Balances with the Reserve Bank + Investments in Government and other approved securities) - (total borrowings from the Reserve Bank, State Bank of India and Industrial Development Bank of India)] / Aggregate demand and time liabilities. NLR-based refinance was discontinued in 1975 in order to regulate both the cost and availability of refinance more effectively.

Under this system, liquidation of Government securities by banks and their recourse to borrowings from the Reserve Bank/ other designated institutions would reduce their NLR below the stipulated level and progressively raise the rate of interest on the entire quantum of refinance support for the banks. As the NLR-based refinance discouraged the banks from liquidating their Government security holdings, it stabilised the Government securities market. Furthermore, since NLR netted out all borrowings of a bank from designated institutions for the purpose of availing refinance from the Reserve Bank, it was a stringent monetary policy tool.

7.56 An abiding responsibility of the Reserve Bank as a central bank has been to monitor the liquidity position of banks. Accordingly, besides the CRR (in vogue from 1935), the Statutory Liquidity Ratio (SLR) became operative under Banking Regulation Act, 1949 as a key prudential instrument whereby the Reserve Bank directed the banks to maintain a stipulated ratio of 'liquid assets' relative to their demand and time liabilities so as to ensure availability of sufficient liquid resources for meeting a drain on their resources should it arise, thereby preserving stability in the banking system. Originally, 'liquid assets' of banks that were to be reckoned under SLR included their holdings of cash, gold, entire amount of balances with the Reserve Bank and current account balances with other banks and unencumbered Government and other approved securities. Since operation of CRR as a variable instrument from 1960, the banks showed a tendency to liquidate their Government securities to fulfill higher CRR requirements. While this would enable banks to keep higher CRR, this would only alter the composition of their SLR portfolio with a decline in holdings of Government securities and a corresponding increase in balances with the Reserve Bank. In order to discourage the practice followed by banks liquidating their Government securities to fulfill higher reserve requirements and stabilise Government securities market, the Banking Regulation Act, 1949 was amended in 1962 to exclude the balances maintained under CRR from being reckoned under SLR. The stipulated level of minimum SLR was also raised from 20 per cent to 25 per cent of demand and time liabilities of banks to strengthen their liquidity. Consequent upon nationalisation of banks and the spread of the banking system from 1969, the SLR, through gradual hikes up to the early 1990s, became essentially an instrument to secure an increasing captive investor base for Government securities as the Government's fiscal deficit expanded (Box VII.3).

The Reserve Bank also promoted channelising of credit flow into certain preferred sectors such as export, small-scale industries and defence sectors.

7.57 The Reserve Bank had to contend with the domestic inflationary fallout of the rupee's devaluation in 1966 and mitigate the impact of severe industrial recession triggered by import compression. The Government also played a proactive role in containing inflationary pressures through a system of administered prices. The Government's food price policy through this system, operative since the World War II, became a tool of controlling increases in food prices. The pricing policy of foodgrains alternated between control, decontrol and partial control up to the Third Plan depending upon harvest conditions and pressures on food prices. The establishment of Agricultural Prices Commission and Food Corporation of India in 1965 started an administrative procurement and issue price system in foodgrains to address, *inter alia*, the need to raise agricultural production as also to give relief to the consumers. The role of Government in controlling inflation widened with the extension of its administered price system to non-agricultural commodities since the Fourth Plan through State participation and control in regard to both wholesale and retail trade. This reduced the scope of automatic linkages between cost and price increases, or between price and wage increases, that exist in the economy. The control was in operation particularly in consumer goods and industrial raw materials which would have a significant bearing on the general cost structure in the economy. Administered prices, therefore, were not restricted to agricultural commodities but also to industrial goods such as cement and steel (Ghosh, 1974).

#### *Social Control and Credit Planning*

7.58 With the fiscal policy laying greater emphasis on social justice and alleviating poverty in the 1970s, monetary policy shifted from 'physical planning' in the financial sector to 'credit planning' in terms of direct lending and credit rationing as a consequence of bank nationalisation in 1969 and public sector involvement in several financial institutions. These structural and organisational changes in the financial system enabled the public sector to draw increasingly on the financial resources of the economy. This altered the nature of relationship between the Reserve Bank and the Government, with the former playing a more limited role in the structure of the financial system and use of the interest rate as monetary policy instrument.

## Box VII.3

## Statutory Liquidity Ratio: Genesis and Functions

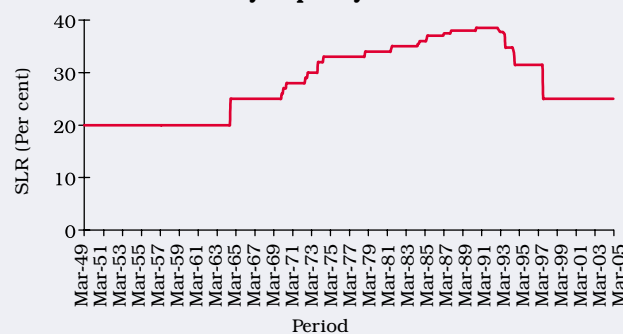
Commercial banks in India have traditionally been subject to two types of reserve requirements, viz., the CRR and the SLR. While the former is a stipulation under Section 42 of the Reserve Bank of India Act, 1934, the latter is specified in Section 24 of the Banking Regulation Act, 1949 under which all banking companies are required to hold a minimum stipulated proportion of their demand and time liabilities in India in the form of cash, gold, balances with the Reserve Bank, current account balances with other banks, money at call and short notice and unencumbered Government and other approved securities. The primary objective of the stipulation of liquidity ratio was to ensure that banks hold sufficient liquid reserves to meet any unexpected drain. Thus, it sought to impose financial discipline on banks and provide some protection to depositors. Commercial Paper (CP) being short-term money market instrument, could have qualified as a 'liquid asset'. However, paucity of good quality CP, necessitated inclusion of Government securities, even though they may have a medium to long-term tenor, in the definition of SLR as they have a gilt edged character and are the easiest stock to liquidate in a crisis (Balachandran, 1998).

Cash maintained with the Reserve Bank for the purpose of meeting CRR requirement formed part of the overall liquidity ratio until 1962. This enabled banks to liquidate their Government security holdings whenever the marginal reserve requirement was raised, thereby blunting the effectiveness of this instrument. During the early 1960s while average overall liquidity ratio continuously declined, the credit to deposit ratio increased, raising apprehensions of bank credit outpacing deposit growth and eroding the liquidity position of the banks. The Banking Regulation Act was, therefore, amended in 1962, raising the minimum SLR of banks from 20 per cent to 25 per cent of their demand and time liabilities in India. The SLR to be maintained was made exclusive of balances maintained for the purpose of meeting cash reserve ratio requirements. Any balances in excess of the prevailing CRR requirements could, however,

be included in the computation of SLR. This amendment ensured that with every increase in CRR, the overall liquidity obligations were correspondingly raised. Banks were required to comply with this requirement from September 16, 1964. The amendment of the Banking Regulation Act in 1983 empowered the Reserve Bank to increase SLR of banks upto 40 per cent.

Although SLR was initially conceived as a measure of securing the liquidity of banks, it also had implication for their ability to expand credit to the private sector. In the light of the monetary expansion triggered by the Reserve Bank's unbridled accommodation of the Government and the need to restrain the pace of expansion of bank credit, the SLR instrument became a tool for mobilising greater resources for the Government from the banks. The SLR was raised gradually from 25 per cent in 1970 to 38.5 per cent in 1990 (Chart A). This served to increase the captive investor base for Government securities, thereby reducing the pressure on the Reserve Bank to absorb these securities. However, the incidence of macroeconomic crisis in the early 1990s and the emphasis of the role of SLR as a prudential instrument rather than as an instrument for accommodating fiscal deficit led to scaling down of the SLR back to the statutory minimum of 25 per cent in October, 1997.

Chart A: Statutory Liquidity Ratio : 1949-2005



7.59 Amidst the inflationary pressures triggered by the oil shock of 1973 fiscal policy undertook stringent measures to reduce disposable income. In a bid to prevent large fluctuations in prices of wheat, the Government nationalised wholesale trade in wheat in 1973 and made procurement price and issue price uniform throughout the country. Over the years, in addition to the commitment towards a large volume of developmental expenditure, the Government's expenditure widened to include rising subsidies. Increase in net transfers to the States on the basis of the recommendation of the Seventh Finance Commission, large interest payments on growing debt, and downward rigidity in prices further

contributed to increased current expenditure. Current revenues, on the other hand, were less buoyant, leading to the emergence of structural imbalances in the form of sizeable revenue deficits in the Central Government budget from 1979-80 and in the combined finances of the Centre and the States since 1982-83.

7.60 The single most important factor influencing monetary policy in the 1970s and the 1980s was the phenomenal growth in reserve money, the major source of which was Reserve Bank's credit to the Government (RBI, 1985). With little control over this variable, monetary policy focused on restricting overall liquidity with a view to containing monetary



expansion and to stem inflationary pressures which built up steadily during the 1970s. The SLR was frequently used as a tool to minimise the impact of fiscal operations on the growth of reserve money as it diverted bank credit away from “general uses” towards funding the Government. The Reserve Bank raised the SLR in three instalments from 25 per cent to 28 per cent in 1970 in order to secure larger subscriptions from banks for Government securities. Since then the SLR was revised upwards periodically and reached 35 per cent in December 1978. The Reserve Bank supplemented the SLR increases with increases in CRR from 1973 to neutralise the effect on base money creation brought out by its accommodation to the Government, thereby restricting the growth in money supply. Thus, a substantial volume of credit was pre-empted from the banks at relatively low interest rates. In fact, as the interest rate on Treasury Bills was left unchanged at 4.6 per cent from 1974 the real interest rate was negative for a large part of the 1970s. As a result, the banks which subscribed to these Treasury Bills rediscounted them with the Reserve Bank at the earliest opportunity, leaving the Reserve Bank with a substantial stock of these Treasury Bills. Moreover, the *ad hoc* Treasury Bills which are essentially short-term in nature became a long-term source of financing the budget, as the volume of outstanding Treasury Bills could not be retired due to the continuance of budgetary deficits. Interest rates on Government securities were, however, raised sharply during the period 1979-81 in response to a spurt in inflation rates on account of the second oil shock of the decade and drought. In order to contain inflationary pressures, the Reserve Bank also raised the Bank Rate periodically during the 1970s.

*Recognition of the Problem of Fiscal Profligacy and the Transition to Monetary Targeting*

7.61 Despite increases in tax/GDP ratio over the years, the revenue deficit which emerged in 1979-80 in the Centre's Budget continued to enlarge in the 1980s, raising concerns over the rising public debt and interest payments and the consequent resource constraint for meeting developmental needs. Strong inflationary pressures witnessed during the previous decade led the Government to pursue a developmental strategy consistent with price stability

in the Sixth Plan. However, there was a series of upward revision in administered prices in 1984-85 and 1985-86 in order to meet cost escalations, promote production, restrict consumption of certain commodities, reduce the magnitude of subsidies and to strengthen mobilisation of resources for financing development plans.

7.62 Removal of infrastructural bottlenecks and increasing productivity were given importance in the Seventh Plan. In its discussion paper on ‘Long-Term Fiscal Policy’ (LTFP) presented to the Parliament in December 1985, the Central Government recognised the deteriorating fiscal position as the most important challenge of the 1980s and set out specific targets and policies for achieving fiscal turnaround. The measures implemented under LTFP, however, gave only a temporary reprieve and the fiscal situation started to deteriorate from 1989-90 as a result of the unbridled growth in public expenditure and insipid performance of the public sector enterprises. With near stagnant gross domestic savings and financial savings relative to GDP at 18.4 per cent and 6.4 per cent, respectively, in the first half of 1980s and the policy decision to raise interest rates on Government securities in line with the recommendation of the Chakravarty Committee<sup>16</sup> the cost of borrowing rose steadily throughout the 1980s. The increase in coupon rates of dated securities and the increase in the borrowing cost of small savings and provident funds led to a sharp increase in interest burden during the second half of the 1980s, pre-empting an increasing proportion of current receipts.

7.63 The steady increase in market borrowings witnessed in the 1980s was accompanied by an increase in Reserve Bank's support to such borrowings. Recognising that an excessive budget deficit would unduly shift the burden of controlling inflation to monetary policy, the Seventh Plan postulated a non-inflationary fiscal policy by fixing deficit financing within safe limits (Malhotra, 1985). Reflecting this, the net Reserve Bank credit to Government as a proportion of reserve money, which reached a peak of 103.3 per cent in 1986-87, declined to 95.0 per cent by the close of the decade.

7.64 Expressing concern over the increased recourse to deficit financing, the Chakravarty Committee emphasised the need to ensure that the Reserve Bank's credit to the Government does not exceed

<sup>16</sup> In order to conduct a comprehensive review of the functioning of the Indian monetary system and to suggest measures for improving the efficacy of monetary policy in the promotion of the basic plan objectives, the Committee to Review the Working of the Monetary System was set up by the Reserve Bank in 1982 (Chairman: Sukhamoy Chakravarty). The Committee submitted its report in 1985.

the safe limit for expansion of reserve money from the point of achieving price stability. The Committee noted that 'a feasible approach to evolving a policy framework for ensuring a desired rate of growth of reserve money and money supply involves a certain degree of coordination between the Government and the Reserve Bank' (RBI, 1985). The Committee recommended that the monetary authority may embark on a strategy of monetary targeting with feedback employing broad money ( $M_3$ ) as the target variable. This strategy would bind the Reserve Bank and the Central Government in a common effort to achieve the desired rate of growth in money supply, taking into account the expected rate of growth of the real sector and the tolerable increase in price level. The Committee also recommended that an aggregate monetary budget be formulated, both annually and for the period covered by the Five Year Plans, in order to achieve reasonable coordination between production and credit plans. In order to eliminate the likelihood of any significant monetisation of debt and consequent increase in Reserve Bank credit to the Government beyond agreed limits, the Committee proposed an upward revision of yields to be coupled with shortening of maturities of Government securities.

7.65 In accordance with the recommendations of the Chakravarty Committee, the Central Government set out the 'anticipated net Reserve Bank credit to the Government' as a memorandum item in its Budget since 1985-86 so as to gauge

accurately the extent of monetisation of the Budget thereby bringing into sharper focus the relevance of the monetary impact of fiscal operations. Banks were also advised in 1985-86 to eschew volatile movements in their cash balances with the Reserve Bank and in their holdings of Treasury Bills as these movements generate instability in the net Reserve Bank credit to the Government.

7.66 The monetary policy strategy shifted from the credit planning approach to a monetary targeting approach from 1986-87 in accordance with the Chakravarty Committee's recommendation. This involved greater coordination between the Reserve Bank and the Central Government as the exercise of setting monetary targets was taken up immediately after the presentation of the Union Budget when the two vital inputs, *viz.*, the magnitude of budgetary deficit and the level of market borrowing programme were made available.

7.67 The sharp deterioration in the fiscal situation during the late 1980s raised concerns over the sustainability of the fiscal policy. Consequent to this development, analytical interpretation of the deficit incurred by the Government and financing thereof was warranted (Rangarajan, *et al*, 1989). Accordingly, the concept of gross fiscal deficit (GFD) reflecting the net borrowing requirement of the Government was introduced. Subsequently, Central Government in its Economic Survey and the Reserve Bank in its Annual Report made extensive use of the concept of fiscal deficit and its financing (Box.VII.4).

#### Box VII.4

##### Measurement of the Fiscal Gap – Budget Deficit, Monetised Deficit and Fiscal Deficit

The fiscal gap up to the mid-1980s was measured in terms of 'budget deficit' which referred mainly to the changes in the amount of *ad hoc* Treasury Bills and other 91-day Treasury Bills outstanding and the changes in the Central Government's deposit balances with the Reserve Bank and its other cash balances. While the budget deficit, as was defined at that time, severely understated the monetary impact of fiscal operations since it did not include Reserve Bank's investment in dated securities, there was also some overstatement of the monetary impact to the extent that the Treasury Bills were held by the banks. In view of this, the Chakravarty Committee emphasised the need to have a measure for the full extent of Government's reliance on Reserve Bank so as to quantify the monetary impact of fiscal operations. Since a sizeable part of the new issues of Government securities was taken up by the Reserve Bank in the

absence of adequate response from the market and subscriptions to dated securities had as much effect on the reserve money growth as purchase of Treasury Bills, the Committee recommended that the net changes in the Reserve Bank's holding of dated securities and Treasury Bills after adjusting the Government deposits with the Reserve Bank, *i.e.*, the net RBI credit to the Government may be taken to measure the extent of monetisation of Government deficit. The Committee also recommended that the fiscal gap be measured in terms of fiscal deficit which would measure the net borrowing requirement of the Government. The Economic Survey of the Government of India for 1989-90 brought out a measure of the fiscal gap in terms of the difference between Government expenditure and net lending on the one hand and current revenue and grants on the other. This was the first official recognition of the concept of fiscal deficit.

### Debt Management *versus* Monetary Management

7.68 During the initial years, the Reserve Bank's investments in the Central and State Government securities were subject to the condition that the total amount would not exceed the aggregate of share capital, reserve funds and three-fifths of the deposit liabilities of the Reserve Bank and a stipulated ratio for composition of short and long dated securities. The fixing of limits on the Reserve Bank's holdings of Government paper was, to a large extent, a lesson from international experience, whereby central banks across the world were forced to provide unlimited accommodation to their Governments' financing requirements from the First World War up to the Great Depression of the 1930s. The restrictions were subsequently removed and provided flexibility to the Reserve Bank in the conduct of open market operations. During the years of World War II, open market operations became an integral part of public debt management to maintain stability of Government security prices and facilitate maximum subscription to the Government issuances.

7.69 Although substantial contribution to the Government's borrowing programme came from non-bank sources such as princely States, big industrialists and businessmen during the formative years, they used to dispose them off to the banks subsequently. The Central Government's net borrowing during 1945-1951 was negative and the Reserve Bank undertook open market purchases of Government securities so as to mitigate tight monetary conditions and banks were advised to maintain a more balanced maturity distribution and desist from the tendency to hold only long-dated securities. During the initial years of planning, the Government's market borrowing programme was insufficient to satisfy the market's appetite and the Reserve Bank had to resort to sale of securities from its stock. This soon reversed during the Second Plan, with a progressive decline in the public's contribution to Government's borrowing.

7.70 The captive market for Government securities resulting from SLR requirement applicable to banks and similar statutory provisions governing investment of funds by financial institutions and insurance companies facilitated the floatation of debt at relatively low interest rates. With the Government borrowings showing a secular increase since the mid-1950s and captive investors reluctant to

subscribe to securities beyond their statutory requirements, the Reserve Bank had to step in to absorb the residual issues.

7.71 The substantial hikes in coupon rates, particularly for long-dated securities since the first half of the 1980s increased the demand for these securities. This coupled with the stricter enforcement of SLR maintenance on a daily basis ensured higher contributions from the banking sector to the Government's market borrowings. Towards the close of the decade, however, non-market sources of raising funds, such as small savings and provident funds gained importance, relegating internal debt management policy to the background (Tarapore, 1990).

7.72 The fairly underdeveloped state of the Government securities market till the early 1990s was a critical hindrance for a successful coordination between monetary and debt management. With the interest rates of Government securities administered and largely uncompetitive, open market operations served more as an adjunct of fiscal policy rather than as a monetary instrument.

### Inter-relationship between Monetary, Fiscal and Debt Management Policies – 1935-1991

7.73 The basic philosophy which underlined the monetary-fiscal relationship during the pre-reform period lay 'not in the independence of the Reserve Bank but the importance of a basic accord to ensure that monetary and fiscal policies work in harmony and pull in the same direction'<sup>17</sup>. Accordingly when the fisc was dominant, the Reserve Bank's operations had to subserve the interests of the former. While the Reserve Bank's monetary and debt management policy stance had to be generally dovetailed with the fiscal policy there were, however, some episodes of conflicts as well as coordination.

#### *Episodes of Policy Conflicts*

7.74 As early as in 1957, the Reserve Bank had raised concerns over its accommodation of the Government through *ad hoc*s when it drew the attention of the Government to the fact that the creation of *ad hoc* Treasury Bills to maintain the Government's closing balance each week had become a 'merely ...mechanical process' with no checks on the Government's ability to spend without

<sup>17</sup> Statement made by former Reserve Bank Governor L.K.Jha, as quoted in Balachandran, 1998 p.730.

regard to the available resources. According to the Reserve Bank, ‘...with an automatic expansion of currency at the will of Government, the Bank ... is not really in a position to discharge the responsibility vested in it by statute of regulating the issue of banknotes... with a view to securing monetary stability in India’ (Balachandran, 1998). Although the Government assured the Reserve Bank that the latter would be involved in the discussions of the Government’s borrowing programme and the ways and means requirements, the absence of any formal checks on the issue of *ad hoc*s considerably weakened the Reserve Bank’s ability to influence their outcome.

7.75 The large size of the Government borrowings often posed problems for the monetary authority in effecting changes in the interest rates as the Government was averse to higher interest rates. This forced the Reserve Bank to adopt other measures without directly raising the cost of borrowing for the Government. For instance, faced with inflationary pressures, the Reserve Bank had to tighten its monetary policy by imposing an incremental CRR in 1960 although it wanted to raise the Bank Rate. This measure, however, could not moderate the expansion of bank credit as banks met this requirement by liquidating their holding of Government securities, thereby leading to a slump in the Government securities market (Balachandran, *op cit*). It was not until 1963 that the Reserve Bank could raise Bank Rate by 50 basis points. Thus, the Reserve Bank’s freedom to choose the monetary tool it wanted to employ was, to some extent, compromised.

7.76 Moreover, during the 1960s, the Reserve Bank’s OMOs increasingly threatened to undermine its monetary policy rather than support it. During 1960-66, the Reserve Bank raised its Bank Rate from 4 per cent to 6 per cent and initiated a series of measures to regulate accommodation to banks so as to restrict monetary expansion. However, to stabilise market conditions, the Reserve Bank became a net purchaser of Government securities through its OMOs, thereby infusing liquidity into the system (Balachandran, *op cit*).

### *Episodes of Coordination*

7.77 While the primary concern of the fiscal policy was to stimulate growth, the Government did not refrain from adopting strong measures to tackle inflation in the mid-1970s. The Government undertook measures to curtail expenditure, limit disposable income, restrict dividend payments and impose compulsory saving schemes on tax payers in the high income bracket<sup>18</sup>. The Government also raised the rates of union excise duties and introduced interest tax of 7 per cent on the gross interest earned by scheduled banks on their domestic loans and advances. With the easing of inflationary conditions the interest tax was withdrawn in 1978 but was reintroduced in 1980 in response to fresh inflationary pressures emanating from the second oil shock. As use of interest tax as a long-term resource augmenting instrument would considerably reduce the effect of monetary policy in responding to the fast changing conditions (Singh, 1982) the Government withdrew the tax in 1985.

7.78 The monetary measures undertaken during this period included raising the Bank Rate, deposit rates, lending rates and rediscount rates. Furthermore, selective credit controls were imposed on sensitive commodities such as foodgrains, cotton, oilseeds and oil, sugar and textiles to discourage the use of bank credit for speculative hoarding of these commodities. Thus, while monetary policy generally played an accommodative role to fiscal policy, there was a close coordination between the two policies at times when drastic monetary control measures were required. This period also signified the emergence of the interest rate as an instrument of credit policy, better inventory control and the discretionary element in Reserve Bank lending to banks. The coordination between monetary and fiscal policies was further strengthened in the wake of the macroeconomic crisis of 1991 and the policy response to it.

### **Third Phase: Macroeconomic Crisis, Reforms and their Impact**

#### *Core Problem in the Macroeconomic Crisis of 1991*

7.79 The higher growth performance of the Indian economy in the 1980s tapered in the early 1990s as

<sup>18</sup> The Additional Emoluments (Compulsory Deposit) Ordinance, 1974 provided for compulsory deposit of the entire additional wages and salaries and half of the additional dearness allowance, which were to be frozen with the Reserve Bank and repaid in five annual instalments after the expiry of the period of deposit. The Companies (Temporary Restrictions on Dividends) Ordinance, 1974 provided for limiting the after-tax profits distributed by companies and the third ordinance, a compulsory deposit scheme was introduced to cover all income tax payers with a net annual income exceeding Rs.15,000. These deposits were also to be frozen with the Reserve Bank and repaid in five annual instalments commencing from the expiry of two years from the end of the financial year in which the deposit was made.



mounting and persistent fiscal deficits spilled over to the external sector and the large current account deficit in the balance of payments became unsustainable with foreign exchange reserves dipping below US\$ 1 billion on July 12, 1991. Furthermore, the unbridled monetary accommodation of the fiscal deficits and the resultant monetary expansion fuelled double digit inflation. These macroeconomic imbalances, accentuated by the impact of the global economic shock, triggered an unprecedented external payment crisis.

7.80 The high fiscal deficits, particularly revenue deficits of the Central Government, had set up a 'vicious circle of increased borrowing and attempts to force the banks to lend at below-market rates' (RBI, 1992). Fiscal dominance constrained the conduct of monetary policy in five ways. First, the SLR, which was originally intended as a prudential instrument for banks to undertake risk-free investment, became a vehicle for pre-empting resources of a captive banking system for the Government. The SLR was raised from 25 per cent of gross demand and time liabilities in 1964 to 38.5 per cent of net demand and time liabilities (NDTL) in September 1990. Second, to the extent the banking system's resources fell short of the Government's increasing requirement, the Reserve Bank monetised the fiscal deficits with the ratio of monetisation to GDP nearly doubling from 1.1 per cent during the 1970s to 2.1 per cent in the 1980s. Third, by the end of the 1980s a fiscal-monetary-inflation nexus was becoming increasingly evident whereby excessive monetary expansion on account of monetisation of fiscal deficits fed into inflation, which in turn, led to an increase in the expenditures of the Government greater than its revenue mobilisation, thereby widening the fiscal deficits further. Fourth, with the compulsion of making available larger resources for the Government, the Reserve Bank had to mitigate the monetary impact of the fiscal deficits by impounding the resources that the banks could have extended to the commercial sector through periodic hikes in the CRR from 3 per cent of NDTL in September 1964 to 15 per cent in July 1989. Finally, the need to contain the interest burden of public debt necessitated a regime of administered interest rates which blunted the interest rate channel of monetary policy transmission mechanism.

*Crisis Resolution Strategy and Relaxation of Fiscal Constraint on Monetary Policy – 1991-92 to 1993-94*

7.81 The incidence of macroeconomic crisis turned to be a blessing in disguise for two reasons. First, it

gave due recognition to the core problem of escalating fiscal deficit which hindered an appropriate monetary fiscal interface for sustaining economic growth and applying brakes in the emerging high inflationary expectations. Second, the crisis created an exigency and elicited strong and decisive coordinated response on the part of the Government and the Reserve Bank to charter a strong reversal of *hitherto* followed policies. In fact, it has been argued that 'the uniqueness of 1991 lies in the fact that the Government used the opportunity created by the crisis to push through reforms that had little to do with the crisis itself' (NCAER, 2001).

7.82 The Government and the Reserve Bank pursued jointly a crisis resolution strategy imparting a new direction to the monetary fiscal interface, whereby fiscal policy for the first time assigned due importance to monetary management. In pursuance of this strategy, a sharp correction in fiscal deficit was implemented in 1991-92 and fiscal consolidation was continued by lowering gross fiscal deficit relative to GDP through expenditure compression measures and by taking substantially lower recourse to monetisation during 1990-91 to 1996-97. Notably the revenue deficit was also brought down by the Central Government during this period. The control over the budgetary disequilibrium and the debt of the Central Government relaxed the extent of fiscal dominance in monetary policy formulation and facilitated the Reserve Bank in bringing down CRR and SLR, in line with the recommendations of the Committee on the Financial System (Chairman: M. Narasimham, 1991), thereby freeing resources of the banking system for the commercial sector. The Reserve Bank also undertook a two-step downward adjustment of the exchange rate of rupee in July 1991 and introduced a dual exchange rate system in March 1992 to maintain competitiveness in exports. It also undertook measures to contain imports so as to restore the precarious position of foreign exchange reserves. Measures were also taken to restrain demand and reign inflationary pressures. The Reserve Bank eventually migrated to a market-determined exchange rate system by March 1993. The coordinated strategy of stabilisation and reform initiatives facilitated a pick up in the real GDP growth by the mid-1990s.

*Direct to Indirect Instruments of Monetary Control*

7.83 The proactive fiscal compression measures, the decision to use SLR as a prudential instrument and its phased reduction along with CRR set the stage

**Table 7.5: Monetary Policy Instruments**

Instrument/ Decade	1930s-1940s	1950s	1960s	1970s	1980s	1990s	2000s and so far
1	2	3	4	5	6	7	8
CRR				✓	✓	✓	✓
SLR				✓	✓	✓	
Standing Facilities		✓	Based on Net liquidity	Sector specific refinance	Sector specific refinance	Sector specific refinance de-emphasised	
Selective Credit Controls	✓	✓	✓	✓	✓	Phased out	
Open Market Operations	✓	✓	✓	✓		Reactivated in 1992-93	✓
Bank Rate		✓	✓	✓		Reactivated	✓
Repos/Reverse Repos auctions under Liquidity Adjustment Facility (LAF)							✓
Market Stabilisation Scheme							✓

✓ Denotes active operation of the instrument.

for the Reserve Bank to reactivate its indirect instruments of monetary policy (Table 7.5). The Reserve Bank used the Bank Rate as an instrument of monetary policy after a decade, raising it by two percentage points in 1991 to contain inflationary pressures. As OMO could be calibrated to target liquidity in the financial system, the Reserve Bank reactivated OMO as an instrument of monetary management. This was enabled by a transition to a system of market determined interest rates in Government securities and the development of an adequate institutional framework in the Government securities market. The Reserve Bank also introduced repos to undertake temporary absorptions of liquidity by selling Government securities to the market and reversing the transaction after a predetermined period, initially kept as a fortnight to match the cycle of reserve management by the banks.

7.84 The active application of indirect instruments for mitigating inflationary pressures continued during 1993-1995 in the wake of unprecedented capital flows and the consequent higher monetary expansion. As the exchange-rate system became market-based and a transition was being made towards current account convertibility, the Reserve Bank had to absorb excess capital flows in the first round to keep the exchange rate stable. It had to divest Government securities from its portfolio through the open market and repo operations so as to sterilise the monetary impact of the capital inflows and to restrain inflationary pressures. Thus, the Reserve Bank's recourse to OMO sales acted as a

substitute to a hike in CRR and obviated the need to resort to an across-the-board monetary tightening.

*Easing of the Fiscal Constraint on Monetary Policy: 1994-2003*

7.85 An abiding joint objective of the fiscal and monetary policies during this phase was to make arrangements to delink fiscal deficit from automatic monetisation so as to improve the efficacy of monetary management. Operationalisation of landmark historic agreements between the Reserve Bank and the Central Government in September 1994 phased out the process of automatic monetisation of fiscal deficits through *ad hoc* Treasury Bills. While monetary policy objectives continued to focus on price stability and facilitating adequate credit availability for assisting economic growth, the emphasis between the two depended upon evolving conditions. Predicated upon the reduction of automatic monetisation, the fiscal dominance on monetary policy was getting toned down considerably. Although fiscal deficits started increasing from 1997-98, a steady financing support from the market as well as small savings/investments by the National Small Savings Fund (NSSF) helped in restraining monetisation of deficits. Monetary policy, on the other hand, had to face new challenges in the form of cycles of capital flows as well as credit off-take. Under a deregulated environment, the Reserve Bank had to shoulder the additional responsibility of maintaining interest rate conditions conducive to economic growth and minimising cost

of Government borrowings, while maintaining monetary and financial stability.

#### *Phasing out Ad hoc Treasury Bills*

7.86 In pursuance of the recommendations of the Chakravarty Committee, the Reserve Bank adopted a framework of monetary targeting with feedback since the mid-1980s, whereby the targeted growth of money supply was consistent with economic growth and an acceptable level of inflation. Adherence to the target implied a limit to the monetisation of Government deficit. Despite the proactive fiscal compression and Reserve Bank's efforts in moderating money supply during the early part of the 1990s, the continuance of the *ad hoc* Treasury Bills implied that there could not be an immediate check on the monetised deficit. In fact, there were instances when the fiscal deficit was large during the course of the year but had moderated by the year-end. Recognising

this, the Government and the Reserve Bank agreed in 1994 to a three-stage process of elimination of *ad hoc* Treasury Bills over a three-year period ending 1996-97 (Box VII.5).

7.87 As a result of the process of limiting the issuance of *ad hoc* Treasury Bills, the monetised deficit fell sharply during 1994-95 and for the first time in almost two decades monetary expansion during the year was not attributable to the monetisation of the fiscal deficit. The Central Government did not take recourse to *ad hoc* Treasury Bills during the greater part of the year resulting in a sharp decline in the extent of monetisation of Central Government's deficit through *ad hoc* Treasury Bills from 22.2 per cent as at end-March 1994 to 1.8 per cent as at end-March 1995. However, in the wake of a spurt in commercial credit offtake during 1995-96, despite a reduction in the Centre's fiscal deficit, the Reserve Bank had to undertake large scale

#### **Box VII.5**

##### **Transition from Automatic Monetisation to Ways and Means Advances**

Monetary policy had to contend with the imperatives of automatic monetisation through accommodating Government of India's *ad hoc* Treasury Bills up to March 1997. In order to check this unbridled automatic monetisation of Government deficits, the First Supplemental Agreement between the Reserve Bank and the Government of India on September 9, 1994 set out a system of limits for creation of *ad hocs* during the three-year period ending 1996-97 before being completely phased out from April 1997. It was agreed during 1994-95 that the net issue of *ad hoc* Treasury Bills would not exceed Rs.6,000 crore as end-of the year, whereas it would not exceed Rs.9,000 crore for more than 10 continuous working days during the year. It was further agreed that if the net issue of *ad hoc* Treasury Bills exceeded Rs.9,000 crore for more than the stipulated period, the Reserve Bank would automatically reduce the excess amount of the *ad hoc* Treasury Bills beyond the prescribed level by auctioning of Treasury Bills or floatation of Government of India dated securities. While the year-end limit was lowered further to Rs.5,000 crore for 1995-96 and 1996-97, the 'within-the-year' limit was retained at Rs.9,000 crore for these two years. It was agreed that a suitable daily monitoring mechanism would be put in place by the Reserve Bank so as to furnish an updated position of the net issue of *ad hoc* Treasury Bills to the Government. Accordingly, the Reserve Bank was responsible to advise the Government about the net increase in *ad hocs* on a daily basis and the number of consecutive working days when the net issue of *ad hocs* exceeded the stipulated level, while on receipt of this information the Government had to convey to the Reserve Bank its views and

instructions on regularisation or the extent to which market borrowings had to be raised.

In pursuance of the Second Supplemental Agreement between the Reserve Bank and the Government of India on March 6, 1997, the *ad hoc* Treasury Bills were completely phased out by funding *ad hoc* Treasury Bills as on end-March 1997 into special undated securities at an interest rate of 4.6 per cent on April 1997 and were replaced by a system Way and Means Advances (WMA) commencing April 1, 1997. In order to smoothen the transition, the proportion of auction 91-day Treasury Bills was increased. Under the WMA system the Reserve Bank has been extending short-term advances only up to the pre-announced half-yearly limits, at a mutually agreed rate of interest rate and fully payable within three months. The Government of India was also allowed to incur overdraft but at an interest rate higher than that of the WMA which, effective April 1, 1999 has been restricted to a maximum of 10 working days. Furthermore, it was also agreed that the Reserve Bank would trigger fresh floatation of Government securities whenever 75 per cent of the WMA limit was reached. It was also agreed that the Government's surplus cash balances with the Reserve Bank beyond an agreed level would be invested by it in its own paper. With the depletion of Government securities from the Reserve Bank's portfolio on account of its sterilisation operations, investment of Central Government's surplus cash balances in dated securities was temporarily suspended between April and June 2004 before being partially restored with a ceiling of Rs.10,000 crore (enhanced to Rs.20,000 crore in October 2004).

devolvement of Government securities to ensure completion of the market borrowing programme, thereby increasing monetisation. The conditions normalised subsequently and the net issuances of *ad hoc* Treasury Bills reverted to well below the ceiling by the second half of 1996-97, reflecting greater market participation (Table 7.6).

7.88 The discontinuance of *ad hoc* Treasury Bills and its replacement by WMA in 1997-98 turned out to be valuable in three respects. First, the shift from the administered interest rate (4.6 per cent) to market-determined interest rates made the Government more conscious of the true costs of its borrowing programme. While this was expected to impart fiscal discipline, the move towards bond financing induced conditions for increased private capital formation. Second, it freed monetary policy from the fiscal deficit's straitjacket. Third, it allowed interest rate to reflect the opportunity cost of holding money among financial and other assets so as to improve its allocative efficiency (Jalan, 2002).

#### *Monetary Policy Strategy under Reduced Monetisation of Fiscal Deficits*

7.89 The coordinated strategy of phasing out of the *ad hocs* and institution of fiscal discipline under WMA freed monetary management from the vestiges of uncontrolled direct monetisation of fiscal deficit. A Monitoring Group on Cash and Debt Management of the Central Government with representatives from the Central Government and the Reserve Bank, set up in 1997 to manage this WMA system, has been periodically reviewing, *inter alia*, the monthly fiscal deficit, progress of borrowing programme, instruments of borrowing and cash position of the Central Government so as to identify suitable strategies for effective cash management. In order to facilitate cash

management in the absence of 91-day tap Treasury Bills and *ad hoc* Treasury Bills, the Reserve Bank introduced auctioning of the Central Government's 14-day Treasury Bills during 1997-98. Consequently, despite some stress in the Central Government's finances, its recourse to WMA has, by and large, been below the WMA limits reflecting a strong market support to the Government's market borrowing programme. In fact, despite continued fiscal stress, the net Reserve Bank's credit to the Central Government declined and recorded a surplus in 1999-2000 for the first time since 1977-78.

7.90 The movements in net Reserve Bank credit to Government, which captures the net monetary impact of the fiscal operations, increasingly depended upon the interface between the Reserve Bank's primary and secondary market operations and its active public debt management which facilitated lower recourse to WMA. The extent of monetisation through devolvement/private placement could, therefore, be moderated through OMO. While the primary market operations have been driven by the objectives of debt management policy, *viz.*, to ensure financing of fiscal deficit in a cost effective manner, the Reserve Bank's secondary market operations in the form of OMO or repo are driven by imperatives of monetary management.

#### *Fine-tuning of Monetary Policy Operating Procedures*

7.91 Freed of direct fiscal dominance, monetary policy formulation could address long-term structural issues while simultaneously pursuing short-term policy measures to take care of the specific economic situation. With the opening up of the Indian economy and introduction of market-determined exchange rate management the sources of monetisation increasingly shifted from fiscal policy to external flows. Thus, on the one hand, the monetary authority's control over monetary aggregates came to be influenced by capital flows, exchange rate movements and financial innovations; on the other hand, money demand became more interest sensitive due to the deregulation of interest rates, thereby changing the relationship between money, output and prices. These developments called for fine-tuning of monetary policy operating procedures as well as intermediate targets to be pursued towards achieving the overall objectives of economic growth, inflation and financial stability. Accordingly, the Reserve Bank switched over from a monetary targeting to a multiple-indicator approach whereby information on an array of indicators such as currency, credit extended by banks and financial

**Table 7.6: Fortnightly Average of Net Issue of *Ad hoc* 91-day Treasury Bills (Face Value)@**

(Rupees crore)			
Fiscal Year	1994-95	1995-96	1996-97
1	2	3	4
April-June	-1,593	10,398	13,654
July-September	-4,864	12,445	9,299
October-December	-6,013	10,030	5,633
January-March	-919	8,844	2,861
End-March	1,750	5,965	4,685
Fiscal Year Average\$	-3,249	10,280	7,612

@ As per RBI Records.      \$ After Closure of Accounts.

Source: Reserve Bank of India Annual Reports.



institutions, fiscal position, trade, capital flows, interest rate, inflation rate, exchange rate, refinancing and transactions in foreign exchange started being monitored on a high frequency basis for monetary policy formulation.

7.92 Simultaneously, the shifts in the channels of monetary policy transmission brought about by the freeing up of financial prices called for harnessing monetary policy instruments to address both the price and quantum of liquidity. The Reserve Bank continued to promote the use of indirect instruments in the conduct of monetary policy. The Bank Rate was reactivated as an interest rate signalling mechanism over the medium-term from 1997 while the repo rate emerged as the marginal liquidity management rate with the money market rates expected to hover within the corridor of the repo rate and Bank Rate. Since the latter half of the 1990s the Reserve Bank adopted a strategy of undertaking private placement/devolvement of Government securities in the face of adverse market conditions but offloading them through open market sales when conditions became more conducive. As far as direct instruments were concerned, the SLR was lowered to its statutory minimum level of 25 per cent of NDTL in October 1997 and the policy of phased reduction in CRR and rationalisation of the Reserve Bank's refinance facilities were continued notwithstanding some temporary two-way drifts around the long-term path to meet specific circumstances.

7.93 An important prerequisite for the Reserve Bank to modulate primary liquidity conditions by operating the OMO is for it to have an adequate stock of Government securities in its portfolio. The increasing market participation in the primary issuance of Government securities, and the Reserve Bank's predominant use of OMO sales from its portfolio of Government securities for absorbing the excess liquidity prevailing almost continuously since 1998-99 resulted in a steady diminishing of marketable securities available on its own account. An important aspect of OMO since 1998-99 has been inclusion of Treasury Bills of varying maturities. As external capital flows picked up, the Reserve Bank had to supplement the outright OMO sales of Government securities with reversible absorptions under the Liquidity Adjustment Facility (LAF), operative from June 2000, for sterilising the monetary

impact of its accretion in net foreign currency assets. The LAF instrument, which was introduced to manage liquidity only at the margin, therefore, became a tool for managing enduring liquidity and was losing its efficacy as an instrument to manage short-term liquidity.

#### Role of Treasury Bills<sup>19</sup>

7.94 Treasury Bills, the key short-term borrowing instrument of the Central Government<sup>20</sup> and a convenient risk-free short-term investment avenue for the market, have served as an important tool of short-term liquidity management for the Reserve Bank. However, up to the early 1990s (especially from 1965 with a migration to the tap issuance system), the Treasury Bills could not be operated as a monetary instrument with flexible rates for liquidity management through open market operations. Market participants displayed a tendency to rediscount their initial subscriptions with the Reserve Bank which resulted in the latter passively absorbing a large volume of Treasury Bills in addition to its holding of *ad hoc* Treasury Bills issued to refurbish Government balances. The absence of a market outside the Reserve Bank for the Treasury Bills and the inflexibility in the discount rate from 1974 limited the use of Treasury Bills as a monetary tool or an efficient money market instrument. Furthermore, quite often in the 1980s, the nominal discount rates dipped below the inflation rates implying negative real interest rates.

7.95 The auctioning of 182-day Treasury Bills in 1986 followed by a switch over to a full-fledged auctioning system in issuances of all Treasury Bills by the early 1990s and the institutionalisation of a system of primary dealers realigned the discount rates of Treasury Bills to the market-determined rates. It also helped in the development of a Treasury Bill market outside the Reserve Bank and facilitated the use of Treasury Bills as a monetary instrument to suitably manage short-term liquidity through open market operations. The underlying rationale for developing the Treasury Bill instrument during this phase lay in providing short-term funds to the Government at market-determined rates which, through the emergence of market reference rate, would also facilitate monetary policy operations. The issuances of Treasury Bills were also modulated in the wake of extinguishing *ad hoc* Treasury Bills and

<sup>19</sup> Discussion here focuses on Treasury Bills other than *ad hoc* Treasury Bills issued to replenish Government balances. For a detailed discussion on evolution of Treasury Bill market please refer to chapter VI.

<sup>20</sup> The Reserve Bank undertook sale of Treasury Bills on behalf of State Governments during the period 1938-1950.

the need to adhere to the discipline required under the WMA, on the one hand, and the requirement of developing a proper risk-free short-term yield curve for the market under evolving liquidity conditions, on the other. Since April 2004, the Treasury Bills have also been used for sterilising the monetary impact of capital flows under the MSS.

### Reserve Bank's relations with the State Governments: 1935-2003

7.96 The Reserve Bank's relations with the States (then Provincial Governments) was not direct till April 1, 1937 as the Central Government met the ways and means requirements of the Provincial Governments. With the introduction of Provincial autonomy in 1937 and the States Reorganisation Act, 1956, the Reserve Bank entered into separate agreements with the Provinces/States to transact banking business of the Provincial Government/State Government concerned. The Reserve Bank, besides performing routine agency and banking function for the State Governments, also helped float State Loans; extended ways and means advances to tide over temporary mismatches in receipts and expenditure of the States; and accommodated, to a great extent, their propensity to draw unauthorised overdrafts (ODs).

7.97 In terms of the agreement between the State Governments and the Reserve Bank, the latter is required to transact the general banking business of the States for which they have to keep a specified minimum balance<sup>21</sup> with the Reserve Bank. Under the agreements, the States were required to meet any temporary deficits in their minimum balances either by using their own Treasury Bills or by obtaining WMA from the Reserve Bank. The WMA extended to the State Governments by the Reserve Bank were limited to a multiple of the minimum balances held by them with it. The Reserve Bank also extended special WMA against Central Government securities. Despite these facilities, the WMA limit was frequently violated by some State Governments running ODs for extended periods. As the State Governments could not eliminate their excess drawings by the close of the year, the Central Government took over their unauthorised ODs. The Centre adjusted the amount against its assistance to the States either in the same year or over a period

of years and, in certain cases, extended special loans to States to clear their ODs. By the mid-1960s the States' ODs impinged upon the Centre's efforts to stabilise its finances in the wake of the balance of payments problems and the consequent need for obtaining assistance from the IMF. Furthermore, since the Central Government was itself running budget deficits, the unauthorised ODs of the State Governments were replaced, at frequent intervals, by loans from the Reserve Bank to the Centre against *ad hoc* Treasury Bills. Thus, although the Reserve Bank did not indulge in direct monetisation of the State Governments' ODs, such monetisation took place indirectly.

7.98 As the ODs by States were augmenting the reserve money, three groups were set up by the Reserve Bank in 1971, 1978 and 1985 to examine the WMA and OD scheme to suggest measures to bring about greater financial discipline among the States. The recommendations of these groups for the Reserve Bank included, *inter alia*, suspension of payments after due notice if the ODs persisted beyond seven working days; requesting State Governments to take corrective measures in case of indebtedness beyond 45 days even within the WMA limit and cautioning them if they exceed 75 per cent of the WMA limit. Although these recommendations were accepted, up till 1985 the Reserve Bank was unable to resort to the extreme measure of 'stop payment' uniformly for all the States. As a result, notwithstanding the repeated notices to the States sent by the Bank, several States remained in ODs for extended periods. With the implementation of the Overdraft Regulation Scheme effective October 2, 1985, the prescribed limit of seven consecutive working days for overdrafts was strictly enforced and the Reserve Bank and its agencies stopped payments on behalf of the States if they remained in overdraft beyond the prescribed period.

7.99 In view of structural difficulties faced by the State Governments in meeting temporary mismatches and keeping in view issues relating to fiscal and monetary management, the Reserve Bank modified the WMA scheme for the State Governments, which had operated from April 1937 to end-February 1999, on the basis of recommendations of the Informal

<sup>21</sup> The minimum balances were fixed at Rs.195 lakh for the first time in April 1937 but became effective from April 1, 1938. The amount of minimum balances have been revised upwards four times since then - April 1953 (Rs.4.00 crore), March 1967 (Rs. 6.25 crore), May 1976 (Rs.13.00 crore) and April 1999 (Rs.41.04 crore). In 1999, the Reserve Bank delinked the limits on WMA from minimum balance but revised and linked the minimum balances to the same base as Normal WMA.

Advisory Committee on Ways and Means Advances to State Governments (Chairman: B. P. R. Vithal). Accordingly, effective March 1999 the Reserve Bank delinked the normal WMA limits from the minimum cash balance approach and switched over to a formula-based approach whereby the revised WMA limits were based on the three-year moving average of the aggregate of revenue receipts and capital expenditure. The underlying rationale of the formula was that it would closely approximate the States' cash flows, while excluding the impact of the revenue deficit. Under the revised scheme, the limits on special WMA were directly proportional to the State Governments' holdings of Central Government dated securities and Treasury Bills with no ceiling. However, the disciplinary mechanism underlying the overdraft regulation was tightened and no State was to be ODs beyond 10 consecutive working days (12 days effective February 2001) beyond which the Reserve Bank was to stop payment on behalf of the concerned State Governments. The overdraft was constrained within a limit of 100 per cent of normal WMA in a financial year with a cautionary advice by the Reserve Bank on the first occasion of infringement and a grace of three consecutive working days (five days effective February 2001) to bring the ODs within the limit beyond which payments had to be stopped. The interest rates charged on the WMA and OD were Bank Rate and Bank Rate *plus* two percentage points, respectively. The minimum balances were also revised upwards linking them to the volume of budgetary transactions. The review of future revisions by the Reserve Bank was to be taken after three years.

7.100 Although the WMA facility was intended to bridge the temporary mismatches between receipts and expenditure, the States' recourse to ODs for long periods resulted in a situation whereby WMA effectively became a safety net between two spells of ODs. Notwithstanding this, the Advisory Committee on WMA to State Governments (Chairman: C. Ramachandran) continued the liberal dispensation of the prevalent normal WMA scheme in view of the serious liquidity crunch resulting from worsening fiscal situation in many States (RBI, 2003b). The Committee, however, simplified the formula by linking WMA limits to a single variable, *i.e.*, revenue receipts, as the inclusion of capital expenditure tended to cause distortions. Moreover, the Committee felt that revenue receipts are

relatively transparent and also determine the repaying capacity of the States. Accordingly, the Reserve Bank revised the WMA Scheme for the States on March 3, 2003<sup>22</sup>. Interest rate on Special WMA was kept below that of normal WMA so as to encourage the recourse to Special WMA before availing normal WMA. A differential interest rate became applicable for the normal WMA on the basis of duration so as to discourage utilisation beyond 90 days.

7.101 To sum up, the evolutionary process of monetary fiscal interface in India up to 2002-03 can be assessed in terms of three major turning points. First, the advent of development planning in India and the large resource requirements it entailed called for greater monetary accommodation, often automatic, to the Government with the consequential loss of monetary control. The nationalisation of banks in the late 1960s gave greater access to the Government over financial resources to meet its growing needs. From the 1970s, the instruments of monetary policy were deployed as a rearguard action to counter the effects of monetisation of deficits. The second turning point was the due recognition by the Government and the Reserve Bank of the implications of monetisation of fiscal deficit through the analytical framework of 'monetary targeting with feedback' which sought to restrict the Reserve Bank's credit to the Government so as to contain reserve money expansion within safe limits for achieving price stability. In the aftermath of the macroeconomic crisis of 1991, the Government and the Reserve Bank initiated a joint strategy of medium-term fiscal consolidation and containment of monetisation of fiscal deficit. The fiscal consolidation during the first half of 1990s set the stage for the third turning point, whereby the Government in its Budget 1994-95 stated that '...Government should not be able to finance its deficits by creating money, through unlimited recourse to the Reserve Bank, by issue of *ad hoc* Treasury Bills. This practice has also weakened the Reserve Bank's capacity to conduct effective monetary policy...'. Accordingly, a formal agreement between the Government and the Reserve Bank in 1994 guided the eventual phasing out of automatic monetisation through *ad hoc* Treasury Bills by end-March 1997. The phasing out of *ad hoc*s and the pursuit of an active public debt management policy by the Reserve Bank enabled greater flexibility in monetary management.

<sup>22</sup> The revised normal WMA limits have been computed by taking into account the average of revenue receipts for the preceding three years and then applying a higher multiplication factors of 3.19 and 3.84 for non-Special and Special category States, respectively, so that adequacy of limit is ensured.

#### IV. EVOLUTION OF PUBLIC DEBT MANAGEMENT

7.102 The Reserve Bank manages the debt of the Central Government by statute while it manages the debt of State Governments on the basis of separate agreements. It advises the Government during the formulation of its annual borrowing programme. An abiding objective of public debt management policy over the years has been the minimisation of cost of borrowing for the Government within the overall objectives of monetary policy. Towards this end, the Reserve Bank, in consultation with the Government, manages the timing, type of instruments, maturity profile and composition of debt. Operationally, it also deals with the servicing and repayment of government debt.

7.103 The evolution of public debt management in India has been inextricably linked with the developments in monetary fiscal interface. While fiscal policy has determined size of the public debt, the debt management policy has determined its composition so as to minimise its cost and modulate its maturity pattern contingent upon policy and investor requirements, and liquidity conditions. The monetary impact of debt depended upon its holding pattern, particularly the extent of which was held by the Reserve Bank (Tarapore, 1990). Up to the early 1990s, debt management was passively driven by fiscal policy compulsions of essentially financing Government borrowings through direct monetisation (automatic in terms of *ad hoc* Treasury Bills and Reserve Bank's holdings of Government securities) and captive subscriptions from the banks through the SLR mechanism at pre-determined low sub-market coupon rates. As the public debt levels mounted, the high levels of monetisation of fiscal deficits, the statutory pre-emptions of resources from banks, and distortion of term structure of interest rates consequent upon artificially low interest rates on Government paper made the process of passive debt management unsustainable. Accordingly, in the wake of macroeconomic crisis in 1991 a phase of pursuing active debt management commenced from the early 1990s by systematically developing the Government securities market, reducing the levels of statutory pre-emptions, sharply reducing the monetisation of deficits and activating indirect instruments of monetary policy. Government borrowing was made market-related through the introduction of auctions in primary issues which enabled the Reserve Bank to impose market discipline on fiscal activism. The abolition of *ad hoc* Treasury Bills and introduction of the WMA for the

Central Government eliminated the softer mode of financing fiscal deficit through automatic monetisation. Apart from guiding the sequence of policy reforms in the Government securities and other financial markets so as to make them more integrated, the Reserve Bank also examined the microstructure of markets so as to strengthen their processes and make them more transparent, efficient, fair and risk-free. The process of market development also helped monetary and debt management operations of the Reserve Bank with the reactivation of the instrument of open market operations.

#### Passive Public Debt Management

7.104 The Reserve Bank as a debt manager had to ensure that while the borrowings of the Government were on the best possible terms and conditions, the adverse effects of Government borrowings on industry and trade were minimised. The strategy for Central Government bond issuances were varied by the Reserve Bank, from time to time, during the years of the World War II, depending upon the evolving conditions. The nomenclature of the various loans was done carefully to draw appeal from the subscribers. Broadly, the war was financed with a coupon rate of three per cent, the prevailing Bank Rate, although the issue price was varied according to the maturity of the loan. The loans issued comprised short, medium and long-term maturities. Market preference was for long-term securities anticipating substantial cheapening of money.

7.105 The floatation of loans was generally done during the slack season so that the Government's borrowing needs did not clash with the private sector's requirement for funds. The Central loans were floated ahead of State loans. There were two instances, in 1954 and 1963, when the Reserve Bank resorted to combined floatation of loans for the Central and State Governments. In both the cases the loans did not meet with any 'notable success' since a majority of the States refrained from aggressively promoting the loan in which their share was determined by the Centre. Hence, the Reserve Bank reverted to floating separate loans for the Centre and the States from 1964 onwards.

7.106 The Reserve Bank offered a menu of Government securities of different maturities from the Second Plan onwards, in order to provide investors with a broad loan mix and to address the problem of unbalanced portfolios, as opposed to the single medium dated securities sold during the First Plan period. The concentration was, however, in short dated



instruments since these were more popular with the market. The maturity pattern of Government securities underwent a transformation over the years reflecting the nature of investible funds, the coupon rates on different securities, the pattern of ownership and the risk of depreciation. The problem of bunching of repayments led the Reserve Bank and the Government during the late 1950s to lengthen the maturity pattern of the loans despite the higher cost involved. The first long-dated security was issued in 1959 with a 20-year maturity, followed by a 23-year maturity security in 1962. The maximum maturity was lengthened to 30 years in 1969-70.

7.107 The share of short-term securities in the total outstanding securities declined steadily during the 1960s and the early 1970s, even as that of long-term securities continued to rise. There was no perceptible change in the share of medium term securities except for a spurt in the mid-1970s. In 1974-75, deviating from the prevailing practice of lengthening maturities, the Reserve Bank resorted to shortening maturities in order to reduce the extent of depreciation on account of an upward movement in prices. In 1984-85 the maximum maturity was lengthened from 28 years to 30 years but was brought down to 20 years in 1986-87 in line with the recommendations of the Chakravarty Committee recommendation.

7.108 The annual increase in interest rates of Government securities till the late 1970s was marginal, thereby resulting in a misalignment of the coupon rates and yields on Government securities *vis-à-vis* the interest rates on other instruments. An Internal Working Group (Chairman: D.C.Rao), set up in 1980 to address the issues relating to debt management, recommended a one-time increase of three percentage points in interest rates on Government securities to bring them in alignment with other interest rates. The Reserve Bank, therefore, effected larger increases in coupon rates from the early 1980s, particularly at the long-end. The coupon rates for long-dated securities increased from 6.5 per cent in 1977-78 to 11.5 per cent in 1985-86. Despite these increases the interest rates on Government securities remained unattractive, as the interest rate on a 30-year Government security was below that offered by banks on five-year term deposits and other comparable instruments. The Chakravarty Committee in 1985, therefore, made several recommendations to ensure positive real interest rates on Government securities. The implementation of these recommendations created the environment for realigning interest rates on Government securities closer to the market rates in the early 1990s.

#### *Management of State Government Debt*

7.109 States' market borrowings in the post-War period were smaller than War years due to diminished capacity of the market to absorb them. Since 1951, the Reserve Bank abandoned underwriting of State loans, which it had undertaken since 1938 and undertook several measures to promote the market for State Governments loans which included limited subscription to the primary issuance of State Loans from early 1950s, evening out the market for State Government securities and attempting to reduce the size of loans.

7.110 State loans were expanded, from the mid-1950s, to accommodate large plan outlays. As the State loans appealed to only a limited clientele who preferred yield to liquidity, State Governments resorted to forcing their securities upon unwilling subscribers, mostly small banks and insurance companies, who then offloaded these at a discount soon after the closure of the issues, destabilising the Government securities market. The Reserve Bank had to intervene and subscribe to the State Government issues to make good for shortfalls in public subscriptions, especially in the early 1960s. As part of the disinflationary policy of the Government, the Reserve Bank discontinued subscribing to State loans from 1965-66 onwards. The Reserve Bank, instead encouraged the States to distribute the unsubscribed portions of their loans among themselves.

#### **Reactivating Public Debt Management**

7.111 During the phase of fiscal dominance, the problem of overarching public debt management inhibited efficient monetary control. The initiatives for relaxing fiscal dominance in monetary policy and progressive market-orientation of Government debt through the auction system in 1990s provided greater headroom to the Reserve Bank to undertake active monetary and debt management. Unlike the pre-reform phase when the cost of the Government debt was contained administratively at sub-market interest rates, under a system of market-determined cost of Government borrowings from the 1990s an abiding responsibility of the Reserve Bank as debt manager of the Government has been to minimise cost of public debt, keeping in view the rollover risk, within the overall objectives of monetary policy. The Reserve Bank had to undertake active public debt management, especially in view of growing market borrowing of the Government fuelled by re-emergence of high fiscal deficits from the second half of 1990s.

7.112 A challenge faced by the Reserve Bank has been to reduce the interest cost of market borrowings even in the face of ever increasing quantum of such borrowings by the Government. The Reserve Bank faced a twin challenge in the 1990s in pursuing its objective of controlling interest cost. First, the market realignment of interest rates on Government securities implied an increase from the sub-market levels in the pre-reform phase. Second, a steady increase in the share of Government securities in financing fiscal deficit of the Central Government from 21 per cent in 1991-92 to 80 per cent in 2004-05 reflected the significant role played by marketable securities. Thus, the Reserve Bank was vested with the responsibility of managing the cost of an increasing proportion of the Government borrowing.

7.113 The Reserve Bank followed a four-fold strategy in its public debt management. First, it modulated the maturity pattern of the primary issuances so as to minimise the cost. Second, during occasions when the market was not conducive for subscription at a reasonable cost it acquired Government securities under devolvement/private placement and offloaded the same once market conditions stabilised. Third, the Reserve Bank has been taking measures to broaden and deepen the Government securities market by widening the investor base and introducing new innovative instruments from time to time to suit market demand. Finally, the Reserve Bank introduced in 2002-03 the issuance of half-yearly indicative calendars for the core component of the Central Government's market borrowing programme to provide transparency and thereby enable the market participants to improve their investment planning.

*Management of Maturity Pattern and Cost of Government Debt*

7.114 The growing volume of domestic Government debt cast uncertainties in financial markets, fuelling investor expectations of higher interest rates, on the one hand, and restricting the manoeuvrability of the debt managers for ensuring interest rates conducive to promoting economic growth and financial stability on the other. As the higher stock of Government debt constrained the leverage in lowering interest rates on long-term, the Reserve Bank had to place bond issuances at the shorter end of the market during the first half of 1990s. In view of the market perception and the transition from pre-announced coupon to market related rates as well as the need

to widen investor base beyond the captive confines, the maximum maturity was reduced from 20 years to 10 years and the minimum maturity was lowered from five years to two years. As a result, the share of short dated securities (*i.e.*, under five years) as a proportion of total outstanding dated securities sharply rose between March 1991 and March 1998, while that of securities with a tenor above 10 years declined. Inevitably this led to a sharp bunching of securities for redemption and frequent roll-over of short-term issues which together posed problems for the Reserve Bank in the management of liquidity. In order to avoid such bunching of future repayments, the Reserve Bank adopted a conscious strategy from 1998 to elongate the maturity pattern of Government debt through issuances of long-term papers to reduce refinancing risk (Table 7.7). Accordingly, securities over 10-year maturity constituted the largest share of outstanding stock of Government debt. The maximum maturity of Central Government securities was increased from 25 years to 30 years during 2002-03. The weighted average maturity of the outstanding Central Government stock of securities rose from 6.6 years in 1997-98 to 13.76 years as at end-March 2005. The successful elongation of the maturity in a market related interest rate environment has been facilitated by the development of the Government securities market and reasonably benign inflation environment in the recent years.

7.115 The Reserve Bank also had to carefully weigh considerations on elongating maturity so as to continue to pursue the objective of minimising the cost of borrowings as elongation of maturity could invariably involve increasing interest costs. However, the soft interest rate conditions since the late 1990s helped the Reserve Bank in lowering the weighted average yield of market loans from 12 per cent in 1997-98 to 6 per cent in 2004-05. In order to reduce the large debt servicing burden on Government,

**Table 7.7: Maturity Profile of Central Government Securities**

(Per cent)

Year (end-March)	Outstanding Stock		
	Under 5 Years	5-10 Years	Over 10 Years
1	2	3	4
1990-91	9	6	86
1997-98	41	41	18
2004-05	27	30	43

**Source:** Reserve Bank of India Annual Reports.

particularly in a rising interest rate scenario, the Reserve Bank has also conducted issuances of floating rate bonds.

#### *Developing the Government Securities Market*

7.116 Development of the Government securities market is critical for facilitating active public debt management policy, development and integration of financial markets and operation of indirect instruments of monetary policy (Reddy, 2002). While a better functioning Government securities market has provided greater degrees of freedom to the Reserve Bank as the debt manager to optimally manage the maturity and cost of public debt, it has also enabled monetary policy to lower the statutory pre-emption ratios and use open market (or repo) operations for monetary management (Rangarajan, 1997a). Introduction of an auction procedure for the Centre's borrowing through dated securities from 1992-93 paved the way towards market-determination of interest rates in the Government securities market. Subsequently, the Reserve Bank has been taking a number of measures to develop the Government securities market. These include introduction of new instruments, development of an appropriate institutional infrastructure in the form of primary dealers for proper intermediation of the Government securities market, widening of investor base and the setting up of delivery-versus-payment system in 1995 to minimise settlement risk in Government security transactions. As part of further reforms, the Reserve Bank developed benchmark securities by consolidating new issuances in key maturities, enhanced fungibility and liquidity by re-issuances of existing loans and promoted retailing of Government securities. Since the late 1990s, the Reserve Bank has been pursuing a policy of passive consolidation of Central Government securities through the process of reissuance of existing securities through price-based auctions<sup>23</sup>.

#### *Management of State Governments' Market Borrowings*

7.117 The allocation of funds to State Governments under the Market Borrowing Programme (MBP) is finalised by the Central Government and the Planning Commission in consultation with the Reserve Bank. As per the 'traditional tranche method' in vogue up to 1998, the Reserve Bank completed the combined

borrowing programme of all the State Governments in two or more tranches through bond issuances with a pre-determined coupon and pre-notified amounts for each State. The traditional tranche ensured success of the primary issuances of the State Governments in an era of high SLR and small size of State Government borrowings. However, a progressive reduction in the SLR requirements which resulted in excess holdings of SLR securities by banks and the differing perceptions of individual States by the investor community required a move away from the traditional tranche method. In the context of financial sector reforms and to provide scope to better managed States to access funds directly at market rates, effective from 1998-99, an option was made available to the State Governments to enter the market individually using the auction method<sup>24</sup> (with pre-determined notified amount but without pre-determined coupon rate) or tap method (with pre-determined coupon rate but without pre-determined notified amount). The State Governments have adopted the auction system for raising a part of their market borrowings since January 1999. The experience of the States that used the auction method indicated that some of them could mobilise loans at competitive rates while other States had to pay higher rates. The factors which seemed to determine the spreads, apart from size and timing of the issues, included overall strength and prospects of a State's finances, its overall indebtedness including its off-budget borrowings and contingent liabilities like guarantees, efforts to control its indebtedness and its track record of honouring guaranteed commitments. In case of some of the States which did not opt for the flexible auction method, the Reserve Bank continued with the traditional tranche method as it was perceived to be both preferable and cost efficient. However, as banks and financial institutions were increasingly linking their subscriptions to the track record of the States, particularly in honouring their guaranteed bonds and loans of their enterprises as well as the liquidity of the State Government securities, the Reserve Bank introduced 'umbrella tap tranche' method whereby combined borrowings for all States were raised indicating a targeted amount at a predetermined coupon but without notifying the amounts for individual States. The Consolidated Sinking Fund (CSF) was set up in 1999-2000 to meet redemption of market loans of State Governments with each State having to contribute 1 to 3 per cent of

<sup>23</sup> Details of evolution of Government securities market are discussed in chapter VI.

<sup>24</sup> The auction method permitted the States to raise, at their discretion, 5-35 per cent of their allocated MBP through auctions.

its outstanding market loans each year to the Fund. The accretions to the Fund were to be invested in the securities of the Central Government.

7.118 The issues that continued to linger in ensuring successful completion of the MBP of the States include scope of underwriting by the PDs, allowing the States to access funds beyond the ceiling of allocation through the 'flexible' method, difficulties in accessing the market for the States who have not cleared their overdues in respect of bonds of the State level institutions with State Government guarantees, separation of debt management from monetary management and thereby having a separate institutional framework for mobilising State Government borrowings.

*Reserve Bank's Consultative Approach in Management of Public Debt*

7.119 As alluded to earlier, a Monitoring Group on Cash and Debt Management of the Central Government has been managing the WMA system since 1997 through periodic review of the relevant variables pertaining to the borrowing and cash position of the Central Government on an ongoing basis. Furthermore, a Technical Advisory Committee on Government Securities market was formed in January 1997 in order to develop the Government securities market through consultation. This Committee has been providing advice on all policy matters concerning the Government securities market.

7.120 To sum up, the evolving debt management strategy of the Reserve Bank over the years has been influenced by the changes in the operating procedure of monetary policy and the development of financial markets, institutions and instruments. Prior to the 1990s, the Reserve Bank's passive debt management strategy led to large involuntary holding of Government securities by the financial sector at sub-market interest rates which resulted in financial repression. Consequently, the Reserve Bank had to shift towards a more active debt management strategy by institutionalising market mechanism for Government securities, thereby encouraging voluntary financing of fiscal deficit by the financial sector. This also facilitated the conduct of monetary policy through indirect instruments of policy, viz., open market operations which activated the interest rate channel of monetary policy transmission. A migration to market related interest rates, however, raised the cost of Government borrowing necessitating a strategy of shortening the maturity profile of the same. The redemption pressure on account of bunching of

repayments led to a shift in strategy in the late 1990s towards elongating the maturity profile amidst softer interest rates and low inflation expectations. The Reserve Bank also undertook consolidation of the primary issuances of the Government paper through reissuances of key benchmark securities under price-based auctions to improve tradeability of Government securities and enhance the price discovery process. With the opening up of the economy and a more active debt management policy, there was gradual shift in the operating procedure of monetary policy to a multiple indicator framework since the late 1990s, whereby both quantum and rate variables of high frequency, including fiscal indicators, were monitored for drawing policy perspectives. In this regard, a mechanism for coordination of the technical expertise of the Reserve Bank and the Government in matters relating to monetary and debt management has been put in place in the form of a monitoring group on Cash and Debt Management of the Central Government since April 1997. The Reserve Bank has also introduced a system of advance announcement of indicative calendars of Government securities auctions from 2002-03 to stabilise market sentiments. The Reserve Bank, however, gauges the pulse of the market before conducting auctions of Government paper. The public debt management function of the Reserve Bank has been further strengthened since 2003-04 by the enabling environment created by fiscal consolidation.

## V. FISCAL LEGISLATION, MONETARY AND DEBT MANAGEMENT (2003-2005)

### Operationalising Rule-based Fiscal Consolidation

7.121 The deterioration of the fiscal situation and increased dis-saving of Government administration by the latter half of 1990s renewed the urgency for improving public finances, both at Centre and State levels, particularly, in view of the need to benchmark Indian codes and practices to international standards in the aftermath of its membership to G 20 group of countries (Reddy, 2000a). Accordingly, the Government constituted a Committee on Fiscal Responsibility Legislation (Chairman: E.A.S. Sarma) in January 2000 to examine the various aspects of the fiscal system and recommend a draft legislation on fiscal responsibility. The Union Budget 2000-01 underlined, in the context of medium-term management of fiscal deficit, the need for 'a strong institutional mechanism embodied in a Fiscal Responsibility Act'. The Reserve Bank facilitated the preparation of the Fiscal Responsibility Legislation



by providing technical inputs. The spirit of rule-based fiscal consolidation was evident in the introduction of the Fiscal Responsibility and Budget Management (FRBM) Bill in December 2000 which proposed a legal and institutional framework for initiating a medium-term management of fiscal deficit. The enactment of the FRBM legislation in August 2003 set the tone of fiscal consolidation during 2003-04. A combination of measures to enhance revenue buoyancy and contain revenue expenditure along with a cut back in capital expenditure and higher realisation of disinvestment proceeds resulted in all key deficit indicators of the Central Government being lower than budget estimates for the first time since the initiation of structural reforms. The commitment to fiscal

prudence was further demonstrated by notifying the FRBM Act and Rules in July 2004 which, in turn, streamlined the presentation of the Union Budget from 2004-05 (Box VII.6).

7.122 The Central Government's finances, guided by the FRBM Act, improved as revenue deficit and gross fiscal deficit declined at a greater pace than the minimum stipulated levels during 2004-05 under the FRBM Act/Rules. The incremental liabilities accruing during that year were below the FRBM ceiling (Table 7.8). The Reserve Bank also provided technical assistance to an inter-institutional Working Group (2005) with select representatives from the Central and the State Governments in the preparation of a model Fiscal Responsibility Legislation (FRL) for the State Governments.

#### Box VII.6

##### Progress Towards Enacting Fiscal Responsibility Legislation

The genesis of the need for enacting the Constitutional provision for imposing a ceiling on borrowings of the Central Government (Article 292) dates back to 1957-58 when such a view was expressed by the Estimates Committee on Budgetary Reforms. The constitutional provision limiting Government borrowings could not, however, be enforced as a law due to the Government's opposition claiming that this provision was 'permissive, not mandatory'. Furthermore, the Government opined that the Parliamentary approval of the Budget implied approval for borrowings as well as deficit financing (clearly indicated in the Budget) and that legal limits necessarily had to be high and wide which in reality provide no checks. The Reserve Bank, in general, did not dispute this view, although in 1964, reacting to the Ninth Report of the Public Accounts Committee, it urged the Government to give a 'careful thought' to recognise explicitly the principle of parliamentary sovereignty over Government borrowing. The Estimates Committee, 1991-92 raised the issue of legal stipulation on Government borrowing again but recommended its periodic review which was resisted by the Government on three grounds. First, the constitutional limit could cover only market loans, Treasury Bills and external loans but not the borrowings under the Public Account of India. Second, the fixation of Government borrowings on the security of the Consolidated Fund of India and fresh liabilities under Public Account of India as a ratio to GDP would operationally not be feasible as GDP estimates were available with a lag. Finally, any such limit when exceeded would have to be regularised in due course which would not be an improvement over the prevailing system of Parliamentary voting in the case of excess expenditure over grants. The Reserve Bank also raised the issue of placing limits on public debt within the Constitutional purview while mandatorily disclosing

information to the Parliament on other liabilities, contingent liabilities and overall public sector deficit (RBI, 1997a).

The Fiscal Responsibility and Budget Management (FRBM) Bill was introduced in December 2000 and after some revisions the FRBM Act 2003 was enacted on August 26, 2003 and was notified on July 5, 2004 along with the FRBM Rules, 2004. The Act embodies the spirit of inter-generational equity and provides for long-term macroeconomic stability by reducing fiscal deficit and eliminating revenue deficit by March 31, 2008 (extended to March 31, 2009 *vide* Finance Act, 2004). These deficits could, however, exceed the targets on grounds of national security, national calamity or other exceptional circumstances. The Act prohibits direct borrowings by the Centre from the Reserve Bank from the year 2006-07 onwards except by way of Ways and Means Advances to meet temporary mismatches in receipts and payments or under exceptional circumstances. The Reserve Bank may, however, buy and sell securities in the secondary market. The Act also stipulates quarterly reporting of the Central Government finances in relation to the budget estimates. The FRBM Rules, 2004 have set annual targets for phased reduction in key deficit indicators over the period ending March 31, 2008 and imposed ceilings on Government guarantees and additional liabilities. In accordance with the FRBM Rules, 2004, the Union Budgets 2004-05 and 2005-06 presented the Macroeconomic Framework Statement, Medium-term Fiscal Policy Statement and Fiscal Policy Strategy Statement. The Central Government's Task Force on Implementation of the Fiscal Responsibility and Budget Management Act, 2003 (Chairman: Vijay Kelkar) drew up the medium-term framework for fiscal policies to achieve the FRBM objectives by 2008-09.

**Table 7.8: FRBM Rules for the Central Government**

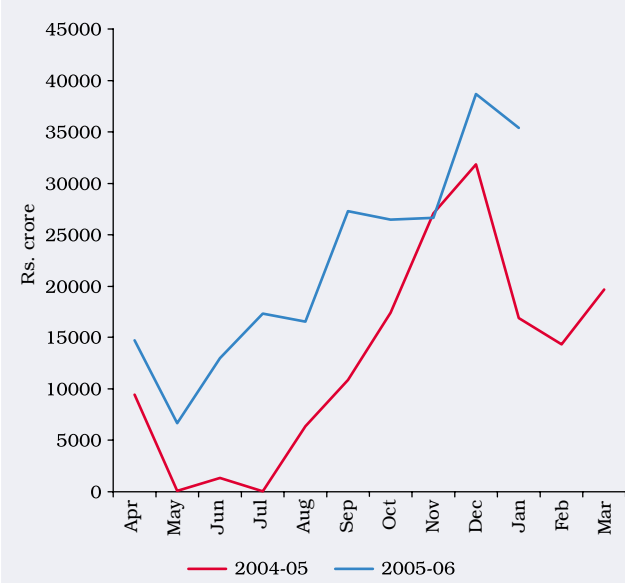
Parameter	Provisions in the FRBM Rules	2004-05
Gross Fiscal Deficit (GFD)	To be reduced by 0.3 per cent or more of GDP every year, beginning with the year 2004-05, so that it does not exceed 3 per cent of GDP by end-March 2008 (later extended to end-March 2009).	Reduced by 0.3 per cent of GDP in revised estimates over 2003-04 (RE) and 0.4 per cent in Provisional Accounts over 2003-04.
Revenue Deficit (RD)	To be reduced by 0.5 per cent or more of GDP at the end of each year, beginning from 2004-05, in order to achieve elimination of the RD by March 31, 2008, as prescribed in the FRBM Act (later extended to end-March 2009).	Reduced by 0.9 per cent of GDP in revised estimates over 2003-04 (RE) and 1.0 per cent in Provisional Accounts over 2003-04.
Contingent Liabilities	The Central Government shall not give guarantees aggregating an amount exceeding 0.5 per cent of GDP in any financial year beginning 2004-05.	The available information on guarantees as furnished in the Union Budget 2005-06 relates to the fiscal year 2003-04.
Additional Liabilities	Additional liabilities (including external debt at current exchange rate) shall not exceed 9 per cent of GDP for the year 2004-05. In each subsequent year, the limit of 9 per cent of GDP shall be progressively reduced by at least one percentage point of GDP.	7.8 per cent of GDP in terms of preliminary estimates.

### Monetary Policy in a Framework of Rule-based Fiscal Consolidation

7.123 Monetary policy, though relieved of fiscal dominance, faced new challenges emerging from the liquidity overhang resulting from strong capital flows. The Reserve Bank responded with a policy mix of sterilisation, prepayment of external debt and liberalisation of foreign exchange transactions. Furthermore, the maintenance of sizeable surplus cash balances by the Central Government became a persistent feature since August 2003, enabled by increased issuance of Treasury Bills and operation of debt swap scheme, while its recourse to WMA has been virtually absent (Chart VII.1).

7.124 In accordance with the Second Supplemental Agreement between the Reserve Bank and the Central Government in 1997, the Centre has been investing its surplus cash balances over and above the minimum stipulated limit in its own paper purchased from the Reserve Bank from 1997-98. The Reserve Bank also pursued a policy of converting the entire stock of Central Government's non-transferable 4.6 per cent Special Securities to marketable securities by the year 2003-04, thereby ensuring availability of sufficient securities in the portfolio of the Reserve Bank to conduct open market operations (Table 7.9). The surge in capital inflows and the recourse to open market operations for sterilising their monetary impact, however, depleted the Reserve Bank's stock of Government securities. This

**Chart VII.1: Daily Average Centre's Surplus Cash Balances**



necessitated the use of Liquidity Adjustment Facility (LAF) operations, an instrument for managing short-term liquidity, for sterilising capital flows. The ratio of open market sales by the Reserve Bank to the addition to its gilt portfolio dropped to about 50 per cent during 2003-04 from an average of 90 per cent in the preceding five years following a switch to LAF operations (RBI, 2004).

7.125 The Reserve Bank examined alternate instruments for sterilisation in the wake of persistent

**Table 7.9: Reserve Bank's Stock of Central Government Securities**

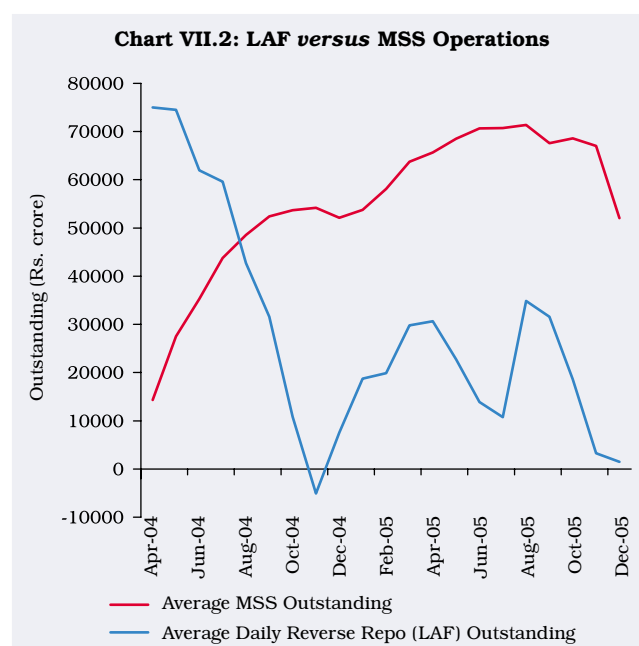
(Rupees crore)			
Fiscal Year	Outstanding Dated Securities	Outstanding amount of Special Securities Issued in Conversion of <i>Ad hoc</i> Treasury Bills	Total Outstanding
1	2	3	4
1996-97	6,666	1,21,818	1,28,484
1997-98	31,977	1,01,818	1,33,795
1998-99	42,212	1,01,818	1,44,030
1999-2000	35,190	1,01,818	1,37,008
2000-01	41,732	1,01,818	1,43,550
2001-02	40,927	1,01,818	1,42,745
2002-03	55,438	61,818	1,17,256
2003-04	77,397	0	77,397
2004-05	80,770	0	80,770

Source: Reserve Bank Annual Report 2004-05.

capital flows and depletion of Government securities from its portfolio. In this context, the Reserve Bank's Working Group on Instruments on Sterilisation (Chairperson: Usha Thorat) was in favour of revisiting the 1997 agreement so that the Government's surpluses with the Reserve Bank are not automatically invested and can remain as interest-free balances with the Reserve Bank, thereby releasing the Government securities for further sterilisation operations (RBI, 2003c). Accordingly, investment of the Central Government's surplus cash balances in dated securities was discontinued temporarily from April 8, 2004. Subsequently, with the introduction of the Market Stabilisation Scheme to absorb liquidity, investment of the Centre's surplus cash balances in its own paper was partially restored in June 2004 with a ceiling of Rs.10,000 crore (enhanced to Rs.20,000 crore in October 2004).

#### Market Stabilisation Scheme

7.126 In pursuance of the recommendations of the Working Group on Instruments on Sterilisation, the MSS was introduced from April 1, 2004 under a Memorandum of Understanding (MoU) between the Central Government and the Reserve Bank. Under this scheme, injections of primary liquidity on account of any increases in the Reserve Bank's net foreign



assets (NFA) are absorbed by the issuances of Central Government Treasury Bills and dated securities under MSS. The money raised under the MSS is held by the Government in a separate identifiable cash account maintained and operated by the Reserve Bank, which would be appropriated only for the purpose of redemption and/or buyback of issuances under MSS. Thus, the increases in the Reserve Bank's NFA are matched by accretion in Government balances under MSS, thereby driving down the net Reserve Bank credit to the Government and nullifying the monetary impact of an increase in the Reserve Bank's NFA. The operation of the MSS has emerged as a key instrument of sterilisation and has effectively curbed the burden on LAF operations (Chart VII.2).

#### Public Debt Management amidst Low Monetisation

7.127 A new dawn of fiscal marksmanship, large capital flows, comfortable liquidity conditions and stable inflation expectations have facilitated the conduct of public debt management by the Reserve Bank. The debt management operations were particularly strengthened for the Central Government in the wake of their lower market borrowings during 2003-04 and 2004-05. The investments by the National Small Savings Fund (NSSF) from the debt swap scheme (DSS)<sup>25</sup> proceeds relieved the pressure

<sup>25</sup> Under the DSS, operative between 2002-03 to 2004-05, the State Governments prepaid high cost debt to the Central Government, which, in turn, used such proceeds for redeeming its securities issued to the NSSF. The NSSF reinvested the same in Special Central Government Securities at lower interest rates.

on the market borrowings for financing fiscal deficit of the Central Government for these two years. Furthermore, the availability of surplus cash balances with the Centre additionally warded off pressure on the market borrowing programme during 2004-05. A noteworthy feature has been the virtual absence of recourse to WMA due to availability of surplus cash balances with the Centre. The conducive macroeconomic conditions and better fiscal marksmanship facilitated, to a great extent, the Reserve Bank's pursuit of its twin objectives of minimising of cost over time and lengthening the maturity of debt. The weighted average cost of market borrowings of the Centre as well as the States showed a decline for eight years in succession up to 2003-04 while weighted average maturity of market borrowings continued to be elongated. Notwithstanding a hardening of interest rates during 2004-05 attributable to spurts in international oil prices, global upturn of the interest rate cycle and sharp spikes in domestic inflation, public debt continued to be managed successfully with the increase in the weighted average cost and a decline in the weighted average maturity being only marginal. The innovative public debt management techniques in terms of measures in developing the Government securities market, a salient feature since the late 1990s continued and supported the increasing subscription of the Government's market borrowings by banks, financial institutions and insurance companies.

### Public Debt Restructuring

7.128 The major risk associated with the management of public debt is the size of the debt itself and the pressure on account of its servicing. Fiscal adjustments through restructuring of public debt aim at mitigating the burden associated with unsustainable debt-GDP ratios and rising debt service burden. The underlying rationale for explicit debt reduction is to avoid a situation of 'debt overhang' when debt exceeds a country's repaying capacity. Debt restructuring is usually undertaken through debt swap, debt buyback, rescheduling, debt relief and concessional refinancing. The high accumulation of public debt in the Indian economy since the mid-1990s has created a heavy debt-servicing burden. Various measures have evolved over the years including market-related primary issuance of Government securities, introduction of varied instruments and alignment of the maturity period of new debt issuances to redemption pattern of existing debt stock. Efforts have been made to actively restructure public debt as part of the fiscal

consolidation process as envisioned by the Government in its Union Budget 2003-04. Accordingly, the Central Government prepaid high cost foreign currency loans to the World Bank and Asian Development Bank in 2002-03 and 2003-04. The Reserve Bank also conducted the first-ever buyback auction for 19 high coupon but relatively illiquid Central Government securities on a voluntary interactive basis and reissued four existing liquid securities of equal face value. Furthermore, an innovative scheme of restructuring and consolidation of States' debt was also undertaken through the DSS, whereby the States prepaid high cost debt from the Centre with fresh market borrowings and small savings proceeds at prevailing interest rates over a three-year period ending 2004-05.

### Reserve Bank's Recent Initiatives as Manager of States' Debt

7.129 A noteworthy feature in recent years has been a lower recourse of the States to WMA and OD reflecting, *inter alia*, an improvement in the States' finances resulting from an array of fiscal reforms including higher revenue mobilisation since the late 1990s as also steady flow of resources in the form of small savings collections. The Reserve Bank also provided the States with greater flexibility by allowing them to raise up to half of their market borrowings through the auction method where specific requests were made by them.

7.130 Reserve Bank has been organising the conferences of the State Finance Secretaries in a structured manner since 1997, wherein a consensual approach among the Central Government, State Governments and the Reserve Bank has evolved on issues relating to the State finances. In this context, the Reserve Bank has continued its efforts to sensitise the States about the problems posed by the increasing volume of their guarantees to State-level institutions as the devolvement of these guarantees on the State Governments would impinge on their debt sustainability and overall financial stability. In pursuance of the recommendations of the Report of the Technical Committee on State Government Guarantees, so far nine States have fixed statutory/administrative ceilings on guarantees issued by them (RBI, 1999 and 2005d). In order to collect and monitor information on State Government guaranteed advances and bonds from the investors' side on a periodic basis, the Reserve Bank constituted a Standing Committee on Information on State Government Guaranteed Advances and Bonds in 2004.



It also constituted a Group to Study the Pension Liabilities of the State Governments (Chairman: B. K. Bhattacharya) which in its report recommended certain alternative long-term structural solutions to the pension problems of the States (RBI, 2003a). The Reserve Bank also set up a Working Group on Methodology of Compilation of data on State Government liabilities for devising a methodology of compilation of data on various types of debt liabilities of the States.

7.131 To sum up, the period 2003-2005 marked a renewed commitment by the Government towards fiscal consolidation in the wake of fiscal deterioration in the late 1990s. The Reserve Bank also sensitised the Government on the consequences of fiscal dominance and highlighted the importance of placing a statutory ceiling on debt. The Government, therefore, embarked on a rule based fiscal consolidation process which was facilitated by the favourable macroeconomic environment. This phase also witnessed better cash management resulting in a lower recourse by the Government to WMA from the Reserve Bank. These factors have facilitated the conduct of both debt and monetary management which, in turn, have helped in stabilising interest rate expectations despite hardening of international crude oil prices. In respect of relations with the State Governments, the Reserve Bank has pursued a consultative approach for improving fiscal management in the context of the financial sector reforms. In this context, the State Finance Secretaries Conference arranged by the Reserve Bank has been providing a platform for exchange of views between Central and State Governments and the Reserve Bank on critical policy issues which, *inter alia*, include ceiling of State guarantees, scheme of consolidated sinking fund and approach to market borrowing programme.

## VI. MONETARY FISCAL COORDINATION IN THE CONTEXT OF FRBM ACT (2005 - 2009)

7.132 The monetary-fiscal coordination and public debt management has entered a new phase in the context of the framework of cooperative fiscal federalism from 2005-06 and the Reserve Bank's scheduled withdrawal from participating in the primary Government securities market from 2006-07 as stipulated under the FRBM Act, 2003. At the State level, 16 State Governments have also enacted Fiscal Responsibility Legislations (FRLs), partly driven by the Twelfth Finance Commission's

(Chairman: C. Rangarajan, 2005) (TFC) debt relief incentives. These measures aim at eliminating the revenue deficit by 2008-09, reduce fiscal deficit and, thereby, the debt of the State Governments. Operationalising the TFC's recommendations the Central Government has and would continue to release only the grant portion of Central assistance to State Plans and allow the States to approach the market directly for raising their loan portfolio from 2005-06 onwards. With the progressive reduction of Centre's intermediation of States' borrowings, except for those that are fiscally weak, the Reserve Bank would have to shoulder the responsibility of facilitating the States' market borrowings requirements. The Reserve Bank will facilitate a smooth transition in consultation with the Central and the State Governments.

7.133 With the operationalisation of the Reserve Bank's withdrawal from the primary market from April 2006, it would not be able to act as an underwriter of the last resort in the Government's issuances and provide the Government with funds as and when it required<sup>26</sup>. This would require an alternative institutional arrangement to be put in place for ensuring that debt management objectives continue to be met and the Government is able to borrow under all conditions without exacerbating market volatility. As the Reserve Bank would continue to intervene in the secondary market, the open market operations would become a key instrument for monetary and public debt management, thereby necessitating a reorientation through a review of processes and technological infrastructure consistent with market advancements.

### Debt Management Strategy under New Setting

7.134 The phase of the Reserve Bank's withdrawal from the primary market for Government securities would become operational on April 1, 2006. The Reserve Bank has been undertaking preparatory work anticipating this since the initiation of reforms. An abiding strategy of the Reserve Bank in developing Government securities market since the early 1990s has been to work towards an appropriate juncture when non-captive investors can play a predominant role in the secondary segment of the market, thereby facilitating an underwriting of the entire auction issues by the primary dealers which can, in turn, make these securities accessible to the final investors. A well

<sup>26</sup> It was visualised in the early 1990s that there would be a gradual progress to a system of increasing participation of primary dealers and eventually to a stage where primary dealers would be required to take up the entire issue (RBI, 1993).

developed Government securities market would allow the Reserve Bank to refrain from participating in the primary issuances of the Government security, but undertake liquidity management through buying and selling of securities under its open market operations. Recognising the expected change in the debt management operational setting under FRBM from April 2006, the Reserve Bank's Internal Technical Group on Central Government Securities market examined the balance sheet of progress in the development of this market and recommended measures for reorienting and strengthening the operating framework for the conduct of monetary policy, public debt management and regulatory oversight of the Government securities market, particularly in order to strengthen the OMO framework so as to address the emerging needs and equip both the Reserve Bank and market participants appropriately. As the recommendations imply a fundamental alteration of the debt issuance system, they are being examined and would be finalised by the Reserve Bank only after consultations with the Government as also market feedback.

7.135 Assessing the progress, the Technical Group noted that though the evolution of debt management, open market operations and the Government securities market has been satisfactory, there is a need to reorient the OMO due to three factors. First, the financial market integration in India is 'still far from complete' with continued prevalence of segmentation in terms of maturity, liquidity and risk; asymmetric integration; and lack of depth. Integration was also found incomplete even within the Government securities market across tenors as revealed by instances of distortion or inversion of yield curves amidst surplus liquidity conditions. Second, while debt management has continued to elongate the maturity profile of the Government securities, liquidity was often limited to few segments. Third, the tendency of banks to refrain from the market during an interest rate upturn could become even more stark when the proposed amendment is made to the Banking Regulation Act of providing flexibility to the Reserve Bank in setting lower SLR. The Group, thus, recommended that while the OMO would continue to be principally directed at residual/unanticipated 'autonomous' liquidity movements driven by Government's borrowing or capital flows, the Reserve Bank may retain the option of participating in the secondary market as felt appropriate to contain excessive volatility, promote orderly market conditions and improve market liquidity in Government securities.

7.136 In the aftermath of the Reserve Bank's exit from the primary market, the Group recommended measures for a more active and dynamic participation of primary dealers by favouring 100 per cent underwriting commitment on the basis of minimum and auction-determined additional bidding commitments. In exchange, the possibility of providing PDs with a repo facility to park their auctioned stock with the Reserve Bank after the auction allotment to tide over any temporary funding risk may have to be examined. The Group also favoured a 'measured approach' in selectively permitting exclusivity to PDs in primary auctions, while setting aside apprehensions of the possibility of cartelisation, risks of 'front running' by PDs and increased cost of acquisition of securities by investors. While PDs could be incentivised for 'market making', the Group noted that the Reserve Bank may continue to develop the market amidst the changed contextual setting through introduction of new instruments; introduction of Separate Trading for Registered Interest and Principal of Securities (STRIPS); 'active consolidation' of Government stock through buy-back of large number of small-sized illiquid securities in exchange for small number of liquid securities; improvement of transparency and flexibility of the auction process; undertaking phased introduction of 'short-selling' with appropriate safeguards; and phased introduction of 'when issued' market so that market turnover is not affected on an interest rate upturn.

#### **Separation of Public Debt and Monetary Management: Issues and Options**

7.137 Public debt management is the process of establishing and executing a strategy for managing the Government's debt in terms of optimising the cost and maturity of debt, ensuring the required amount of funding for the Government and developing an efficient market for Government securities. Monetary management, on the other hand, is the mechanism of influencing the cost and availability of credit by regulating the supply of money and interest rates in the economy within the overall objective of attaining price stability. Thus, a conflict between debt management and monetary management develops when the monetary authority has to pursue the dual objective of minimising the cost of debt for the Government while simultaneously aiming at achieving price stability. Often, the emergence of inflationary pressures requires a tightening of monetary policy stance by raising interest rates, which may adversely impact on the cost of Government borrowings. It is, therefore, held that sound financial management is

ensured when the two activities are kept separate (Sundararajan *et al*, 1997). The essential pre-condition for this separation is that the Government fully meets its funding requirements by public borrowings at market-related rates without the need for central bank's accommodation of debt. Monetary policy, then, can solely concentrate on its principal task of controlling inflation.

#### *Case for Separation*

7.138 In advanced economies with fully liberalised and well developed financial and Government securities markets, debt management is based on the fiscal operations of the Government while monetary policy is carried out independently. This helps to ensure that the debt management decisions are taken independent of the interest rate decisions and conflict of interest in market operations is avoided. In these countries, the alignment of policy objectives is achieved through the work of market forces, with financial market rates increasingly used as inputs in decision-making. Furthermore, the independent pursuit of the objectives of fiscal, monetary and debt management policies is also supported by institutional arrangements that separate the objectives and instruments of the central bank, the treasury and debt management authorities, respectively. Such separation is already in practice in Australia, Ireland and the UK.

7.139 Creating a separate debt office, however, does not necessarily ensure an independent debt management policy. In order to develop a sound and balanced approach to debt management, establishing clear objectives and organisational responsibility for the debt office is paramount while the deregulation and development of financial markets are prerequisites for the separation of public debt management from monetary policy. As a consequence, practically all decisions regarding debt management matters are transferred to the debt office and formal coordination exists in terms of ensuring consistency in policy objectives.

#### *Case against Separation*

7.140 In emerging market economies with underdeveloped financial markets, monetary and debt management cannot be strictly separated, since debt management operations may necessitate central bank interventions and thus have an impact on interest rates and domestic financial markets. Therefore, sequencing of financial sector reforms is important to achieve separation. In many emerging market economies, the central bank undertakes debt

management functions mainly because it has the required expertise to monitor relevant information and accordingly modulate market liquidity as part of its monetary policy operations.

7.141 In the early stage of financial market reform, debt instruments and primary market issuance are often used for monetary purposes, calling for much closer day-to-day collaboration between the monetary and fiscal authorities. In this regard, development of financial markets and well coordinated monetary and debt management procedures are mutually reinforcing. The adoption of market based instruments-which initially require arrangements for close coordination of objectives and instruments-expands opportunities for active liquidity management by the central bank and provides incentives for institutional development. In turn, the resulting increase in depth and efficiency of money and Government securities markets opens up additional opportunities to strengthen instruments and coordination procedures of monetary and public debt policy. In this regard, countries undergoing a transition from 'captive sourcing' of Government borrowing requirements (through statutory liquidity requirements) to 'voluntary sourcing' (using market based practices) need to build up supporting debt management functions. Placing those functions within a comprehensive framework for public debt management is important in achieving the objectives of debt and monetary management.

7.142 In the last two decades, while a consensus seems to have emerged on the need to separate monetary and debt management, institutional separation of these two functions may not always be feasible in emerging market economies. In these economies, where the central bank has an operational role for debt management, the nature of the role, the timing and type of policy operation needs to be clearly specified in order to ensure functional separation between public debt and monetary management.

#### *The Indian case*

7.143 In India, where public debt management and monetary policy are vested with the Reserve Bank, the debate on separating debt management from monetary policy formulation is contingent upon reasonable progress being made towards satisfying the three necessary preconditions for this separation, *viz.*, development of financial markets, reasonable control over the fiscal deficit and necessary legislative changes (RBI, 2002a). The Indian economy has made considerable progress in developing its financial

markets and in particular the Government securities market. Furthermore, fiscal dominance in monetary policy formulation has become less binding in recent years. With the onset of a rule-based fiscal consolidation process, the stipulated withdrawal of the Reserve Bank from the primary market of Government securities and expected legislative changes permitting a reduction in the statutory minimum SLR, the case for separation of debt management from monetary policy in India has, perhaps, never been as compelling before as at present. In this regard, the Committee on Capital Account Convertibility (Chairman: S.S.Tarapore) had recommended the separation of debt from monetary management (RBI, 1997b). The Advisory Group on Transparency in Monetary and Financial Policies had recognised that separation of debt management and monetary policy is a necessary condition but the sufficient condition is the need for a reasonable degree of fiscal responsibility (RBI, 2000).

7.144 The core issue of the conflict between monetary policy and public debt management lies in the fact that while the objective of minimising market borrowing cost for the Government might generate pressures for keeping interest rates low, compulsions of monetary policy amidst rising inflation expectations may necessitate a tighter monetary policy stance. Although during the pre-reform period in India, monetary policy passively accommodated fiscal policy through monetisation, the inflationary pressures were kept within control through the Government's administered price system, its proactive coordination with the Reserve Bank and the Reserve Bank's sterilisation of the monetary impact through progressive increases in the CRR of banks. During the post-reform period, although monetisation of fiscal deficits has been scaled down, the public debt has risen unabated. The Reserve Bank could, nevertheless, proactively manage public debt and minimise its cost as requisite developments in the Government securities market and prevalence of generally comfortable liquidity conditions prompted the banks to invest in Government securities far in excess of their SLR stipulations. As inflationary pressures moderated considerably since the latter half of 1990s, the Reserve Bank could maintain interest rates at levels, which were conducive for economic growth while meeting its debt management objectives of minimising cost for the Government.

7.145 The argument in favour of separating debt management from monetary policy rests in assigning

an exclusive single goal of price objective for monetary policy, which would provide transparency in central banking operations thereby enhancing its credibility. While, in principle, separating debt from monetary management enhances efficiency in monetary policy formulation, the debate in the Indian context needs to recognise certain key dynamics of debt-monetary interface in India.

7.146 First, in the Indian context, the joint policy and procedural initiatives by the Government and the Reserve Bank have facilitated in achieving reasonably good degree of coordination between public debt management and monetary policy formulation. While fiscal discipline and reduced monetisation of deficits as well as reactivation of public debt management since the 1990s have imparted considerable autonomy to the operation of monetary policy, the Reserve Bank's proactive debt management, including efficient operation of the Government securities market, has also facilitated the conduct of monetary policy, particularly through its indirect instruments. In fact, the Reserve Bank's holding of huge stock of Government securities as the debt manager enabled it to sterilise the monetary impact of the capital flows through open market operations.

7.147 Apart from coordination at the policy level, procedurally a regular system of coordination has also been established, whereby, annually, the Reserve Bank advises the Government in December/January on the likely course of monetary policy in the ensuing year and the feasible level of Government borrowing consistent with the monetary policy objectives, taking into account the projected level of economic growth and the tolerable level of inflation. The Government's borrowing programme as subsequently announced in the Budget, in turn, forms a crucial input in framing the stance of monetary policy set out in the Reserve Bank's Annual Policy Statement. In recent years, the need for a greater coordination on a day-to-day basis has also been recognised through the development of a 'Short-Term Liquidity Forecasting Model' in the Reserve Bank which projects 'net liquidity' for guiding its policy actions in the market on a daily basis. In its capacity as the debt manager to the Government, the Reserve Bank is able to assess systemic liquidity with reasonable accuracy for monetary management operations through the liquidity assessment model.

7.148 Second, the Reserve Bank's experience in managing public debt over the years has equipped it



with the requisite technical capacity of fulfilling the twin responsibilities of debt management and monetary policy operation efficiently, consistently and in a coordinated manner in tune with the requirements of the Government and market conditions. For instance, in order to contain the interest cost of Government borrowings, the Reserve Bank has had to adjust the timing of issuances, the types of instruments and its maturity profile, depending on market sentiments. In the absence of suitable market conditions, the Reserve Bank has devolved the Government securities in its own account and offloaded them as market became more conducive. Furthermore, during the recent years, the Reserve Bank has developed appropriate tools like LAF so as to insulate internal debt from the short-term effects of monetary policy, which has, in turn, also facilitated the operation of monetary policy quite independently. In this context, it needs to be noted that coordination achieved in India has been essentially similar in procedure to that between the Treasury and the Federal Reserve Board in the USA. For example, the Treasury and the Federal Reserve Board have traditionally maintained independence in their respective tasks of debt management and conduct of monetary policy. However, coordination exists between the Fed and the Treasury. The goal of the Treasury is to finance Federal debt with minimum disruption to financial markets. The Fed acts as the agent for the Treasury and conducts all auctions, collects proceeds and maintains accounts of the Federal debt (Blommestein and Thunholm, 1997).

7.149 As it may be observed from the above discussion, while coordination between monetary and public debt management has improved in India, several challenges lie ahead. First, the persistence of a large Government market-borrowing programme has implications for the efficient conduct of the Reserve Bank's debt and monetary management operations. Second, in the wake of operationalisation of the recommendations of the Twelfth Finance Commission, the Centre ceases to operate as an intermediary for mobilising resources for States with the latter having to raise funds directly from the market. Third, while the Government sector's demand for market borrowing may remain unabated, the growth in demand of bank credit from the commercial sector, particularly in the wake of increased economic activity, would also compete for resources of the financial system. Fourth, the Reserve Bank's withdrawal from the primary market issuance of Government paper from April 1, 2006 would have implications for the management of

interest rate expectations. Fifth, the implementation of the proposed amendment to the Banking Regulation Act permitting flexibility to banks for lowering SLR below 25 per cent of net demand and time liabilities of banks would reduce the captive subscription to Government securities. All these challenges call for the Reserve Bank's continued effort in widening the investor base of the Government securities market within the overall framework of developing the debt market.

7.150 A pragmatic view needs to be taken on the issue of separation in India after weighing the *pros* and *cons* of what is really gained from separation of public debt from monetary management. The options for separation are limited, *viz.*, (a) transferring debt management responsibility to the Government, (b) the creation of a separate debt office specifically for that purpose and (c) retaining debt management with the Reserve Bank while functionally separating it from monetary management. The first option faces some legal constraint as the Reserve Bank is empowered to manage public debt by statute. Moreover, fiscal activism could have serious ramifications for the credibility of debt management operations when both are conducted by the same entity. The second option of setting up an independent debt authority though having the advantage of unbiasedness in decision making would be constrained by the narrow objective of optimising public debt rather than factor in the monetary implications of such actions. Moreover, both these options requiring an institutional separation of monetary and debt management functions would have to recognise the comparative advantage of the institutional memory and the technical expertise reposed with the Reserve Bank in managing the public debt over the years and the evolution of a formal institutional mechanism for resolving issues relating to functional coordination among monetary, fiscal and debt management policies. The third option of retaining public debt management with the Reserve Bank, thus, merits some consideration. With the progress of fiscal consolidation under the FRBM phase, a view has been emerging that the Reserve Bank would have to reorient Government debt operations and simultaneously strengthen monetary operations. This entails a functional separation between debt management and monetary operations of the Reserve Bank (RBI, 2005b). In this regard, a separate Financial Markets Department (FMD) within the Reserve Bank was set up in 2005 with the objective of functionally separating monetary and debt management functions.

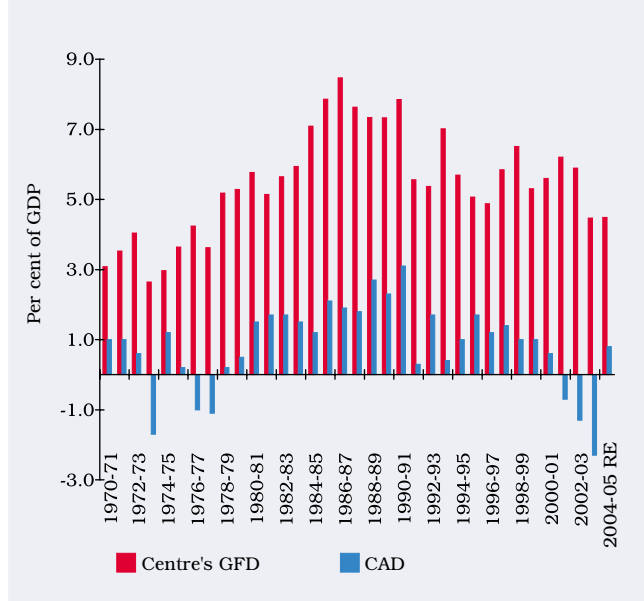
**VII. MONETARY FISCAL INTERFACE:  
AN ASSESSMENT**

**Trends in Fiscal Imbalances and Macroeconomic Consequences**

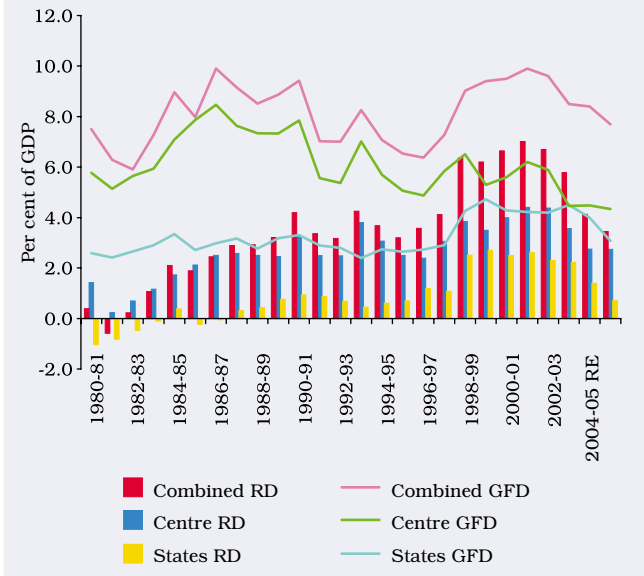
7.151 An analysis of the Central Government finances over the years shows an increasing trend in the gross fiscal deficit interrupted by brief phases of corrective efforts during the mid-1970s and the first half of 1990s. The emergence of deficits in the revenue account since the late 1970s led to a sharp deterioration of GFD which spilled over to the external sector, culminating in the macroeconomic crisis of the early 1990s (Chart VII.3). The post-reform experience reveals that strong inflows both in the current and capital accounts of the balance of payments in the Indian economy staved off the adverse impact of continued fiscal imbalances on the external sector. However, recent years have witnessed some improvement in GFD, reflecting improved revenue buoyancy and expenditure rationalisation supported by a rule-based fiscal consolidation.

7.152 Revenue imbalances in the combined Government finances of the Centre and States since the early 1980s, primarily on account of higher interest payments, subsidies and defence expenditure coupled with losses in the public sector enterprises led to widening of the fiscal gap. The first half of the 1990s witnessed fiscal consolidation, mainly through cutbacks in capital outlays of the Central Government. The impact of the Fifth Pay Commission is visible on revenue deficit of the State

**Chart VII.3: Fiscal and External Imbalances**



**Chart VII.4 : Revenue and Fiscal Deficit of the Centre and States**



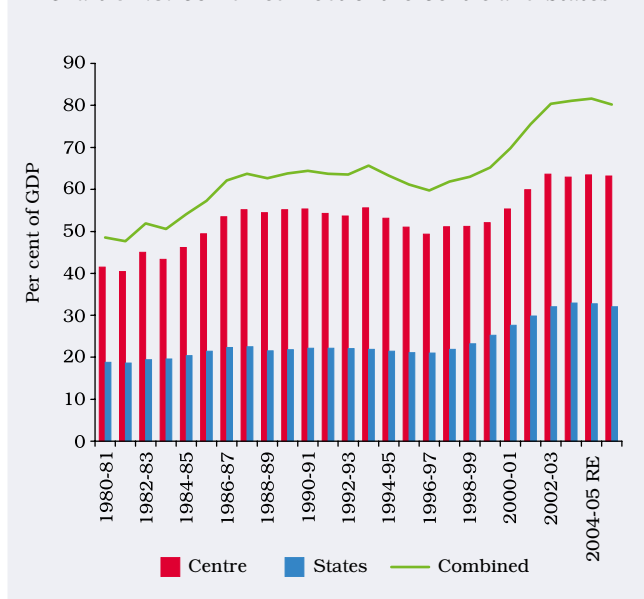
Governments in the second half of the 1990s which ultimately resulted in widening of the combined revenue and fiscal deficits. The recent thrust on fiscal consolidation through fiscal legislation resulted in the downward movement of both revenue and fiscal deficits at the Centre as well as the State levels (Chart VII.4).

**Debt Position**

*Problems of Mounting Debt Burden*

7.153 The dynamics of public debt, which turned adverse in the 1980s, reflected a sharp deterioration in the fiscal deficit of the Government. The debt/GDP ratio of the Central Government rose from 41.6 per cent in 1980-81 to 55.3 per cent in 1990-91. This had three major implications. First, the concomitant rise in interest burden absorbed an increasing proportion of revenue receipts thereby raising the revenue deficits. Interest payments/revenue receipts ratio increased from 21.0 per cent in 1980-81 to 48.7 per cent in 1993-94. Second, the increasing levels of borrowings exerted an upward pressure on interest rates, crowding out interest-sensitive private investments in the short run and thereby adversely impacting economic growth. Third, the large borrowings added to the repayment burden resulting in the problem of frequent debt rollovers. The fiscal compression measures initiated by the Central Government in 1991 and consequent control on net market borrowings facilitated a reduction in its debt/GDP ratio from 55.3 per cent in 1990-91 to 49.4 per

Chart VII.5: Combined Debt of the Centre and States



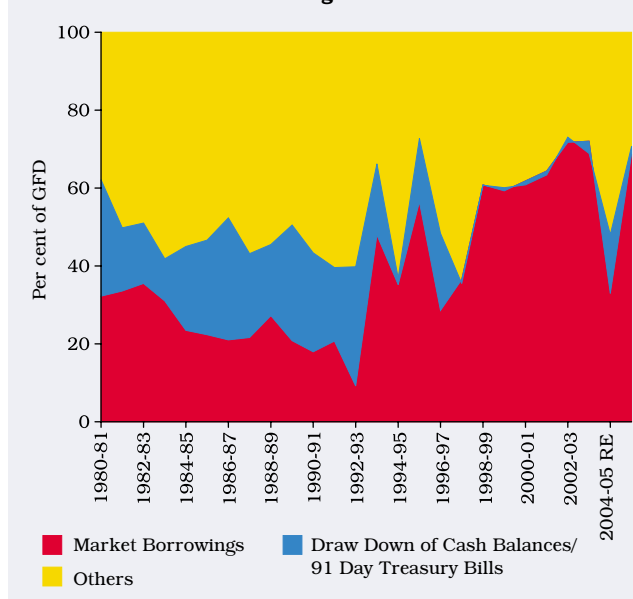
cent by 1996-97. Furthermore, interest payments/revenue receipts ratio declined to 45.4 per cent in 1995-96. However, a reversal in the fiscal consolidation process during the second half of the 1990s and the consequent increase in market borrowings pushed up the Central Government's debt/GDP ratio. The interest payments/revenue receipts ratio, however, continued to decline to 41.8 per cent in 2004-05, reflecting essentially revenue buoyancy. The State Governments' debt/GDP ratio increased from 18.8 per cent in 1980-81 to 22.5 per cent in 1990-91 but after declining marginally to 21.1 per cent in 1995-96 increased again to 33.3 per cent in 2004-05 (Chart VII.5).

### Financing of Fiscal Deficit

7.154 The financing of the fiscal deficit of the Government is critical as it has important implications for the monetary fiscal interface. The relative share of market borrowings in total financing and direct financing by the Reserve Bank have important implications for the objectives of monetary policy. In respect of the Central Government, the automatic monetisation effected through recourse to *ad hoc* 91-day Treasury Bills was the major financing item prior to April 1997. With the discontinuation of *ad hoc* Treasury Bills, the share of monetised deficit in the Central Government's GFD has come down (Chart VII.6).

7.155 An analysis of credit extended to the Government sector since the 1980s by the Reserve

Chart VII.6: Financing of GFD of the Centre



Bank and the rest of the banking sector reveals an increase in the contribution by other banks during the mid-1980s on account of increases in coupon rates along with higher SLR stipulation. The transition from a passive to active debt management policy since the early 1990s by introducing auction system and development of new instruments is reflected in the increase in financing of the Government deficit by the banks and a concomitant decline in the Reserve Bank's contribution (Box VII.7). In fact, the banks' contribution exceeded the SLR stipulation since 1999-2000 indicating a shift from involuntary to voluntary holding of Government securities (Chart VII.7).

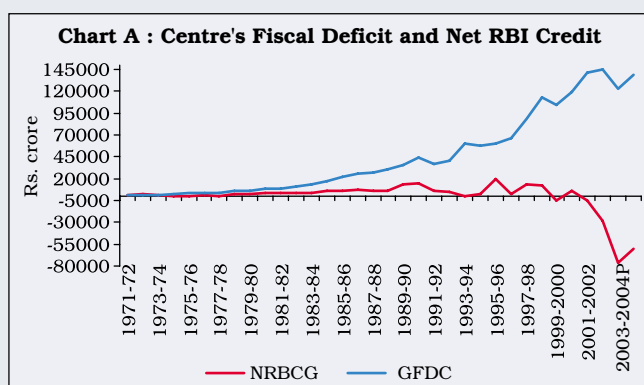
7.156 The Reserve Bank's net credit to the Government was the primary driving force of reserve money growth up till the early 1990s (Chart VII.8). Sharp increases in the former have almost always been accompanied by a similar increase in the latter. The Reserve Bank had to, therefore, resort to changes in CRR to modulate the growth in money supply. The CRR, originally conceived as a prudential measure, was increasingly used as a monetary tool to neutralise the impact of reserve money expansion induced by deficit financing.

7.157 With the onset of economic reforms, the Reserve Bank's contribution to the Central Government's borrowing programme declined for the most part of the 1990s. However, the severe strain in the Central Government finances and associated higher market borrowing requirement in the late

## Box VII.7

## Gross Fiscal Deficit and Central Bank Financing of Government: The Indian Experience

The trends in fiscal deficit and variation in the central bank credit to Government are considered to be crucial in analysing fiscal dominance. Such an analysis is broadly indicative of the extent of coordination between monetary and fiscal policy. In the Indian context, the gross fiscal deficit of the Central Government (GFDC) has, in general, been increasing during the period 1971-2005, particularly since the middle of the first half of the 1980s. The variation in net Reserve Bank credit to the Centre (NRBCG) has, however, had distinct phases (Chart A). The relationship between the two variables, accordingly, is expected to have undergone some major structural changes.



To examine the statistical relationship between the GFDC and NRBCG (during 1971-2005), the following regression equation with a first order autoregressive component (AR1) is estimated:

$$\text{NRBCG} = 15019.95 + 0.78 \cdot \text{GFDC} + [\text{AR1}=1.11]$$

(0.54)      (0.00)      (0.00)

$$\text{Adjusted } R^2 = 0.75 \dots (1)$$

(Figures in parentheses are p values)

The relationship between the GFDC and variation in NRBCG is positive and statistically significant. It is, however, evident from Chart A that NRBCG has witnessed some structural changes and hence the relationship between the two variables has undergone similar changes. Two major factors triggering the structural changes in the series are: (i) the change in the institutional and policy framework since April 1997, whereby the Reserve Bank discontinued the issuance of 91-day *ad hoc* Treasury Bills and introduced the mechanism of Ways and Means Advances; and (ii) the surge in capital inflows since 2001 mainly emanating from movements in international interest rates. To examine the statistical significance of the

anticipated change in the relationship between the two variables, Chow's (1960) breakpoint test was applied with the following results:

**Structural change test for year 1997-98**

F-Statistic : 6.80; Probability : 0.00

**Structural change test for year 2001-02**

F-Statistic : 25.13; Probability : 0.00

**Structural change test for year 1997-98 and 2001-02**

F-Statistic : 14.09; Probability : 0.00

The F-statistic, which is based on the comparison of restricted and unrestricted sum of squared residuals, is high and statistically significant indicating that there has been structural change in 1997-98 and 2001-02 in the relationship between the GFDC and variation in NRBCG. To further examine the stability of coefficients across the three sub-samples, following Kennedy (2003), the Chow test was carried out for both the periods (1998 and 2002) together which indicated presence of structural change in relationship between the two variables. Since the macroeconomic conditions have a direct bearing on capital flows, the impact of capital inflows on NRBCG is further examined by incorporating NFARB (net accretion to foreign exchange assets of the Reserve Bank (net of revaluation) representing capital inflows) in the regression equation (2). The coefficients of both the variables turned out to be statistically significant with expected signs.

$$\text{NRBCG} = 1758.63 + 0.22 \cdot \text{GFDC} - 0.75 \cdot \text{NFARB} + [\text{AR1}=0.31]$$

(0.17)      (0.00)      (0.00)      (0.11)

$$\text{Adjusted } R^2 = 0.97 \dots (2)$$

(Figures in parentheses are p values)

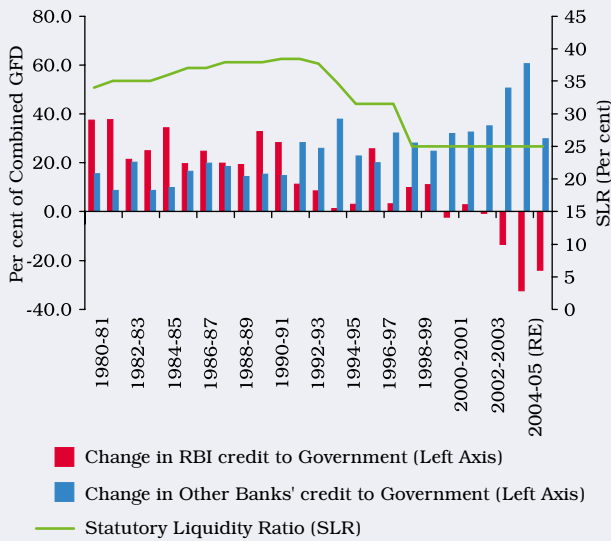
The above exercise reveals that the evolving Government securities market and surge in inflows of capital in recent years have substantially changed the nature of financing of the Government's deficit. The accretion to domestic monetary resources available from swapping the inflows was used by the banks to invest in Government securities. Concomitantly, since the Reserve Bank divested its stock of Government securities through OMO sales in order to neutralise the monetary impact of the swapped inflows, this resulted in a decline in net RBI credit to the Centre. Thus, the Central Government's gross fiscal deficit has been largely financed by banks rather than Reserve Bank's credit, thereby resulting in lower monetisation of deficit.

1990s amidst tight liquidity conditions necessitated a higher primary subscriptions by the Reserve Bank (Chart VII.9). Therefore, the Reserve Bank's

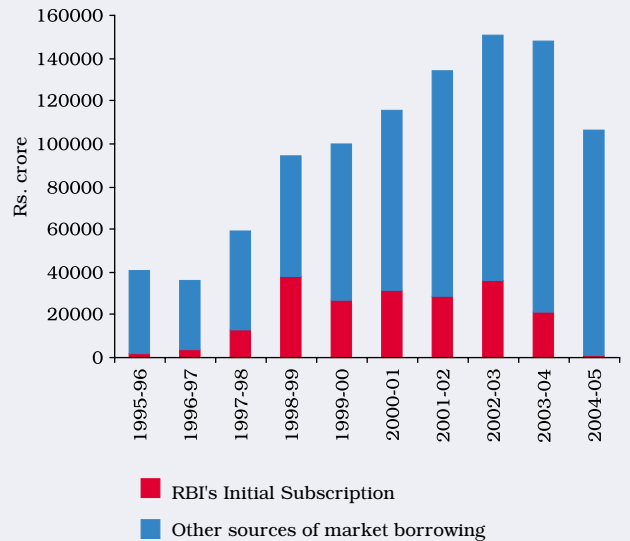
intervention by way of devolvement and private placement facilitated in managing the cost of Government's market borrowings.



**Chart VII.7: Banking Sector Accommodation of Combined Fiscal Deficit**



**Chart VII.9: RBI's Initial Subscription to Centre's Gross Market Borrowings**

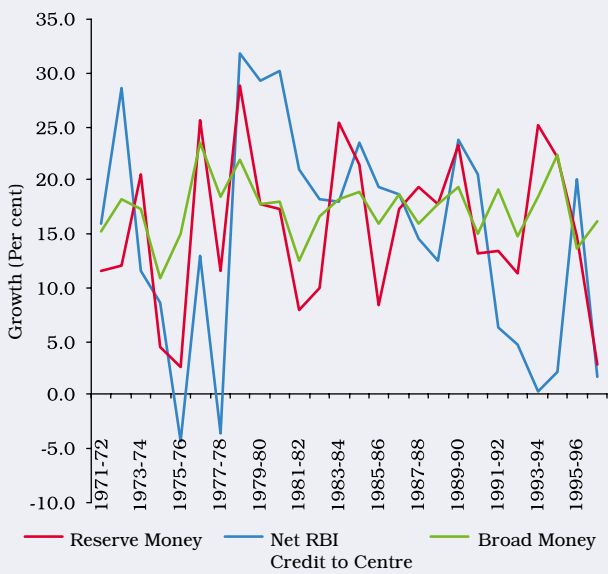


7.158 Despite large interventions of the Reserve Bank in the primary market, the net Reserve Bank credit to the Central Government maintained, in general, a declining trend on account of open market sales conducted by the Reserve Bank. It is pertinent to note that the net Reserve Bank credit to the Central Government turned negative since 2001-02 as a consequence of open market sales conducted to sterilise the monetary impact of large capital inflows (Chart VII.10). Thus, with the opening up of the economy, increases in the net foreign assets of the

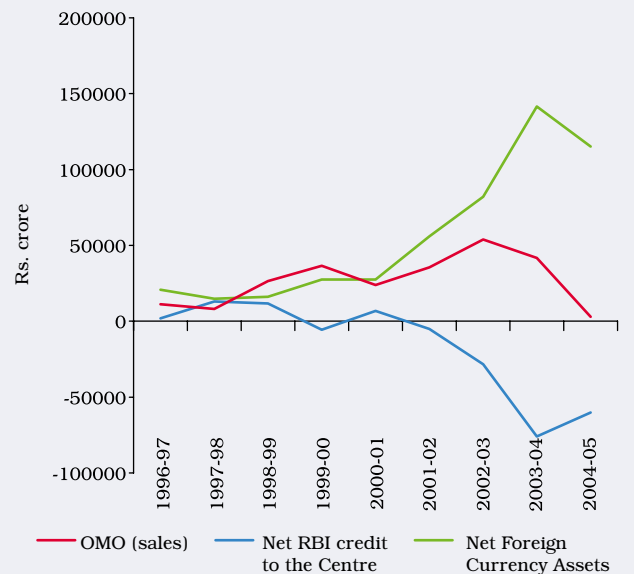
Reserve Bank became an important source of reserve money expansion.

7.159 An important aspect of Reserve Bank's debt management operations in India in the 1990s has been to minimise the interest cost of market borrowings by modulating the maturity structure suitably. This had resulted in a compression of average maturity of market debt, with a significant decline in the proportion of long-term debt to total outstanding debt from 75.8 per cent at end-March 1992 to 18.2 per cent at end-March 1998. Taking cognisance of

**Chart VII.8: Monetised Deficit and Monetary Aggregates**



**Chart VII.10: Reserve Bank's Open Market Operations**



**Chart VII.11: Yield and Maturity of Primary Issuances of the Centre**



the problem of bunching of repayments and frequent roll-over arising from a large share of short-term debt in total debt, the Reserve Bank took a conscious decision to lengthen the maturity structure of market debt since 1998-99 amidst softer interest rate conditions so as to balance the objectives of interest cost and roll-over. This debt management strategy resulted in a gradual reduction in the average yield while elongating the average maturity of Central Government market loans over time (Chart VII.11).

7.160 An overall assessment of monetary fiscal interface indicates that fiscal deficit contributed positively in driving growth in money supply through net Reserve Bank credit to the Government particularly before 1997-98. Subsequently, the phasing out of automatic monetisation of fiscal deficit and surge in capital inflows have caused structural breaks in the relationship between net Reserve Bank credit to the Centre and its gross fiscal deficit in the years 1997 and 2001. Such a break in the relationship indicated a shift in the sources of money creation from the Government sector (net Reserve Bank credit to the Government) to the external sector (net foreign assets of the Reserve Bank) during the first half of the current decade. Thus, the impact of fiscal operations on monetary policy, which was predominant till 1997, weakened thereafter.

## VIII. CONCLUSIONS

7.161 From the conceptual evolution of monetary fiscal interface in India documented above, it may be

useful to draw some lessons from the Reserve Bank's experience over the past seven decades. First, the Reserve Bank had to cope with the challenges thrown up by the changing phases of fiscal policy – from fiscal neutrality to fiscal dominance and further to fiscal consolidation - by suitably adapting the operating procedure of monetary policy and making institutional arrangements so as to foster monetary and financial stability. In this regard, the macroeconomic crisis of 1991 created urgency in addressing the imbalance in the monetary fiscal interface due to fiscal dominance. This was facilitated through a mutual agreement between the Reserve Bank and the Government to phase out automatic monetisation of fiscal deficit.

7.162 Second, despite some improvement in the monetary fiscal interface, fiscal dominance persisted with growing market borrowings, necessitating the Reserve Bank's adoption of a strategy of appropriately combining devolvement/private placements with open market operations in order to contain the cost of Government borrowings.

7.163 Third, the opening up of the economy posed new challenges in the conduct of monetary policy. In the wake of large capital flows, the dynamics of monetary fiscal interface has undergone a steady transformation whereby the problem of "impossible trinity" of fixed/managed exchange rate (for relative price stabilisation purposes and a credible nominal anchor), an independent monetary policy (for output stabilisation purposes) and an open capital account (for greater efficiency) has been addressed in a phased manner. While the Reserve Bank has been empowered with greater instrument autonomy, the exchange rate adjustment has essentially been market-driven with episodic interventions to counter self-fulfilling speculative activities. However, the opening up of the capital account has been calibrated sequentially which, as evident from the East Asian Crisis, has turned out to be prudent. The Reserve Bank, being at the helm of money, Government securities and foreign exchange markets, could balance diverse considerations of interest rate and exchange rate stability through appropriate market interventions and interest rate signals.

7.164 Finally, the Reserve Bank could carefully craft its debt management policy so as to simultaneously meet the objectives of minimising cost as well as reducing rollover risks of Government borrowings through elongation of maturity of Government paper. Thus, in this regard, the Reserve Bank has been successful in meeting the challenges of debt

management while ensuring orderly financial market conditions.

7.165 While the Reserve Bank's varied experience in handling different challenges would help in future policy formulation, it is imperative to take cognisance of certain issues, which are bound to shape the future course of monetary fiscal interface. First, there is a need to evaluate the progress made by the monetary fiscal coordination in India in relation to international evidence. While the survey of international best practices reveals that there is an institutional limit on central bank's accommodation to Government in most countries, in the Indian context, the extent of monetisation of public debt has declined in recent years as a result of the emerging macroeconomic dynamics whereby large capital flows had to be sterilised through open market operations.

7.166 Second, a unanimous view emerging from the international experience is that central banks refrain from participating in the primary market auction of Government securities. In India, as per the FRBM stipulations, the Reserve Bank would not be participating in the primary market auctions from April 2006 onwards. This would be in tune with the traditional argument that the power to spend money should be separated from the power to create money (Reddy, 2001). While the withdrawal of the Reserve Bank will impart greater functional autonomy to monetary policy, the Reserve Bank will have to keep a vigil on interest rate uncertainties and create alternate financing mechanism for ensuring successful completion of the Government's market borrowing programme. With the growing integration of financial markets, future demand pressures on the bond market would have repercussions for the entire structure of interest rates in the economy (Mohan, 2002).

7.167 Third, with high levels of public debt in India, the case for a separation of monetary and debt management seems to be gaining ground. International experience suggests that functional autonomy of debt from monetary management has been operationalised by hiving off the debt management office from the central banks thereby benefiting from the institutional memory and expertise of a common pool of resources. For instance, in the United States the Treasury and the Federal Reserve Board have traditionally maintained independence in their respective tasks of debt management and conduct of monetary policy though coordination exists between them. On the other hand, in many developing countries, the central bank

continues to be responsible for both monetary and debt management operations although it does not participate in the primary market of Government securities as a competitive bidder. Given the complexities in separating the function of monetary and debt management, a minimum requirement should be that their relationships and transactions be reported as transparently as possible (Reddy, 2001). In the event of a functional separation, greater explicit coordination between the monetary and the debt authorities would be required to resolve policy dilemmas of simultaneously undertaking exchange rate, monetary and debt management, which the Reserve Bank has hitherto addressed by virtue of being vested with all three responsibilities.

7.168 Fourth, the key to successful monetary-fiscal coordination is the realisation by the fiscal authorities that the control over deficits reins inflation expectations thereby facilitating the conduct of monetary policy. Thus, if inflation expectations are anchored at low levels, a proactive monetary policy can ensure a stable and low interest rate regime that is conducive to maintaining the momentum of economic growth while facilitating the task of public debt management.

7.169 Fifth, in the context of undertaking fiscal consolidation within the FRBM framework, it is imperative that the Governments do not take recourse to 'creative accounting' in order to fulfil the targets set under the fiscal rules. In this context, there is a need to transparently report all fiscal liabilities so that the monetary authority can accurately assess the credit needs of the Governments in the long-term and accordingly design its monetary policies.

7.170 Finally, coordination between fiscal and monetary policies can be ensured while maintaining operational autonomy if there is a consultative approach in (a) evolving macroeconomic objectives; (b) recognising the implications of various possible policy options for attaining these objectives; and (c) sharing and use of respective forecasts of the state of economy in the absence of policy interventions (Reddy, 2001). In this context, although a reasonable degree of monetary fiscal coordination has been achieved in anticipating future liquidity requirements through the operationalisation of a Short Term Liquidity Forecasting Model, there is a need to adapt the same to suit the future contextual settings over a longer term, particularly in the light of evolving macroeconomic scenario arising out of FRBM stipulations.