Chapter 8
Concluding Observations and Policy Inputs

8.1 Conclusions
The study tries to review the trends and composition of domestic debt of the central government and traces the underlying causes of rising debt behaviour of the central government in India. It also reviews the domestic debt policy of the central government and interest rate policy relating to domestic debt which may have implications for the fiscal and monetary stability of the country. Subsequently, it empirically addresses the question of sustainability of domestic debt of the central government and examines the impact of central government domestic debt along with combined government domestic debt on private consumption and investment. Based on the reviews and econometric results, the following conclusions and inferences have emerged from the study.

- The fiscal development in India presents a worrisome picture of the financial position of the central government. The domestic debt of the central government, showing an upward trend is found to have attained a higher level in the 1990s. Towards the mid-1990s, the debt as a percentage of GDP at market prices, (although showing a marginal falling trend as compared to the early years of 1990s) is observed to be prevailing at a higher level.

- Although the central government has relatively been relying more on domestic sources of debt, where external public debt is no longer an important source of financing central government deficits, the government over the years has heavily resorted to market borrowings and small savings and provident funds except the year 1999-00 (from where there has been a drastic fall in small savings). The fall in small savings is due to the changing fiscal policy of the central government in the context of its changing budgetary accounting practices. This is done

\[\text{Since much of policy interests lie in evaluating the long-run effects of fiscal policy, therefore, the summary results analysed based on application of cointegration and error correction techniques, emphasis on the long-run}\]

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in order to reduce the central government’s own deficits as the state governments and union territories apportion a major portion of small savings from the centre.

- The reason for a high level of overall debt of the central government is traced to the increase in government expenditure and less revenue receipts from both the tax and non-tax sources. The gap between government expenditure and revenue receipts is observed to be widened at a higher level of expenditure.

- The study observes that within the expenditure management policy of the central government, it is the inefficiency with regard to the utilization pattern of financial resources which has given rise to such a precarious fiscal situation of the central government. The quality of fiscal adjustment is found to have mainly deteriorated due to a disproportionate rise in revenue expenditure in total expenditure of the central government. Within revenue expenditure, it is observed that interest payment constitutes a sizable proportion of total current expenditure and revenue receipts. Almost 50 per cent of total revenue receipts is absorbed in payment of total interest liabilities leaving the rest for incurring other current and capital expenditures.

- The off-budgetary activities have also led to fiscal problems. The additional financial burden and fiscal risks have arisen due to proliferation of central government guarantees to the state governments and public and private sector units - called contingent liabilities of the central government.

- Realising the shortcomings of the past debt management policies several reform measures are introduced in terms of floatation of large number of debt instruments and ensuring market orientation to the debt management program. As a result, there is now direct participation of effects of government debt and other macroeconomic variables on private sector activities. However, the analysis for short-run effects is presented in the empirical section of preceding chapters.
banks and non-banks in the government security market giving space to the open market operations of the central bank. But the major criticism advanced against the government debt management is that despite all these developments, the banks and non-banks participate only in the government debt market, as a result, there is no significant overall development of the financial and capital markets in India, and it is no different from the program prior to 1990's.

- An empirical examination of sustainability of domestic public debt provides a clear evidence of unsustainability of different components of domestic debt along with unsustainability of aggregate domestic debt exclusive of the debt from the Reserve Bank of India.

- Examining the macroeconomic impact of domestic public debt of the central government as well as combined government, the study finds that in the long-run domestic public debt has an adverse impact on private consumption, while domestic public borrowing has no impact on private investment. The adverse impact of public debt on private consumption is found to be due to credit constraints on private sector. Since banks and other financial institutions are large subscribers to the government bonds, holding of more government bonds by these institutions implies more credit absorption by the government. When the government absorbs the financial resources, the resources from the surplus private sector units do not flow to deficit private sector units. Hence, there will be less credit availability for the liquidity constrained individuals. Thereby, it reduces private sector consumption. Although increase in domestic public debt directly implies an increase in private sector savings, the same does not imply an increase in private investment as it is observed that government borrowings do not get translated into increasing private sector investment. For achieving higher growth rate, as observed in highly developed economies, private consumption demand in tandem with private investment demand has to increase to higher levels. In other words, consumption demand has to be sustained with the increase in private investment demand. But contrarily,
although there is an increase in per capita private consumption expenditure, there is a decline in private consumption expenditure to GDP ratio which has got implications for future growth rate of the economy. The decline in private consumption expenditure to GDP ratio may also imply less consumption of higher bracket income individuals and hence more savings by them in the form of government bonds. Thus, the policy exercise should be carried out aimed at setting the aggregate demand goal at a higher level.

- Although the empirical results suggest that in the long-run government expenditure raises private consumption expenditure, public sector investment expenditure tends to crowd out private investment. The positive impact of government expenditure on private consumption can hold for the reason that government spends a larger proportion of its financial resources on current expenditure. Interest payment, wages and salaries and subsidies constitute a larger proportion of current government expenditure; this generates income for the private sector. As income increases due to increase in government expenditure, it leads to a rise in private consumption expenditure. This fact can be argued from the perspective of distributinal effect of public expenditure. Given a higher marginal propensity to consume of the lower bracket income individuals, if more income is transferred to them through the channel of government expenditure, it may result in more private consumption expenditure.

- Since private investment is integral to achieve higher rate of growth, for promoting growth, government investment should promote private investment rather than retarding private investment in the economy. The adverse impact of public sector investment on private investment may be due to the investment competition between private sector and public sector with regard to absorbing physical and financial resources as well as creation of market for the output.
• Although, studies by Sundararajan and Thakur (1980), Patnaik and Joshi (2000), Pradhan, Rath and Sarma (1990) and others in the context of India, which point out that government investment tends to crowd in private investment, the present study has found contradictory results; it is due to differences in the sample period of the studies and the econometric methods applied. For a time series application (since it requires sufficient number of observations but due to sample size constraint), the study finds it difficult to divide the whole sample into two sub-samples on the basis of major policy changes i.e. one sample period is before 1990s and the other is after 1990s when the economy experiences significant structural changes. Nevertheless, the study estimates the result with a 1990-91 dummy but this shows positive influence on private investment. The significant and positive influence of dummy on private investment may be due to modernisation of domestic industries to compete with foreign industries, removal of restrictions in investment and adoption of delincensing industrial policy regime in the country. These may have a positive influence on private sector investment. The influence of macroeconomic crisis faced by the country does not get reflected in the dummy for private investment model. It is difficult to isolate other policy influences as against the positive influence of delincensing policy regime on private investment. In some years, there may be crowding in impact of public sector investment and in some (years) there may be crowding out impact of public sector investment expenditure but the net impact may be crowding out of private investment by public sector investment. The crowding out impact may be explained in terms of absorption of financial and physical resources by public sector. Public sector absorption of resources goes beyond the government absorption because public sector includes government as well as public sector enterprises and other departmental undertakings which can absorb additional financial and real resources after netting out government's acquisition of resources.

• Given the unsustainability sign of fiscal policy, what is required by the government at the present juncture is to concentrate on revenue
optimization and not on revenue maximization along with controlling
government expenditure under unproductive heads. The government
does not necessarily trim down total expenditure, but needs to cut down
imprudent expenditures. More than the issue of unsustainability of
domestic debt of the central government (which has recently attracted a
lot of policy attention) it is the impact of public debt that has drawn a
considerable attention. While the unsustainability of domestic debt has
got implications for managing government's finances, the domestic
public debt has a bearing on the macro economy. The sustainability of
fiscal policy also hinges on whether the government activities are growth
promoting or growth retarding. In this context, the stability calibration
shows that India should not worry about the fiscal restraint exercise,
given the fact that growth rate is maintained at a higher level. Therefore,
India should not aim at expenditure compression, rather it should
concentrate on expenditure management to ensure that there is a
reduction of obligatory expenditure and rise in productive expenditure. A
higher growth rate can be achieved provided public expenditure is
efficiently and productively utilized.

- On the basis of unsustainability of domestic debt of the central
government, the study suggests that government has to be very
cautious in exercising its fiscal policies in the future. Otherwise, the
government may face a catastrophe in its fiscal management operations
due to financial over burden. The government cannot continue to breach
the intertemporal budget constraint over the long run. Therefore, the
study suggests that it is the pattern of fiscal deficits which the
government has to worry about; the fiscal deficit pattern has resulted in
a higher level of government debt-to-GDP ratio and interest payment-to-
GDP ratio over the decades.

- The study does not suggest compromising on total expenditure of the
government or raising the tax rates drastically in the future in order to
achieve fiscal policy sustainability, but what the government needs to do
is that it has to allocate resources to productive channels which would
give rise to desirable returns in order to meet the desired expenditure. As far as government expenditure through debt-financing is concerned, the government has to be very cautious about how it is investing, and also whether it is effective in enhancing the growth rate of the economy. Debt-financing without any desired positive influence on the economy is meaningless and counter productive. Expenditure on productive lines would not only give rise to direct return but also, by raising GDP of the economy, can raise the revenue of the government in the form of volume of taxes for with an increase in GDP of the economy, the tax base of the economy would be expanded. The debt service burden as a proportion of total expenditure, can come down if the investments made by the government through borrowings, give rise to adequate returns either through the generation of non-tax revenues or through tax revenues. This would help the government efficiently manage its fiscal policy in a more flexible economic environment.

- Improvement in public infrastructure can augment private investment, output and hence would lead to buoyancy in tax revenues. Non-tax revenues should increase through increases in dividends from public enterprise investments. Expenditure reduction being inflexible downwardly, the axe of deficit reduction partly puts pressure on non-tax revenue in the revenue receipt side, and partly on capital expenditure in the expenditure side of the budget in the current fiscal adjustment program. This implies that although non-tax revenue has stagnated at a lower level, in the context of relative decline in tax revenue receipts, further emphasis has to be placed on various ways of raising non-tax revenues for adjustment of fiscal imbalances of the central government in India. In view of continuous and large increases in current expenditure, where a large proportion of revenue receipts is earmarked for interest payments without generating corresponding returns, there exists a serious policy concern towards sustainability of the central government finance in India. Due to rigidities in public expenditure, spending cuts, which are necessary for the fiscal adjustment have not focussed on the programs that should be cut, but focused on programs
that could be cut. Cuts in investment and maintenance spending are expected to affect efficiency. Proper targeting of social expenditures and discipline in the use of resources can improve the quality and sustainability of fiscal adjustment to a significant degree.

- Converse to the expectation of complementarity effect of government investment in a developing economy, the result suggests that government investment results in crowding out impact. As private investment is central to achieve high growth rate of the market-led economies, government investment should be complementary to private investment for achieving higher growth rate. The government has to find out critical areas in which private sector can be induced to raise its investment. The best course for the government would be to venture into areas where the private sector has not made an entry. This would have implications for the future growth of the economy. The policymakers should bear in mind that the government investment spending (although may not generate immediate returns) helps the economy grow over the long-run. The fiscal policy should be formulated bearing the long-term perspective in mind.

- Prudent government debt management is important from several considerations. Government’s debt portfolio is the largest financial portfolio in the economy. It can generate substantial risk relating to the government’s balance sheet and the country’s financial stability. Prudent debt management can make the country less susceptible to contagion and financial risk. Therefore, government debt management policies can have important implications for the effectiveness of other macroeconomic policies. The government can reduce risk associated with its debt portfolio by choosing an appropriate composition of debt, interest rate structure, and maturity profile of debt. If government’s debt management strategy is poorly designed, implemented, and communicated, it can induce adverse (investor’s) sentiment, raise debt-servicing costs, damage government’s credibility, and exacerbate financial market instability. Debt management practice should ensure
investor’s participation in the domestic bond market and strengthening the efficiency of domestic financial market. Therefore, prudent practices in debt management include recognition of the benefits of debt management such as a close coordination of debt and monetary management, a limit on debt expansion, careful management of refinancing risk and interest costs and a sound institutional structure, including clear delegation of responsibilities and associated accountabilities among government agencies involved in debt management.

- Interest payment entails a large claim on public resources, and reduces government’s capacity to spend on social sectors and developmental activities. Interest payment can be reduced either by retiring debt, particularly higher interest bearing debt or by curbing the growth of new debt (India Economic Survey, 1996-97). Efficient government debt management can reduce government’s debt-servicing cost by reducing credit and liquidity premium in the term structure of interest rates for government securities.

- Interest rate and government debt are closely interrelated. For a good financial and monetary environment, there is a necessity of equilibrium interest rate in the economy. For an undistorted equilibrium interest rate and financial market, government debt is one of the instruments in the development of capital market requiring greater policy attention. It is evident from the economic literature that deviation of interest rate either in the upward or downward direction from its market determined equilibrium position is considered as one of the pertinent factors for macroeconomic instability in developing economies like India. The higher interest rate structure not only presages the danger of recession, but also pushes the economy into the debt trap situation (Morley et. al, 1987). In contrast, a lower interest rate structure discourages private savings and hence constrains investment by engaging private sector in speculative activities. Moreover, an appropriate interest rate policy which is sufficiently realistic, stable and flexible can impart more strength to
the monetary authority in curtailing short-term demand for funds or speculative demand for money. To maintain a positive interest rate two methods could be employed i.e. (i) issue of index loans and (ii) manipulation of nominal rates of interest. The interest rate reflects the opportunity cost of holding different kinds of assets determined by what the asset holders would receive under alternative uses of their savings and an equilibrium occurs when the return on various assets converge. A realistic structure of interest rates ensures growth with stability. The realistic rates of interest on government borrowing in India have to take into account the social opportunity cost. Besides ensuring fiscal adequacy for developmental expenditures, government debt policy has to ensure maintaining monetary stability. Government debt management policy should not interfere with the rates of interest policy and overall monetary policy of the country.

- However, a major limitation of the study is that the result is not based on a complete model of private investment. A complete analysis of the interactions between fiscal variables and other real macro economic variables is possible only within the framework of a fully specified general equilibrium macroeconomic model taking into account all the structural features of the economy which falls beyond the scope of the analysis. Rather, the study tries to examine the relationship between private investment and domestic borrowings of the central government in India within a simple framework.

### 8.2 Direction for Future Research

There is much scope for studying the distributional aspect of public debt which is crucial for the allocation of resources and for maintaining equity and welfare objective in the economy. Moreover, the growth rate of the economy matters most. One can examine the impact of public debt and expenditure on the growth rate, which can have more implications for the economy in guiding the policy makers.

The effect of government expenditure differs in terms of its utilisation. The effect would be different if it is utilised for investment purposes rather than for
consumption. Within the consumption purpose, the effect also depends on whether government incurs consumption expenditure on durables or non-durables. One needs to classify the expenditure according to the purpose of analysis. The effect of expenditure is different from effect of different methods of financing the expenditure. It is argued that it is the growth of public debt which influences economic activities in the long-run rather than the absolute level of public debt. One can undertake an analysis in examining the impact of fiscal policy of all the respective state governments on different economic activities on a similar line through an application of a panel regression model.

8.3 Limitations of the Study
The present analysis applies Dickey-Fuller and Phillip and Perron tests to evaluate sustainability. The limitation of these methods is that they do not account for the breaks in the series for testing the stationarity and non-stationarity of series. The evaluation of sustainability can further be carried out by applying recently advanced unit root tests, which take into account multiple breaks in a series.

Since the automatic monetisation as a method of financing the government expenditure is withdrawn from 1997-98, the study is not concerned with the effects of monetisation. Rather, the study focuses on public domestic debt which is raised from the public in analyzing the macro economic impact. The study, on the basis of Ricardian equivalence proposition, has considered only the bond-financed expenditure. Only recently economists have begun to argue that in the same way monetisation would have neutral impact on the economy through its inflationary impact. When the government finances its expenditures through monetisation, it leads to an increase in money supply. But the real money supply and income would remain unchanged due to an increase in prices. Nevertheless, monetisation is not a permanent arrangement (nor is it a preferred arrangement always). One can undertake a study by separating out the impact of monetisation from the impact of aggregate domestic debt of the government on various economic activities in order to examine what holds good for the economy.