# RECENT FISCAL TRENDS IN TAMIL NADU AND THE SUSTAINABILITY OF FISCAL STANCE

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**September 1999**

## Executive Summary

This paper reviews budget expenditure trends in Tamil Nadu and the key indicators of fiscal performance, during the period 1980/81 - 1998/99. The review indicates the emergence of large and persistent current and fiscal deficits from 1987/88. Revenue financed expenditures have grown rapidly as successive five year plans have led to increasing magnitudes of committed non-plan development expenditure. Plan expenditures in the current budget are also quite substantial in Tamil Nadu. The rising current account deficits coupled with large annual increases on wages and subsidies have emerged as major structural problems in the budget. Currently, a very large proportion of the current budget is allocated to wages, interest payments, subsidies and grants making it extremely difficult to bring about any realignment of expenditures. The trends in debt/SGDP ratio are also reviewed as well as the recent increases in the average cost of financing the deficits.

Using a simple analytical framework, this paper then analyzes the sustainability of the government's fiscal stance taking into account the magneto of annual debt flows into the budget. Tentative projections of the likely fiscal trends in the medium term are made on the basis of a number of assumptions about the variables that influence sustainability. Three alternative scenarios are presented each reflecting a different fiscal stance. Scenario 1 is a base line scenario and assumes that primary deficits will be controlled at 2.0% of the SGDP and current revenues will amount to 15% of the SGDP each year. Scenario 2 assumes moderate fiscal reform with primary deficit remaining at 1.5% of the SGDP each year throughout the projection period with current revenues remaining at 15% of SGDP each year. Scenario 3 assumes strong fiscal reform including a substantial reduction in subsidies coupled with revenue increases. In this scenario a primary deficit of 1.0% of the SGDP is assumed for the projection, with current revenues increasing to 16% of the GSDP each year during the first five years of the projection and increasing to 16.5% of the GDP in the remaining five years.

The base line projection (Scenario 1) results in an increase in the debt/GSDP ratio from 18% in 1998/99 to 28% in five years and to 37% in ten years. In this scenario interest payments will account for 17% of the current revenues in five years and 24% in ten years. Scenario 2 also results in large

increases in the debt ratio and share of interest payments in current revenue. Scenario 3, reflecting strong fiscal reform shows a more moderate increase in the debt ratio to 23% in five years and 28% in ten years. Interest payments will account for 13% of current revenues in five years and 16% in ten years.

The choice amongst the three scenarios presented is essentially a policy decision; from an economic point of view, Scenario 3 is the preferred option, subject to the assumptions made about projected rates of growth of nominal SGDP and the projected average cost of financing the deficits. However, from the point of view of sustainability of fiscal stance, defined as having a stable debt ratio for long periods of time, none of the scenarios are considered sustainable.

The paper then reviews the financing plan for the Ninth Plan, and the actual achievement during the first three years. Given the excellent record of resource mobilization for the eighth plan and substantial mobilization so far for the ninth plan, it appears that the Tamil Nadu government will be able to achieve the plan financing targets and perhaps exceed them as happened during the eighth plan. However for enhancing government's budgetary contributions for plan investments, it will be necessary to control the growing revenue deficits. This measure is also required if the medium term projections in Scenario 3 are to be realized. The paper suggests that without some rationalization of the Public Distribution System, it may be difficult to reduce current account deficits in the medium term. The feasibility of achieving the projected contributions of the Tamil Nadu Electricity Board and the State Road Transport Corporations (RTCs) for the Ninth Plan are then reviewed keeping in view the contributions in the first three years of the plan. The paper recommends policy reforms to revive the tariff on power supplied to agriculture users to enhance public and private investments in the power sector and the rationalization of the fares structure in RTCs to enhance investment and improve the quality of service in this sector.

The paper concludes by highlighting the premium on fiscal reform for the state government so as to maintain the tempo of development and suggests briefly the most critical areas for immediate policy reform as well as process reforms to strengthen the planning and management of public expenditures in Tamil Nadu.

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## 1. Economic Performance

Tamil Nadu is the seventh largest state in India. It accounts for nearly 6.6% of India's population and ranks sixth in terms of per-capita net domestic product amongst the states in India. Grouped as a middle-income state, Tamil Nadu's per-capita net domestic product of Rs 11,708 (at 1996/97 prices) is the highest amongst its group. The state has also witnessed consistently good rate of growth of the economy and is one of the seven fastest growing states in India. Between 1991/92 and 1996/97, the annual compound rate of growth of net state domestic product was 5.9%.

At 1.3% per annum, the rate of growth of population in Tamil Nadu is the second lowest compared to all other states in India. With a very high literacy rate of 63% and well-developed social and physical infrastructure, Tamil Nadu is also one of the six states in India where the pace of poverty reduction has been relatively rapid, as per the estimates of the Expert Group quoted in the Ninth Five Year Plan 1997-2002 published by the Planning Commission. The following table shows the decline in the percentage of population living below the poverty line in urban and rural areas over a period of two decades since 1973/74:

**Trends in Poverty Ratio in Tamil Nadu**

| Year | Rural | Urban | Total |
|---|---:|---:|---:|
| 1973/74 | 57.43 | 54.47 | 56.51 |
| 1977/78 | 57.68 | 53.23 | 56.25 |
| 1983/84 | 53.99 | 49.22 | 52.38 |
| 1987/88 | 45.80 | 43.88 | 45.13 |
| 1993/94 | 32.48 | 39.77 | 35.03 |

The national Planning Commission has also estimated a further reduction in the overall poverty ratio to 30.73% by 1996/97, which is projected to decline further to 18.1 1 % by the year 2001 /2002.

However, as will be discussed in the later sections of this paper, given the special features of fiscal federalism in India and Centre-state financial transfers, the significant economic progress which the state has achieved has often resulted in a decline in the flow of central resources to the state.

## 2. Recent Fiscal Trends and Indicators of Fiscal Performance

### 2.1 Size of the Public Sector in Tamil Nadu

Budgeted expenditures in Tamil Nadu, as a ratio of the State's Gross Domestic Product (SGDP) have remained relatively stable for long periods of time; however, there have been distinct ups and downs in the ratio during the last two decades. After recording a high average of nearly 21 % of SGDP during 1980/81 to 1984/85, the ratio declined gradually to 19% by 1988/89. Again, the years 1989/90 - 1992/93 recorded increased expenditures, with the ratio of expenditures to SGDP averaging around 21 %. During the years 1993/94 1995/96, expenditures declined to nearly 18% of SGDP, only to rise again during 1996/97 and 1998/99 to more than 19%. However, compared to the average of other middle income states in India, the size of budget expenditures in Tamil Nadu has been much smaller.

The ratio of budget expenditures to GSDP cannot however be taken as a complete measure of the size of the public sector in Tamil Nadu. This is due to ingenious practice of mobilizing resources outside the budget, through a number of state level financial institutions for financing infrastructure development. Tamil Nadu had established five development finance companies to mobilize extra-budgetary resources from term lending institutions and through public deposits for financing investment projects. Of these, two are in the area of mobilizing resources for industrial development, two for infrastructure investments and one for the development of urban infrastructure. Most of the institutions have performed well with adequate profits and reasonable returns on equity, and have been able to bring about substantial additionality in resource mobilization.

Another financial strategy which the state government has been following to mobilize additional resources for investment projects is the practice of giving government guarantees. State guarantees have become an accepted method of financing public and private enterprises in many states in India, as opposed to direct budgetary provisions. This method does not require immediate cash and at least for some time tends to hide the apparent fiscal costs. The magnitude of outstanding guarantees given by the Tamil Nadu government is well- documented and as at the close of the financial year 1996/97 it amounted to Rs3,484.75 crores or **4.46% of the SGDP.** Guarantees given to the statutory boards accounted for 80.5% of the total guarantees. Of this, 67% was accounted for by the Tamil Nadu Electricity Board. So far, except for one small case pertaining to a cooperative society, the state government has not been called upon to pay up on account of such guarantees. Although the practice of giving guarantees is very much under control it could develop into a fiscal risk in view of the hidden fiscal costs. There is a possibility that such guarantees could lead to excessive requirement of public financing in the medium and long term. Such risks can be controlled and reduced if the government considers them in their policy debates as part of a central financial planning and management process.

### 2.2 Resource Mobilization

Budgetary resources on revenue account consist of state's own tax and non tax revenues, central revenue transfers (share in central taxes) and central grants. **Table 1** shows the trends observed under each of these categories.

Tamil Nadu's record of resource mobilization is one of the best compared to the other states in India. Sales tax was first introduced in India in Tamil Nadu. As could be seen from **Table 1**, there is a distinct improvement since 1990, in the mobilization of state's own revenues. The realization of state taxes as a percentage of SGDP improved from an average of 10.74% during the five year period 1989/90 - 1993/94 to 11.21% during the last five years , with sales tax contributing nearly 67% of state's own revenues. The trends observed reflect varying rates of growth in individual taxes, additional resource mobilization for financing plan programs, inflation and elasticity of taxes to the rate of growth of SGDP.

The average annual rate of growth of the state's tax revenue has also been higher (except during the period 1985/86 to 1994/95) compared to the other middle income states and the average for all states as reflected in the following table:

**Average Annual Growth Rate in States' Tax Revenue**

| STATE | 1980/81-1984/85 | 1985/86-1989/90 | 1990/91-1994/95 |
|---|---|---|---|
| Andhra Pradesh | 19.0 | 15.3 | 12.2 |
| Karnataka | 17.7 | 16.3 | 17.5 |
| Kerala | 16.6 | 14.7 | 18.0 |
| Tamil Nadu | 22.0 | 14.2 | 18.7 |
| West Bengal | 16.8 | 15.7 | 14.2 |
| All States | 16.8 | 16.2 | 16.5 |

(Source: Reserve Bank of India Bulletin, February 1999, Statement 15, Page 541)

Non-tax revenues of the state government consist of interest receipts, cost recoveries on account of various services provided by the government, forest revenue and profits and dividends from state public enterprises. These have remained small and more or less static contributing only to on an average to about 1.l 8% of the SGDP during the last five years. There is in fact a major decline in the realization of non-tax revenues compared to the record of early eighties. Considering the fact that 85% of non-tax revenues is accounted for by interest payments, there is indeed potential for the realization of user charges from the services being rendered by the government in various sectors. According to one analysis, cost recoveries during the period 1985-1990 covered only 3% of the budgetary outlays for social and community services and 10.5% for economic services (including forests) (Guhan, 1992).

As far as the state's share of central taxes is concerned, there has been a distinct decline. This is partly due to the changes in the successive Finance Commission's recommendations and partly as a result of the state's own efforts in resource mobilization and growth in per-capita incomes. From well above 3.0% of the SGDP in the early eighties, the share declined to 2.13% of the SGDP during 1989/90 - 1993/94 and to 1.58% of SGDP during the last five years. A major system constraint that the state is facing in the horizontal sharing of central taxes amongst the states is the increasing weight given to redistribute criteria in the successive Finance Commission recommendations. As a prudent state, Tamil Nadu has not qualified for "gap grants" or to special treatment in plan assistance. At the same time, Tamil Nadu's relatively high per-capita income, rules out any additional central financial assistance on grounds of equity.

Central grants reflected in Table 1 include grants for state plan schemes, grants for central and centrally sponsored schemes, and some statutory grants . Nearly 85% of grants received by Tamil Nadu are plan grants. Of this nearly 60% reflect grants for central and centrally sponsored anti-poverty programs. Center's financial support for state plan schemes is based on a "modified Gadgil formula", with 30% of such assistance in the form of grants and the balance as g loans. This is calculated after setting aside the allocations required for externally aided projects and area programs such as hill and tribal area projects. However, within this amount, 30% of grants available is allocated to special category states, with the balance being divided amongst other states on the basis of population (60%), tax effort (10%), per-capita income (20% but restricted to states with per-capita income below the national average) and 10% for "special problems". It is therefore easy to see why the share of Tamil Nadu in central grants is declining despite its revenue efforts and good record of implementation of plan programs. The state does not also "qualify" for non-plan grants.

As result of these systemic constraints, Tamil Nadu's current revenues as percentage of SGDP has declined from an average of 15.92% during 1989/90 1993/94 to 15.20% during the last five years.

### 2.3 Composition of Expenditures

**Table 2** shows the expenditure trends observed in current and capital expenditures since 1980/81. It needs to be clarified that in the context of states in India as well as the central government, the distinction between current and capital expenditures is an accounting practice, devoid of any economic meaning for two reasons. First, all grants are treated as current expenditures in budgetary terminology, although they may be grants for water supply, rural works and other physical infrastructure of a capital nature. All loans, including loans to public enterprises are treated as capital expenditure even though they may be meant to cover operations and maintenance expenditure shortfalls. Second, a major portion of the investment expenditures under the Five Year Plans are not financed directly by the budget, but through additional. loans raised institutions outside the budget.

Thus, in reviewing the composition of budgeted expenditures, it is important to keep in view the special features of classification of public expenditures that have become an established practice in India. Over a period of time and as basis for central transfers four broad categories of expenditure have evolved, namely, "plan", "non-plan", "developmental" and "non-developmental". Thus current expenditures of the state government are grouped into three categories, namely (i) plan /development expenditures, (ii) non-plan development expenditures, (iii) non-plan non-development expenditures.

Plan/development expenditures reflect that group of revenue expenditures financing plan programs in the state, under a current five-year plan. A complex set of guidelines exist for treating continuing expenditures on incomplete projects carried forward from previous five year plans to become eligible for being treated as plan/development expenditures, under the current plan. Non-plan development expenditures are typically expenditures on continuation and maintenance of basic needs and welfare programs and rural development services (such as education, health, welfare of backward classes, nutrition etc.,) which were initiated in the previous plan periods and which become committed non-plan development oriented revenue expenditures in subsequent plan periods. State government subsidies are also included in this group. The category of expenditures referred to as non-plan non-development expenditures include interest payments, pensions, expenditures on state legislature, police and administrative services such as district administration and fiscal services.

The above grouping of expenditures is also the basis on which the national Planning Commission estimates "the balance available from current revenues" (BCR) for financing plan outlays both for a five-year period and for annual plan outlays. BCR is arrived at after deducting non-plan non-development and non-plan development expenditures from the state own current revenues and central non plan grants and is considered as an important measure of resource mobilization by the state government. While this approach puts pressures on the state government to control non-plan non-development and non-plan development expenditures, the five-year cycle implicit in the planning process, results in major financing problems for the state government for continuing programs. Along with pressures on containing non-plan non-development expenditures, the burden of financing the recurrent costs of continuing services and programs is thus shifted to the state government after the end of each plan period. Since many such programs, including public health, rural development, poverty alleviation, primary and secondary education, are staff intensive, any increase in wage levels increases this category of expenditures substantially. In fact most such non-plan development expenditures (excluding subsidies) should be considered as "quality inputs" for delivery of basic social services and the continuation of programs for rural and social development started in the previous plan periods.

Viewed from this angle, the "development" component of current expenditures (excluding subsidies) in Tamil Nadu during the eighth plan and during the first two years of the ninth plan has been well above 62% of the total, and accounting between 11 % and 12% of GSDP, as shown in the following table:

**Composition of Current Expenditures (Rs Crores)**

| Year | Current Expenditure | Plan Expenditure | Non-Plan Development Expenditure | Total Development Expenditure |
|---|---|---|---|---|
| 1992/93 | 8,078 | 1,935 | 2,939 | 4,874 |
| 1993/94 | 8,666 | 2,235 | 3,263 | 5,498 |
| 1994/95 | 9,491 | 2,546 | 3,537 | 6,083 |
| 1995/96 | 10,911 | 3,282 | 3,667 | 6,959 |
| 1996/97 | 13,065 | 3,754 | 4,228 | 7,982 |
| 1997/98 | 14,960 | 4,060 | 5,002 | 9,062 |
| 1998/99(RE) | 16,084 | 4,532 | 6,605 | 11,141 |

The increase in the share of current expenditures in the total budgeted expenditures of the state government from 70% on an average during the early eighties to 88% during the five years 1994/95 to 1998/99 reflected in Table 2 is thus accounted for the increasing shares of plan and non-plan development expenditures. In the successive plan outlays, the proportion of plan revenue expenditure is much higher in Tamil Nadu compared to the average for all states. Also, within current expenditures, the proportion of development spending (i.e., outlays on maintenance or continuation of outlays under the previous plans) is also much higher in Tamil Nadu compared to the average for all states.

The rapid increase in total current expenditures is also contributed by increases in wages, interest payments, grants and subsidies. The increase in the wage bill has been around 20% on an average in recent years and this is accounted for both by an increase in numbers as well as the wage rate and dearness allowance payments. With the implementation of the Fifth Pay Commission's recommendations the wage bill is likely to increase even further. Currently wages, interest payments, grants (including grants to local bodies) and subsidies account for about 87% of the current expenditures reflecting a high degree of rigidity in current expenditures. **It is therefore important that a medium term strategy is developed by the government to reduce the rate of growth of revenue expenditures and mobilize resources for development programs and for seed capital for getting maximum leverage from borrowed funds. Basically, such a strategy could consist of mobilizing non-tax revenues and user charges, reducing the rate of growth in wages and a phased reduction in budgeted subsidies.**

## 2.4 Key Fiscal Ratios

**Table 3** shows the trends in the current balance, the overall or fiscal balance and the primary balance of the budget as percentages to SGDP for the period 1980/81 to 1998/99. The state government had a record of continuous current surpluses during the years, 1980/81 to 1986/87. Since 1987/88 there has been a persistent current deficit, the magnitude of which has been fluctuating, reflecting more the fluctuations in revenue and not in expenditures. 1997/88 is a turning point not only for Tamil Nadu but for all other states in India. The non-plan revenue surplus of several states started declining with the commencement of the eighth plan (1987/88) with the revenue components of the plans getting bigger and bigger. It is relevant to note that the Tenth Finance Commission observed, " that all states have had almost identical turning points seem to suggest that there are systemic factors underlying the deterioration rather than state specific reasons" (para 2.14).

While the years 1989/90 to 1992/93 were characterized by large increases in the current deficit, significant improvements are noticeable 1994/95 and 1995/96. However the improvement has been short lived. After these years, **there has again been a steady and steep increase in the current deficit.**

The government's fiscal deficit has also been fluctuating following closely its current deficits. With the deterioration of current balance starting in 1987/88, fiscal balance also deteriorated to particularly high levels during the years 1989/90 and 1992/93. However, the years 1993/94 to 1995/96 witnessed strong improvements mainly due to improved revenue performance. Since 1996/97 the fiscal deficit has continued to worsen, once again reaching a high 3.69% of the SGDP in 1998/99. The large and persistent current and fiscal deficits following each other has indeed led to a mounting interest burden, pre-empting a larger and larger share of current revenues. Interest payments used to account for about 6.5% of current revenue during the years 1981 to 1987 (Table 6). The average share of interest in current revenue for the last five years is about 12.7%. **This is a very important structural development in the Tamil Nadu budget, highlighting the need for developing a medium term strategy to reduce deficits on revenue account.**

Although it is not a consolation, Tamil Nadu, compares favorably with other middle income states in India in the share of interest payments in revenue expenditures as could be seen from following table:

**Share of Interest in Revenue Expenditure (Percentages)**

| State | 1990-95 | 1996/97 | 1997/98 | 1998/99 |
|---|---|---|---|---|
| Andhra | 11.8 | 12.8 | 14.7 | 16.8 |
| Karnataka | 11.1 | 11.8 | 12.0 | 12.6 |
| Kerala | 14.8 | 16.3 | 14.2 | 15.7 |
| **Tamil Nadu** | **9.0** | **11.3** | **11.8** | **11.2** |
| West Bengal | 15.8 | 18.7 | 19.2 | 22.7 |
| All States | 13.6 | 15.3 | 16.1 | 16.2 |

(Source: Reserve Bank of India Bulletin, February 1999, Statement page S24

The trends observed in the primary deficit ratios over the years, also reflect a steady widening of the gap between fiscal and primary deficits, mainly on account of increasing interest payments.

Overall, the key fiscal ratios reflect increased borrowing to finance public expenditures. As stated earlier, the rising current account deficit, especially since 1996/97 seems to have emerged as a major structural problem in the Tamil Nadu budget, as this leads directly to increasing fiscal deficits and interest burden. Given these trends, it is clear that the focus of fiscal policy in the medium term must be on controlling the current account or revenue deficit. As stated earlier this must be achieved through a combination of several means, including mobilization of non-tax revenues and user charges, controlling the rate of a growth in wage expenditures, and most importantly through a phased reduction in subsidies.

## 2.5 Trends in Debt/SGDP Ratio

In reviewing the trends in Tamil Nadu's debt/SGDP ratio, it is necessary to keep in view the growth in public debt of the central government as well as all the state governments. As far as the central government is concerned, the share of public debt stocks (excluding other liabilities) in GDP at current market prices increased from 31.0% in 1980/81 to 36.6% in 1987/88, declining to 30.8% in 1996/97. The combined total debt of all state governments increased from 17.6% of the GDP in 1980/81 to 21% in 1987/88 but declined to 19.3% in 1996/97. Over 60% of the state governments' debt is on account of their liabilities to the central government (RBI Bulletin, December 1997). Compared to these ratios, Tamil Nadu's record of debt management has been impressive as reflected in a **steady decline of debt/SGDP ratio** during the last two decades. The debt/SGDP ratio has declined from a high 34.5% in 1980/81 to 21.7% in 1987/88 and 17.13% in 1996/97 (Table 4).

However, Tamil Nadu's stock of debt in absolute terms has grown nearly four times in just ten years. It has increased from about Rs 4,000 crores (in current prices) in 1986/87 to about Rs 15,000 crores in 1997/98. This development, against the background of relatively stable ratios of current revenues to GSDP, implies much less degrees of freedom in the medium term as interest payments will go to unsustainable levels crowding out other expenditures. It is also important to keep in view two distinct aspects of the growing volume of debt in Tamil Nadu. While the stock of outstanding debt at the beginning of each year reflects the accumulated volume over years, net of repayments, the annual flow indicates the extent of debt financing of the year's expenditures. This is also reflected in the volume of overall (fiscal) deficit each year. **Table 4** reflects both the total new borrowing (gross borrowing) each year and the stock of outstanding debt.

There has been a steady increase in net borrowing since 1992193, reflecting perhaps the increasing volume of loan financed plan expenditures. The ratio of new loans to repayments each year has increased substantially since 1991192. In the early eighties, government's new borrowing amounted on an average to 1.5 times the repayment each year. This ratio has been steadily on the increase particularly since the early nineties. From 1991192 the ratio has remained well above 4.5, increasing to 5.3 in 1996197 and 5.9 in 1997198. These trends imply that the **government's fresh borrowing each year is nearly six times the annual repayment.**

From an analytical point of view it is also apparent that new borrowing each year has become an important source of financing budgeted expenditures. As indicated in **Table 5**, the annual flow of debt (net borrowing) has been financing an increasing share of budgeted expenditures since the early nineties. It is now financing nearly 12% of the total budgeted expenditures compared to a ratio of less than 8% in the early eighties.

This development could put a strong upward pressure on interest payments as well as the debt/SGDP ratio in the medium term. Also, in the context of an overall shortening of maturities since 1991, these trends could very well lead to bunching of repayments and a consequent ballooning of gross borrowing requirements.

In addition to loans passing through the budget, Tamil Nadu government has also developed a clear strategy for securing additionally in resources for plan projects through off budget financing of infrastructure investments in a major way. This strategy has enabled the government to obtain maximum leverage from limited government financial resources so that such investment projects are financed and completed in time. Although a majority of such plan projects financed through off budget borrowing are reported to be either self financing or self liquidating in nature, this strategy will indeed put additional pressures through interest payments being financed in the budget. The magnitude of total loan financing (both through the budget and off budget) has been substantial during the eighth plan and is projected to increase further in the ninth plan as shown in the following table:

**Total Borrowing for 8th and 9th Five-Year Plans (Rs Crores)**

| | 8th Plan(Actual) 1992/93-1996/97 | 9th Plan (Outlay) 1997/98-2001/02 |
|---|---|---|
| 1. Total Outlay | 10,748 | 25,000 |
| 2. Center's Contribution | 4,196 | 9,988 |
| 3. State's Contribution | 6,552 | 15,012 |
| Provident Fund | 849 | 1,109 |
| Small Savings | 1,552 | 2,375 |
| Debentures/Bonds | 1,174 | 3,048 |
| Market Loans(SLR) | 1,422 | 2,413 |
| Negotiated Loans | 1,011 | 3,112 |
| Total Borrowing | 6,008 | 12,057 |

**Source: Finance Department, Government of Tamil Nadu.**

Center's contribution shown in the above includes loans and grants. Loans from provident fund, small savings, and market loans (SLR) all pass through t budget. Negotiated loans are partly for budgeted investments such as water supply and partly off budget passing through state government institutions. Borrowing through debentures and bonds is outside the budget resorted to by state's financial institutions.

## 2.6 Average Cost of Borrowing or Financing of the Deficits

In assessing the medium term financial implications of the growing volume of debt in Tamil Nadu, it is important to keep in view the recent developments at the central government level, especially the trends observed in achieving market determined interest rates for government borrowing. The financial sector reforms implemented by the central government since 1991 have resulted in a relative freeing of interest rate structures when compared with many years of financial repression. In April 1992, a 364-day Treasury Bill on an auction basis was introduced with discounts varying between 10.9% and 1 1.4%. In January 1993 a 91-day auctioned Treasury Bill was introduced with interest rates varying from 7.9% to 10.3%. In fact, the weighted average coupon rate on all loan maturities moved from 7.03% in 1980/81 to 13.75% in 1995/96, declining to 13.69% in 1996/97 and 12.05% during 1997/98. At the level of the central government, the coupon rate on a 10 year government stock increased from 6.5% in 1980/81 to 10.5% in 1986/87 and 14% in 1995/96. Subsequently it declined to 13.05% in 1997/98 (Reserve Bank of India Bulletin, December 1997).

As an integral part of the economic reforms being implemented, the central government also entered into an agreement with the Reserve Bank of India in March 1997, putting to an end the four-decade old system of financing the budget deficit through the issuance of ad hoc Treasury Bills and replacing it with a new system of Ways and Means Advances (WMA) with limits. This is an important development which places a ceiling on the monetization of deficits through the central government's direct borrowing and thereby its ability to keep borrowing and lending to the state governments.

These developments have important implications for Tamil Nadu as over 73% of new borrowing each year, especially since 1991/92 reflect loans from the central government (Table 4). It is therefore useful to assess the average cost of borrowing for financing the state government's fiscal deficits. **Table 7** provides an estimate of this measure. The average cost (at current prices) is derived by dividing the total interest payments made in a year by the par value of outstanding debt at the beginning of that year. This measure simplifies estimation in the absence of details about interest rate structure but in essence captures the maturity mix of actual state government debt. Measured in this manner, **the average cost of financing deficits has increased from below 5% in the eighties to nearly**

**12% since 1993/94**. A two-year moving average of this estimate in Table 7 shows the striking and steady increase in the costs of financing deficits over the last two decades. **The two-year moving average cost has increased from 10.89% in 1993/94 to 13.11% in 1998/99.**

## 3. Sustainability of Fiscal Stance

### 3.1 An Approach to Sustainability

Given the special pattern of financing plan expenditures at the state level reviewed in the previous section and the rapid increase in the average cost of financing , this paper reviews medium term sustainability of the state government's fiscal stance by focusing on the likely evolution of the debt ratio as it relates to other variables that influence fiscal outcomes. In general, a sustainable fiscal stance is one that leads to a fairly stable ratio of debt to GDP for relatively long periods of time. This implies that as long as there is a rapid growth of the economy a government can continue to borrow and spend. However there are several other broader macroeconomic implications of deficit financing such as the crowding out of the private sector and the economic impact of the composition of public expenditures which influence the rate of growth of an economy.

### 3.2 Pattern of Financing the Deficits

The central government is a major "lender" to state governments in India in an economic sense. All assistance to the state plans (excluding centrally sponsored schemes) is provided on the same terms, namely 70% in loans and 30% in grants. The financial transfers to the state government consist of (i) statutory flows mandated by the 10~" Finance Commission, (ii) discretionary flows determined by the Planning Commission for the state plans, and (iii) loans to finance the fiscal deficits of the states. Nearly about 45% to 50% of the state government expenditure is thus financed by the central government. Therefore, the size and composition of central government transfers influence the level and pattern of spending of the state government as well as the fiscal deficit ratios. The statutory grants from the central government are aimed to finance partly the current deficits of the state government. Consequently in the planning and management of state government's expenditures, there are no normative current account deficits; rather such deficits are projections by the state government.

However, unlike the central government, the state government cannot run budgetary deficit at the end of a financial year. Thus, if there is a current deficit (revenue deficit), it is covered through some or other form of borrowing, impacting on the fiscal deficit. The financing of the fiscal deficit is done through several distinct channels. Among these, loans from the central government are provided under very different terms. For example, the block plan loans, which represent 70% of the total assistance to the state's plan are provided at less than market rates, whereas the small savings loan (75% of the net small savings collections in the state) is provided at near market rates. The state government also raises about 15% to 20% of its requirements in the open market with the size and the terms of this loan determined by the Reserve Bank Of India. The balance required to finance the fiscal deficit is met from various state level funds such as provident funds and from negotiated loans.

An interesting feature of Tamil Nadu's fiscal trends over the last twenty years is the fact that **the average cost of borrowing has been below the average rate of growth of GBDP.** This is mainly due to the central government regulation of financial markets in the past, and the pattern of financing of the deficits through central government loans at rates below market rates. It is also due to the fact that Tamil Nadu is one of the six fastest growing states in India. Do these trends imply that the state government can continue to incur large magnitudes of fiscal deficits? Can the government continuously roll over debt and accumulated interest? Known as a rational Ponzi scheme in economics, will such a perpetual roll over of debt succeed ? The answer to these questions depends on the projected growth rates of the economy, the projected average cost of borrowing and the behavior of the "lender". In particular, if the future rate of growth of Tamil Nadu economy slows down or if the average cost of borrowing increases, such a scheme will produce a rising debt/SGDP ratio and will eventually force the government to implement harsh measures of fiscal contraction or increase its revenues; in turn both these measures will accentuate economic slow down.

### 3.3 Conceptual Framework

Given the above pattern of financing of state government expenditures, the key fiscal indicator for assessing sustainability is the state government's primary balance (fiscal or overall balance less interest payments) each year. Therefore, for assessing the sustainability of fiscal policy in the medium term at the state government level, where there is no direct seigniorage revenue and no direct foreign borrowing, the basic relationship on the accumulation of debt can be expressed by the following equation:

**Borrowing in year "Bt"=(1+r) Bt-1-Primary Balance**
**(1)**

Where "r" is the ex-post unit cost of government borrowing during period "t" and 1 the outstanding stock of debt in period t-1.

The annual increase in debt "b" in year `t" can be derived from (1) above and expressed by the following identity:

**b = Bt - Bt-1 = r.Bt-1 - Primary Balance**
**(2)**

The above accounting relationship implies that:

(I) if the government is able to have a primary balance equal to zero, the stock of debt will grow at a rate **equal** to the interest rate,

(ii) if the primary balance is negative, i.e. if there is a primary deficit, the stock of debt will grow at a rate **exceeding** the interest rate.

(iii) if the government runs a primary surplus, the stock of debt will grow more slowly than the interest rate. In the unlikely event of the surplus more than offsetting the interest payments on existing debt, then the stock of debt will actually **shrink** over time.

In order to assess the mutual consistency among a number of macro level variables, it is customary to focus on the ratios to GDP. In terms of ratios, equation

(1) can be expressed as follows:

**Bt/Yt=Bt-1 (1+r)/Yt-1 (1+g)- Primary Balance/Yt** **(3)**

**Bt/Yt = (1+r)/(1+g)*Bt-1/Yt-1 - Primary Balance/Yt** **(4)**

Where Bt is the nominal value of the stock of outstanding debt and Yt is the nominal value of the GDP in year `t', Bt-1 and Yt-1 the respective nominal values in the year t-1, "g" the annual rate of growth of nominal GDP and "r" the interest rate. In this formulation, for example, where the average rate of interest of 12.25%, (1+r) is simply 1.1225 and where the rate of growth of nominal GDP of 12%, (1+g) is I .1200. It follows from (4) above that:

(i) if the primary balance to GDP ratio is equal to zero, the debt/GDP ratio will grow at the rate **equal** to (1+r)/(1+g).

(ii) if the government runs a primary deficit the debt/GDP ratio will grow at a rate **exceeding** (1+r)/(1+g);

(iii) if the government runs a primary surplus, the debt/GDP ratio will grow at a rate **not exceeding** (1+r)/(1+g).

Thus, the starting point for analyzing sustainability of fiscal stance from this angle is the general rule, **that if the government's primary deficit is zero, the debt/GDP ratio will grow by (1+r)/(1+g) where "r" is the average unit cost of government borrowing and "g" the average annual rate of growth in nominal GDP**. Therefore, to answer the question whether the Tamil Nadu government can continuously roll over debt, we need to review the historical behavior of the ratio (1+r)/(1+g), However, it has to be emphasized such an analysis is normally carried out with a long time series data on both "r" and "g" and must take into account the "fiscal shocks" that may have taken place during the period.

The analysis attempted in this paper uses the annual data from 1980/81 to 1998/99 and in **nominal** terms. The ratio (1+r)/(1+g) is however not affected whether "r" and "g" are measured in nominal or real terms. The analysis also assumes that during the years covered, the government has continued to finance the deficits with more or less the same pattern of loans. In order to smoothen the fluctuations observed in "r" and "g", a 2-year moving average is used for both these variables. The results of the analysis are shown in **Table 7**. It can be observed that the (1+r)/(1+g) ratio has been increasing steadily over the period covered from an average of about **0.53 during 1980/81 to 1985/86, to 0.67 during the next five year period and to 0.76 during 1991/92 to 1995/96**. During the last three fiscal years covered in the analysis, the ratio has reflected a large increase, exceeding the value of 1.0 in 1998/99. **It is emphasized that this ratio by itself is a useful indicator of the growth in debt ratio only when the government's primary deficit is zero.** Under conditions of large and continuous primary deficits the rate of growth of the debt/GDP ratio **will be much higher.**

While the low ratios of (1+r)/(1+g) are able to explain as to why, despite having continuous primary deficits during the period 1980/81 to 1986/87, the debt/SGDP ratio has actually declined, the past behavior of this ratio offers no clue as to the medium term prospects, except to highlight the fact that it has exceeded the value of 1. However this change in the state's fiscal dynamics means that continuing **large primary deficits will have a significant impact in the rapid growth of debt/SGDP ratio and interest payments. An inescapable conclusion is that the Tamil Nadu budget, despite a conservative management record, has now become very vulnerable to changes in the average cost of financing fiscal deficits. This development in combination with mobilization of resources for plan investment projects outside the budget calls for a major change in the fiscal stance of the government.**

## 3.4 Medium Term Projections

The future course of the (1+r)/(1+g) ratio will depend on the behavior of the major "lender" to the state government, namely the central government and the likely developments in the economy and the financial sector. Using the above conceptual framework, this paper analyzes the sustainability of the Tamil Nadu government's fiscal stance by making some tentative projections of the likely fiscal trends in the medium term. For this purpose a number of assumptions are made on the variables that influence sustainability. The following sections review the background behind the assumptions.

a) Average Cost of Borrowing

This is perhaps the single most important determinant of sustainability in the medium term given the rapid growth in the nominal value of outstanding debt. We have already seen a steady increase in the average cost of borrowing (Table 7), which has become more rapid since the year 1993/94. Against this development, it needs to be recognized that there are considerable pressures for fiscal reform at the level of the central government mainly to control budget deficits and annual borrowing requirements. The next step in the evolution of the much needed fiscal adjustment at the central government level could very well be the placing of a statutory limit on total public debt or new borrowing, under Article 292 of the Constitution of India. There are in fact growing pressures on the central government to limit borrowing to finance the current account deficits of the state governments. This is an issue, which has been stressed repeatedly by the Reserve Bank of India from the early eighties, and most recently in 1997 (Reserve Bank of India Bulletin, December 1997). Thus, there is a possibility that the central government may be persuaded to place a statutory limit on its own public debt.

Against this background, it is interesting to note that the terms of reference of the Eleventh Finance Commission now include a direction to the Commission to review the finances of the central government and the states and suggest ways and means by which governments, collectively and severally, may bring about a **restructuring of public finances so as to restore budgetary balance** and maintain macroeconomic stability. This new task for the Finance Commission, reflects perhaps the growing concern of the central government for restoring fiscal balance.

Irrespective of the nature of fiscal reforms that may be designed and implemented by the central government, it is reasonable to assume that the movement towards market determined interest rates for loans being offered to the state governments will continue. As part of the financial sector reform, the Reserve Bank of India has consistently reduced the Statutory Liquidity Ratio (SLR) for banks implying that captive markets for government securities would shrink further in the near future. Although the central government has moved over to an auction system by offering market related interest rates, the state governments are still continuing with the earlier system. In the case of Tamil Nadu the rate of interest on open market loans was 12.25% so far in 1999, whereas the auction method resulted in an interest rate of 1 1.74%. The bonds and debentures mobilized through financial institutions so far in 1999 are reported to have an average interest rate ranging between 13.4% and 13.7%.

It is therefore reasonable to assume that a larger proportion of the state government's borrowing may be at rates closer to market rates than is the case at present. The average cost of borrowing during the 1996/97 - 1998/89 for the state government using a moving average has been 12.63%. The year 1996197 is chosen a:. the reference point for calculating the average, due to the fact that the central government did away with the practice of issuing ad hoc Treasury Bills to finance its (and the state governments) deficits and introduced a new system of ways and means advances to the state governments, with effect from that year.

Taking these factors into account, the average cost of borrowing in nominal terms for the Tamil Nadu government is projected at **12.70% for the year 1999/2000 and is projected to increase by 25 base points or 0.25% each year during the next five years.**

**(b) Growth Rate of Nominal SGDP**

It is extremely difficult to make reasonable projections on the likely annual growth rate of SGDP at current prices. It is recognized that the actual movement of the other variables in the projection is extremely sensitive to projections of the SGDP. However, keeping in view Tamil Nadu's record as one of the fastest growing states in India and using the weighted average annual rate of growth of nominal SGDP of 13.20% during the period 1996/97 to 1998/99 (the same reference period used for assumptions about the average cost of borrowing) as the starting point the projections assume that **nominal SGDP will grow at a steady annual average rate of 13.5%.**

**(c) Government's Fiscal Stance**

As mentioned earlier, the key fiscal ratio in this conceptual framework is the **primary balance**. Given the nature of Centre-state financial relationships, this is not a pre-determined policy variable at present; rather it is the net outcome of the state government's financial transactions during the year. The magnitude of the overall balance is influenced strongly by the state government's current balance. The increasing pressures on the revenue budget, discussed earlier, renders it difficult to make any assumptions about the projected primary balances of the state government in the medium term.

In order to overcome this problem, three different scenarios are presented in this paper. The **first scenario** (base line projection) assumes that there is no major policy change and revenues, expenditures and deficits continue as at present. The

**second scenario** assumes moderate expenditure reforms and the **third,** strong expenditure reforms combined with additional resource mobilization.

However, the base line scenario assumes that the state government will control its primary deficit at **2.0% of the SGDP** on average during each of the years covered under the projection. This itself is a very **restrictive assumption** given the projected increases in salary payments, effective 1999/2000. As stated earlier, between 1994/95 and 1998/99, salary payments have accounted for about 55% of the current expenditures or 9% of the SGDP and have grown at an average annual rate of some 15% during the last five years. If the proposal to give house allowance to employees at 30% of the salary, instead of the current 5% is implemented, the salary bill will increase by 19%. It is for these reasons that assuming an average primary deficit of 2.0% is considered a very restrictive assumption. Therefore another underlying assumption in the base line scenario is that, **despite the stickiness of expenditures on salaries and subsidies, the state government will reduce current expenditures or increase current revenues** by about 0.50% of the SGDP starting with the year 2000/2001 and increasing to 0.58% of the SGDP by the year 2002/23. This degree of fiscal adjustment is indicated due to the projected annual increases in interest payments and the constraint of having a primary deficit level of 2.0% of SGDP in the projection.

The second scenario assumes that primary deficit, as a percentage of SGDP will be reduced by moderate expenditure control measures to an average of 1.5% of the SGDP during the projection period of ten years.

The third scenario assumes stronger expenditure reforms including perhaps a substantial reduction in subsidies. A primary deficit of 1.0% of the SGDP is assumed for the ten years covered by the projection.

**(d) Resource Mobilization**

Considering the reasonably good record of resource mobilization of the state government, the base line and the second scenarios assume an annual average realization of 15% of the GSDP as **the combined revenues of the state, share in central taxes and central grants.** It is recognized that the growth in state's own revenues depends very much on the growth rates observed in the manufacturing sector as sales tax accounts for 67% of the total. It is also important to note that there has been a steady decline in the share of central taxes as a ratio of SGDP commencing from the Tenth Finance Commission award (Table 1). The future direction of the share is dependent on the recommendations of the Eleventh Finance Commission. For these reasons, it is assumed in the base line and the second scenarios, that the state government **will mobilize additional resources through tax and non-tax revenues,** to compensate for any shortfall in its share of central taxes and grants and current revenues will amount to about 15% of the SGDP each year.

The third scenario assumes a further improvement in resource mobilization through tax reforms and improvements in tax administration so as to increase the realization of current revenues to 16.0% of the SGDP a year on an average during the first five years, and improving it to 16.5% in the next five years.

### 3.5 Policy Implications of Projections

**Table 8** shows the projections of the year end outstanding debt, the debt/GSDP ratio and the share of interest payments in the projected current revenue for a ten year period under each of the three scenarios. It is emphasized that the projections in Table 8 are extremely sensitive to assumptions about the annual rate of growth of SGDP at current prices and the average cost of financing government expenditures. Subject to these qualifications, the key ratios projected for the **next five years** are shown below:

**Implications of Alternative Fiscal Scenarios**

| | **Debt/SGDP Ratio** | | | **Interest as % of Revenue** | | |
|---|---|---|---|---|---|---|
| **Year** | **Scenario 1** | **Scenario 2** | **Scenario 3** | **Scenario 1** | **Scenario 2** | **Scenario 3** |
| **1999/00** | **20.08** | **19.58** | **19.08** | **12.03** | **12.03** | **11.28** |
| **2000/01** | **22.03** | **21.03** | **20.03** | **13.32** | **12.99** | **11.87** |
| **2001/02** | **24.02** | **22.52** | **21.02** | **14.65** | **13.98** | **12.49** |
| **2002/03** | **26.06** | **24.06** | **22.06** | **16.01** | **15.01** | **13.13** |
| **2003/0** | **28.16** | **25.66** | **23.15** | **17.40** | **16.07** | **13.39** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **4** | | | | | | |

For the first five years of the projection, it is clear that Scenario 1 results in a much faster rate of growth of the debt ratio and a rapid increase in the share of interest payments in current revenue, compared Scenarios 2 and 3. In fact, if one looks at the projections for a ten year period shown in Table 8 the rate of increase, in the debt ratio in Scenario 1 is even more striking. **This implies that even if the state government restricts the primary deficit to 2.0% of the GSDP, at the end of the ten year period, the debt ratio goes to 37.38% of GSDP and about 23.54% of current revenues will be required for interest obligations.** Clearly this is not a sustainable scenario. Considering the large and persistent current deficits and the rigidity of current expenditures, the projected increases in interest payments will be very difficult to finance, leading again to increased borrowing.

The projections in Scenario 3, which involves **controlling the primary deficit to 1.0%** of the GSDP each year for the next ten years and realizing current revenues to the extent of **16%** of the projected GSDP each year in the first five years and increasing the realization to **16.5%** during the next five years of the projection is clearly a more preferred option. The debt ratio grows to 23.15% at the end of the five year period, with interest payments accounting for 13.39% of current revenues.

However as stated earlier, a general rule for assessing a sustainable fiscal stance is a fairly stable debt ratio for extended periods of time, say for a minimum of twenty years. Viewed from this angle, none of the scenarios projected above can be considered sustainable. All of them lead to rapid increases in the debt ratio and the quick crowding out of non-interest expenditures in the budget.

**The choice amongst the three scenarios is essentially a policy decision, and will depend on the weights assigned to future welfare as opposed to maximizing current "benefits" or consumption. However, from an economic point of view, it is apparent that the rate of growth of debt ratios as well as the rate of increase in the share of interest payments in current revenues reflected in scenario 3 are preferable to those reflected in the other two scenarios.**

## 4. Financing the Ninth Plan 1997/98 - 2001/2002

Given the recent fiscal trends and the medium term projections discussed in the previous sections of the paper, it is interesting to review the actual record of financing the ninth plan outlays in Tamil Nadu. The following section attempts a brief assessment of the financial performance during the first three years of the plan period.

### 4.1 Implementation Record of Eighth Plan

Tamil Nadu has had a very good record of implementation of the eighth plan's financial outlays as shown in **Table 10**, which compares the planned and actual outlays. In fact it is one of the four states in India (the others being Andhra, Maharashtra, and Kerala), where the actual financial performance exceeded the planned outlay (Kurian, 1999). Aggregate resources for the eighth plan were fixed at Rs 10,200 crores, against which Tamil Nadu achieved an actual realization of Rs 10,738 crores (both at constant 1991/92 prices), indicating a 105% realization.

The improvement in plan finance during the eighth plan was mainly due to the increased mobilization of state's own resources, which was 144% of the plan projection. State's own resources included a positive Balance &Om Current Revenue (BCR) of Rs 1,219 crores, which included an additional resource mobilization of Rs 2,113 crores. The original projection for BCR was -Rs I crores. 'Thus the increase in BCR realization in absolute terms reflected an improvement of Rs 2,319 crores, which were a significant contribution for pl: financing.

Contributions from the Tamil Nadu Electricity Board (TNEB) improved ~ Rs 848 crores compared to an original projection of - Rs 1,040 crores. However the Road Transport Corporations did not perform well in mobilizing resources for their planned investments under the plan. Realization of central assistance fell short of the target as a result of a shortfall in externally aided projects.

### 4.2 Financing Projections for Ninth Plan

The total outlay proposed for the Ninth Plan (1997/98 - 2001/2002) amounts to Rs 25,000 crores - of this the state's contribution amounts to Rs.

I5,012 crores or 60% with the balance (Rs 9,988 crores) coming from the central government. These targets are more than double compared to the financial targets and achievements during the Eighth Plan.

The state government planned contribution of Rs. 15,012.09 crores to the Ninth Plan outlay is made up of the following:

| **Source** | **Rupees in Crores** |
|---|---|
| 1. Balance from Current Revenues | -4,560.93 |
| 2. Additional Resource Mobilization | 5,682.00 |
| 3. Contribution of TNEB | 835.67 |
| 4. Contribution of RTCs | 713.82 |
| 5. Loan Financing | 11,740.76 |
| 6. Central Grants | 600.77 |
| TOTAL | 15,012.09 |

As per the tentative estimates available so far, the implementation record during the first three years (1997/98 - 1999/2000) of the plan is very good. Against a total outlay of Rs 15,012 crores at 1996/1997 prices, as the state government's contribution, Rs 9,051 crores at current prices or 60% is likely to be achieved in the first three years. The center's contribution is during the first three years of the plan is likely to be Rs 4,519 crores or 45% of the planned outlay. Thus, the overall realization of the plan outlay in the first three years is likely to be about Rs 13,570 crores at current prices against a total outlay of Rs 25,000 crores (at 1997/98 prices), which is an impressive record.

However, within the different components that make up for the state's contribution, there are some issues which need careful review, so that the planned outlay can be achieved in full and perhaps exceeded, as happened in the Eighth Plan. The following sections highlight the issues under various groups of state's own contribution to the ninth plan.

## 4.3 Balance from Current Revenues (BCR)

During the first three years of the ninth plan, the actual realization of BCR is estimated at Rs 166.16 crores in 1997/98, -Rs 1,466.50 crores in 1998/99 (RE) and -Rs 1,229.08 crores in 1999/2000 (BE). Although the projections for 1998/99 and 1999/2000 may undergo some changes when the accounts for these years are finalized, the shortfall on this account so for is -Rs 2,529.42 crores compared to a total target of - Rs 4,560.93 crores. This is mainly on account of increases in non-plan development and non-plan non-development expenditures in the revenue budget as well as a relative slow down in the growth of state's own revenues in 1999/2000.

As already discussed, current expenditures of Tamil Nadu government are under increasing pressures on account of committed expenditures on interest payments, wages and pensions and subsidies. (n fact these categories of expenditure also make it extremely difficult for the state government to reduce deficits on current account. Increasing current account deficits feed into overall or fiscal deficits, necessitating additional borrowing, which in turn has an impact on the rate of growth of interest payments in the subsequent years, reducing the potential for realizing "BCR".

It will therefore be useful for the government to consider a phased rationalization of current expenditures so as to reduce current account deficits and mobilize resources for financing plan outlays. As could be seen from the table below, it appears that the critical area for immediate reform is a rationalization of the pattern of subsidies in, the expenditures.

Subsidies in Current Expenditures (Rs Crores)

| Year | PDS Subsidy | Power Subsidy | RTCs Subsidy | Total |
|---|---|---|---|---|
| 1992/93 | 694 | 826 | 35 | 1558 |
| 1993/94 | 402 | 490 | 42 | 934 |
| 1994/95 | 535 | 654 | 26 | 1215 |
| 1995/96 | 615 | 353 | 51 | 1222 |
| 1996/97 | 874 | 382 | 80 | 1485 |
| 1997/98 | 905 | 586 | 57 | 1676 |
| 1998/99 | 900 | 570 | 92 | 1691 |
| 1999/00 | 1000 | 250 | 80 | 1360 |

Source: Finance Department, Government of Tamil Nadu. The table reflects actual for the years 1992!93 to 1997/98, projected expenditure in 1998/99 and budget estimates for 1999/ 2000.

There is a significant increase in the Public Distribution System subsidy since the year 1996/97; this is indeed a major component of the subsidies financed out of current revenues and is meant to cover the difference between the issue price charged by the Food Corporation of India and the selling price at the fair price shops. Although central government has been increasing the issue price, there has been no corresponding increase in the selling price by the state government. There is considerable evidence to suggest that PDS benefits mainly thc: urban consumers of all income groups and the off take in rural areas is very low. There is also enough potential to rationalize the subsidy structure through targeting mechanisms aimed at benefiting the population below the poverty line. Even a reduction of Rs 250 crores from the total allocated to subsidies could save Rs 30 crores per year as interest payments and will reduce revenue deficit by Rs 280 crores. More importantly, it could lead to an additionality in resource mobilization for physical infrastructure through leveraging other sources of funding. **The bottom line appears to be that without a phased reform of the PDS, there is very little potential to reduce the projected current account and fiscal deficits.**

### 4.4 Additional Resource Mobilization

Against a target of Rs 5,682 crores to be mobilized during the ninth plan, it is estimated that net additional resources mobilized (through new measures less the financial impact of tax concessions) amounted to Rs 210 crores a year as per measures announced in the 1997/98 budget, Rs 340 crores a year in the 1998/99 budget and Rs 261 crores a year in the. 1999/2000 budget. Thus a total of Rs 1,571 crores has been realized during the first three years of the plan period. The measures already implemented are likely to yield an additional Rs 3,193 crores during the five years of the plan period or 5G% of the target. 'Thus, **new revenue measures, including possible increases in non-tax revenues or user charges may lave to be implemented by the state government to mobilize the balance required of Rs 2,489 crores during thc last two years of thc plan to achieve the planed targets.**

### 4.5 Contribution of TNEB

Against a projected contribution of' Rs 835.67 crores from the Tamil Nadu Electricity Board (TNEB) for its plan investments, Rs 294 crores or 35% has been estimated to have been realized in the first three years of the plan. This consisted of Rs 498 crores in 1997/98, -Rs 329 crores in 1998/99 and an estimated Rs 125 crores in 1999/2000 (BE). In view, of the pressing need for investments in the power sector, it is important to achieve the planned outlay and perhaps to increase it as happened during the eighth plan. This is a critical need for the future growth of the economy and for encouraging investments, both foreign and domestic in the power sector.

This will require major tariff reforms, especially in the agricultural sector. Thc state government started giving free power to agricultural consumers with effect from the year 1990/91 and despite the consensus reached at the Chief Ministers Conference on Power Sector Reforms in 1996, no steps have been taken so far to re-introduce agricultural tariff. Roughly about 25% to 27% of the power distributed by TNEB is consumed by the agricultural sector. Consequently the rate of return on net fixed assets of the TNEB has deteriorated from-11.6 in 1985/86 to -18.6% by 1995/96 (Govinda Rao et al, 1998).

Apart from direct government subsidy every year to cover operating losses,

there is also an element of cross subsidy from industrial consumers. Consequently the industrial tariff a much higher than average unit costs and this is encouraging industrial consumers to establish captive power plants. This development will increase the operating losses of the TNEB by reducing the demand for industrial power. With a view to enhance supply in the state, the state government has also been encouraging Independent Power Producers. However, this policy decision to allow the entry of private producers was not preceded by pricing policy reforms. Consequently the TNEB is now required to pay about Rs 216 crores per year (at the rate of Rs 3 per unit of power purchased) to one private company which has already started supply to TNEB.
'

The annual losses incurred by the TNEB and the subsidy paid from the budget during the Eighth plan and the first three years of the Ninth plan are shown below:

**TNEB-Losses on Agricultural Tariff and Government Subsidy (Rs Crores)**

| Year | Losses on Agrl. Tariff | Government Subsidy |
|---|---|---|
| 1992/93 | 757 | 826 |
| 1993/94 | 940 | 490 |
| 1994/95 | 1,116 | 653 |
| 1995/96 | 1,357 | 354 |
| 1996/97 | 1,308 | 382 |
| 1997/98 | 1,638 | 586 |
| 1998/99 | 1,949 | 570 |
| 1999/00 | 2,470 | 250 |

(Losses on Agricultural tariff are estimates by TNEB as measured by the difference between end unit cost per unit and revenue realized).

These developments have seriously hampered the capacity of the TNEB to invest in generation, transmission and distribution and to maintain existing assets properly. The huge losses being incurred year after year, have also led to budgetary transfers eroding the capacity of the government to finance new investments to match the growing demand for electricity in the state- It is also true that uneconomic pricing for agriculture will lead to a lack of cost consciousness on the part of consumers and poor management of demand. Finally, the policy of cross subsidization and charging higher tariffs on industrial and commercial consumption will adversely affect the competitiveness of Tamil Nadu for new investments. It is therefore imperative that a phased reduction of the subsidy to agricultural consumers is implemented as early as possible. It is also true that only through tariff reform can the state government succeed in realizing thc huge magnitude of investments required in this sector.

### 4.6 Contribution of RTC' s

Although the contribution of thc Road Transport Corporations (RTC 's) negative (-Rs 523.29 crores) during the Eighth plan period, the Ninth plan visualizes that the RTCs will mobilize resources to the extent of Its 713.82 crores, mainly through tariff revision. The performance so far is reported to be a negative contribution of Rs 1,054 crores, seriously eroding the capacity of RTC's to invest in the transportation sector. As in the case of' TNEB, the lack of an appropriate pricing policy to compensate for the rapid increase in unit costs has resulted in huge financial losses for the RTCs. The government used to implement annual increases in fares till the year 1992 commensurate with cost increases. However since 1993 there has been no increase in fares. Although a big increase was announced in 1997 this was soon withdrawn. In addition to an uneconomic fare structure despite the mounting demand for urban transport services, the state government is also providing a subsidy to RTC' s to compensate for the concessional fares given to students. This subsidy averaged about Rs 46.8 crores a year during the Eighth plan period and has increased to an average of Rs 76.3 crores a year during the first three years of thc Ninth plan.

According to one estimate, the accumulated financial losses of RTCs for the period 1972/73 to 1994/95 (22 years) amounted to Rs 326 crores. This loss has increased to Rs 500 crores for 1995/96 and 1996/97 and to Rs 2,279 for the three years, 1997/98 to 999/2000. Thus the total accumulated loss for the period

1972/73 to 1999/2000 amounts to Rs 3,185 crores. (NIPFP, State Fiscal Studies Tamil Nadu, 1999). The impact of these numbers is significant considering the fact that about 47% of the total financial requirements of RTC's in the year 1995/96 were met from borrowing.

Considering the magnitude of mounting financial losses it is unlikely that the RTCs will be able to contribute Rs 713.82 crores for their Ninth plan projects. However this sector has to be given priority for resource mobilization consistent with the present policy of the state government to increase investments in urban infrastructure. **lt is therefore important that pricing reform is introduced in a phased manner, so that investments are made possible both to meet the existing demand and to improve the quality of the services.**

## 4.7 Mobilization of Other Resources for P1an Programs

The achievement so far in mobilizing extra-budgetary resources for the ninth plan is indeed outstanding. This is reflective of the careful pro-active policy being followed by the state government to mobilize resources for the infrastructure investments. Against a planned outlay of Its Rs 11 ,742 crores !or the: five year period the government has already mobilized Rs 11,458 crores from various sources as shown below (all at current prices):

**Mobilization of Other Resources for Ninth Plan**

| Source | Five Year Outlay 1997/98-2001/2002 | Estimated Realization 1997/98-1999/2000 |
|---|---|---|
| State Provident Fund | 1,109 | 1,792 |
| Capital receipts | -315 | 4 |
| Small savings loans | 2375 | 1897 |
| Net Market Borrowing | 2413 | 1574 |
| Negotiated loans | 3112 | 1848 |
| Debentures/Bonds | 3,048 | 4343 |
| Total Rs Crores | 11,742 | 11,458 |

Source: Finance Department Government of Tamil Nadu.

As stated earlier, loans from provident fund, small savings, and market loans (SLR) all pass through the budget. Negotiated loans which include loans from LIC, GIC, NABARD, REC, and IDBI/SDBI, are partly for budgeted investments such as water supply and partly off budget passing through state government institutions. Borrowing through debentures and bonds is outside the budget resorted to by states' financial institutions.

The near realization of the planned outlays within the 6rst three years is no doubt due to the priority given by the state government for speeding up the financing of physical infrastructure investments, the institutional capacity within thc public sector in Tamil Nadu for preparing a portfolio of "bankable" projects for resource mobilization and the implementation record. Currently a number of major infrastructure projects are being implemented in the state with cost sharing by the central government and through mobilization of off budget resources by the state government.

## 4.8 Central Assistance for Ninth Plan

The estimates available so far indicate a shortfall in central assistance to the ninth plan. Against a projected outlay of Rs 9,988 crores, the realization during the first three years has been only Rs 4,515 crores or 45% of the outlay. This is due to a realization of only 39% of the planned normal central assistance and 38`% of the planned assistance for externally aided projects.

## 4.9 Conclusions

Overall, the prospects of achieving the plan outlays and in fact exceeding them appear to be good. However, given the structural characteristics that have developed in the budget, the following constraints need review:

*** Mobilization of the required balance from current revenues on account of the increases in current account deficits,**

*** Likely constraints in achieving the targeted additional resource mobilization**

*** Tariff reform for agricultural power to enhance both public and private investments in the power sector;**
*** Tariff reform in STCs to encourage investments and improve the quality of service, particularly in urban centres**.

## 5. Broad Directions of Fiscal Reform

The medium term fiscal projections discussed in this paper imply that the state government is well-advised to consider planning and implementing a phased program of fiscal reform. **Fiscal reform is essential to maintain and improve the tempo of development which the state has seen in the first three years of the Ninth Plan (1997/98 - 1999/2000) and increase the rate of growth of investments in key sectors such as power and urban infrastructure**. It is also reasonable to expect that the flow of central government concessionary loans and grants to state governments in the medium term is likely to be influenced not only by the recommendations of the Eleventh finance Commission but also by the nature and degree of fiscal reforms being implemented by the state governments themselves. It may not be possible for the central government to continue to finance the current deficits of the state government, given the compulsions at the national level on limiting public debt and annual borrowing. There are also likely to be pressures coming from the center that the state governments consider placing statutory limits on public debt as per the provisions of Article 293 of the Constitution. The magnitude of revenue resources which the state government has committed to devolve to local bodies (8% of certain state revenues rising over the years) is also likely to put additional pressures on the budget. The acceptance of the State Finance Commission's recommendation in this regard puts an additional pressure for fiscal reform.

The most important conclusion in this review of fiscal trends is that despite a conservative fiscal stance and very good resource mobilization efforts for the ninth plan, budgetary resources arc being diverted from infrastructure investments as the government has continued its commitment on subsidies. With the recent increase in the cost of borrowing, it has become imperative to reduce current account deficits substantially and this can be achieved only through a rationalization of non-plan expenditures and through the mobilization of' non-tax revenues and user charges.

**This paper has also demonstrated that in the absence of a medium term fiscal reform aimed at controlling the primary deficit to about 1.0% of the GSDP, the debt ratio could climb to unsustainable levels, creating more problems for the management of current expenditures due to mounting interest payments.**

The areas of action which the state government may consider to move in the direction of the achieving medium term sustainability can be grouped under two broad categories, namely, immediate policy reform and medium term process improvements in budgeting.

The areas for immediate policy reform include the following:

*Rationalization of the **Public Distribution System** to enhance its impact on the population living below poverty line, while at the same time reducing the budgetary outflow on this account.

* Phased reinstatement of **tariff on power supplied to the agricultural sector** with a view to improve the financial viability of TNEB and facilitate the much needed investments in the power sector.

* Review of **pricing policy on urban transport** to improve the financial viability of RTCs and to enhance investments and the quality of service in this sector.

* Review of **public sector employment and compensation policies** with view to reduce the rate of growth in expenditures on wages and release resources for operations and maintenance expenditures in the delivery of essential government services.

* Review of the potential to realize **additional non-tax revenue and user charges** from such of those government services that are in the nature of direct and immediate private benefits to recipients, particularly those above the poverty line.

As far as process reforms are concerned, it is recommended that the government consider implementing the following measures:

* Introduction of a **Medium Term Expenditure Framework** to facilitate the advance planning of revenues and expenditures, consistent with fiscal targets and priorities for allocation of expenditures. The development of a three year rolling expenditure plan could assist in coordinating budgetary and off budget investments, setting priorities and translating priorities into annual budgets.

* **Public Expenditure Reviews** of selected sectors each year with a view to rationalize budgetary allocations to improve efficiency and enhance the impact on economic growth and poverty alleviation. A **budget rationalization program** can be developed on the basis of such reviews to identify priorities for reallocations from unproductive expenditures to increased expenditures on infrastructure and social services and build a consensus within the government for such reallocations.

*** Increase investments for physical infrastructure** in the state as private sector participation for such investments is likely to be slow in response, with considerable legal and financial issues to be settled and with potential for contingent liabilities;

* **Increase investments in human infrastructure**, particularly in primary education and basic health care services through reallocation of resources to carefully targeted programs aimed at the population living below the poverty line.

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**September 1999** **Table 1**

**TAMIL NADU- TRENDS IN CURRENT REVENUES 1980/81-1998/99**
(Rs. Crores)

| **Year** | **State Taxes** | **Percent of GSDP** | **Non-Tax Revenue** | **Percent of GSDP** | **Share of Central Taxes** | **Percent of GSDP** | **Central Grants** | **Percent of GSDP** | **Total Current Revenue** | **Percent of GSDP** |
|---|---|---|---|---|---|---|---|---|---|---|
| 1981 | 639 | **7.91** | 232 | **2.87** | 292 | **3.61** | 117 | **1.45** | 1,280 | **15.84** |
| 1982 | 844 | **8.69** | 144 | **1.48** | 327 | **3.37** | 126 | **1.30** | 1,441 | **14.84** |
| 1983 | 1,012 | **10.09** | 167 | **1.67** | 355 | **3.54** | 143 | **1.43** | 1,677 | **16.73** |
| 1984 | 1,146 | **9.84** | 190 | **1.63** | 401 | **3.44** | 225 | **1.93** | 1,962 | **16.85** |
| 1985 | 1,299 | **9.51** | 217 | **1.59** | 443 | **3.24** | 268 | **1.96** | 2,227 | **16.31** |
| 1986 | 1,549 | **9.90** | 239 | **1.53** | 515 | **3.29** | 335 | **2.14** | 2,638 | **16.86** |
| 1987 | 1,758 | **10.04** | 253 | **1.44** | 584 | **3.33** | 284 | **1.62** | 2,879 | **16.44** |
| 1988 | 1,763 | **8.52** | 296 | **1.43** | 652 | **3.15** | 380 | **1.84** | 3,091 | **14.94** |
| 1989 | 1,994 | **8.60** | 335 | **1.44** | 722 | **3.11** | 437 | **1.88** | 3,488 | **15.04** |
| 1990 | 2,489 | **9.17** | 393 | **1.45** | 947 | **3.49** | 422 | **1.56** | 4,251 | **15.67** |
| 1991 | 3,124 | **9.97** | 381 | **1.22** | 1003 | **3.20** | 579 | **1.85** | 5,087 | **16.23** |
| 1992 | 3,734 | **10.10** | 394 | **1.07** | 1190 | **3.22** | 734 | **1.99** | 6,052 | **16.38** |
| 1993 | 4,162 | **9.68** | 531 | **1.23** | 1419 | **3.30** | 822 | **1.91** | 6,934 | **16.12** |
| 1994 | 4,801 | **9.26** | 612 | **1.18** | 1,553 | **2.99** | 1008 | **1.94** | 7,974 | **15.38** |
| 1995 | 5,834 | **9.61** | 701 | **1.15** | 1,735 | **2.86** | 878 | **1.45** | 9,148 | **15.06** |
| 1996 | 7,151 | **10.58** | 858 | **1.27** | 1,806 | **2.67** | 784 | **1.16** | 10,599 | **15.68** |
| 1997 | 7,983 | **10.22** | 885 | **1.13** | 2,166 | **2.77** | 927 | **1.19** | 11,961 | **15.31** |
| 1998 | 8,686 | **9.94** | 1122 | **1.28** | 2,728 | **3.12** | 1,051 | **1.20** | 13,587 | **15.55** |
| 1999 | 9,625 | **9.75** | 1,157 | **1.17** | 2,409 | **2.44** | 1,070 | **1.08** | 14,261 | **14.38** |

1. Year refers to the closing year of the financial year. e.g. 1981 refers to f.y 1980/81
2. Source: Finance Department, Government of Tamil Nadu.
3. Non-Tax revenue figures exclude adjustments of TNEB arrears during 1992-1995.
4. 1999 figures are actuals.

**September, 1999** **Table 2**

**TAMIL NADU - TRENDS IN EXPENDITURES 1980/81 - 1998/1999**
(Rs. Crores)

| Year | Current Expend. | Percent to total Expend. | Capital Expend. | Percent to total Expend. | Total Expend. | Ratio of current Expend. to GSDP | Ratio of Capital Expend. to GSDP | Ratio of Total Expend to GSDP |
|---|---|---|---|---|---|---|---|---|
| 1981 | 1,152 | 71.04 | 470 | 28.96 | 1,622 | **14.26** | **5.81** | **20.07** |
| 1982 | 1,359 | 70.43 | 571 | 29.57 | 1,929 | **13.99** | **5.88** | **19.87** |
| 1983 | 1,576 | 72.28 | 605 | 27.72 | 2,181 | **15.72** | **6.03** | **21.75** |
| 1984 | 1,911 | 73.44 | 691 | 26.56 | 2,602 | **16.41** | **5.93** | **22.34** |
| 1985 | 2,210 | 78.80 | 595 | 21.20 | 2,805 | **16.18** | **4.35** | **20.54** |
| 1986 | 2,450 | 78.85 | 657 | 21.15 | 3,107 | **15.66** | **4.20** | **19.86** |
| 1987 | 2,776 | 80.63 | 667 | 19.37 | 3,442 | **15.85** | **3.81** | **19.66** |
| 1988 | 3,375 | 83.26 | 678 | 16.74 | 4,053 | **16.31** | **3.28** | **19.59** |
| 1989 | 3,763 | 83.48 | 745 | 16.52 | 4,508 | **16.22** | **3.21** | **19.43** |
| 1990 | 4,731 | 83.29 | 949 | 16.71 | 5,680 | **17.44** | **3.50** | **20.93** |
| 1991 | 5,641 | 88.95 | 701 | 11.05 | 6,342 | **18.00** | **2.24** | **20.24** |
| 1992 | 6,911 | 90.02 | 766 | 9.98 | 7,677 | **18.70** | **2.07** | **20.77** |
| 1993 | 8,078 | 88.95 | 1,003 | 11.05 | 9,081 | **18.78** | **2.33** | **21.11** |
| 1994 | 8,666 | 88.94 | 1,077 | 11.06 | 9,743 | **16.71** | **2.08** | **18.79** |
| 1995 | 9,491 | 85.93 | 1,554 | 14.07 | 11,045 | **15.63** | **2.56** | **18.19** |
| 1996 | 10,911 | 88.98 | 1,351 | 11.02 | 12,262 | **16.14** | **2.00** | **18.14** |
| 1997 | 13,065 | 86.73 | 2,000 | 13.27 | 15,065 | **16.72** | **2.56** | **19.28** |
| 1998 | 14,951 | 88.33 | 1,975 | 11.67 | 16,926 | **17.11** | **2.26** | **19.37** |
| 1999 | 17,408 | 91.28 | 1,663 | 8.72 | 19,071 | **17.63** | **1.68** | **19.31** |

1. Year refers to the closing year of the financial year. e.g. 1981 refers to f.y 1980/81
2. Source: Finance Department, Government of Tamil Nadu
3. Current expenditures exclude adjustments of TNEB arrears during 1992-1995.
4. Current expenditures for 1999 exclude "non-cash" salary arrears.

**September 1999** **Table 3**

## TAMIL NADU- TRENDS IN KEY FISCAL RATIOS 1980/81 - 1998/99

(Rs. Crores)

| Year | Current Expend. | Current Revenue | Capital Receipts | Current Balance | Current Balance as % of GSDP | Total Expend. | Overall or Fiscal Balance | Fiscal Balance as a % of GSDP | Interest | Primary Balance | Primary Balance as a % of GSDP |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1981 | 1,152 | 1,280 | 134 | 128 | **1.58** | 1,622 | (208) | **(2.57)** | **91** | **(117)** | **(1.45)** |
| 1982 | 1,359 | 1,441 | 196 | 82 | **0.85** | 1,929 | (292) | **(3.01)** | **92** | **(200)** | **(2.06)** |
| 1983 | 1,576 | 1,677 | 106 | 101 | **1.01** | 2,181 | (398) | **(3.97)** | **101** | **(297)** | **(2.96)** |
| 1984 | 1,911 | 1,962 | 176 | 51 | **0.44** | 2,602 | (464) | **(3.98)** | **127** | **(337)** | **(2.89)** |
| 1985 | 2,210 | 2,227 | 180 | 17 | **0.12** | 2,805 | (398) | **(2.91)** | **146** | **(252)** | **(1.85)** |
| 1986 | 2,450 | 2,638 | 105 | 188 | **1.20** | 3,107 | (364) | **(2.33)** | **162** | **(202)** | **(1.29)** |
| 1987 | 2,776 | 2,879 | 110 | 103 | **0.59** | 3,442 | (453) | **(2.59)** | **199** | **(254)** | **(1.45)** |
| 1988 | 3,375 | 3,091 | 251 | (284) | **(1.37)** | 4,053 | (711) | **(3.44)** | **284** | **(427)** | **(2.06)** |
| 1989 | 3,763 | 3,488 | 263 | (275) | **(1.19)** | 4,508 | (757) | **(3.26)** | **305** | **(452)** | **(1.95)** |
| 1990 | 4,731 | 4,251 | 258 | (480) | **(1.77)** | 5,680 | (1,171) | **(4.32)** | **366** | **(805)** | **(2.97)** |
| 1991 | 5,641 | 5,087 | 128 | (554) | **(1.77)** | 6,342 | (1,127) | **(3.60)** | **456** | **(671)** | **(2.14)** |
| 1992 | 6,911 | 6,052 | 1,295 | (859) | **(2.32)** | 7,677 | (330) | **(0.89)** | **557** | **227** | **0.61** |
| 1993 | 8,078 | 6,934 | 705 | (1,144) | **(2.66)** | 9,081 | (1,442) | **(3.35)** | **688** | **(754)** | **(1.75)** |
| 1994 | 8,666 | 7,974 | 337 | (692) | **(1.33)** | 9,743 | (1,432) | **(2.76)** | **957** | **(475)** | **(0.92)** |
| 1995 | 9,491 | 9,148 | 473 | (343) | **(0.56)** | 11,045 | (1,424) | **(2.34)** | **1,090** | **(334)** | **(0.55)** |
| 1996 | 10,911 | !0,599 | 407 | (312) | **(0.46)** | 12,262 | (1,256) | **(1.86)** | **1,293** | **37** | **0.05** |
| 1997 | 13,065 | 11,961 | 658 | (1,104) | **(1.41)** | 15,065 | (2,446) | **(3.13)** | **1,476** | **(970)** | **(1.24)** |
| 1998 | 14,951 | 13,587 | 1,217 | (1,364) | **(1.56)** | 16,926 | (2,122) | **(2.43)** | **1,763** | **(359)** | **(0.41)** |
| 1999 | 17,408 | 14,261 | 323 | (3,147) | **(3.19)** | 19,071 | (4,487) | **(4.54)** | **2,062** | **(2,425)** | **(2.46)** |

1. Year refers to the closing year of the financial year e.g 1981 refers to f.y 1980/81
2. Source: Finance Department, Government of Tamil Nadu

**Tamil Nadu: Evolution of Public Debt** (Rs. Crores)

| Year | Internal Debt of State 1 | Loans from Centre 2 | Total New Borrowing 1+2 | Repay-ments 3 | Net Borrowing (1+2)-3 | Total Public Debt | GSDP | Debt/GSDP Ratio |
|---|---|---|---|---|---|---|---|---|
| 1981 | 45 | 155 | 200 | 64 | 136 | 2,798 | 8,081 | **34.62** |
| 1982 | 51 | 155 | 206 | 75 | 131 | 2,929 | 9,712 | **30.16** |
| 1983 | 48 | 209 | 256 | 110 | 146 | 3,075 | 10,025 | **30.67** |
| 1984 | 57 | 314 | 371 | 150 | 221 | 3,296 | 11,646 | **28.30** |
| 1985 | 87 | 257 | 345 | 145 | 200 | 3,496 | 13,658 | **25.60** |
| 1986 | 95 | 393 | 488 | 202 | 286 | 3,782 | 15,648 | **24.17** |
| 1987 | 133 | 344 | 477 | 171 | 306 | 4,088 | 17,513 | **23.34** |
| 1988 | 204 | 393 | 597 | 193 | 404 | 4,492 | 20,693 | **21.71** |
| 1989 | 205 | 403 | 608 | 210 | 398 | 4,890 | 23,199 | **21.08** |
| 1990 | 237 | 526 | 763 | 233 | 530 | 5,420 | 27,134 | **19.97** |
| 1991 | 219 | 748 | 967 | 279 | 688 | 6,108 | 31,339 | **19.49** |
| 1992 | 263 | 860 | 1,123 | 229 | 894 | 7,002 | 36,957 | **18.95** |
| 1993 | 323 | 974 | 1,297 | 278 | 1,019 | 8,021 | 43,010 | **18.65** |
| 1994 | 351 | 1,088 | 1,438 | 301 | 1,137 | 9,158 | 51,858 | **17.66** |
| 1995 | 402 | 1,502 | 1,905 | 244 | 1,661 | 10,819 | 60,734 | **17.81** |
| 1996 | 474 | 988 | 1,462 | 270 | 1,192 | 12,011 | 67,589 | **17.77** |
| 1997 | 471 | 1,307 | 1,778 | 338 | 1,440 | 13,451 | 78,124 | **17.22** |
| 1998 | 698 | 1,435 | 2,133 | 408 | 1,725 | 15,176 | 87,394 | **17.37** |
| 1999 | 930 | 1,634 | 2,564 | 495 | 2,069 | 17,245 | 98,756 | **17.46** |

1. Year refers to the closing year of the financial year e.g 1981 refers to f.y 1980/81
2. Source: Finance Department, Government of Tamil Nadu
3. The above table excludes Ways and Means Advances (WMA)

**TAMIL NADU: INCREASE IN DEBT AS A PERCENTAGE OF EXPENDITURE**
(Rs. Crores)

| Year | Total Exp. | New Loans | Increase in Debt | New Loans as % of Total Exp. | 2 Year Moving Average | Increase in Debt as % of Exp. | 2 Year Moving Average |
|---|---|---|---|---|---|---|---|
| 1981 | 1,622 | 200 | 136 | 12.32 | NA | 8.36 | NA |
| 1982 | 1,929 | 206 | 131 | 10.66 | **11.49** | 6.78 | **7.57** |
| 1983 | 2,181 | 256 | 146 | 11.76 | **11.21** | 6.69 | **6.74** |
| 1984 | 2,602 | 371 | 221 | 14.25 | **13.00** | 8.50 | **7.59** |
| 1985 | 2,805 | 345 | 200 | 12.29 | **13.27** | 7.13 | **7.81** |
| 1986 | 3,107 | 488 | 286 | 15.69 | **13.99** | 9.19 | **8.16** |
| 1987 | 3,442 | 477 | 306 | 13.86 | **14.77** | 8.90 | **9.04** |
| 1988 | 4,053 | 597 | 404 | 14.73 | **14.29** | 9.98 | **9.44** |
| 1989 | 4,508 | 608 | 398 | 13.49 | **14.11** | 8.84 | **9.41** |
| 1990 | 5,680 | 763 | 530 | 13.43 | **13.46** | 9.34 | **9.09** |
| 1991 | 6,342 | 967 | 688 | 15.25 | **14.34** | 10.84 | **10.09** |
| 1992 | 7,677 | 1,123 | 894 | 14.63 | **14.94** | 11.64 | **11.24** |
| 1993 | 9,081 | 1,297 | 1,019 | 14.28 | **14.45** | 11.22 | **11.43** |
| 1994 | 9,743 | 1,438 | 1,137 | 14.76 | **14.52** | 11.67 | **11.45** |
| 1995 | 11,045 | 1,905 | 1,661 | 17.24 | **16.00** | 15.04 | **13.35** |
| 1996 | 12,262 | 1,462 | 1,192 | 11.93 | **14.58** | 9.72 | **12.38** |
| 1997 | 15,065 | 1,778 | 1,440 | 11.80 | **11.86** | 9.56 | **9.64** |
| 1998 | 16,926 | 2,242 | 1,725 | 13.25 | **12.52** | 10.19 | **9.88** |

1. Year refers to the closing year of the financial year e.g 1981 refers to f.y 1980/81
2. Source: Finance Department, Government of Tamil Nadu

**September 1999** **Table 6**

**Tamil Nadu: Share of Interest in Revenue**
(Rs. Crores)

| Year | Total Debt | GSDP | Debt/GSDP Ratio | Interest Payments | Current Revenue | Share of Interest in Revenue |
|---|---|---|---|---|---|---|
| 1981 | 2,798 | 8,081 | **34.62** | 91 | 1,280 | 7.11 |
| 1982 | 2,929 | 9,712 | **30.16** | 92 | 1,441 | 6.39 |
| 1983 | 3,075 | 10,025 | **30.67** | 101 | 1,677 | 6.05 |
| 1984 | 3,296 | 11,646 | **28.30** | 127 | 1,962 | 6.48 |
| 1985 | 3,496 | 13,658 | **25.60** | 146 | 2,227 | 6.55 |
| 1986 | 3,782 | 15,648 | **24.17** | 162 | 2,638 | 6.14 |
| 1987 | 4,088 | 17,513 | **23.34** | 199 | 2,879 | 6.91 |
| 1988 | 4,492 | 20,693 | **21.71** | 284 | 3,091 | 9.19 |
| 1989 | 4,890 | 23,199 | **21.08** | 305 | 3,488 | 8.75 |
| 1990 | 5,420 | 27,134 | **19.97** | 366 | 4,251 | 8.61 |
| 1991 | 6,108 | 31,339 | **19.49** | 456 | 5,087 | 8.95 |
| 1992 | 7,002 | 36,957 | **18.95** | 557 | 6,052 | 9.21 |
| 1993 | 8,021 | 43,010 | **18.65** | 688 | 6,934 | 9.93 |
| 1994 | 9,158 | 51,858 | **17.66** | 957 | 7,974 | 12.00 |
| 1995 | 10,819 | 60,734 | **17.81** | 1,090 | 9,148 | 11.91 |
| 1996 | 12,011 | 67,589 | **17.77** | 1,293 | 10,599 | 12.20 |
| 1997 | 13,451 | 78,124 | **17.22** | 1,476 | 11,961 | 12.34 |
| 1998 | 15,176 | 87,394 | **17.37** | 1,763 | 13,587 | 12.98 |
| 1999 | 17,245 | 98,756 | **17.46** | 2,062 | 14,261 | 14.46 |

1. Year refers to the closing year of the financial year e.g 1981 refers to f.y 1980/81
2. Source: Finance Department, Government of Tamil Nadu

September 1999 Table 7

**TAMIL NADU: AVERAGE COSTS OF FINANCING DEFICITS**

| Year | GSDP Current Prices | Total Debt | Interest Paid | Notional Average Cost(%) | 2-Year Moving Average Cost(%) | Growth Rate of Nominal GSDP | 2-Year Moving Growth Rate | (1+r)/ (1+g) | (1+r') (1+g' |
|---|---|---|---|---|---|---|---|---|---|
| 1981 | 8,081 | 2,798 | 91 | NA | NA | NA | NA | NA | NA |
| 1982 | 9,712 | 2,929 | 92 | 3.29 | NA | 20.20 | **10.10** | 0.44 | NA |
| 1983 | 10,025 | 3,075 | 101 | 3.46 | **3.38** | 16.10 | **18.15** | 0.52 | **0.48** |
| 1984 | 11,646 | 3,296 | 127 | 4.14 | **3.80** | 15.60 | **15.85** | 0.55 | **0.53** |
| 1985 | 13,658 | 3,496 | 146 | 4.43 | **4.28** | 17.74 | **16.67** | 0.52 | **0.54** |
| 1986 | 15,648 | 3,782 | 162 | 4.64 | **4.53** | 14.19 | **15.97** | 0.61 | **0.56** |
| 1987 | 17,513 | 4,088 | 199 | 5.26 | **4.95** | 12.48 | **13.34** | 0.68 | **0.64** |
| 1988 | 20,693 | 4,492 | 284 | 6.95 | **6.10** | 17.87 | **15.18** | 0.61 | **0.64** |
| 1989 | 23,199 | 4,890 | 305 | 6.79 | **6.87** | 12.11 | **14.99** | 0.76 | **0.68** |
| 1990 | 27,134 | 5,420 | 366 | 7.48 | **7.14** | 16.96 | **14.54** | 0.65 | **0.70** |
| 1991 | 31,339 | 6,108 | 456 | 8.40 | **7.94** | 15.50 | **16.23** | 0.72 | **0.68** |
| 1992 | 36,957 | 7,002 | 557 | 9.12 | **8.76** | 17.92 | **16.71** | 0.68 | **0.70** |
| 1993 | 43,010 | 8,021 | 688 | 9.83 | **9.48** | 16.38 | **17.15** | 0.75 | **0.72** |
| 1994 | 51,858 | 9,158 | 957 | 11.93 | **10.88** | 20.57 | **18.48** | 0.72 | **0.73** |
| 1995 | 60,734 | 10,819 | 1,090 | 11.90 | **11.91** | 17.12 | **18.85** | 0.81 | **0.76** |
| 1996 | 67,589 | 12,011 | 1,293 | 11.95 | **11.93** | 11.29 | **14.21** | 1.03 | **0.91** |
| 1997 | 78,124 | 13,451 | 1,476 | 12.29 | **12.12** | 15.59 | **13.44** | 0.87 | **0.94** |
| 1998 | 87,394 | 15,176 | 1,763 | 13.11 | **12.70** | 11.87 | **13.73** | 1.06 | **0.96** |
| 1999 | 98,756 | 17,245 | 2,062 | 13.59 | **13.35** | 13.00 | **12.44** | 1.03 | **1.04** |

1. The ratio (1+r)/(1+g) is derived using nominal annual values, while the ratio (1+r')/(1+g') uses the 2-year moving averages.

2. Total Debt refers to outstanding debt at the end of the financial year.

**September 1999** **Table 8**

**TAMIL NADU: ALTERNATIVE FISCAL SCENARIOS (RS CRORES)**

| | SGDP | Primary Balance | Average cost of Borrowing | Year end Debt | Debt/ SGDP Ratio | Interest Payments | Current Revenue | Interest/ Revenue (Percent) |
|---|---|---|---|---|---|---|---|---|
| **1. Baseline Scenario** | | | | | | | | |
| 1999 | 98,756 | (2,425) | 1.1270 | 17,245 | **17.46** | 2,062 | 14,261 | **14.46** |
| 2000 | 112,088 | (2,242) | 1.1295 | 21,720 | **19.38** | 1,944 | 16,813 | **11.56** |
| 2001 | 127,220 | (2,544) | 1.1320 | 27,131 | **21.33** | 2,453 | 19,083 | **12.86** |
| 2002 | 144,395 | (2,888) | 1.1345 | 33,668 | **23.32** | 3,071 | 21,659 | **14.18** |
| 2003 | 163,888 | (3,278) | 1.1370 | 41,559 | **25.36** | 3,820 | 24,583 | **15.54** |
| 2004 | 186,013 | (3,720) | 1.1395 | 51,077 | **27.46** | 4,725 | 27,902 | **16.94** |
| 2005 | 211,125 | (4,222) | 1.1420 | 62,552 | **29.63** | 5,820 | 31,669 | **18.38** |
| 2006 | 239,626 | (4,793) | 1.1445 | 76,383 | **31.88** | 7,143 | 35,944 | **19.87** |
| 2007 | 271,976 | (5,440) | 1.1470 | 93,051 | **34.21** | 8,742 | 40,796 | **21.43** |
| 2008 | 308,693 | (6,174) | 1.1495 | 113,136 | **36.65** | 10,673 | 46,304 | **23.05** |
| **2. Moderate Fiscal Reform** | | | | | | | | |
| 1999 | 98,756 | (2,425) | 1.1270 | 17,245 | **17.46** | 2,062 | 14,261 | **14.46** |
| 2000 | 112,088 | (1,681) | 1.1295 | 21,160 | **18.88** | 1,944 | 16,813 | **11.56** |
| 2001 | 127,220 | (1,908) | 1.1320 | 25,861 | **20.33** | 2,390 | 19,083 | **12.52** |
| 2002 | 144,395 | (2,166) | 1.1345 | 31,505 | **21.82** | 2,927 | 21,659 | **13.52** |
| 2003 | 163,888 | (2,458) | 1.1370 | 38,280 | **23.36** | 3,574 | 24,583 | **14.54** |
| 2004 | 186,013 | (2,790) | 1.1395 | 46,410 | **24.95** | 4,352 | 27,902 | **15.60** |
| 2005 | 211,125 | (3,167) | 1.1420 | 56,167 | **26.60** | 5,288 | 31,669 | **16.70** |
| 2006 | 239,626 | (3,594) | 1.1445 | 67,877 | **28.33** | 6,414 | 35,944 | **17.85** |
| 2007 | 271,976 | (4,080) | 1.1470 | 81,935 | **30.13** | 7,769 | 40,796 | **19.04** |
| 2008 | 308,693 | (4,630) | 1.1495 | 98,815 | **32.01** | 9,398 | 46,304 | **20.30** |
| **3. Strong Fiscal Reform with Revenue Increase** | | | | | | | | |
| 1999 | 98,756 | (2,425) | 1.1270 | 17,245 | **17.46** | 2,062 | 14,261 | **14.46** |
| 2000 | 112,088 | (1,121) | 1.1295 | 20,599 | **18.38** | 1,944 | 17,934 | **10.84** |
| 2001 | 127,220 | (1,272) | 1.1320 | 24,590 | **19.33** | 2,327 | 20,355 | **11.43** |
| 2002 | 144,395 | (1,444) | 1.1345 | 29,342 | **20.32** | 2,784 | 23,103 | **12.05** |
| 2003 | 163,888 | (1,639) | 1.1370 | 35,000 | **21.36** | 3,329 | 26,222 | **12.69** |
| 2004 | 186,013 | (1,860) | 1.1395 | 41,743 | **22.44** | 3,980 | 30,692 | **12.97** |
| 2005 | 211,125 | (2,111) | 1.1420 | 49,782 | **23.58** | 4,757 | 34,836 | **13.65** |
| 2006 | 239,626 | (2,396) | 1.1445 | 59,372 | **24.78** | 5,685 | 39,538 | **14.38** |
| 2007 | 271,976 | (2,720) | 1.1470 | 70,819 | **26.04** | 6,795 | 44,876 | **15.14** |
| 2008 | 308,693 | (3,087) | 1.1495 | 84,493 | **27.37** | 8,123 | 50,934 | **15.95** |

**September 1999** **Table 9**

**TAMIL NADU: COMPOSITION OF CURRENT EXPENDITURE**
(Rs. Crores)

| Year | Salaries | % to Total | O & M | % to Total | Interest | % to Total | Grants | % to Total | Subsidy | % to Total | Total Exp. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1985 | 923 | 42 | 155 | 7 | 146 | 7 | 384 | 17 | - | - | 2210 |
| 1986 | 1136 | 46 | 203 | 8 | 162 | 7 | 392 | 16 | - | - | 2450 |
| 1987 | 1288 | 46 | 207 | 7 | 199 | 7 | 520 | 19 | - | - | 2776 |
| 1988 | 1431 | 42 | 224 | 7 | 284 | 8 | 861 | 26 | - | - | 3375 |
| 1989 | 1680 | 45 | 243 | 6 | 305 | 8 | 875 | 23 | - | - | 3763 |
| 1990 | 2232 | 47 | 271 | 6 | 366 | 8 | 835 | 18 | 280 | 6 | 4731 |
| 1991 | 2753 | 49 | 330 | 6 | 456 | 8 | 724 | 13 | 548 | 10 | 5641 |
| 1992 | 3078 | 45 | 454 | 7 | 557 | 8 | 1132 | 16 | 640 | 9 | 6911 |
| 1993 | 3501 | 43 | 478 | 6 | 688 | 9 | 1033 | 13 | 1178 | 15 | 8078 |
| 1994 | 3925 | 45 | 559 | 6 | 957 | 11 | 1073 | 12 | 1041 | 12 | 8666 |
| 1995 | 4405 | 46 | 652 | 7 | 1090 | 11 | 861 | 9 | 1234 | 13 | 9491 |
| 1996 | 5093 | 47 | 765 | 7 | 1293 | 12 | 922 | 8 | 1526 | 14 | 10911 |
| 1997 | 6110 | 47 | 834 | 6 | 1476 | 11 | 1233 | 9 | 1786 | 14 | 13065 |
| 1998 | 7135 | 48 | 944 | 6 | 1763 | 12 | 1218 | 8 | 1906 | 13 | 14951 |
| 1999 | 9521 | 54 | 1055 | 6 | 2122 | 12 | 1234 | 7 | 1570 | 9 | 17697 |

1. Year refers to the closing year of the financial year e.g. 1985 refers to f.y. 1984/1985
2. Source: Finance Department, Government of Tamil Nadu
3. Expenditure shown under salaries include dearness allowance, gratuity, pensions and salaries under grants
4. Interest payments in this table include, above the line debt charges.
5. Grants shown above are "non-salary grants"

September 1999

Table 10

**TAMIL NADU: PROJECTED OUTLAYS AND REALIZATION FOR 8$^{TH}$ PLAN**
**(Rs. Crores at 1991/92 prices)**

| | Outlay | Actuals |
|---|---|---|
| **A. States Own Resources** (1 to 10) | **4,537.78** | **6,542.46** |
| 1. Balance from Current Revenue Of | (1,100.55) | 1,219.32 |
| which Additional Resource Mobilization | 0.00 | 2,113.43 |
| 2. Contribution of Public Enterprises | (1,152.22) | 325.08 |
| Of which TNEB | (1,040.00) | 848.37 |
| Of which RTCs | (111.82) | (523.29) |
| Of which Others | (0.40) | 0.00 |
| 3. State Provident Fund | 425.00 | 849.09 |
| 4. Miscellaneous Capital Receipts | (873.48) | (1,091.14) |
| 5. Special Grants(TFC) | 0.00 | 81.31 |
| 6. Loans Against Small Savings | 1,750.00 | 1,551.57 |
| 7. Debentures/Bonds | 0.00 | 1,174.27 |
| 8. Additional Resource Mobilization | 2,605.00 | 0.00 |
| 9. Net Market Borrowing | 1,608.85 | 1,421.58 |
| 10. Negotiated Loans | 1,275.18 | 1,011.38 |
| **B. Central Assistance** | **5,662.22** | **4,195.66** |
| Of which Externally Financed Projects | 3,500.00 | 1,766.21 |
| **D. Grand Total** | **10,200.00** | **10,738.12** |