Chapter 1

Introduction

In recent years, tackling the large fiscal deficit\(^1\) and growing public debt in India has become one of the key components of fiscal management. One of the major arguments to bring down the fiscal deficit to GDP ratio was to contain the growth of public debt\(^2\). The combined public debt-GDP ratio\(^3\) of central and state governments (eliminating double counting) remained stable at around 44 per cent during the 70s. However, it started showing sharp rising trend from 1982 onwards and by the end of March 1990, combined debt-GDP ratio increased to 67 per cent. Although, during the 1990s, this trend has been arrested, the burden of debt continued to increase. Increase in the debt-servicing obligation, despite the decline in the debt-GDP ratio during the 1990s, could be attributed to the deregulation of interest rate in a significant manner, which made government borrowing more expensive compared to the earlier years. The deregulation of interest rates is one of the components of financial sector reform that has been underway since 1991. During the 1990s, the government also undertook several fiscal reforms to reduce the fiscal deficit and public debt. In the context of fiscal and financial reforms, this study examines the factors behind the growth of debt, its impact on the conduct of fiscal and monetary policy and its long run sustainability with special emphasis on the interest rate policy reform.

Economic theory does not provide us with any cogent criterion by which we can decide that a particular level of debt-GDP ratio is "too" high (Spaventa: 1988). Also there is no universally valid thumb rule for prudential limits on debt-GDP ratio (Rajaraman and Mukhopadhyay: 2000). However, the increase in the public debt-GDP ratio assumes relevance for three important reasons. First of these is financial crowding out. In the absence of debt neutrality\(^4\), the substitution of borrowing for current taxes will tend to

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\(^1\) Government deficit or fiscal deficit implies the net borrowing requirement of the government. It is defined as the excess of government expenditure over non-debt creating receipts of the government.

\(^2\) The stabilisation and structural adjustment programme initiated in India in 1991 also called for a reduction in fiscal deficit as burgeoning fiscal deficit may create various macroeconomic distortions, viz., pushing up of rate of interest, widening of current account deficit in the BOP account, inflation and crowding out of private investment. "At a macroeconomic level fiscal deficit inevitably spills into balance of payment problem and creates inflationary pressure in the economy" (Economic Survey-1990-91, p. 91).

\(^3\) The debt-GDP ratio wherever reported is with reference to the GDP NEW SERIES, the base year being 1993-94.

\(^4\) Debt Neutrality refers to the absence of real effects from alternative ways of financing a given public expenditure programme (Buiter: 1990, pp. 48).
raise private consumption and in full employment situation of resources, this will lead either to the displacement of private investment and other interest-sensitive forms of private spending\(^5\) or to an increase in the deficit on the current account of the balance of payment. Secondly, if the deficit rises continuously, there is a possibility of eventual monetisation of persistent deficit, which has got its adverse implication on price stability. Thirdly, increase in deficit raises the possibility of insolvency of government exchequer (Buiter and Patel: 1994). As mentioned earlier, this study concentrates on the last two issues where rising debt is regarded as a constraint on the conduct of fiscal and monetary policies.

1.1 Policy Initiatives: A Synoptic View

In the face of rising debt-GDP ratio, government undertook several fiscal policy initiatives during the 1990s', which aimed at cutting down the fiscal deficit to reduce the growth of debt. The fiscal consolidation programme undertaken included a policy of expenditure reduction, rapid tax reform and innovations in the type and nature of debt instruments. In accordance with this objective, in the fiscal year 1996, the government fixed the medium term goal of bringing down the fiscal deficit to GDP ratio to 4 per cent. Also in the year 2000, the government has drafted the Fiscal Responsibility and Budget Management Bill, 2000, which set a target of reduction of fiscal deficit to 2 per cent of GDP by the end of 31\(^{st}\) March 2006.

The policy initiative was also undertaken to give leverage to central bank (Reserve Bank of India) to pursue a monetary policy with greater independence. The attempt to delink monetary and fiscal operations by providing greater autonomy to central bank was to reduce considerably the scope of the government in monetising deficits when expenditure levels shoot up. In other words, monetisation becomes the prerogative of the central bank consistent with goals of price stability and growth. Major policy initiatives in this regard were doing away with automatic monetisation of public debt through adhoc – Treasury bills from April 1\(^{st}\) 1997, moving towards market related borrowing programme for the government and placing its issues through auctions,

\(^5\) In underemployment situations, crowding out is not inevitable because with underemployed resources, government expenditure increases aggregate demand at prevailing prices and interest rates. However, if the government provides goods and services that are by nature close substitutes for private consumption and investment, direct 'crowding out' may occur (Buiter and Tobin, 1990a).
gradual withdrawal of portfolio restrictions on banks and other financial institutions to facilitate the deepening of the government securities market.

The fiscal consolidation programme did result in a decline in the public debt to GDP ratio of the central government during the 1990s' compared to the level reached during the last half of the 1980s'. The total debt-GDP ratio of the central government declined from 58.89 per cent in 1990-91 to 49.69 percent in 1998-99. Even though debt-GDP ratio declined, the debt-servicing obligation continued to be high and showed an increasing trend over the years resulting into the continuous shrinkage of resources available for non-interest expenditure. The share of revenue earning of the central government that had to be set aside to meet the interest payment obligation increased from 39.12 per cent in 1990-91 to 52.09 per cent in 1998-99. The reason for such high increase in the interest burden is multifold. One of the principal reasons was the increase in the interest rates on government securities across all maturities. The increase in the rate of interest was the result of the policy shift of moving towards market related rates of interest on government securities.

The rationale behind the market related borrowing programme by the government was primarily to create and widen the investor's base for government securities outside the captive market to reduce government's dependence on monetisation. During the administered interest rate regime, government largely depended on captive investors to mop up resources by increasing their reserve requirements, viz., the periodic upward revision of SLR for commercial banks. Low rates of interest on these reserves invested in government securities was regarded as a taxing on the banking system which in turn argued to have adversely affected the profitability of banks (Reserve Bank of India: 1985). The lower profitability was considered as the reason for the higher spread between lending and deposit rates of the banks. In other words, during the administered interest rate regime, the deposit rates of banks were kept artificially low and lending rates were kept artificially high. The low deposit rates and high lending rates argued to have adversely affected the financialisation of savings and acted as a hindrance for higher investment activity. Thus, it was argued that government's moving towards market related borrowing programme would help improving the profitability of banks and would reduce the spread of interest rates of bank's lending and deposit rates and also would help improving the financialisation of savings.
Given the objective of deregulation of interest rates delineated above, the government started moving from an administered interest rate regime to deregulation since the early 1990s. As mentioned earlier, the deregulation of interest rate made government borrowing more expensive because of the sharp rise in the interest rates. The availability of finance through monetisation was also no longer available and government resorted to high cost market borrowing to finance the fiscal deficit. The anti-inflationary monetary policy stance as shown in limiting government's ability to monetise deficit could itself be a major reason behind the increase in the interest rate. Dornbusch and Draghi (1990) observed that when the US shifted to a sharply anti-inflationary monetary stance in the early 1980s, and other countries joined, in part to avoid dollar appreciation and imported inflation, world real interest rate turned sharply positive.

The high interest rate regime has direct bearing on accumulation of debt and debt management, especially the internal debt management. This study focuses on the accumulation of domestic debt of the central government. The study covers a period from 1974-75 to 1998-99 with special emphasis on 1980s and 1990s. From a revenue account surplus situation during the 1970s, the central government plunged into revenue account deficit from 1979-80 onwards and the revenue account gap further widened during the 1990s. In contrast, 90s witnessed a tendency to contain fiscal deficit as a result of policy initiatives we have already discussed.

1.2 Defining Debt

It is to be noted that conceptually, public debt refers to not only the debt of the government but the debt of public sector as a whole which comprises of central, state, union territory and local governments and various other public sector entities. Ideally one should have dealt with the total public sector debt. However, many of these agencies borrow from each other, viz., almost 70 per cent of the outstanding debt of the state governments is owed to the central government. Public undertakings borrow from the central and state governments as well as public financial institutions. There are also intra public undertakings borrowing and lending. However, detailed information on all

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6 Although, in recent months, short term interest rates have fallen in major countries including India the drop in Indian interest rates is less spectacular and the gap between India and world real interest rates remain large (Jha: 2002, p. 479).

7 Although both external as well as internal debt of the government of India increased over the years, the growth of the latter was much faster than the former.
these borrowing and lending is not available from the published sources. Paucity of information may tend to over estimate public sector debt, as elimination of intragovernmental transaction would become impossible. Thus, we concentrate on the central government's domestic debt, which currently accounts for more than 85 per cent of the combined domestic debt of the central and state governments.

According to the current budgetary practice, the internal and external debt together constitute the total public debt as reported under the 'Consolidated Fund of India-Capital Account' in the Annual Financial Statement of the Union Budget. The internal debt includes market loans, special securities issued to Reserve Bank of India, compensation and other bonds, treasury bills issued to Reserve Bank of India, state governments and other parties and non-negotiable and non-interest bearing rupee securities issued to international financial institutions. The internal debt is also classified into market loans, other long and medium term borrowings and short term borrowing as shown in the receipt budget. External debt represents loan received from foreign governments and bodies.

However, public debt as defined does not include all the 'other liabilities' of the central government. The liabilities other than internal and external debt would include other interest bearing obligations of the government such as post office savings deposits, deposits under small savings schemes, loans raised through post office cash certificate, etc., provident funds, interest bearing reserve funds of departments like railways and telecommunications and certain other deposits. Unlike public debt, the 'other liabilities' of government arises more in its capacity of a banker rather than as a borrower and thus shown in the 'public account'. However, as in both the cases government has to meet debt-servicing obligations, by character 'other internal liabilities' are no different than

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8 It has also been suggested that "while analysing the debt situation, the impact of various quasi-fiscal activities, unfunded liabilities (viz., liabilities arising from unfunded public pension or insurance schemes) and contingent liabilities (viz, loan guarantees, exchange rate guarantees, deposit insurance etc.) should not be ignored. The impact of unfunded liabilities arising from pension obligation to employees in the public sector has been significant. The outstanding liabilities, of the Central and State governments against the State and public provident funds, insurance and pension funds amounted to Rs. 168617 crore in 1997-98 as against Rs. 60,753 crore in 1990-91.

Guarantees provided by the Centre and State governments for promoting economic activities were about 9 per cent of GDP by the end March 1999. Although from a accounting view point guarantee do not form a part of the public debt, such contingent liabilities would pose constraints in the event of default." (Lahiri and Kanman: 2001).
public debt instruments. Thus, the debt as defined for the purpose of study, as domestic debt is both *internal debt* and *other internal liabilities*. In Fiscal Year 1999, other internal liabilities constituted 37.48 per cent of the total domestic debt. Currently, the domestic debt (as per this definition) alone constitutes around 50 per cent of GDP.

1.3 Context of the Present Study

Accumulation of public debt has a pre-independence history in India (Dalay: 1966, United Nations Organisations: 1951). It was during the First World War, the colonial government resorted to market borrowing for meeting a part of the war expenditure (Barman: 1986). Public borrowing during that period was based on the orthodox principle of public finance which argued that government should try to contain expenditures within the limits of resources available from taxation and avoid borrowing even for beneficial public works. After independence, adoption of the process of planned economic development accorded an increasing significance to public debt as a means of raising resources. The first five-year plan document noted that "(T)echniques of borrowing, in particular have to be adopted so as to convey to the people the larger purpose for which the loans are being raised and to facilitate their participation in the development programme on the largest possible scale" (Government of India: 1952, First Five-year Plan Report: p. 55).

In Indian context, though limited, there are studies that tried to examine the impact of growing public debt on government finance and on the macroeconomy. It has been noted that national debt in India has grown enormously since 1956 and became a major factor influencing the monetary and fiscal policies (Ghuge: 1977, Barman: 1986). Barman (1986) also observed that growing public debt has inflationary consequences, especially because of the predominance of the captive market and that can only be overcome by inducement to higher savings mobilisation through an appropriate interest rate policy. According to Lal (1978), low rates of interest on public debt and continuous support of the government-borrowing programme on the long run basis by the Reserve Bank of India have aggravated the monetary instability in the economy. Mishra (1985) argued that phenomenal growth of public debt only reflects the use of debt as an instrument of resource mobilisation for planned economic development and the cost of debt servicing should not be a matter of fiscal constraint when it is seen in the rational perspective of debt management.
However, the increase in the public debt in absolute terms and relative to GDP was sharper during the 1980s compared to the earlier period. In the face of rising debt-GDP ratio, literature expressed serious concern about the growing volume of debt and debt servicing obligations during this period. The Report of the Comptroller General of India (1988) expressed serious concerns against the rapid growth of public debt. Lakdawala (1990) pointed out that if the present debt situation were allowed to persist would throw a grave burden on the treasury and an intolerable monetary deficit. Remedial measures as suggested were cost effectiveness and productiveness of capital expenditure, increasing the profitability of public sector enterprises for better post-tax net return on capital invested and reduction of revenue deficit. According to Ghosh (1988), rapid increase in public debt and the burden of interest charges has become a major hindrance in the process of orderly implementation of development planning, not only in the public sector but also in the private sector. The study of Bhattacharya and Guha (1992) attempted to analyse the causes behind the rise in domestic and external debt in India and its effect on growth, inflation and balance of payment by estimating a macroeconometric model. Counter factual simulations revealed that overall increase in the interest rate structure was a major reason for the increase in the debt-GDP ratio. Apart from that, rising current expenditure is also found to be a major reason for the rise in the debt-GDP ratio. Gulati (1993) commented that “if we are worried about the burden of growing public debt, the thing to do for the policy makers is not to stop or reduce public borrowing but to review the existing allocation of governmental expenditures and make sure that the maximum proportion of these expenditures is incurred in areas and in a manner that contributes, of course optimally, to the growth of national income.”

The sharp increase in the debt-GDP ratio has also contributed to the emergence of literature on the sustainability of the public debt and possible insolvency of government exchequer. Through projection of key macro variables, some studies tried to show an explosive rise in the debt-GDP ratio and corresponding interest outgo to government receipts9. In the Indian context, Seshan (1987) first took up discussion on the issue of sustainability of public debt and concluded that ‘given the current trend it appears that by 1992-93, a point may be reached when market borrowing may not be adequate to

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9 Here it should be made clear that the questions and concerns regarding the sustainability of debt basically dealt with the internal debt, including other internal liabilities of the central government.
meet even interest payments'. However, Seshan's (1987) study was criticised on methodological ground as it was based on simple trend analysis. Rangarajan et al (1989, 1994), Chelliah (1991), Buiter and Patel (1994), Buiter and Patel (1997) and Rajaraman and Mukhopadhyay (2000) undertook other major exercises on sustainability of public debt.

Deriving the future time profile of net primary deficit through intertemporal budget constraints by assigning values to the key parameters, viz., real GDP growth, inflation rate, nominal interest rate on domestic borrowing and lending and fraction of domestic borrowing on lent, Rangarajan et al. (1989, 1994) estimated the future profile of debt-GDP ratio, corresponding interest burden and concluded that debt becomes unsustainable in the long run. Similarly by assigning values to the key parameters like GDP growth, rate of borrowing and interest rate, Chelliah (1991) arrived at a similar conclusion.

Buiter and Patel (1994) confirmed the same argument. By testing the government solvency constraint econometrically, deriving the discounted value of public debt and estimating the demand for base money concluded that without a fiscal correction, the future solvency of the government exchequer will be in question. The estimation of the demand for base money showed that scope for seigniorage financing of government deficit is limited as it would entail danger of long run inflation. Heavy fiscal retrenchment was suggested as the remedial measure. Later exercise of Buiter and Patel (1997) developed an accounting framework in order to test the public sector solvency and fiscal correction in India. This accounting framework was used to trace the growth of public debt and the public sector solvency over time based on the concept of 'primary surplus' and 'primary gap'. On the basis of certain assumptions, this study concluded that further fiscal retrenchment of the order of 4.5 per cent of GDP would be required to ensure solvency with a stable debt-GDP ratio.

Rajaraman and Mukhopadhyay's (2000) study focused on the sustainability of undiscounted public non-monetised domestic debt by using ARIMA model. The study noted that "More than the forecast level of debt which in itself is not intolerably high, the good fit offered by the fixed slope model shows that the time path of debt will not naturally stabilise at any level without a correction in the underlying fiscal parameters."
(Rajaraman and Mukhopadhyay: 2000, pp. 221). However, the study did not specify the nature of fiscal correction ideal to achieve a stabilisation of the debt-GDP ratio.

These literature on sustainability are constrained by their assumptions with regard to the relationship between GDP growth and government borrowing. As mentioned, in order to estimate the future time profile of debt-GDP ratio, the study of Rangarajan et al (1989, 1994) and Chelliah (1991) assumed a constant GDP growth and an increasing path of primary deficit, which implicitly assumes that increasing borrowing meant to be for unproductive purposes. Though it is extremely difficult to incorporate a dynamic growth path within an intertemporal budget constraint to test for long run sustainability of debt, it should also be noted that judgement on sustainability would remain incomplete unless we examine the relationship between the 'fiscal policy stance' and 'economic activity'. As Domar (1944) pointed out, the problem of debt burden should be viewed as a problem of growth of national income, the relationship between the two must be verified. If a fiscal policy is growth enhancing in nature, growing debt can be brought under limit through the expansion of national income and corresponding increased revenue mobilisation. Other important limitations of these studies are that they have failed to take note of the fact that even with an increasing borrowing, the debt burden can be kept within a manageable limit if the efficiency of the government expenditure improves which ensures a higher return on government investment. Also, these studies did not undertake a comprehensive analysis of the factors responsible for the growth of debt. If debt has really reached an unsustainable level, one should also trace out the factors responsible for the emergence of an unsustainable situation. This is all the more important in the context of developing countries, because in the face of increasing debt, a policy of fiscal retrenchment may adversely affect economic growth by increasing the bottlenecks in social and economic infrastructure which is largely financed by the government expenditure.

Apart from this, the study on domestic debt should give adequate importance on the impact of the changes in the internal debt management policy on the accumulation of debt and debt burden. A faulty debt management policy can always lead to an explosive rise in the debt servicing obligation by changing the structure of debt and interest rates on debt instruments. During the 1990s, changes in the interest rate policy from administered regime to deregulation and limits to monetisation of deficit are some of the
principal factors that had contributed to the sharp increase in interest payment on domestic debt of the government.

1.4 Objectives of the Study

In the context of the literature discussed above, the major objectives of the study can be put into the following lines:

(i) **Analyse the trend, composition, ownership and maturity pattern of domestic debt and evaluate the observed pattern in the perspective of internal debt management**

(ii) **Examine whether the term structure of interest rate operates in the government security market in the deregulated interest rate regime.**

(iii) **Trace out the structural factors contributed to the increase in debt and debt burden.**

(iv) **Analyse and empirically examine the rationale behind the interest rate policy reform on government borrowing, viz., creation of investor's base for government securities outside the captive market, and reduce degree of monetisation of deficit and thus debt.**

(v) **Examine the long run debt sustainability in a theoretical construct of quantifiable future profile of debt-GDP ratio having examined the relationship between fiscal policy stance and macroeconomic activity.**

1.5 Data Sources


Disaggregated data on total outstanding debt is drawn from two Reserve Bank of India publications, viz., Report on Currency and Finance (various issues) and Hand-Book of Statistics on Indian Economy. The data on interest rates on government borrowing across maturities, data on maturity pattern and ownership of debt are also drawn from these two
sources. The data on major banking aggregates, viz., credit, deposits, commercial banks investment in government securities and major monetary aggregates are drawn from the Hand-Book of Statistics on Indian Economy-2000 and Report on Currency and Finance. The data on commercial banks’ earning and expenditure profile used in this study is drawn from the Statistical Tables Relating to Banks in India and recent estimates are drawn from the www.rbi.org.in.

The disaggregated data on interest payment in different categories of debt is drawn from various issues of the Union Finance Accounts published by CAG. The major revenue aggregates are drawn from Indian Public Finance Statistics, published by the department of economic affairs Ministry of Finance and Hand-Book of Statistics on Indian Economy-2000. The data on peak rates of major direct and indirect taxes are drawn from the Finance Bill of Union budget documents of different years. The data on gross capital formation and on savings are drawn from National Accounts Statistics-1951-52 to 1992-93 and 2001 published by CSO. The GDP data is also drawn from the CSO.

1.6 Chapter Scheme

This study is organised in seven chapters. Apart from the first chapter, which introduces the context of the study and identifies the objectives there are six more chapters. The chapter-2 critically reviews the theoretical literature on public debt. The chapter-3 discusses the measurement issue and derives the profile of domestic debt. This chapter also evaluates the internal debt management policy by examining the composition, ownership, maturity and interest rates structure of domestic debt, and undertakes an econometric analysis to examine the term structure of interest rates in the deregulated interest rate regime. A comparison of assets and liability position and the strain of debt burden on central government finance are also undertaken in this chapter. The chapter-4 identifies the structural factors behind the growth of debt. Chapter-5 analyses the rationale behind the interest rate policy reform and examines whether interest rate deregulation on government securities achieved its desired objectives. Chapter-6 examines the sustainability of domestic debt of the central government. Chapter-7 summarises the findings of the study and draws conclusions.