# A Study on Debt Problem of the Special Category States

(Revised)

Study Conducted for the 13<sup>th</sup> Finance Commission, Government of India

> Rajiv Gandhi University Itanagar Arunachal Pradesh

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# **Executive Summary**

India comprises apart from six union territories, 18 states in the general and 11 in the special category. All the North-Eastern States, Jammu and Kashmir, Himachal Pradesh and Uttarakhand are in the special category. The special category states have some distinct characteristics. They have international boundaries, hilly terrains and have distinctly different socio-economic developmental parameters. These states have also geographical disadvantages in their effort for infrastructural development. Public expenditure plays a significant role in the Gross State Domestic Product of the states. The states in the North-East are also late starters in development. In view of the above problems, central government sanctions 90 percent in the form of grants in plan assistance to the states in special category.

In the post globalization period the objective of fiscal federalism in India is interstate equity based on fiscal efficiency. For the achievement of international competitiveness India needs macro economic stability with micro economic efficiency. To achieve these objectives, finances of both central and the state governments are now found to be guided by the fiscal reforms programme. In the present context there is a necessity for stability of budget deficit and sustainability of debt in order to maximise growth.

With the above mentioned objectives, the present study comprises five chapters including the introduction. Chapter II deals with conceptual framework and Chapter III analyses indicators of debt and its changing composition. Chapter IV gives an overview of public finance and Chapter V exhaustively analyzes debt sustainability of the special category states with policy recommendations.

The entire study is based on Domar Model of debt sustainability. It uses secondary data particularly those of Reserve Bank of India on State finances. Appropriate statistical and econometric techniques have been applied for the estimation of different parameters, which facilitate the present study for interpretation. Jammu and Kashmir

and Mizoram have experienced high Debt-GSDP ratio, due to high fiscal deficits and low growth rate. In the case of Himachal Pradesh, Manipur, Nagaland, Tripura and Uttarakhand there is high Debt-GSDP ratio but these states are experiencing high fiscal deficits and high growth rate. For Arunachal Pradesh and Sikkim there is low fiscal deficits and relatively high growth rate yet they have high Debt-GSDP ratio perhaps owing to their high fiscal deficits in the past. It is observed that in the long-run there is no debt sustainability for any states in the special category except Assam on the basis of the Domar model. Debt sustainability can be explained in either of the two conditions.

- (i) r < g if there is primary deficit.
- (ii) If r > g, there must be primary surplus.

r, and g, represent annual rate of interest and GSDP growth rate respectively.

Arunachal Pradesh, Assam, Himachal Pradesh, Manipur, Meghalaya, Sikkim, Tripura, Uttarakhand have achieved real primary surplus in the period 2005-09. However Jammu Kashmir, Mizoram and Nagaland continued in primary deficits during this period. For these states fiscal reform is warranted particularly in the context of primary expenditure by correcting the distorted growth of primary expenditure. In other words there should be diversion of non-developmental revenue and capital expenditure towards developmental capital expenditure to up-grade economic services, infrastructure development which would ultimately lead these states to high growth trajectory. With the hike in growth rate debt sustainability would be attained ultimately. It is predicted that except Jammu Kashmir and Mizoram other states can achieve nearly 30 percent of Debt-GSDP ratio by 2014-15. The most important problem in some of the states is the significant proportion of contingent liabilities to GSDP. For Jammu and Kashmir and Himachal Pradesh, it is 20 and 10 percent respectively.

The most important prescription for special category states is **interest free** loan with rationalization of public expenditure based on growth enhancing sectoral allocation of resources. For special category states unlike other states there is no hard budget constraint as the central transfer is high. Through the enactment of FRBM these states are also availing themselves of the benefit of debt swapping and debt relief schemes which

facilitate reduction of the average annual rate of interest. Fiscal imprudence through contingent—liabilities results in growing Debt-GSDP ratio of all these states which ultimately lead to debt un-sustainability. It necessitates special incentive for all these states for reduction in fiscal deficits to GSDP ratio, Debt to GSDP ratio and last but not least for the raising of capital expenditure to total expenditure ratio. The 13<sup>th</sup> Finance Commission may give appropriate incentive-based recommendations in this context. For special category states fiscal consolidation is to be more in the direction of effective expenditure management by the proper utilization of funds which will be dependent on their own fiscal efforts. Central transfers combined with improved fiscal efforts of these states can tackle the special problems, develop infrastructure and result in good governance. There is a necessity of developing all these states at par with other states. This can only be possible if all these states are guided by the norms of inter-state equity based on fiscal efficiency.

## Chapter-I

#### Introduction

#### 1.1 Introduction:

The special category states are Arunachal Pradesh, Assam, Himachal Pradesh, Jammu and Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and Uttarakhand. Basically, the special category states have international boundaries and they are distinctly different from other states in various economic parameters. Up to 1999 there were ten states in this category and with the inclusion of Uttaranchal in 2000 later renamed as Uttarakhand in 2006, size of the category increased to eleven

#### 1.2 Growth Performance of the States

Table 1.1 gives the real growth performance of the states during 1999-05. The growth of per capita income of Jammu and Kashmir was lowest at 1.61 percent, among all the special category states. Except Jammu and Kashmir, Assam, Himachal Pradesh, Mizoram and Meghalaya all the states' per capita income grew above the national average.

Table 1.1

Growth rate of SDP, its different sector and population

States	Agriculture	Industry	Service	SDP/GDP	Population	PCSDP
States	1999-2005	1999-2005	1999-2005	1999-2005	1999-2005	1999-2005
Arunachal Pradesh	0.75	19.01	8.39	7.26	1.42	5.82
Assam	1.95	7.73	6.37	5.24	1.5	3.74
Himachal Pradesh	6.6	8.53	6.34	6.8	1.7	5.11
Jammu and	4	0.83	4.88	4.11	2.49	1.61

Kashmir						
Manipur	5.17	2.5	10.69	8.52	2.04	6.48
Meghalaya	4.29	8.14	5.47	5.67	1.42	4.25
Mizoram	1.45	5.08	7.23	6.2	2.53	6.02
Nagalaand	12.64	8.94	8.5	9.79	3.41	6.35
Sikkim	6.02	6.6	8.1	7.49	1.72	5.77
Tripura	4.24	3.68	9.51	7.77	1.11	6.66
Uttranchal	2.5	13.55	9.28	8.28	1.67	6.61
India	2.73	6.84	8.69	7.06	1.59	5.44

In Arunachal Pradesh, Assam and Mizoram growth performance of agriculture was lower than the national average. In industry, performance of Arunachal Pradesh, Assam, Himachal Pradesh, Meghalaya, Nagaland and Uttarakhand, was above the national average. Industry performed badly in Jammu and Kashmir, Manipur and Tripura.

Performance of service sector was above the national average in Manipur, Tripura and Uttarakhand. The least performance was observed in Jammu and Kashmir and Meghalaya. Performance of Arunachal Pradesh, Nagaland and Sikkim can be comparable with the national average.

Per capita income of Assam, Jammu and Kashmir, Meghalaya and Mizoram declined as a percentage of national average during 1999-05 (table 1.2). An increasing tendency was observed in other states. Except Himachal Pradesh and Sikkim, none of the states had per capita income above the national average in 2005.

Table 1.2 (a)
PCGSDP of different States as a percentage of National Average

Year	Arunachal Pradesh	Assam	Himachal Pradesh	Jammu and Kashmir	Manipur	Meghalaya
1999-00	85.65	75.54	133.11	89.89	82.70	91.91
2000-01	88.95	74.94	136.60	89.53	74.27	92.37
2001-02	96.90	72.65	136.03	85.65	74.76	93.09
2002-03	90.07	74.73	137.17	85.50	71.22	93.21
2003-04	91.95	72.96	136.21	82.01	72.28	92.32
2004-05	96.42	71.56	136.32	79.55	83.41	91.87
2005-06	92.07	69.34	134.72	NA	84.00	88.60
2006-07	NA	68.04	133.70	NA	84.61	85.53

Table 1.2 (b)
PCGSDP of different States as a percentage of National Average

Year	Mizoram	Nagaland	Sikkim	Tripura	Uttranchal
1999-00	102.20	85.54	98.50	86.39	87.31
2000-01	102.40	94.42	100.24	89.09	93.90
2001-02	102.42	95.12	100.41	97.69	93.68
2002-03	107.60	95.66	104.65	99.68	98.57
2003-04	101.19	93.68	103.95	97.36	97.59
2004-05	97.24	100.37	104.73	98.39	97.90
2005-06	94.09	NA	103.37	97.59	98.49
2006-07	91.25	NA	102.03	NA	98.75

Table 1.3 gives a picture of the contribution to growth by different sub-sectors during 1999-05. Agriculture's contribution to growth in Arunachal Pradesh was the lowest. Apart from Arunachal Pradesh, Mizoram and Uttarakhand are two states with agriculture's contribution to growth of GSDP being less than the national average. Contribution of industry to growth was higher than the national average in Arunachal Pradesh and Uttarakhand. However, in the states like Jammu and Kashmir, Manipur, Mizoram, Nagaland and Tripura contribution to growth by industry was much lower than the national average.

Table 1.3 Contribution of different sectors to the growth of GSDP in Special Category States

Contr	Contribution to Growth by Different Sectors						
States	Agriculture	Industry	Service				
States	1999-05	1999-05	1999-05				
Arunachal Pradesh	2.83	24.50	72.67				
Assam	11.64	22.05	66.31				
Himachal Pradesh	23.67	22.94	53.44				
Jammu and Kashmir	30.02	2.49	67.50				
Manipur	16.05	2.72	81.24				
Meghalaya	16.32	24.68	59.00				
Mizoram	4.27	5.07	90.66				
Nagaland	40.88	2.89	56.23				
Sikkim	16.72	9.04	74.27				
Tripura	13.92	2.94	83.13				
Uttarakhand	7.05	25.82	67.13				
India	8.06	18.87	73.07				

During 1999-05, service sector contributed 73 percent to growth at the national level. In Manipur, Mizoram and Tripura contribution of service sector to growth was more than 80 percent. The case of Arunachal Pradesh and Sikkim is comparable with the national average. However, in Himachal Pradesh, Meghalaya and Nagaland the contribution was less than 60 percent.

#### 1.3 Role of Public Expenditure in State Income

Public expenditure plays a crucial role particularly in the state income of the North-Eastern States. Existing research findings suggest that the non-infrastructure category of service sector contributes disproportionately to the growth of service sector in North-Eastern States (Sarma and Nayak, 2004). In that context, it is important to examine the role of public expenditure in the special category states. Table 1.4 gives the detail.

Table 1.4

Public Expenditure as a percentage of GSDP

States	1991-95	1995-00	2000-05	2005-09
States	Average	Average	Average	Average
Arunachal Pradesh	68.89	69.33	73.46	87.24
Assam	23.19	22.01	23.08	25.89
Himachal Pradesh	40.06	37.47	35.34	33.70
Jammu and Kashmir	45.30	48.11	43.90	50.41
Manipur	55.70	53.65	55.61	52.44
Meghalaya	40.58	35.74	32.93	39.02
Mizoram	77.90	76.85	72.15	75.94
Nagaland	67.27	57.24	45.71	42.15

Sikkim	74.49	77.17	75.10	78.74
Tripura	44.93	40.86	37.41	36.83
Uttaranchal			23.51	30.52
All special category States	37.15	36.60	33.45	36.48
14 non-special category states	18.38	17.35	20.33	19.74

Public expenditure as a percentage of GSDP was as high as 77.90 percent and 74.40 percent in 1991-95 in Mizoram and Sikkim respectively. The lowest was observed in Assam (23.19 percent) in the same period.

Table 1.4 reveals that, the importance of public expenditure in GSDP declined consistently up to 2000-05, in special category states and increased in non-special category states. However, in 2005-09 the reverse has occurred. The important point is that, the importance of public expenditure in the GSDP of special category states is almost doubled that of non-special category states.

In Himachal Pradesh, Jammu and Kashmir, Meghalaya and Tripura, it ranged from 40 percent to 50 percent in 1991-95. In the states like Arunachal Pradesh, Mizoram, Nagaland and Sikkim, it was higher than 60 percent. In 2005-09, in three states namely Arunachal Pradesh, Mizoram and Sikkim the ratio was more than 70 percent. Between 1991-95 and 2005-09, more than 18 percentage point's increase in the ratio was observed in Arunachal Pradesh. In Himachal Pradesh, Manipur, Mizoram, Nagaland and Tripura the ratio declined and in other states, increased in the same period.

Thus, one may conclude that over time the importance of public expenditure in aggregate GSDP of special category state has declined and the lowest importance was in the period 2000-05. However, in five states, namely Arunachal Pradesh, Jammu and Kashmir, Manipur, Mizoram and Sikkim the importance of public expenditure in GSDP still continues.

#### 1.4 Rise in Public Debt of the States

The importance of public expenditure in the economy of the special category states can be judged from the previous section. With the rise in the role of the government in delivering various services, the states are borrowing from various sources to meet their requirements.

Table 1.5

Debt as a Percentage of GSDP

Name of States	Year	Year
	1991-92	2008-09
Arunachal	46.24	66.82
Assam	36.16	24.80
Himachal	39.53	58.78
Jammu and Kashmir	80.70	69.10
Manipur	47.86	58.60
Meghalaya	20.70	36.08
Mizoram	53.27	96.61
Nagaland	47.26	40.60
Sikkim	59.83	78.60
Tripura	38.83	43.80
Uttarakhand	-	39.22

Table 1.5 shows growth in public debt in all the states. In 1991-92, only Mizoram and Sikkim had Debt-GSDP ratio above 50 percent. In 2008-09, except Assam, Meghalaya, Tripura and Nagaland, rest of the states had Debt-GSDP ratio above 50 percent. The 12<sup>th</sup> Finance Commission recognized the tolerable limit of the ratio as 28 percent and recommended all the states to reduce their respective ratios to 28 percent by 2009-10. In this context, only Assam had the tolerable limit of 26.80 percent in 2008-09. Therefore, it is important to analyse the debt-sustainability problem of the states in a greater detail.

With the above background the study is divided into following Chapters:

Chapter-I : Introduction

Chapter-II : Conceptual Framework

Chapter-III : Indicators of Debt and its Changing Composition

Chapter-IV : **Overview of Public Finance** 

Chapter-V : Sustainability of Public Debt and Conclusion

# Chapter-II Conceptual Framework

#### 2.1 Review of Literature

They are also constrained with imposition of taxes as there are a few items left to them to tax. They cannot borrow from other countries. Due to increase in public expenditure they incur fiscal deficit. Keynesian economists view this as growth promoting, while neo-classical and Ricardian School views this as detrimental to growth.

In the neo-classical views, revenue deficit is dis-saving and has adverse effect on growth, if reduction in saving is not offset by private investment. Perhaps, in the context of special category states, the neo-classical argument seems to be appropriate, where private investment is very low under the situation, when deficit is meant for current consumption.

In a situation, when government borrows, it is liable to pay back the principal with interest in future. Debt sustainability analysis is based on the logic that, when the government fails to pay back the loan, the government becomes insolvent. So the concept of debt-sustainability relates to the ability of the government to service its debt obligations in perpetuity without explicit default (Burnside, 2004). Thus, solvency requires that with a finite time horizon, public debt in the last period becomes non-positive (Rangarajan and Srivastava, 2005). This implies, present value of future debt becomes zero. This is possible if the government is efficient.

By using the neo-classical view, the issue of solvency in the context of India was analysed by Buiter and Patel (1992). They found out the criterion of solvency as, 'if the rate of growth of public debt is more than real interest rate, then the government becomes insolvent'. Subsequent studies related to sustainability of central government debt was done by Patnaik (1996), Lahiri and Kannan (2000), Achaya (2001) and Ahluwalia (2002). At the state level however a few studies are available. The notable among them are studies by Rajaraman et al. (2005), Dholakia et al. (2004), Rath (2004) and Elena Ianchovichina et al (2007). The study by Rath (2005) was on Orissa and that of Elena Inachovichina et al. (2007) was on Tamilnadu with the neo-classical framework. The study of Elena Inachovichina used uncertainty in his analysis to make the analysis more comprehensive. Rajaraman et al. (2004) found that, interest rate on public debt crossed the nominal growth rate of GSDP during 1997-02, which resulted in debt un-sustainability of the states. They also dealt with the special category states and recommended different solutions for achievement of primary surplus for a stable Debt-GSDP ratio in future. They also argued for expenditure compression and improvement in own revenue collection effort to overcome the problem. The study recommended improvement of tax effort for Manipur, Mizoram and Nagaland, compression of non-interest revenue expenditure growth to all states, raising return on capital outlay to all states except Assam and raising interest receipt on loans to 5 per cent to all states to solve the problem.

The study by Dholakia *et a.l.* (2004) was conducted for the 12<sup>th</sup> Finance Commission on fiscal sustainability of Debt of all states. By following the neoclassical approach, they identified the growth rate in GSDP required for all the states including the special category states to achieve a tolerable Debt-GSDP ratio in 2009-10. In the special category states, recommended growth rate by them ranged from 22.5 per cent in Mizoram to 3.4 per cent in Sikkim. Finally, they

argued that growth alone will not solve the problem of debt sustainability and recommended compression of primary expenditure using different scenarios.

In the special category states, particularly the northeastern states public expenditure plays a crucial role in the growth of GSDP (Sarma and Nayak 2006) and private investment is negligible. Thus, growth mainly comes from government spending. In a situation, where primary expenditure is compressed, automatically the victim is the developmental capital outlay, which ultimately results in reduction in growth. Therefore, to attain debt-sustainability, the present attempt aims at adopting the neo-classical treatment of the problem and to examine, how compression in public expenditure has led to compression in capital outlay which ultimately led to reduction in growth.

#### 2.2 Domar Model of Debt sustainability<sup>1</sup>

According to Domar (1944), the inter-temporal financing constraint of the sub-national government may be written as:

-

<sup>&</sup>lt;sup>1</sup> Domar analysis is the basis on which debt sustainability study is done. For a detail survey on the issue and latest literature please refer to Burnside (2004) and Ianchovichina, Lili Liu and Mohan Nagarajan (2007)

In order to attain solvency, present outstanding stock of public debt  $(D_0)$  must be equal to the sum of the discounted primary surplus of future years.

In other words:

$$Do = -\sum_{t=1}^{\infty} \frac{DEF_{t}^{p}}{(1+r)^{t}} \qquad (2)$$

By simplifying equation (1), we can write

$$D_{t} - D_{t-1} = DEF_{t}^{p} + r(D_{t-1})$$
But  $D_{t} = (1 + k)D_{t-1}$  (where, 'k' is the growth rate of public debt)
$$\Rightarrow D_{t-1} = (1 + k)^{-1}D_{t}$$

$$\Rightarrow (1 + k)D_{t-1} - D_{t-1} = DEF_{t}^{p} + r(D_{t-1})$$

$$\Rightarrow D_{t-1}(1 + k - 1) = DEF_{t}^{p} + r(D_{t-1})$$

$$\Rightarrow kD_{t-1} - r D_{t-1} = DEF_{t}^{p}$$

$$\Rightarrow DEF_{t}^{p} = (k - r)D_{t-1} \dots (3)$$

By using equation (3) in equation (2) we can write-

$$Do = -\sum_{t=1}^{\infty} \frac{(k-r)D_{t-1}}{(1+r)^{t}}$$

$$\Rightarrow Do = (r-k)\sum_{t=1}^{\infty} \frac{D_{t-1}}{(1+r)^{t}}....(4)$$

From equation '4' we can deduce that for  $D_0=0$ , the necessary condition is, r=k.

In other words, interest rate must be equal to growth rate of debt stock.

From equation (1), we can write that

$$D_{t} = DEF_{t}^{P} + D_{t-1} + r(D_{t-1})$$

$$\Rightarrow D_t = DEF_t^P + (1+r)D_{t-1}$$

$$\Rightarrow D_t = (1+r)D_{t-1} + DEF_t^P \dots (5)$$

By dividing both sides of the equation by  $Y_t(Y_t)$  is the GSDP in time, t), equation (5) may be written as

$$\frac{D_t}{Y_t} = \frac{(1+r)D_{t-1}}{Y_t} + \frac{DEF_t^{\ p}}{Y_t}...(6)$$

But,  $Y_t = (1 + g)Y_{t-1}$ , where 'g' is the growth rate of GSDP.

Therefore, equation (6) can be written as:

$$\frac{D_{t}}{Y_{t}} = \frac{(1+r)D_{t-1}}{(1+g)Y_{t-1}} + \frac{DEF_{t}^{p}}{Y_{t}}$$

$$\Rightarrow d_{t} = \left(\frac{1+r}{1+g}\right)d_{t-1} + P_{t}^{p} \dots (7)$$

Where 
$$d_t = \frac{D_t}{Y_t}, d_{t-1}, = \frac{D_{t-1}}{Y_{t-1}}, P_t^p = \frac{DEF_t^p}{Y_t}$$

Since targeted value of  $P_t^p$  is a constant term, equation (7) is a first order difference equation. By solving equation (7), we can write

$$d_{t} = \left(\frac{1+r}{1+g}\right)^{t} d_{0} - P_{t}^{p} \left(\frac{1+r}{1+g}\right)^{t} \left(\frac{1+g}{g-r}\right) + P_{t}^{p} \left(\frac{1+g}{g-r}\right) \dots (8)$$

So in the long run, when  $t \to \infty, d_t$  will tend to  $P_t^p \left(\frac{1+g}{g-r}\right)$ , only

when 
$$\left(\frac{1+r}{1+g}\right)^t \to 0$$
  

$$\Rightarrow 0 \le \frac{1+r}{1+g} < 1$$

$$\Rightarrow 1+r < 1+g$$

$$\Rightarrow r < g$$

In other words interest rate must be less than annual growth rate of GSDP. Therefore, for solvency and sustainability of public debt,  $k \le r < g$ , i.e. growth

rate of public debt  $\leq$  interest rate < growth rate of GSDP, when a sub-national economy is running by accumulating primary deficit.

In order to capture the impact of inflation on the above process we can use equation (8) after calculating 'r' and 'g' in real terms. 'g' is computed after dividing the GSDP at current price with GDP deflator.

The real 'r' = 
$$\left(\frac{R+1}{\wedge +1}\right) - 1$$

'r' and 'g' stands for real interest and growth rate respectively, 'R' is the nominal interest rate and ' $\land$ ' is inflation rate. Thus, by using real growth and interest rate we can forecast the future debt-GSDP of the states by using equation (7).

#### 2.3 Incremental Debt-GSDP ratio

The inter-temporal financing constraint of the sub-national government may be written as:

$$DEF_{t}^{P} = D_{t} - D_{t-1} - r(D_{t-1})....(1)$$

$$\Rightarrow D_{t} - D_{t-1} = DEF_{t}^{p} + r(D_{t-1})$$

By dividing both side by Y<sub>t</sub>

$$\Rightarrow \frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_t} = \frac{DEF_t^p}{Y_t} + \frac{rD_{t-1}}{Y_t}$$

But,  $Y_t = (1+g)Y_{t-1}$ , where 'g' is the growth rate of GSDP.

$$\Rightarrow \frac{D_t}{Y_t} - \frac{D_{t-1}}{(1+g)Y_{t-1}} = \frac{DEF_t^p}{Y_t} + \frac{rD_{t-1}}{(1+g)Y_{t-1}}$$

$$\Rightarrow \frac{D_t}{Y_t} = \frac{DEF_t^p}{Y_t} + \frac{D_{t-1}}{(1+g)Y_{t-1}} + \frac{rD_{t-1}}{(1+g)Y_{t-1}}$$

$$\Rightarrow \frac{D_t}{Y_t} = \frac{DEF_t^p}{Y_t} + \frac{D_{t-1}}{Y_{t-1}} \left( \frac{1}{1+g} + \frac{r}{1+g} \right)$$

$$\Rightarrow \frac{D_t}{Y_t} = \frac{DEF_t^p}{Y_t} + \frac{D_{t-1}}{Y_{t-1}} \left( \frac{1+r}{1+g} \right)$$

By subtracting  $\frac{D_{t-1}}{Y_{t-1}}$  from both side of above equation,

$$\Rightarrow \frac{D_{t}}{Y_{t}} - \frac{D_{t-1}}{Y_{t-1}} = \frac{DEF_{t}^{p}}{Y_{t}} + \frac{D_{t-1}}{Y_{t-1}} \left(\frac{1+r}{1+g}\right) - \frac{D_{t-1}}{Y_{t-1}}$$

$$\Rightarrow \frac{D_{t}}{Y_{t}} - \frac{D_{t-1}}{Y_{t-1}} = \frac{DEF_{t}^{p}}{Y_{t}} + \frac{D_{t-1}}{Y_{t-1}} \left(\frac{1+r}{1+g} - 1\right)$$

$$\Rightarrow \frac{D_{t}}{Y_{t}} - \frac{D_{t-1}}{Y_{t-1}} = \frac{DEF_{t}^{p}}{Y_{t}} + \frac{D_{t-1}}{Y_{t-1}} \left(\frac{r-g}{1+g}\right)$$

Thus, the left hand side of the equation gives us incremental Debt-GSDP ratio, which is dependent on  $\left(\frac{r-g}{1+g}\right)$ .

#### 2.4 Relationship between Gross Fiscal Deficit and Debt- GSDP ratio

In order to achieve the targeted Debt- GSDP ratio of 28 per cent in 2014-15, we have used the following methodology to calculate the targeted growth rate.

By using equation (1) we can write

$$FD_t = D_t - D_{t-1} (9)$$

Here,  $D_t$  and  $D_{t-1}$  stands for outstanding debt in the year, 't' and 't-1' respectively.

 $FD_t$ , is the fiscal deficit in the year't'.

$$\Rightarrow D_{t} = D_{t-1} + FD_{t}$$

$$\Rightarrow \frac{D_{t}}{Y_{t}} = \frac{D_{t-1}}{Y_{t}} + \frac{FD_{t}}{Y_{t}}$$

$$\Rightarrow \frac{D_{t}}{Y_{t}} = \frac{D_{t-1}}{(1+g)Y_{t-1}} + \frac{FD_{t}}{Y_{t}} \text{ (Here 'Y' is GSDP)}$$

$$\Rightarrow \frac{D_t}{Y_t} = \frac{D_{t-1}}{(1+g)Y_{t-1}} + \frac{FD_t}{Y_t}......10$$

By generalization, it can be written in the static form as:

$$\frac{D}{Y} - \frac{D}{(1+g)Y} = \frac{FD}{Y}$$

$$\frac{D}{Y} \left[ 1 - \frac{1}{1+g} \right] = \frac{D}{Y} \left[ \frac{g}{1+g} \right] = \frac{FD}{Y}$$

$$\Rightarrow \frac{Debt}{GSDP} = \left( \frac{1+g}{g} \right) * \left( \frac{FiscalDeficit}{GSDP} \right)....(11)$$

Further, the derived equation (9) can also be manipulated as follows:

$$FD_t = D_t - D_{t-1} \tag{9}$$

Here  $D_t$  and  $D_{t-1}$  stand for outstanding debt in the year, 't' and 't-1' respectively.

 $FD_t$  is the fiscal deficit in the year 't'.

$$D_{t} = D_{t-1} + FD_{t}$$

$$\Rightarrow D_1 = D_0 + FD_1$$

 $\Rightarrow$   $D_{\gamma} = D_1 + FD_1$ , if Fiscal deficit remains constant

$$\Rightarrow D_2 = D_0 + FD_1 + FD_1$$

$$\Rightarrow D_2 = D_0 + 2FD_1$$

In general, we can write (if Fiscal Deficit is a constant term over the entire period)

$$\Rightarrow D_{t} = D_0 + t(FD_0)$$

By dividing both side of the equation by  $Y_0$ , we can write,

$$\frac{D_{t}}{Y_{0}} = \frac{D_{0}}{Y_{0}} + \frac{t(FD_{o})}{Y_{0}}$$

$$\Rightarrow \frac{D_t}{Y_t} (1+g)^t = \frac{D_0}{Y_0} + \frac{t(FD_0)}{Y_0} \dots (12)$$

Where, 'g' is the growth rate of GSDP and 't' is the time.

#### 2.5 Measurement of Deficit:

The present attempt has basically followed the following definitions:

- (i) Gross fiscal Deficit = Total Expenditure Recovery of Loan and advances - Revenue receipts - Non-debt capital receipts -Repayment of loan excluding repayment for WMA (Ways and means Advance from RBI).
- (ii) Primary Deficit = Gross Fiscal Deficit Interest payment.

Total expenditure = Revenue Expenditure + Capital Expenditure.

Revenue Expenditure = Developmental expenditure + Non-developmental

expenditure + Grants-in-aid contribution +

Compensation and Assignment to Local Bodies

and Panchayati Raj Institution.

Capital expenditure = Total capital outlay (Developmental + Non-

Developmental) + Discharge of Internal debt

(excluding WMA to RBI) + Repayment of Loan

to the Centre + Loan and Advance by the State

Government.

Revenue Receipts = Tax Revenue (Own Tax Revenue + Share in

Central Taxes) + Non-tax Revenue (Own Non-

Tax Revenue + Grants from the Centre).

#### 2.6 Outstanding Debt Stock:

Total outstanding liability of the State government is given in the study of State Finance 2008 of Reserve Bank of India (RBI, 2008). There total outstanding liability is computed as follows:

Total outstanding Liabilities = State Development Loans + Power Bond + Compensation + NSSF + Ways and Means advance from RBI + Loans from Bank and Financial Institutions + Loans from Centre + Provident Fund + Reserve Fund + Deposit and Advance + Contingent Fund.

From the total outstanding liabilities, total outstanding debt stock can be found out by deducting WMA from RBI, by following Dholakia *et al.* (2004).

#### 2.7 Sources of Data

#### **Budget data**

We have obtained various budgetary statistics from Handbook of Statistics on State Finance (RBI, 2004) for accounts data from 1991-92 to 2001-02. For the data from 2002-03 to 2007-09 we have taken the accounts data of different states from study of State Finance 2004, 2005, 2006,2007 and 2008 from RBI website. The data related to 2007-08 and 2008-09 refers to revised and budgeted respectively. For rest of the years, i.e. from 1991-92 to 2006-07, the data are of accounted or actual data.

#### **GSDP** Data

The details on GSDP data of various years are available with Central Statistical Organization. It is also available in their website. They have two series of data pertaining to our period of analysis. First one is available with base 1993-

94 to 1999-2000, and the second one with base 1999-2000. Since our analysis period is 1991-2009, it is difficult to use two sets of data with different base and to come out with a meaningful conclusion. Again the problem with CSO is that for some states, GSDP data is not available after 2004-05. Therefore we have an alternative with Reserve Bank of India published, 'State Finances: A Study of 2008-09', (RBI, 2008), where statement 27 and 28 gives data on, outstanding liability of the State Governments in Rupees and as a percentage of GSDP respectively for the period 1991-92 to 2008-09. Therefore, by dividing given outstanding liability, by outstanding liability as a proportion of GSDP, we can find out the GSDP of the States for different years. Again, by cross-checking with the data available with CSO, it was found that the computed GSDP figures are at current price. Further, it was noted that the computed GSDP for the period 1991-92 to 1998-99 are at the base 1993-94 and that of 1999-2000 to 2008-09 are of the base 1999-2000. We have used the data carefully and in the analysis we have avoided comparing budgetary statistics as a percentage of GSDP of period 2000-09 with 1991-2000. But in case of growth rate of GSDP used in debt sustainability analysis of chapter-V, we have converted the 1991-99 GSDP data to 1999-2000 base, by splicing method and computed the respective growth rate.

The GSDP data used in chapter-I in the growth of GSDP and its different sub-sectors for the period 1999-05, we have used the CSO data (at constant price) directly.

For the conversion of current price GSDP and budgetary statistics to constant price, we have used national GDP deflator because price data is not available for all the states uniformly.

#### 2.8. A Note on Data on Sikkim

In case of Sikkim, the receipt from lottery selling is taken as non-tax revenue. The expenditure incurred due to prize money and other expenditure due to lottery is kept as miscellaneous revenue expenditure. Therefore, if the total expenditure or revenue is taken as given in the budgetary statistics, it becomes more than 100 percent of GSDP and comparison with other states makes it erroneous. Therefore, we have netted out the expenditure in lottery head from the receipts from lottery and put the amount as non-tax revenue to make the budgetary parameter more relevant.

#### **Chapter-III**

# **Indicators of Debt and its Changing Composition**

#### 3.1 Introduction

It is clear from the introduction chapter that in many of the states Debt-GSDP ratio is alarmingly high. In order to understand the extent of the problem and the underling causes of high Debt-GSDP ratio, inter temporal behaviour of the following ratios is examined:

- (i) Revenue expenditure to Revenue receipts;
- (ii) Interest Payment to Revenue accepts;
- (iii) Interest Payment to own Revenue receipt;
- (iv) Gross Fiscal Deficit to GSDP;
- (v) Primary Deficit to GSDP; and
- (vi) Debt to GSDP.

Further, the changing composition of outstanding debt stock is also analysed.

# 3.2 Revenue Expenditure to Revenue Receipts

Revenue Expenditure to Revenue Receipts is an indicator, which explains the extent to which Revenue Receipts contributes to capital formation in the economy. It also explains the extent of borrowing used for current expenditure.

In 1991-95, except two states, Himachal Pradesh and Nagaland- all the states had the ratio less than 100 percent (table A 3.1). It implies that some part of current revenue was used to finance capital expenditure in those states where the ratio was less than 100 percent. Contribution of current revenue to capital expenditure was as high as 30.24 percent in Arunachal Pradesh. In Jammu and

Kashmir and Mizoram the contribution was 13.16 and 15.30 per cent respectively. In Assam, Meghalaya, Sikkim and Tripura, it was ranging in between 5 to 10 percent.

In the period 1995-2000 (which corresponds to the award period of 10<sup>th</sup> Finance Commission) the situation deteriorated in all states except Tripura, where a marginal improvement was observed. Reduction of this ratio means lesser contribution of current revenue to capital expenditure. In Assam, Himachal Pradesh and Nagaland, revenue expenditure became more than 100 percent of revenue receipts. In other words capital receipt was used to finance revenue expenditure.

In 2000-05, further deterioration in the ratio took place in eight states namely Arunachal Pradesh, Assam, Himachal Pradesh, Manipur, Meghalaya, Mizoram and Uttarakhand. Improvement in the ratio took place in Jammu and Kashmir, Nagaland and Sikkim. In five states i.e. Assam, Himachal Pradesh, Manipur, Mizoram and Uttarakhand the ratio was more than 100 percent.

In the period 2005-09, improvement took place in all the states. Thus, in 2005-09, all the states maintained revenue surplus.

# 3.3 Interest to Revenue Receipt Ratio

This ratio explains the debt obligations of the states. If the ratio increases, productive investment suffers. In the special category states the ratio is not high because of central inflow (Table A 3.2). The table reveals that between 1991-95 and 2000-05, the ratio increased in 9 states. Only in Jammu and Kashmir there was a marginal decline. In 2005-09 decline in the ratio was observed in all states as compared to the period 2000-05. However, in 2000-05 the ratio was abnormally high in Himachal Pradesh (32.18 percent) and Uttarakhand (19.40 percent).

### 3.4 Interest to Own Revenue receipts Ratio

Since the special category states are highly dependent on central inflow, interest to own revenue ratio gives a clear picture about debt obligation met from their own resources. Past borrowing is responsible for the present interest payment. A prudent fiscal policy prescribes that own revenue should be able to meet the present interest obligations.

Continuous deterioration was observed in the ratio in 1995-2000 as compared to 1991-95 in eight states (Table A 3.3). Only in Jammu and Kashmir a marginal improvement was noticed. In 2000-05, deterioration took place in six and marginal improvement was observed in Assam, Jammu and Kashmir, Sikkim and Tripura. In 2005-09 position of all the states improved as compared to 2000-05. However in Mizoram and Nagaland the ratio continued to be above 100 percent. The implication is that, the states were not able to meet the interest payment from their own resources and central inflow was used for interest payment.

#### 3.5 Gross Fiscal Deficit to GSDP ratio

Using Domar specification, the relationship between Debt-GSDP ratio and Fiscal Deficit can be derived as (it is derived in Chapter-II)

$$\frac{Debt}{GSDP} = \left(\frac{1+g}{g}\right) * \left(\frac{GFD}{GSDP}\right) .....3.1$$

Here, GFD is Gross Fiscal Deficit and 'g' is the growth rate of GSDP.

Thus, given the growth rate, Debt-GSDP ratio is dependent on Gross Fiscal Deficit-GSDP ratio.

In 1991-95 Gross Fiscal Deficit was more than 10 percent of GSDP in Nagaland and Sikkim and below 3 percent in Arunachal Pradesh, Assam and Manipur (Table A 3.4). It was above 5 percent in Meghalaya, Himachal Pradesh and Tripura. During 1995-2000, it increased in all states except Tripura and Meghalaya. Four states, namely Manipur, Mizoram, Nagland and Sikkim experienced more than 10 percent of the ratio. Except in Assam, Meghalaya and Tripura, the ratio was more than 5 percent. In 2000-05, in Manipur, Nagaland and Sikkim the ratio turned out to be single digit figure but stood above 5 percent mark. Arunachal Pradesh, Himachal Pradesh and Mizoram continued with more than 10 percent of Gross Fiscal Deficit-GSDP ratio. In 2005-09, the ratio improved in all the states. It was more than 5 percent in the states of Jammu and Kashmir, Mizoram, and Uttarakhand. In case of Arunachal Pradesh it became -0.36 percent of GSDP.

Despite the improvement in Gross Fiscal Deficit in many of the states Debt- GSDP did not improve. To have some analysis the states are classified as given in table 3.1 below.

Table 3.1

Classification of States by Gross Fiscal Deficit and Growth rate of GSDP

States with High	States with High	States with low	States with low	
Gross Fiscal	Gross Fiscal	Gross Fiscal	Gross Fiscal	
Deficit and low	Deficit and high	Deficit and	Deficit and Low	
growth rate growth rate		moderate growth	growth rate	
		rate		

Jammu	and	Himachal	Arunachal	Meghalaya and
Kashmir and		Pradesh,	Pradesh and	Assam
Mizoram		Manipur,	Sikkim	
		Nagaland,		
		Tripura, and		
		Uttarakhand		

The states with High Fiscal Deficit and Low growth rate are experiencing a high Debt-GSDP ratio. The states are Jammu and Kashmir and Mizoram. Here the high Debt-GSDP ratio is basically because of high GFD and low growth rate.

The states with high growth and high gross fiscal deficit are Himachal Pradesh, Manipur, Nagaland, Tripura and Uttarakhand. Here the high Debt-GSDP ratio is because of there historic high Gross Fiscal Deficit. The states with low gross fiscal deficit and moderate growth rate are Arunachal Pradesh and Sikkim. The high Debt-GSDP ratio is because of their historic high gross fiscal deficit. The states with low fiscal deficit and low growth rate are Assam and Meghalaya. Here, the present Debt-GSDP ratio is because of low growth rate. Thus, there exists a clear relationship between growth rate of GSDP and Debt-GSDP ratio, via Fiscal Deficit.

#### Required Growth rate to achieve targeted Debt-GSDP ratio of 28 percent

By taking the terminal year as 2014-15 and base year 2005-09, we can compute the required growth rate to achieve Debt-GSDP ratio of 28 percent in 2014-15<sup>2</sup>. The underlying assumptions under different scenarios are as follows. (i) Under scenario-I, the achieved Gross Fiscal Deficit-GSDP of 2005-09 is maintained in the subsequent years and (ii) under scenario-II, the FRBM committed Gross Fiscal Deficit of 3 percent is

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<sup>&</sup>lt;sup>2</sup> Please refer to 12<sup>th</sup> Finance Commission Report, page 69-71.

maintained in all the subsequent years. So time 't' is equal to 6. Thus, the equation (12 of Chapter-II) can be written as:

$$Z.(1+g)^6 = X + 6FD$$

Where **Z**= Debt-GSDP ratio in the terminal year i.e 2014-15, 'g'= growth rate of GSDP, **X**= base year Debt-GSDP ratio and **FD** is the achieved Gross Fiscal Deficit-GSDP ratio of 2005-09 and is a constant term over time.

$$\Rightarrow (1+g)^6 = \frac{X+6FD}{Z}$$

$$\Rightarrow (1+g) = \left\{ (X+6FD)/Z \right\}^{1/6}$$

$$\Rightarrow g = \left\{ (X+6FD)/Z \right\}^{1/6} - 1 \dots (3.2)$$

By simulating the equation (3.2) we can predict the required growth rate to achieve Debt-GSDP of 28 percent in the year 2014-15 under the two scenarios. Table 3.2 gives the detail. Following conclusions can be derived from table 3.2.

**Under scenario-I**: Here the states are expected to maintain the achieved Gross Fiscal Deficit of 2005-09 in the subsequent years, i.e from 2009-10 to 2014-15. Only Assam seems to achieve the targeted Debt-GSDP ratio of 28 percent in 2014-15 (column-5). In other states the required growth rate is quite high. It is as high as 25.25 percent for Mizoram and 25.5 percent for Jammu and Kashmir. In other states the required growth rate ranges in between 10 to 20 percent per annum.

**Under scenario-I:** Here, the states are expected to maintain their committed Gross Fiscal Deficit of 3 percent of GSDP as per FRBM act in the subsequent years, i.e from 2009-10 to 2014-15. None of the state seems to achieve the targeted growth rate in GSDP (column-7). The required growth rate is as high as 28.00 percent for Mizoram and 21.91 percent for Sikkim. In other states the required growth rate ranges in between 10 to 20 percent per annum.

Thus, the above projected growth seems to be quite high which can never be achieved by any state in India in near future. Therefore, we are to analyze the entire problem taking a holistic view, which is discussed in chapter-V.

Table 3.2

Growth Rate required to achieve Debt-GSDP Ratio of 28 percent under different scenarios

States	Average	Targeted	Achieved	Real	Achieved	Real Growth
	Gross	Debt- GSDP	Debt-	required	Growth	rate required,
	Fiscal	ratio of	GSDP	Growth	rate	if Gross
	Deficit to	the year 2014-15	ratio	Rate (%)	(real)	Fiscal Deficit
	GSDP		(2005-09)	under the		remains at
	ratio			assumption-		3% of GSDP
	achieved			1		for all the
	(2005-					subsequent
	09)					years
1	2	3	4	5	6	7
Arunachal						
Pradesh	-0.0092	0.28	0.690	14.62	5.08	20.80
Assam	0.0136	0.28	0.289	4.79	5.7	8.98
Himachal		0.28				
Pradesh	0.0404		0.624	20.70	8.02	19.21
Jammu &		0.28				
Kashmir	0.0633		0.691	25.05	6.59	20.83
Manipur	0.0360	0.28	0.656	20.85	6.8	20.00
Meghalaya	0.0154	0.28	0.386	9.33	6.54	12.44
Mizoram	0.0679	0.28	1.052	31.67	5.82	28.00
Nagaland	0.0538	0.28	0.427	17.83	7.86	13.76
Sikkim	-0.0031	0.28	0.739	17.06	7.57	21.91
Tripura	0.0294	0.28	0.505	15.98	8.01	16.08
Uttarakhand	0.0424	0.28	0.425	15.92	7.83	13.69

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### 3.6 Primary Deficit to GSDP ratio

This indicator explains the fiscal pressure on the government since interest payment is obligatory. It is the necessary condition that explains the behaviour of Gross Fiscal Deficit-GSDP ratio and Debt-GSDP ratio in the long run. Improvement in primary Deficit-GSDP improves the Gross Fiscal Deficit-GSDP ratio. It also explains the time path of Debt-GSDP ratio.

In 1991-95 four states namely Arunachal Pradesh, Assam, Jammu and Kashmir and Manipur had primary surplus (negative sign indicates surplus in table A 3.5). Primary Deficit to GSDP ratio was relatively high in Himachal Pradesh, Meghalaya, Nagaland and Sikkim. In Mizoram and Tripura, it was relatively less.

In 1995-2000, deterioration in the ratio was observed in Arunachal Pradesh, Himachal Pradesh, Jammu and Kashmir, Manipur, Mizoram and improvement in Assam, Meghalaya, Nagaland, Sikkim and Tripura. It was around 4 percent and above, in the states of Himachal Pradesh, Manipur, Mizoram, Nagaland and Sikkim.

In 2000-05, deterioration took place in six states (Arunacahl, Assam, Jammu and Kashmir, Meghalaya, Mizoram and Tripura). Improvement took place in Himachal Pradesh, Manipur, Nagaland and Sikkim. In Uttarakhand it was moderate.

In 2005-08, improvement in the ratio took place in nine states and deterioration in Jammu and Kashmir and Nagaland. Among the improved states, Arunachal Pradesh, Assam, Himachal Pradesh, Manipur, Meghalaya, Sikkim, Tripura and Uttarakhand had primary surplus.

The trend in Primary-Deficit to GSDP ratio suggests that, the states that experienced deterioration in Primary Deficit to GSDP ratio in 1995-2000 and/or 2000-05, had abnormally high Debt- GSDP ratio in 2005-09.

Another trend that is coming out from the analysis is that, the states that had Primary Deficit- GSDP ratio of 4 percent or above in either/both, in the period 1995-2000 or 2000-05, had abnormally high Debt- GSDP ratio in 2005-09. This is true in the case of Arunachal Pradesh, Himachal Pradesh, Manipur, Mizoram, and Sikkim. The trend suggests that borrowing of the period 1995-2005 is the main reason behind the present debt position of the states.

#### 3.7 Debt- GSDP ratio

The outcome of the above five indicators is the Debt- GSDP ratio. Table A 3.6, gives the details. In 1991-95 and 1995-2000, six out of ten special category states had the ratio below 45 percent. In Himachal Pradesh and Mizoram only a substantial increase (more than 10 percent) of the ratio was observed in 1995-2000 as compared to the previous period. Thus, 2000-05 is the critical period, where significant increase in the ratio took place in all the states as compared to 1995-2000.

The percentage points increase in the ratio was significant in the states of Arunachal Pradesh (16.42 points), Himachal Pradesh (17.73 points), Manipur (16.46), Meghalaya (9.12 points), Mizoram (30.14 points), Nagaland (5 points), Sikkim (24.13 points). and Tripura (11.38 points). When we compare the percentage point increase in the ratio between 1995-2000 and 2000-05 with that of outstanding Debt-GSDP ratio of 2005-09, then the following conclusion emerges.

"The states, that had the maximum increase in the ratio in 1995-2000 and/or 2000-05, had the maximum Debt-GSDP ratio in 2005-09".

Thus, the period 1995-2000 and 2000-05 is the bench mark period in which significant deterioration in the debt-GSDP ratio of the states took place in all the states. For the states like Himachal Pradesh and Mizoram the problem started in the period 1995-2000.

### 3.8 Changing composition of Outstanding Debt

Outstanding liability of the states can be broadly grouped under three categories i.e. (i) Total internal debt comprising market loan, NSSF and loan from the financial institution; (ii) Loan from central government; and (iii) Public accounts comprising Provident Fund, Reserve Fund, Deposit and Advance, and Contingency Fund. Prior to 1999-2000, securities issued under NSSF was kept under central government loan. After 1999-2000, NSSF came as a different heading.

Tables A 3.7 to A 3.10, give the changing composition of outstanding debt of the states over time. Due to definitional problem table A 3.7 is not comparable with others. However, liabilities under the Market Loan, Public Accounts and Loan from Financial institutions are comparable consistently over time. Changing composition of each and every sub-component is discussed as follows:

Market Loan: Share of Market loan in total outstanding liability of all states has undergone a significant change over time during 1991-92 and 2007-08.<sup>3</sup> In Arunachal Pradesh, the share went up from 12.24 percent in 1991-92 to 23.60 percent in 2007-08. The change is same for all the states. Except Arunachal Pradesh, Tripura, Manipur and Mizoram share of market loan has become more than 30 percent in 2007-08. The maximum was observed in Nagaland (57.99 percent). In Mizoram, the share went up from 0 percent in 1991-92 to 25.71

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<sup>&</sup>lt;sup>3</sup> Time period refers to 31<sup>st</sup> March of the year indicated.

percent in 2007-08. In Tripura a marginal increase of 3 percentage points took place in the same period and was 20.98 percent in 2007-08. Thus, over time market loan is gaining importance in the states.

Loan from Financial institutions: Under this head also a significant change in share was observed during 1991-92 and 2007-08 in the states of Arunachal Pradesh, Assam, Himachal Pradesh, Meghalaya, Mizoram and Nagaland. A decline in share was observed in Manipur, Sikkim and Tripura. However, the importance of this component, found to be significant in Himachal Pradesh, Jammu and Kashmir, Mizoram and Nagaland. The share was less than 10 percent in other states.

**NSSF:** As discussed above, NSSF became a separate head in the debt accounting system in 1999-2000. Therefore, here the analysis will pertain to the period 2000-01 and 2007-08.

In 2000-01, NSSF had a small share, ranging in between 0-2 percent in all states except Assam. In 2007-08, the share became 20 percent and more in Arunachal Pradesh, Assam, Himachal Pradesh and Tripura. In Manipur, it became 14.91 percent and in rest of the states it was less than 10 percent.

Loan and Advance from the Central government: Central government's Loan and Advance to the states was around 45 percent and above in Arunachal Pradesh, Assam, Jammu and Kashmir and Uttarakhand in 2000-01. It was ranging in between 30-39 percent in Himachal Pradesh, Manipur, Mizoram, Nagaland Sikkim and Tripura and 27 percent in Meghalaya in the same time. In 2007-08, there was a drastic fall in the share in most of the states. In the states of Arunachal Pradesh and Manipur, it was around 20 percent in 2007-08 and in Assam, Jammu and Kashmir, Meghalaya, Mizoram, Nagaland, Sikkim and

Tripura the range was in between 10-13 percent. In Himachal Pradesh and Uttarakhand, the share was 5 percent and below.

Thus, in 2007-08, a drastic fall in the share of Central government loan in total outstanding debt liability took place. This was basically due to conversion of high interest rate bearing central loan by low interest loan from the market and financial institution. Further, it happened because of 12<sup>th</sup> Finance Commissions' incentives.

Public Accounts: Share of Public accounts in total debt liability was 30 percent and above in the states of Arunachal Pradesh, Himachal Pradesh, Manipur and Mizoram in 1991-92. The maximum was in Mizoram (44.17 percent) and minimum in Assam (7 percent). In 2007-08, a decline in the importance was observed in Arunachal Pradesh (8 percentage points), Himachal Pradesh (2 point) and in other states, an increase. The states like Assam, Himachal Pradesh, Jammu and Kashmir, Meghalaya, Sikkim and Uttarakhand had a share ranging in between 20-30 percent in total debt-liability. Mizoram and Tripura had the maximum around 45-46 percent and the minimum was observed in Nagaland.

Thus, over time the importance of Loan and Advance from the Central Government is declining fast and the states are dependent more on the market for their borrowing requirements, and there is also a significant deterioration in Debt-GSDP ratio. Therefore, it is important to examine the debt sustainability of the States using a scientific framework developed in chapter-II.

Revenue Expenditure to Revenue Receipt Ratio **Table A 3.1** 

SI.	2040	1991-95	1995-00	2000-05	2005-06	2006-07	2007-08	2008-09	2005-09
No.	States	Average	Average	Average	Total	Total	Total	Total	Average
1	Arunachal Pradesh	92.69	76.94	94.62	90.17	73.19	79.88	75.91	78.69
2	Assam	95.24	102.60	108.19	87.47	83.83	99.48	90.30	90.87
3	Himachal Pradesh	105.76	116.43	133.83	98.59	97.56	100.57	99.26	99.02
3	Jammu & Kashmir	82.84	93.42	90.39	84.26	84.03	84.06	77.87	82.30
5	Manipur	81.91	98.63	104.27	83.21	84.35	62.89	68.50	74.78
9	Meghalaya	92.21	93.27	97.87	95.85	89.04	84.31	85.89	87.65
7	Mizoram	84.70	92.64	106.66	96.03	87.22	83.55	91.65	89.14
∞	Nagaland	106.37	102.40	92.50	88.06	87.78	85.09	82.00	88.00
6	Sikkim	86.83	95.91	81.72	81.92	80.97	73.64	49.21	66.41
10	Tripura	68:56	93.67	96.27	79.08	74.48	80.76	81.53	79.17
11	Uttarakhand	ı	ı	115.50	101.34	87.84	88.05	82.84	88.59
12	14 Non Special Category States*	106.95	119.40	126.46	103.30	96.72	97.25	86.76	98.48
Note:	Note: (1) Data of 2007-08 and	d 2008-09 refers to Revised Estimate and Budgeted respectively	ers to Revis	ed Estimate	and Budge	ted respect	ivelv		

Note: (1) Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively (2)\*\* 14 Non Special Category States are Andhra Pradesh, Bihar, Gujrat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharastra, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh and West Bengal.

Interest Payment to Revenue receipt Ratio Table A 3.2

SI.	Ctotos	1991-95	1995-00	2000-05	2005-06	2006-07	2007-08	2008-09	2005-09
No.	States	Average	Average	Average	Total	Total	Total	Total	Average
1	Arunachal Pradesh	5.01	7.12	10.72	90.6	7.74	6.04	6.18	6.94
2	Assam	13.99	15.20	17.49	13.73	12.38	11.84	9.10	11.37
3	Himachal Pradesh	15.72	17.29	32.18	23.83	21.31	22.10	19.46	21.48
3	Jammu & Kashmir	17.89	14.26	14.26	11.27	10.03	14.62	10.45	11.63
5	Manipur	8.39	9.82	16.46	98.6	10.09	8.16	8.60	90.6
9	Meghalaya	6.71	8.60	11.77	11.41	9.91	7.31	6.59	8.24
7	Mizoram	5.02	8.52	13.32	11.53	11.97	8.24	9.84	10.23
8	Nagaland	11.14	12.23	13.10	11.20	12.31	9.84	10.72	10.89
6	Sikkim	9.53	10.98	11.62	10.44	10.55	8.58	5.45	7.97
10	Tripura	06.6	11.20	14.40	13.58	12.25	11.64	9.61	11.59
11	Uttarakhand	ı	ı	19.40	17.20	14.91	14.01	12.47	14.26
12	14 Non Special Category States*	15.18	19.78	31.90	20.83	18.74	17.16	15.92	17.82
Note	Note: (1) Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively	and 2008-05	refers to R	evised Esti	mate and B	udgeted resp	pectively		

(2)\*\* 14 Non Special Category States are Andhra Pradesh, Bihar, Gujrat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharastra, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh and West Bengal.

Table A 3.3 Interest Payment to own Revenue Receipt Ratio (% of GSDP)

					,				
SI.	Ctotos	1991-95	1995-00	2000-05	2005-06	2006-07	2007-08	2008-09	2002-09
No.		Average	Average	Average	Total	Total	Total	Total	Average
_	Arunachal Pradesh	36.74	80.58	97.03	63.44	53.42	29.81	39.09	41.99
2	Assam	43.09	48.93	46.89	35.26	31.66	37.94	32.21	34.17
3	Himachal Pradesh	55.50	49.54	98.46	71.46	55.77	56.85	51.78	57.77
3	Jammu & Kashmir	117.46	98.86	76.13	53.80	47.95	61.87	42.05	51.06
5	Manipur	91.08	115.60	196.43	138.57	95.52	84.69	84.22	95.04
9	Meghalaya	41.87	48.61	28.73	86.64	43.38	46.25	41.82	44.99
7	Mizoram	64.92	123.39	183.27	108.85	117.29	98.36	113.71	109.57
8	Nagaland	115.36	155.94	188.28	125.48	133.08	130.02	134.89	131.10
6	Sikkim	49.81	28.59	92'09	43.50	36.82	44.39	38.14	40.38
10	Tripura	108.27	107.25	93.28	114.16	93.51	83.25	71.39	87.91
111	Uttarakhand	1	-	44.13	39.12	34.78	34.33	32.46	34.75
Note:	Note: (1) Data of 2007-08 and	d 2008-09 refers to Revised Estimate and Budgeted respectively	rs to Reviso	ed Estimate	and Budge	eted respect	ively		

Gross Fiscal Deficit (% of GSDP) Table A 3.4

SI.	States	1991-95	1995-00	2000-05	2005-06	2006-07	2007-08	2008-09	2005-09
No.	States	Average	Average	Average	Total	Total	Total	Total	Average
1	Arunachal Pradesh	1.45	5.07	11.89	8.57	-3.18	9.17	-14.77	-0.36
2	Assam	1.87	2.21	3.35	-0.62	-1.09	4.32	2.09	0.64
3	Himachal Pradesh	6.78	8.91	10.30	2.83	3.25	4.18	5.37	3.95
3	Jammu & Kashmir	3.43	5.54	5.22	5.93	5.02	8.10	6.10	6.31
5	Manipur	2.80	10.83	8.26	4.75	7.37	1.54	1.68	3.71
9	Meghalaya	5.24	4.17	4.60	2.76	1.06	1.10	1.40	1.56
7	Mizoram	4.23	10.79	15.80	14.72	6.40	4.21	3.59	7.29
∞	Nagaland	12.87	10.08	5.54	4.62	8.79	6.05	2.63	5.47
6	Sikkim	11.11	11.53	5.51	8.67	4.76	11.57	-20.78	0.49
10	Tripura	4.80	4.09	5.75	1.20	-1.27	4.32	6.30	2.23
11	Uttarakhand	ı	1	4.70	7.28	2.96	4.65	2.89	3.54
12	14 Non Special Category States*	3.22	4.18	4.15	3.11	2.36	2.68	2.64	2.69
Note	Note: (1) Positive sign indicates deficit and negative indicates surplus	s tivited definits	and negative	indicates en	renluc				

Note: (1) Positive sign indicates deficit and negative indicates surplus.

(2) Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively (3)\*\* 14 Non Special Category States are Andhra Pradesh, Bihar, Gujrat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharastra, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh and West Bengal.

Primary Deficit (% of GSDP) Table A 3.5

SI.	States	1991-95	1995-00	2000-05	2005-06	2006-07	2007-08	2008-09	2005-09
No.	States	Average	Average	Average	Total	Total	Total	Total	Average
1	Arunachal Pradesh	-1.82	09.0	5.94	2.96	-9.15	3.88	-20.45	-5.99
2	Assam	-0.76	-0.39	0.47	-3.50	-3.70	1.47	-0.43	-2.06
3	Himachal Pradesh	2.73	4.47	3.92	-3.31	-2.64	-1.25	0.30	-1.66
3	Jammu & Kashmir	-3.45	-0.17	-0.08	1.07	0.89	1.79	1.64	1.36
5	Manipur	-0.87	6.97	2.44	0.59	2.89	-2.50	-2.14	-0.40
9	Meghalaya	3.07	1.59	1.55	-0.31	-1.95	-2.01	-1.32	-1.41
7	Mizoram	0.65	5.43	8.81	7.65	-1.50	-1.70	-2.37	0.36
∞	Nagaland	7.72	4.82	0.64	0.79	5.04	2.34	-1.08	1.73
6	Sikkim	5.23	4.81	-2.09	2.06	-1.48	5.43	-26.44	-5.65
10	Tripura	1.04	0.23	1.52	-3.29	-5.24	09.0	3.12	-1.528
11	Uttarakhand		ı	1.71	3.59	-0.71	68.0	-0.37	-0.05
12	14 Non Special Category States*	1.12	1.79	0.78	0.13	-0.53	-0.07	0.07	-0.09
Note	Note: (1) Docitive cian indicates deficit and negative indicates cumulis	rates definit ar	artitus	indicates si	120				

Note: (1) Positive sign indicates deficit and negative indicates surplus.

(2) Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively (3)\*\* 14 Non Special Category States are Andhra Pradesh, Bihar, Gujrat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharastra, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh and West Bengal.

Table A 3.6 Debt as a percentage of GSDP (%)

SI.	Ctatos	1991-95	1995-00	2000-05	2005-06	2006-07	2007-08	2008-09	2005-09
No.	States	Average	Average	Average	Total	Total	Total	Total	Average
-	Arunachal Pradesh	35.79	38.41	54.83	72.02	68.91	69.16	66.82	69.01
2	Assam	32.50	28.26	29.69	32.00	29.80	28.00	26.80	28.91
3	Himachal Pradesh	40.72	50.65	64.38	68.40	63.75	60.37	58.78	62.36
3	Jammu & Kashmir	72.12	56.16	58.91	08.89	06.79	70.50	69.10	69.12
S	Manipur	45.15	41.42	57.88	75.50	06.89	62.80	58.60	65.60
9	Meghalaya	24.19	27.88	37.00	40.30	40.00	38.78	36.08	38.59
7	Mizoram	52.91	62.09	95.23	116.00	109.43	101.91	96.61	105.15
~	Nagaland	42.05	44.08	48.99	43.52	43.63	43.50	40.60	42.68
6	Sikkim	98.09	52.20	76.33	75.10	06.89	72.20	78.60	73.92
10	Tripura	42.14	37.71	49.02	58.60	54.10	48.40	43.80	50.51
11	Uttarakhand	ı	1	36.38	46.48	43.39	42.41	39.22	42.46
12	14 Non Special Category States	30.10	27.01	38.62	41.29	38.97	37.17	34.30	37.56
NToto:	M. 41 D. 42 24 2007 00	1 3 00 000 F	G .	1 1	יייי		•		

Note: (1) Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively

(2)\*\* 14 Non Special Category States are Andhra Pradesh, Bihar, Gujrat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharastra, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh and West Bengal.

Table A 3.7 Composition of Outstanding Debt of the Different States 1991-92

Market 1	et NISSE	Loan from Financi al	Total Intern al	Central Govt. Loan and	Provide	Reserve	Depos it and	Conti ngenc y	Total Outstandin g Debt (Without	0 1 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
(%)	(%)	ons (%)	(%)	(%)	(%)	(%)	ce (%)	(%)	Rs Crore	% of GSDP
12.24	0.00	0.00	12.24	47.20	11.54	0.00	29.02	0.00	286.00	46.24
6.01	0.00	0.91	6.92	85.94	3.70	0.91	2.45	0.09	4409.00	36.16
8.57	0.00	2.90	11.47	59.51	26.72	0.13	2.09	0.07	1482.00	39.53
4.91	0.00	15.57	20.48	63.60	11.13	3.07	1.71	0.00	3808.00	80.70
19.07	0.00	10.59	29.66	38.98	19.70	0.21	11.44	0.00	472.00	47.86
16.33	0.00	3.67	20.00	64.90	12.24	1.63	-1.22	2.45	245.00	20.70
0.00	0.00	8.13	8.13	47.70	68.6	0.00	34.28	0.00	283.00	53.27
27.52	0.00	13.30	40.83	46.10	18.58	0.00	-5.50	0.00	436.00	47.26
13.66	0.00	23.60	37.27	52.17	11.80	0.62	-1.86	0.00	161.00	59.83
17.57	0.00	11.25	28.82	46.40	21.27	0.00	3.34	0.18	269.00	38.83
13.61	00	1.5	15.81	55.74	13.81	4.03	10.58	0.72	132623	26.24

Table A 3.8 Composition of Outstanding Debt of the Different States 2000-01

	to la company		Loan from Financi	Total Intern	Central Govt.	D*************************************	Cymoso	Depos	Conti	Total Outstandi ng Debt (Without	1400
	Loan (%)	NSSF (%)	Instituti ons (%)	Debt (%)	Advance (%)	nt Fund (%)	Fund (%)	Advan ce (%)	y Fund (%)	WINES RBI) Rs Crore	Sof Sof GSDP
Arunachal Pradesh	10.29	0.14	1.53	11.96	56.33	36.58	2.23	-7.09	0.00	719.00	40.38
Assam	23.88	8.67	3.24	35.79	50.27	13.70	2.64	-2.55	0.16	9550.00	27.80
Himachal Pradesh	10.89	2.10	21.72	34.71	34.18	23.31	1.07	29.9	90:0	8586.00	57.38
Jammu & Kashmir	10.56	0.00	15.74	26.30	48.32	23.92	5.69	-4.23	0.00	9081.00	56.99
Manipur	15.22	1.12	4.37	20.71	34.25	34.87	0.87	9.30	0.00	1603.00	47.92
Meghalaya	27.31	0.00	5.33	32.64	27.09	15.06	0.86	23.92	0.43	1388.00	33.52
Mizoram	13.19	0.80	14.63	28.62	39.25	24.86	0.32	6.95	0.00	1251.00	65.00
Nagalaand	35.46	1.10	12.02	48.59	29.69	26.69	0.00	-4.97	0.00	1630.00	39.37
Sikkim	24.74	0.00	20.75	45.49	29.19	23.80	1.06	0.35	0.12	853.00	78.96
Tripura	18.82	0.00	7.54	26.36	32.78	39.96	-1.34	1.78	0.45	2242.00	37.33
Uttarakha nd	15.73	5.77	1.22	22.72	44.91	11.11	8.21	13.76	-0.71	4106.00	31.18
14 Non Special Category States	14.54	10.23	4.61	30.38	40.41	15.29	4.05	10.80	0.08	528244	34.11

Table A 3.9 Composition of Outstanding Debt of the Different States 2006-07

Market Loan (%)	NSSF (%)	Loan from Financi al Instituti ons (%)	Total Intern al Debt (%)	Central Govt. Loan and Advance (%)	Provide nt Fund (%)	Reserve Fund (%)	Depos it and Advan ce (%)	Conti ngenc y Fund (%)	Total Outstandi ng Debt (Without WMA RBI) Rs	Debt as a % of GSDP
19.27	21.43	8.60	49.27	20.66	22.77	5.06	2.25	0.00	2314	68.91
37.68	24.22	2.41	64.31	13.79	18.67	4.91	-1.94	0.26	19364	29.80
25.75	20.48	20.74	86.99	5.67	20.03	0.97	6.33	0.03	18040	63.75
25.14	15.89	18.74	59.76	10.49	20.52	5.74	3.48	0.01	19772	67.90
22.75	10.84	2.77	36.36	27.19	20.29	0.32	15.85	0.00	4436	68.90
40.19	9.90	7.06	57.15	12.91	13.59	2.02	14.15	0.21	2819	40.00
22.96	4.29	13.56	40.81	11.76	26.42	0.89	20.12	0.00	3266	109.43
54.38	3.47	16.49	74.33	12.86	15.60	-0.68	-2.15	0.00	3257	43.63
39.91	8.34	8.05	56.31	15.82	22.88	0.14	4.78	0.07	1403	68.90
21.84	19.96	4.19	46.00	9.99	42.05	0.38	1.40	0.18	5567	54.10
21.40	33.84	5.80	61.03	11.67	13.63	5.63	7.92	0.12	1256787	44.40
20.36	34.65	6.15	61.17	12.59	13.33	5.68	7.14	0.10	1131412	38.97

Table A 3.10 Composition of Outstanding Debt of the Different States 2007-08

Debt as a % of	69.16	28.00	60.37	70.50	62.80	39.40	103.37	42.37	72.20	48.40	42.41	37.17	
Total Outstandi ng Debt (Without WMA RBI) Rs	2614	20358	19306	22697	4568	3007	3399	3554	1659	5553	14659	1227189	
Conti ngenc y Fund	0.00	0.25	0.03	0.00	0.00	0.20	0.00	0.00	0.06	0.18	0.26	0.00	
Depos it and Advan	1.64	-1.84	5.92	1.67	14.27	13.17	16.45	-3.52	4.04	1.67	9.20	6.74	
Reserve Fund	4.48	4.67	0.91	5.57	0.31	1.90	0.74	-0.39	0.36	0.29	1.51	5.5	
Provide nt Fund	25.90	19.64	20.53	20.12	20.21	14.13	29.69	14.21	20.37	43.02	8.37	13.14	
Central Govt. Loan and Advance	19.01	12.70	5.01	10.92	21.19	11.67	11.30	11.79	13.08	9.51	3.40	12.13	
Total Intern al Debt	49.01	64.58	67.61	61.71	44.02	58.93	41.81	78.64	62.09	45.31	77.25	62.36	nate.
Loan from Financi al Instituti	5.47	2.98	16.90	17.27	2.78	6.82	11.97	17.45	8.14	4.27	8.74	6.10	vised Estin
NSSF (%)	19.93	23.08	19.83	13.96	14.91	9.58	4.12	3.18	6.93	20.08	31.26	35.84	fers to Re
Market Loan (%)	23.60	38.52	30.88	30.48	26.36	42.53	25.71	57.99	47.02	20.98	37.25	20.42	2007-08 rel
	Arunachal Pradesh	Assam	Himachal Pradesh	Jammu & Kashmir	Manipur	Meghalaya	Mizoram	Nagalaand	Sikkim	Tripura	Uttarakhand	14 Non Special Category States	Note: (1) Data of 2007-08 refers to Revised Estimate.

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### Chapter-IV Overview of Public Finance

#### 4.1 Introduction:

In the previous chapter, it was clear that Debt problem became acute in most of the states during the period 2000-05. Therefore, it is important to analyse the trend in public finance of these states historically. Here an attempt is made to understand the underlying causes of rising Debt-GSDP ratio with the framework follows:

### Framework:

We have derived from Domar model for debt sustainability, the following equation:

$$d_t = \left(\frac{1+r}{1+g}\right) d_{t-1} + P_t^p$$

Here  $d_t$  and  $d_{t-1}$  stands for Debt-GSDP ratio in time't' and't-1' respectively. 'r' and 'g' stands for rate of interest and growth rate of GSDP.  $P_t^P$  is primary deficit in time 't'.

Thus,  $P_t^P$ , i.e. primary deficit in time 't' is the addition made in the year 't' to the Debt-GSDP ratio of the year 't-1'. Therefore, the underlying causes behind primary deficit must be analysed to understand the factors behind growing Debt-GSDP ratio.

#### 4.2 Definitions:

Primary Deficit = Gross Fiscal Deficit-Interest payment

= (Primary Revenue Expenditure + Developmental Capital outlay + Non-Developmental Capital outlay + Loan and Advance by the State Government) – Primary Receipts.

Here, Primary Receipts = Own Tax and Non-Tax Revenue Receipts + Central inflow (Share in Central Tax + Grants) + Non-Debt Capital Receipts.

#### 4.3 Trend in State Finance 1991-95:

During 1991-95, growth rate of primary revenue receipts was less than one percent in Arunachal Pradesh, Manipur, Meghalaya and Nagaland. It was negative in Assam, Sikkim and Tripura. In Jammu and Kashmir, Himachal Pradesh and Mizoram, it was 10.24, 2.50 and 1.55 per cent respectively. Thus, revenue growth was low in all the states except Jammu and Kashmir. The poor performance of primary revenue receipts was mainly due to poor growth in central inflow in the states like Arunachal Pradesh, Manipur, Meghalaya, Nagaland and Tripura. In Assam and Sikkim low growth in revenue receipts was due to negative performance of own revenue and poor performance of central inflow. The relatively better performance of Himachal Pradesh can be attributed to better performance of own revenue. In Jammu and Kashmir growth of central inflow was the highest among all the states under consideration.

During this period, four states namely Arunachal Pradesh, Assam, Jammu and Kashmir and Manipur maintained primary surplus. Out of them, Assam and Manipur did compress their primary expenditure, and Arunachal Pradesh and Jammu and Kashmir did not. The states like Himachal Pradesh, Mizoram, Nagaland and Tripura had primary deficit which was mainly because of higher growth of primary expenditure than primary revenue receipts. Despite

compressing primary expenditure, Meghalaya could not achieve primary surplus. Thus, four states compressed their primary expenditure and six allowed their primary expenditure to grow positively. Therefore, it is important to analyse the contribution made by different components of primary expenditure to its growth. Table 4.1 gives the details.

# Factors contributing to the growth of Primary Expenditure and reasons of high gross fiscal deficit (for details see table 4.1 (a) & (b))

- In Arunachal Pradesh, developmental revenue expenditure was contributing 51 percent to the growth and was enjoying the same share in revenue expenditure. Non-developmental revenue expenditure was contributing less than the share. Developmental capital outlay was contributing 45.64 per cent to growth with a sectoral share of 21 percent. Thus, the main reason of primary expenditure growth was capital outlay in the states. However the state had primary surplus and with high interest payment of 3.27 percent of GSDP ended up with a gross fiscal deficit of 1.45 percent.
- In Assam, developmental revenue expenditure was contributing negatively and non-developmental revenue expenditure was contributing positively but, disproportionately higher than the share in primary revenue expenditure. Developmental capital outlay was contributing negatively. Here negative primary expenditure growth was achieved by curtailing developmental expenditure and expanding non-developmental expenditure. The state had primary surplus and with high interest payment of 2.63 percent of GSDP, ended up with a gross fiscal deficit of 1.87 percent.
- In Himachal Pradesh, both developmental revenue and capital expenditure contributed positively to the positive growth of primary expenditure.

Thus, the rising primary expenditure was used for raising productivity of the economy. With a primary deficit of 2.73 percent and interest payment of 4.05 percent the state ended up with a gross fiscal deficit of 6.78 percent of GSDP.

- In Jammu and Kashmir, both non-developmental revenue and capital expenditure contributed more than 60 percent to the growth of primary expenditure which was more than the share enjoyed (18 percent). This has resulted in decline in capital outlay. However, the state had primary surplus and with high interest payment of 6.88 percent of GSDP ended up with a gross fiscal deficit of 3.43 percent.
- In Manipur, negative primary expenditure growth was mainly due to negative growth of developmental revenue and capital outlay. The non-developmental expenditure's contribution was positive and disproportionately larger than the share enjoyed in primary expenditure. With a primary surplus of 0.87 percent of GSDP which was achieved through reduction in developmental capital outlay, and interest payment of 3.67 percent of GSDP made the gross fiscal deficit 2.80 percent.
- In Meghalaya too, non-developmental revenue expenditure contributed positively and developmental (both revenue and capital) negatively to the negative growth of primary expenditure. Thus, the low growth of revenue receipts resulted in reduction in developmental expenditure. With a primary deficit of 3.07 percent of GSDP and interest payment of 2.17 percent, gross fiscal deficit became 5.24 percent.

- In Mizoram, growth of primary expenditure was positive and more than the growth of revenue receipts. Developmental capital outlay contributed negatively to the growth of primary expenditure. Here also, a distorted growth of primary expenditure took place. The state had primary deficit mainly because of non-developmental expenditure. With interest payment of 3.58 percent of GSDP, the state ended up with a gross fiscal deficit of 4.23 percent.
- In Nagaland, non-developmental revenue and capital expenditure contributed 78 percent to the growth which was disproportionately higher than the share enjoyed in primary expenditure. The positive contribution made by developmental capital outlay was very low. The state had primary deficit of 7.74 percent of GSDP, which was mainly because of non-developmental revenue expenditure growth. With high interest payment of 5.13 percent, gross fiscal deficit became 12.87 percent of GSDP.
- In Sikkim too, negative contribution was made by developmental revenue and capital expenditure. Non-developmental revenue expenditure contributed positively higher than the share. With a primary deficit of 5.23 percent of GSDP and high interest payment of 5.88 percent gross fiscal deficit turned out to be 11.11 percent. The high primary deficit was mainly because of non-developmental expenditure.
- In Tripura also a distorted structure emerged as developmental revenue expenditure contributed negatively and non-developmental expenditure (revenue + capital) positively to the growth of primary expenditure. Capital outlay in economic services contributed negatively. The state had primary deficit of 1.04

percent of GSDP and with high interest payment of 3.76 percent ended up with a gross fiscal deficit of 4.80 percent.

Thus, in eight out of ten special category states a distorted growth of primary expenditure occurred in 1991-95, which was mainly because of low or negative growth of central inflow and the sufferer was the developmental capital outlay. The primary surplus achieved in Assam, Jammu and Kashmir and Manipur was through curtailment in developmental capital outlay. The primary deficit of Himachal Pradesh, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura was mainly due to revenue and non-developmental expenditure. Again with high interest payment, gross fiscal deficit turned out to be very high. Thus, the low growth rate of central inflow (except Jammu and Kashmir) resulted in low capital outlay in all the states.

### 4.4 Trend in State Finance 1995-2000

Growth rate of primary revenue improved in all states except Arunachal Pradesh and Jammu and Kashmir. In Arunachal Pradesh deterioration was mainly because of negative growth of own revenue receipts. In Jammu and Kashmir, though a reduction in growth rate took place, the growth rate was higher than the other nine states. The maximum growth of 12.42 percent took place in Himachal Pradesh, which was mainly because of both central inflow and own revenue.

Growth rate of own revenue was negative in Arunachal Pradesh, Manipur and Mizoram. Growth of central inflow was more than 3 percent in Himachal Pradesh, Jammu and Kashmir, Manipur, Mizoram, Sikkim and Tripura and less, in other states.

Growth rate of primary expenditure was less than primary revenue receipts in Arunachal Pradesh, Himachal Pradesh and Nagaland, and the reverse was true in rest seven states. There was primary surplus in Assam and Jammu and Kashmir. In the remaining eight states, primary deficit was observed. Thus, as compared to 1991-95, Arunachal Pradesh and Manipur joined the primary deficit states in 1995-2000. The important point is that, in Arunachal Pradesh, Himachal Pradesh and Nagaland, the growth in expenditure was less than the growth in revenue and there was primary deficit.

# Factors contributing to the growth of Primary Expenditure and reasons of high gross fiscal deficit (for details see table 4.2 (a) & (b))

- In Arunachal Pradesh, capital outlay was contributing negatively to the growth of primary expenditure but developmental revenue and non-developmental expenditure positively in a distorted manner. The state had primary deficit of 0.60 percent of GSDP which was because of the distorted growth of revenue expenditure. With a high interest payment of 4.47 percent, the state ended up with a gross fiscal deficit of 5.07 percent of GSDP. Due to the negative growth of developmental capital outlay, a sharp decline in growth of GSDP took place (table A 4.1).
- In Assam, non-developmental revenue expenditure contributed 55 percent to the growth of primary expenditure, which was disproportionate to its sectoral share (24 percent). High contribution of non-developmental revenue expenditure distorted the finance of the state despite its better performance in revenue receipts. With a primary surplus of 0.39 percent of GSDP and interest payment of 2.68 percent, gross fiscal deficit became 2.29 percent. With a little improvement in developmental capital outlay, growth rate of GSDP improved to 3.68 percent from, 2.97 percent in 1991-95.

- In Himachal Pradesh, there was proportionate contribution by developmental revenue expenditure to the growth of primary expenditure. However, disproportionate contribution by non-developmental revenue expenditure compelled the state to fall in primary deficit despite better performance in revenue which was also a sign of distortion. The state had primary deficit of 4.47 percent of GSDP and with high interest payment of 4.44 percent, ended up with a gross fiscal deficit of 8.91 percent. However, growth rate of GSDP improved to 8.76 percent which was because of better performance of the other sectors of the economy, as public expenditure carried a low weight in GSDP (table 1.4)
- In Jammu and Kashmir, primary surplus was achieved by curtailing developmental capital outlay and by increasing non-developmental revenue expenditure in a disproportionate way. Developmental revenue expenditure contributed disproportionately in comparison with sectoral share, to the growth of primary expenditure. Thus, though there was primary surplus, the growth of primary expenditure was not equitably distributed. With a primary surplus 0.17 percent of GSDP and high interest payment of 5.71 percent, gross fiscal deficit turned out to be 6.66 percent. However the growth rate was not affected as public expenditure carried a weight of 48 percent in GSDP (table 1.4)
- In Manipur, disproportionate contribution came from non-developmental revenue expenditure and proportionate from developmental revenue and capital outlay to the growth of primary expenditure. Hence, there was no distortion. Borrowing was properly used. The state had primary deficit of 6.97 percent of GSDP and with interest payment of 3.86 percent, finally ended up with a gross fiscal deficit of 10.83 percent. Due to the equitable growth of capital outlay, growth rate of GSDP improved to 6.78 percent from 3.28 percent in 1991-95.
- In Meghalaya, developmental capital outlay contributed negatively to the growth of primary expenditure. Disproportionately high contribution made by

non-developmental revenue expenditure and loan and advance, made the growth of primary expenditure high, which led to primary deficit. However, contribution made by developmental revenue was equitable. The State's primary deficit became 1.59 percent of GSDP and with interest payment of 2.58 percent; gross fiscal deficit became 4.17 percent. The distortion in capital outlay was not reflected in the growth rate of GSDP, as the weight of public expenditure was relatively low in the state.

- In Mizoram, disproportionately high contribution made by loan and advance and non-developmental expenditure made the growth of primary expenditure high, which resulted in primary deficit .However, contribution made by both developmental revenue and capital outlay was equitable. With a primary deficit of 5.43 percent of GSDP and interest payment of 5.6 percent, gross fiscal deficit became 10.79 percent. Growth rate of GSDP improved marginally to 3.5 percent from 2.33 percent in 1991-95.
- In Nagaland, negative contribution came from developmental revenue expenditure to the growth of primary expenditure. Contribution by overall developmental capital outlay was equitable, but contribution of economic service was very low. However, disproportionately high contribution made by non-developmental revenue expenditure pushed-up the growth of primary expenditure, which resulted in high primary deficit of 4.82 percent of GSDP. Again with high interest payment of 5.26 percent of GSDP, gross fiscal deficit became 10.08 percent. Low capital outlay in developmental economic service resulted in low growth rate of GSDP (1.91 percent).
- In Sikkim, high contribution to growth was noticed in developmental revenue expenditure. But disproportionately high contribution of non-developmental revenue expenditure pushed-up the growth of primary expenditure. Again, negative contribution of developmental capital outlay made

the state finance distorted. The process resulted in high primary deficit. The state had primary deficit of 4.48 percent of GSDP and with high interest payment of 6.72 percent, ended up with a gross fiscal deficit of 11.53 percent. The outcome was sharply felt in the growth rate of GSDP, which declined to 5.99 percent from 9.33 percent in 1991-95.

• In Tripura also, disproportionately low contribution was made by capital outlay, proportionate by developmental revenue expenditure and disproportionately high by non-developmental revenue expenditure to the high growth of primary expenditure. The state incurred primary deficit of 0.23 percent of GSDP. With interest payment of 3.86 percent of GSDP, gross fiscal deficit became 4.09 percent. Here, the high growth rate achieved is attributed to better performance of other sectors of the economy.

Thus, non-developmental revenue expenditure in all states pushed-up the growth rate of primary expenditure. Distortion took place in developmental capital outlay in Arunachal Pradesh, Jammu and Kashmir, Meghalaya, Nagaland and Sikkim, where one can infer that borrowing was used for non-developmental purpose in 1995-2000. Further, the process was refueled with high interest payment, resulting in high gross fiscal deficit in all states. Again, reduction in capital outlay resulted in low growth rate of GSDP in those states where public expenditure weight in GSDP was high.

### 4.5 Trend in State Finance 2000-05

In 2000-05, growth of revenue receipts went up sharply in all the states, except Himachal Pradesh. As a percentage of GSDP, revenue receipts declined in all states except Sikkim. This was mainly due to high growth of GSDP in many of

the states in 2000-05 as compared to the previous period. This was also due to the new series of GSDP (1999-2000 series) used to compute the GSDP from 1999-2000 onwards. So the variables as a percentage of GSDP of period 2000-05 were not comparable with that of previous periods.

The rise in the growth of revenue receipts was mainly due to good performance of both own revenue and central inflow in all states except Himachal Pradesh, where a decline in growth took place on both (table A 4.3).

The growth rate of primary expenditure exceeded revenue receipts in Arunachal Pradesh, Manipur, Sikkim and Uttarakhand and all states had primary deficit except Sikkim. In Assam, Himachal Pradesh, Jammu and Kashmir, Meghalaya, Mizoram, Nagaland and Tripura, the growth rate of primary receipts was greater than the expenditure and the states had primary deficit except Jammu and Kashmir. Thus, in 2000-05 only two states namely Jammu and Kashmir and Sikkim had primary surplus as compared to six in 1995-2000. Therefore, it is important to examine the factors responsible for high growth of primary expenditure.

# Factors contributing to the growth of Primary Expenditure and reasons of high gross fiscal deficit (for details see table 4.3 (a) & (b))

• In Arunachal Pradesh, sectoral share of developmental revenue expenditure increased to 57 percent in 2000-05, from 53 and 51 percent in 1995-2000 and 1991-95 respectively. Its contribution to growth of primary expenditure became 66 per cent. Developmental capital outlay's share came down to 23 percent, and the contribution to growth became 19 percent. A rising trend in non-developmental revenue expenditure was also observed. So the structural change was in favour of revenue expenditure and as a result capital outlay suffered. Thus,

distortion was there against capital outlay. Finally, with a primary deficit of 5.94 percent of GSDP and interest payment of 5.95 percent, gross fiscal deficit became 11.89 percent. Due to the positive growth of capital outlay as compared to negative growth in previous period, growth rate of GSDP improved to 5.82 percent from 2.09 percent in 1995-2000.

- In Assam, 60.77 percent of the growth came only from revenue expenditure only. Capital outlay in social service's contribution to growth was negligible and that of economic services' was 27 percent. Loan and Advance contributed significantly which was disproportionate to the share. Here also, a mismatch was found, in favour of revenue expenditure. Finally, the state ended up with primary deficit of 0.47 percent of GSDP. With an interest payment of 2.88 percent gross fiscal deficit became 3.35 percent of GSDP. Due to relatively better performance of capital outlay in economic services, growth rate of GSDP improved to 5.56 percent from 3.68 percent in 1991-95.
- In Himachal Pradesh, developmental revenue expenditure contributed 5 percent to the growth, where as non-developmental revenue expenditure contributed 61.08 percent, which was disproportionately higher than the share in primary expenditure. Developmental capital outlay contributed higher than the share, which was of course good, but absolute share was 15 percent in total expenditure. Thus, non-developmental revenue expenditure was the main reason behind the growth of primary expenditure, which ultimately put the state in primary deficit of 3.92 percent of GSDP. Further with interest payment of 6.38 percent of GSDP, gross fiscal deficit became 10.30 percent. Growth rate of GSDP declined to 5.78 from 8.46 percent in 1995-2000.

- In Jammu and Kashmir, developmental revenue expenditure contributed negatively and non-developmental revenue positively which was less than the share in primary expenditure. Developmental capital outlay contributed 61 per cent and non-developmental, 25 per cent o the growth of primary expenditure. This was for the first time since 1991, developmental capital outlay contributed more than proportionately to the growth of primary expenditure. The important distortion came from non-developmental capital outlay which was contributing 25.64 percent to growth with a sectoral share of only 3 percent. Thus, low contribution of revenue expenditure resulted in primary surplus of 0.08 percent of GSDP in the state. But with high interest payment of 5.30 percent, gross fiscal deficit became 5.22 percent of GSDP. The growth rate of GSDP was maintained at 5.74 percent.
- In Manipur, high contribution of capital outlay and low contribution of developmental revenue expenditure resulted in high growth of primary expenditure and the end result was primary deficit of 2.44 percent of GSDP. The high interest payment of 5.82 percent, made the gross fiscal deficit 8.26 percent of GSDP. High contribution developmental capital outlay resulted in better GSDP growth of 7.54 percent.
- In Meghalaya, disproportionately high contribution made by developmental and non-developmental revenue expenditure and contraction of capital outlay in economic service resulted in low growth rat of primary expenditure. Thus, primary deficit achieved was mainly due to high growth of developmental and non developmental revenue expenditure. The process was distortionary because primary deficit was due to high growth of revenue expenditure at the cost of developmental capital outlay. The end result was a primary deficit of 1.55 percent of GSDP. Interest payment of 3.05 percent of GSDP

pushed up the gross fiscal deficit to 4.60 percent. The outcome of the above process was resulted in reduction of GSDP growth rate to 5.75 percent form 6.42 percent in the previous period.

- In Mizoram, contribution made by revenue expenditure came down significantly in 2000-05. However, for the first time developmental capital outlay contributed significantly to the growth (59 percent) of primary expenditure, which has resulted in high primary deficit of 8.81 percent of GSDP. High interest payment of 6.99 percent of GSDP made gross fiscal deficit 15.80 percent. The better performance of developmental capital outlay pushed-up the growth rate of GSDP to 4.89 percent from 3.15 percent in 1995-2000.
- In Nagaland, both developmental and non-developmental revenue expenditure contributed significantly to the growth (273.48 percent) and heavy compression (-129.04 percent) was done in developmental capital outlay which resulted in low growth of primary expenditure. Finally, the state ended up with a low primary deficit of 0.64 percent of GSDP. The process was highly distortionary as deficit was used for current expenditure at the cost of capital outlay. The primary deficit of 0.64 percent of GSDP and high interest payment of 4.90 percent made gross fiscal deficit 5.54 percent of GSDP. The growth rate in GSDP achieved was 6.25 percent because of better performance of other sectors of the economy.
- In Sikkim, contribution of revenue expenditure declined and that of capital outlay increased as compared to previous period which resulted in high primary expenditure. As a percentage of GSDP also similar pattern is observed. The end result was primary surplus of 2.09 percent of GSDP. The process was equitable. But, interest payment was high (7.6 percent of GSDP) and the end result

was gross fiscal deficit of 5.51 percent of GSDP. Due to the above equitable process, growth rate of the economy improved to 7.63 percent from 5.99 percent in 1995-2000.

- In Tripura, negative contribution was made by developmental revenue expenditure but non-developmental revenue expenditure contributed disproportionately high to expenditure growth. Developmental capital outlay contributed more than □roportionately to its share. Non-developmental revenue and capital expenditure contributed 74 percent to the growth in contrast to the share of 26 percent. This is the main reason behind the growth of primary expenditure and primary deficit of 1.52 percent of GSDP in the state. Interest payment of the magnitude of 4.23 percent, made gross fiscal deficit 5.75 percent of GSDP. The growth rate in GSDP achieved was satisfactory.
- Uttarakhand became a state in 2000-01. Therefore, it had to start its establishment. Here, expenditure growth was 35.89 percent per annum. Out of this high growth, non-developmental expenditure (Revenue + Capital) contributed 25 percent whereas; developmental revenue's was 52 percent. However, significantly larger share (72.12 percent) was due to total revenue expenditure. Primary deficit and interest payment of 1.71 percent and 2.99 percent of GSDP respectively made gross fiscal deficit 4.70 percent. The growth rate in GSDP achieved was satisfactory.

Thus, in the period 2000-05, distorted growth of revenue expenditure in Arunachal Pradesh, Assam, Himachal Pradesh, Meghalaya, Nagaland and Tripura

forced them for primary deficit and with high interest payment, gross fiscal deficit became high. It is high growth of developmental capital outlay in Manipur, Mizoram and Tripura made their primary deficit high. The primary surplus achieved by Jammu and Kashmir and Sikkim was mainly due to low contribution of developmental revenue expenditure to the growth of primary expenditure. But, high interest payment in all states (except in Assam and Meghalaya) exceeded their gross fiscal deficits above 5 percent of GSDP. Even, in the States of Arunachal Pradesh, Himachal Pradesh and Mizoram gross fiscal deficit became more than 10 percent of GSDP.

Further, due to the better performance of developmental capital outlay in total expenditure, growth rate of GSDP in Arunachal Pradesh, Assam, Manipur, Mizoram, Sikkim and Tripura improved as compared to the previous period.

### 4.6 Trend in State Finance 2005-09:

In 2005-09 revenue receipts increased shapely as a percentage of GSDP in Arunachal Pradesh, Assam, Himachal Pradesh, Jammu and Kashmir, Manipur, Meghalaya, Mizoram, Sikkim, Tripura and Uttarakhand. In Nagaland growth rate of revenue increased but as a percentage of GSDP, a decline was observed. Primary surplus was realized in eight states namely, Arunachal Pradesh, Assam, Himachal Pradesh, Manipur, Meghalaya, Sikkim, Tripura and Uttarakhand. In Jammu and Kashmir, primary deficit was achieved because of high growth of primary expenditure over primary revenue receipts. In Mizoram and Nagaland, though the growth of primary expenditure was less than the revenue receipts but as a percentage of GSDP, it was more than revenue receipts. The process resulted in primary deficit.

The better growth in primary revenue was due to better performance of both central inflow and own revenue in the states of Arunachal Pradesh, Assam, Himachal Pradesh, Jammu and Kashmir, Manipur, Meghalaya, Mizoram, Sikkim and Uttarakhand. In Nagaland, as a percentage of GSDP, central inflow declined, though the growth rate increased. Poor performance of Nagaland in total primary revenue was mainly because of poor performance of both central inflow and own revenue.

Since, in eight states primary surplus, and in three, primary deficit was realized, it is important to examine how the states achieved surplus or deficit in 2005-09. Analysis below examines the contribution to growth of primary expenditure by its different components.

# Factors contributing to the growth of Primary Expenditure and reasons of high gross fiscal deficit (for details see table 4.4 (a) & (b))

- In Arunachal Pradesh, primary surplus was achieved by compressing the growth of primary expenditure as compared to revenue. Contribution by developmental revenue expenditure was 128.6 percent and that of developmental capital outlay -29.56 percent. So, by compressing developmental capital outlay, growth rate of primary expenditure was kept below the growth rate of revenue. Therefore, the sustainability of the primary surplus achieved is doubtful. With interest payment of 5.63 percent gross fiscal deficit became 0.36 percent of GSDP. The effect of compression of developmental capital outlay was felt in the reduction of growth rate of GSDP.
- In Assam, contribution to growth analysis gives an equitable result. However, as a percentage of GSDP, primary revenue expenditure increased by 3.7 percentage points and primary capital expenditure by 0.26 points in 2005-09 over 2000-05. Thus, by compressing the capital outlay primary surplus was achieved in Assam. With interest payment of 2.7 percent, gross fiscal deficit became 0.64

percent of GSDP. The outcome of the above process was a decline in the growth rate of GSDP.

- In Himachal Pradesh also, contribution to growth analysis gives an equitable result. As a percentage of GSDP, revenue receipt was more than expenditure. In case of primary revenue expenditure as a percentage of GSDP, 0.39 point and in capital expenditure 0.62 points increase was observed. Thus, the increase was equitable and primary surplus achieved was not distortionary. However, high interest payment of 5.61 percent made gross fiscal deficit 3.95 percent of GSDP. There was also a marginal decline in the growth rate of the economy.
- In Jammu and Kashmir, primary expenditure was more than primary revenue as a percentage of GSDP. Contribution to growth analysis reveals that contribution of developmental capital outlay was 73.39 percent. Compression in developmental revenue expenditure was made, as the contribution was -7.92 per cent. But, no contraction was made in non-developmental revenue and capital expenditure. Thus, the primary deficit achieved was mainly because of non-contraction of non-developmental expenditure, which was distortinary. With high interest payment of 4.95 percent, gross fiscal deficit turned out to be 6.31 percent of GSDP. However growth rate of the economy declined to 3.6 percent.
- In Manipur, primary surplus was achieved. Growth rate of expenditure was less than the revenue. Contribution to growth by developmental revenue expenditure and non-developmental capital expenditure was negative and that of developmental capital outlay was 142 percent. But, contribution of non-developmental revenue expenditure was positive. Thus, the primary surplus achieved was mainly through compression of developmental revenue and non-

developmental capital expenditure. This process is however not distortionary. The high interest payment of 4.11 percent of GSDP made the gross fiscal deficit 3.71 percent. The growth rate achieved was satisfactory.

• In Meghalaya, the growth rate of primary expenditure was less than revenue and trend is same as a percentage of GSDP. Hence, the state achieved primary surplus. But, as a percentage of GSDP primary revenue expenditure went up by 6 percentage points as compared to 0.64 point in primary capital expenditure in 2005-09 over 2000-05. Thus, the increase was not equitable.

Contribution to growth analysis reveals that contraction was made in non-developmental revenue expenditure as it contributed less to the growth of primary expenditure as compared to the share. Thus, the primary surplus achieved was mainly because of compression made in non-developmental revenue expenditure, without touching the developmental side.

• Mizoram experienced primary deficit in 2005-09. As a percentage of GSDP, primary receipts increased by 12.68 percentage points and expenditure by 4.23 points in 2005-09 over the previous period. Out of the increase in primary expenditure, 2 percentage points was attributed to capital and 2.13 points to revenue. However, growth in capital expenditure was negative and that of revenue positive.

Contribution to growth analysis reveals a distorted picture in expenditure. Non-developmental revenue expenditure, with a sectoral share of 20 per cent was contributing 100 per cent and developmental revenue expenditure with a share of 57percent contributing 122.37percent to the growth of primary expenditure. Developmental capital outlay was contributing, - 311.81 percent. Thus, borrowing

was used for revenue expenditure. This is the main reason, why Mizoram is experiencing a high debt-GSDP ratio. The direct effect of the distortion was felt in low growth rate of GSDP as compared to the previous period. Further, high interest payment made gross fiscal deficit high.

• Nagaland's, primary expenditure growth was less than the growth of revenue. As a percentage of GSDP the reverse was true. Here, revenue receipts declined in 2005-09 by 3.13 percentage points over the previous period as a percentage of GSDP. Again, during the same time capital expenditure increased and revenue expenditure declined.

Contribution made to primary expenditure reveals an equitable trend in revenue and developmental capital expenditure but contribution made by non-developmental capital expenditure was distorted. Thus, borrowing was used for non-developmental capital expenditure, which was distortionary. Finally high interest payment made gross fiscal deficit high. The growth rate of the economy declined to 5.58 percent.

• In Sikkim, primary receipts as a percentage of GSDP increased by 10 percentage points in 2005-09 over the previous period whereas, expenditure increase was of 6.67 percentage points. The state had primary surplus of 5.65 percent of GSDP.

Different components of primary expenditure contributed equitably to the growth of primary expenditure. The developmental capital outlay contributed 59 percent to the growth of primary expenditure. Thus, huge primary surplus was responsible for the decline in Debt-GSDP ratio of the state in recent years. The high interest payment made gross fiscal deficit 0.49 percent of GSDP. During this period growth rate of the economy became 7.37 percent.

• Tripura, had primary surplus in 2005-09. As a percentage of GSDP, primary revenue expenditure declined and capital expenditure increased as compared to 2000-05.

In contribution to growth of primary expenditure, equity was observed in revenue and developmental capital outlay. However, the only inequity observed was in non-developmental capital outlay, where contribution to growth was 14.63 percent with a sectoral share of 5 per cent. Interest payment of 3.81 percent of GSDP made gross fiscal deficit 2.23 percent. The growth rate achieved was 5.21 percent.

• Uttarakhand had primary surplus. This was done with equitable growth of all expenditure i.e. developmental and non-developmental. Interest payment of 3.59 percent of GSDP made gross fiscal deficit 3.54 percent

Thus, primary surplus enjoyed by Arunachal Pradesh was achieved with a distorted expenditure pattern. The same is true for Assam. In Mizoram also a distorted expenditure pattern put the state in deficit. Some distortion was also observed in non-developmental capital expenditure in Nagaland and Tripura. In rest of the states, primary surplus was achieved with an equitable fiscal management in 2005-09.

#### Box 4.1

# Fiscal Performance of Special Category States vis-à-vis Non-Special Category State

From tables A 4.1 to A 4.12 following conclusions are derived.

- During the entire period of analysis (1991-2009), growth rate of own revenue receipts in eight special category states was higher than the non-special-category states and the exceptions were Mizoram and Nagaland. As a percentage of GSDP, in the non-special category states, own revenue receipts went-up from 8.93 per cent to 9.63 per cent between 1991-95 and 2005-09. In seven special category states the improvement in own revenue receipts was substantial and more than the increase that took place in non-special category states.
- For the entire period, when a comparison is made between the growth in own revenue and revenue from the centre, a reverse picture emerges. In the non-special category states, growth rate of revenue from the centre was higher than the growth rate of own revenue receipts but in the special category states the trend was reverse, with the exception in Nagaland. The above process has resulted in lower growth rate of primary receipts in Arunachal Pradesh and Mizoram. In the states like Assam, Himachal Pradesh, Jammu Kashmir, Manipur, Meghalaya, Sikkim and Tripura, growth rate in primary receipts was higher than the non-special category states', which was mainly because of better performance of own revenue receipts.
- During 1991-2009, growth rate in primary expenditure in nine special category states was higher than the non-special category states'. In the same period, growth rate in primary capital expenditure was lower in six special categories states as compared to the non-special category states'. In Arunachal Pradesh the growth rate was even 1.89 per cent during the same time.

The period-wise analysis of the fiscal performance of the special category states vis-à-vis non-special category states reveals the following conclusions:

#### 1991-1995

- Primary revenue receipts in 14 non-special category states grew at a rate of 4.43 percent, in contrast to less than one percent or negative in seven special category states. This was mainly because of either negative or low growth rate of revenue from the centre.
- Growth rate of own revenue receipts of Arunachal Pradesh, Manipur and Nagaland was even higher than the non-special category states. As a percentage of GSDP performance of Arunachal Pradesh and Sikkim was also comparable with non-special category states.
- Growth rate of primary capital expenditure in all the special category states was less than the non-special category states.

#### 1995-2000

- Primary receipts fell down in 1995-2000 in all eight special category states except Jammu Kashmir and Himachal pradesh. The trend was same for nonspecial category states. This decline was mainly because of poor performance of own revenue except Tripura.
- Growth rate of primary capital expenditure in non-special category states was 4.82 per cent in contrast to low or negative in six special category states.
- Interest payment in five special category states was higher than the non-special category states.

## 2000-2005

- Growth rate of own revenue receipts was higher in all special category states than the non-special category states.
- In four special category states like Arunachal Pradesh, Himachal Pradesh,

Meghalaya, Nagaland and Tripura, primary capital expenditure grew at a lesser rate than the non-special category states.

• In eight special category states interest payment was higher than the non-special category states.

## 2005-2009

- Growth rate of own revenue receipts in seven special category states was higher than the non-special category states. As a percentage of GSDP also the same trend was observed with some exception in Manipur, Meghalaya, Mizoram and Nagaland.
- Growth rate in primary expenditure in seven states was less than the non-special category states.
- Primary capital expenditure grew at a rate of 12 per cent in non-special category states. In Arunachal Pradesh and Mizoram negative growth was observed.
- In ten special category states interest payment was higher than the non-special category states.

Cont....

Table 4.1(a) Contribution made by sub-components of Primary Expenditure to its growth (1991-95)

							ao <sub>N</sub>	Loans and		
S 26-1661	~ ×	Social Services	<b>Economic</b> <b>Services</b>	Non Interest Non Developmental Expenditure	Social Services (Capital Outlay)	Economic Services (Capital Outlay)	Developmental Gen Service (Capital Outlay)	Advances by State Governments (Capital	Primary Expenditure Growth	Primary Revenue Growth
Sectoral Share (		0.21	0.30	0.15	90.0	0.26	0.01	0.00		
(%)	3.	3.78	7.45	1.51	6.55	8.85	8.10	-30.01	6.10	0.88
Contribution to Growth 13.	13.	13.48	37.61	3.69	6.52	39.12	1.43	-1.86		
Sectoral Share 0.41	0.4	.1	0.24	0.19	0.01	0.08	0.00	90.0		
Growth Rate (%) 2.61	2.6		-4.69	3.02	1.17	-11.07	1.55	-26.94	-2.24	89.0-
Contribution to Growth 50.25	50.2	3	-53.55	26.92	0.54	-44.24	0.20	-80.56		
Sectoral Share 0.35	0.35	16	0.28	0.18	90.0	0.13	0.01	0.00		
Growth Rate (%) 4.74	4.7	4	12.79	6.36	-6.37	33.07	8.90	-8.05	6.63	2.50
Contribution to Growth 15.74	15.7	4	33.77	10.83	-3.65	42.83	0.53	-0.04		
Sectoral Share 0.32	0.3	2	0.23	0.16	0.09	0.16	0.02	0.01		
Growth Rate (%) 2.92	2.9	2	5.37	5.42	<i>19.7-</i>	-0.74	41.73	-26.71	2.39	10.24
Contribution to Growth 32.45	32.4	15	42.37	30.25	-22.68	-4.14	31.41	-9.64		
Sectoral Share 0.33	$\tilde{\epsilon}$ :0	13	0.21	0.21	0.04	0.19	0.01	0.01		
Growth Rate (%) -1.19	-1.	19	-0.86	3.10	-2.90	-7.33	2.36	-33.34	-1.78	0.83
Contribution to Growth -23	-23	-23.99	-10.75	38.54	-7.63	-85.51	1.17	-12.08		

Table 4.1 (b)
Contribution made by of sub- components of Primary Expenditure to its growth (1991-95)

States	1991-95	Social Services	Economic Services	Non Interest Non Developmental Expenditure	Social Services ( Capital Outlay)	Economic Services (Capital Outlay)	Non- Developmental Gen Service (Capital Outlay)	Loans and Advances by State Governments (Capital Expenditure)	Primary Expenditure Growth	Primary Revenue Growth
	Sectoral Share	0.31	0.27	0.19	90.0	0.12	0.01	0.04		
Meghalaya	Growth Rate (%)	-1.59	-6.29	1.65	-7.35	0.38	-10.84	-37.42	-3.83	0.63
	Contribution to Growth	-12.95	-45.29	8.56	-11.16	1.23	-3.64	-36.96		
	Sectoral Share	0.28	0.34	0.17	0.04	0.15	0.01	0.03		
Mizoram	Growth Rate (%)	3.40	0.22	5.54	6.33	-3.56	4.25	-8.17	1.64	1.55
	Contribution to Growth	58.97	4.61	59.10	21.64	-32.94	1.51	-12.94		
	Sectoral Share	0.24	0.30	0.26	0.05	0.11	0.01	0.02		
Nagaland	Growth Rate (%)	89.8	4.16	13.51	2.62	0.88	16.51	-2.11	4.63	0.20
	Contribution to Growth	44.30	-26.71	73.43	2.96	1.99	4.99	96:0-		
	Sectoral Share	0.27	0.31	0.13	80.0	0.19	0.01	0.00		
Sikkim	Growth Rate (%)	2.04	-2.45	7.34	2.30	-13.74	-15.27	1.05	-2.04	-0.05
	Contribution to Growth	28.01	-39.53	47.16	12.6	-134.77	-10.97	0.25		
	Sectoral Share	0.38	0.26	0.19	0.04	0.12	0.01	0.00		
Tripura	Growth Rate (%)	-0.79	-1.73	1.26	17.46	-3.30	38.61	4.36	0.03	-0.28
	Contribution to Growth	-411.34	-606.81	332.36	838.23	-546.40	471.83	22.18		

Cont...

Contribution made by sub- components of Primary Expenditure to its growth (1995-2000) **Table 4.2** (a)

States	1995-2000	Social Services	Economic	Non Interest Non Developmental Expenditure	Social Services (Capital Outlay)	Economic Services (Capital Outlay)	Non- Developmental Gen Service (Capital Outlay)	Loans and Advances by State Governments (Capital Expenditure)	Primary Expenditure Growth	Primary Revenue Growth
A	Sectoral Share	0.25	0.28	0.16	0.05	0.25	0.01	0.00		
Arunachai Dradesh	Growth Rate (%)	6.21	28.0	9.82	-23.90	-8.68	99.7	-3.14	0.10	98.0
Tagesii	Contribution to Growth	2030.48	327.27	2049.19	-1621.75	-2827.96	149.25	-6.47		
	Sectoral Share	0.44	0.20	0.24	0.01	0.07	0.00	0.03		
Assam	Growth Rate (%)	5.63	-2.15	11.18	9.02	7.81	-18.05	-15.11	4.74	2.28
	Contribution to Growth	50.95	-9.02	54.92	1.63	11.59	-0.76	-9.32		
11: 11:	Sectoral Share	0.35	0.28	0.18	0.05	0.10	0.01	0.03		
Filmachai Dradesh	Growth Rate (%)	11.44	8.37	16.13	12.53	99:9	10.56	-7.80	10.65	12.42
Tagesii	Contribution to Growth	38.70	22.21	27.88	90'9	6.70	0.75	-2.33		
10	Sectoral Share	0.27	67.0	0.22	90.0	0.12	0.03	0.01		
Jammu & Kashmir	Growth Rate (%)	6.28	25.16	22.27	-10.69	-12.40	-33.26	29.11	11.72	6.03
TX43111111	Contribution to Growth	15.40	64.44	44.04	-5.68	-13.33	-7.86	3.03		
	Sectoral Share	0.32	0.21	0.22	20.0	0.18	0.01	0.00		
Manipur	Growth Rate (%)	9.51	4.15	15.66	0.29	8.92	-14.98	-40.31	8.87	3.24
	Contribution to Growth	34.89	88.6	39.84	0.22	18.03	-1.02	-1.85		

Table 4.2 (b) Contribution made by sub- components of Primary Expenditure to its growth (1995-2000)

States	1995-2000	Social Services	Economic	Non Interest Non Developmental Expenditure	Social Services ( Capital Outlay)	Economic Services (Capital Outlay)	Non- Developmental Gen Service (Capital Outlay)	Loans and Advances by State Governments (Capital Expenditure)	Primary Expenditure Growth	Primary Revenue Growth
	Sectoral Share	0.33	0.25	0.22	90.0	0.11	0.01	0.04		
Meghalaya	Meghalaya Growth Rate (%)	6.62	0.92	8.35	2.59	-2.14	-3.46	17.16	4.80	1.30
	Contribution to Growth	45.60	4.88	38.69	3.03	-4.78	-0.62	13.29		
	Sectoral Share	0.31	0.27	0.19	0.04	0.15	0.01	0.03		
Mizoram	Growth Rate (%)	5.60	-1.34	3.06	-2.35	3.54	5.93	26.32	3.20	2.94
	Contribution to Growth	52.07	-11.16	17.69	-2.60	16.60	1.19	26.18		
	Sectoral Share	0.25	0.27	0.29	0.07	60.0	0.01	0.01		
Nagaland	Growth Rate (%)	-0.10	-0.32	2.98	3.39	0.36	-13.22	-11.75	99.0	2.69
	Contribution to Growth	-3.88	-13.53	131.63	36.03	5.22	-29.93	-25.54		
	Sectoral Share	0.34	0.30	0.15	20.0	0.14	0.01	0.00		
Sikkim	Growth Rate (%)	11.21	4.99	13.95	-3.32	-10.41	-13.84	-4.44	5.53	4.21
	Contribution to Growth	68.72	26.85	37.27	-4.20	-25.56	-2.86	-0.22		
	Sectoral Share	0.36	0.24	0.20	20.0	0.11	0.01	0.00	1.00	
Tripura	Growth Rate (%)	7.37	3.87	13.57	12.60	-3.70	-46.96	-7.89	6.25	4.14
	Contribution to Growth	42.37	14.66	43.82	14.00	99'9-	<i>6L.T-</i>	-0.40	100.00	

Table 4.3(a) Contribution made by sub- components of Primary Expenditure to its growth (2000-05)

States	2000-05	Social Services	Economic Services	Non Interest Non Developmental Expenditure	Social Services (Capital Outlay)	Economic Services (Capital Outlay)	Non- Developmental Gen Service (Capital Outlay)	Loans and Advances by State Governments (Capital Expenditure)	Primary Expenditure Growth	Primary Revenue Growth
	Sectoral Share	0.26	0.31	0.19	0.04	0.19	0.01	0.00		
Arunachal	Growth Rate (%)	13.92	8.65	8.21	7.62	7.90	-9.39	12.98	9.45	9.11
Pradesh	Contribution to Growth	37.95	27.86	16.20	3.05	15.81	-1.24	0.36		
	Sectoral Share	0.42	0.19	0.25	00.0	0.10	0.00	0.04		
Assam	Growth Rate (%)	29'9	14.05	3.12	3.82	26.10	23.67	30.62	10.85	12.71
	Contribution to Growth	27.46	25.68	7.63	0.17	27.04	0.42	11.63		
TE man of the	Sectoral Share	0.37	0.26	0.21	90.0	60.0	0.00	0.01		
Himachai Pradesh	Growth Rate (%)	2.26	-3.00	2.99	4.74	1.26	14.61	-18.58	1.04	5.19
Tagesti	Contribution to Growth	82.73	-76.77	61.08	27.89	10.74	5.71	-11.55		
1	Sectoral Share	0.25	0.24	0.28	0.05	0.15	0.03	0.01		
Jammu & Kashmir	Growth Rate (%)	1.46	-1.97	3.36	91.91	19.07	45.83	<i>L</i> 2.6-	4.44	10.03
TX4SIIIIIII	Contribution to Growth	6.32	-8.07	16.37	13.17	47.98	25.64	-1.42		
	Sectoral Share	0.32	0.23	0.27	20.0	0.10	0.00	0.00		
Manipur	Growth Rate (%)	2.49	10.21	2.20	40.43	14.09	44.40	52.86	8.51	8.48
	Contribution to Growth	9.58	28.09	7.20	34.07	16.13	2.54	2.43		

Cont...

Table 4.3 (b)
Contribution made by sub- components of Primary Expenditure to its growth (2000-05)

States	2000-05	Social Services	Economic Services	Non Interest Non Developmental Expenditure	Social Services ( Capital Outlay)	Economic Services (Capital Outlay)	Non- Developmental Gen Service (Capital Outlay)	Loans and Advances by State Governments (Capital Expenditure)	Primary Expenditure Growth	Primary Revenue Growth
	Sectoral Share	0.33	0.23	0.24	90.0	60.0	0.01	0.05		
Meghalaya	Growth Rate (%)	3.29	7.14	4.76	5.31	-1.93	10.38	-17.09	3.43	4.61
	Contribution to Growth	32.82	49.64	34.16	9.26	-4.98	2.40	-23.44		
	Sectoral Share	0.32	0.27	0.21	90.0	0.11	0.01	0.03		
Mizoram	Growth Rate (%)	1.60	3.11	4.96	8.16	26.44	14.54	-1.80	5.87	12.63
	Contribution to Growth	<i>LL</i> '8	14.10	17.56	8.37	50.17	1.92	-0.82		
	Sectoral Share	0.23	0.23	0.32	80.0	0.11	0.02	0.01		
Nagaland	Growth Rate (%)	<i>LL</i> :0-	2.62	3.09	-3.78	-3.12	20.14	-100.81	0.64	5.89
	Contribution to Growth	-34.14	113.88	193.74	-61.04	00.89-	69.29	-113.74		
	Sectoral Share	0.30	0.27	0.15	0.11	0.16	0.01	00.0		
Sikkim	Growth Rate (%)	86'9	8.72	7.51	18.24	8.94	26.85	4.52	9.34	7.11
	Contribution to Growth	22.62	25.10	12.49	20.85	15.19	3.74	0.02		
	Sectoral Share	0.34	0.19	0.24	80.0	0.13	0.02	00.00		
Tripura	Growth Rate (%)	99.0	-2.47	3.92	5.87	3.04	33.05	-21.93	1.81	6.75
	Contribution to Growth	10.14	-21.40	42.55	21.27	18.07	32.12	-2.75		
	Sectoral Share	0.40	0.25	0.18	0.02	0.11	0.02	0.03		
Uttaranchal	Growth Rate (%)	36.83	22.52	44.94	205.37	36.64	97.16	24.51	35.89	29.10
	Contribution to Growth	37.44	14.50	20.25	11.93	9.85	4.16	1.86		

**Table 4.4** (a)

Contribution made by sub-components of Primary Expenditure to its growth (2005-09)

	2005-09	Social Services	Economic	Non Interest Non Developmental Expenditure	Social Services ( Capital Outlay)	Economic Services (Capital Outlay)	Non- Developmental Gen Service (Capital Outlay)	Loans and Advances by State Governments (Capital Exnenditure)	Primary Expenditure Growth	Primary Revenue Growth
Š	Sectoral Share	0.23	0.40	0.14	0.04	0.17	0.01	0.00		
	Growth Rate (%)	-10.10	33.19	0.80	-28.31	-7.89	0.34	2.00	11.37	18.36
$\cup$	Contribution to Growth	-27.17	155.73	1.30	-14.28	-15.58	0.03	0.03		
0,1	Sectoral Share	0.40	0.21	0.23	0.02	0.13	0.00	0.01		
_	Growth Rate (%)	18.97	11.04	16.90	82.05	33.65	57.98	8.75	19.53	14.45
_	Contribution to Growth	37.60	11.27	19.62	98.36	21.93	0.87	0.36		
0,1	Sectoral Share	0.37	0.23	0.23	20.0	60.0	0.01	0.01		
_	Growth Rate (%)	5.65	6.05	9.93	13.65	29.05	-2.92	54.37	9.56	4.61
_	Contribution to Growth	21.73	14.41	23.40	10.43	27.15	-0.24	3.12		
	Sectoral Share	0.22	0.24	0.22	60.0	0.17	0.04	0.00		
	Growth Rate (%)	-2.72	1.03	4.23	28.20	3.69	15.52	-0.31	4.37	3.79
	Contribution to Growth	-13.45	5.53	20.60	29.17	14.22	14.12	-0.02		
	Sectoral Share	0.24	0.24	0.19	0.10	0.18	0.04	0.01		
	Growth Rate (%)	-0.26	-2.32	4.23	34.11	27.49	-43.23	-77.56	5.44	8.48
	Contribution to Growth	-1.04	-9.38	13.75	57.36	84.68	-29.75	-15.55		

Cont...

Table 4.4 (b) Contribution made by sub- components of Primary Expenditure to its growth (2005-09)

States	2005-09	Social Services	Economic Services	Non Interest Non Developmental Expenditure	Social Services ( Capital Outlay)	Economic Services (Capital Outlay)	Non- Developmental Gen Service (Capital Outlay)	Loans and Advances by State Governments (Capital Expenditure)	Primary Expenditure Growth	Primary Revenue Growth
	Sectoral Share	0.31	0.31	0.20	90.0	0.10	0.01	0.01		
Meghalaya	Growth Rate (%)	18.15	25.88	7.51	15.97	30.81	37.11	58.62	19.83	20.28
	Contribution to Growth	27.62	40.52	7.59	2.00	14.75	1.78	2.75		
	Sectoral Share	0.31	0.27	0.20	90'0	0.15	0.01	0.01		
Mizoram	Growth Rate (%)	2.71	2.37	6.01	13.70	-30.54	-9.84	-8.62	-0.32	4.35
	Contribution to Growth	69.51	52.86	100.23	68.64	-380.45	-6.62	-4.83		
	Sectoral Share	0.21	0.24	0.28	60.0	0.14	0.04	0.00		
Nagaland	Growth Rate (%)	-0.13	5.43	4.45	8.16	4.23	36.54	107.17	5.46	8.02
	Contribution to Growth	-0.52	24.17	23.33	13.08	10.86	26.22	2.86		
	Sectoral Share	0.27	0.22	0.15	0.11	0.23	0.02	0.00		
Sikkim	Growth Rate (%)	7.23	11.02	7.15	24.40	28.38	37.04	4.19	15.28	24.07
	Contribution to Growth	12.75	15.89	6.84	17.66	41.53	5.33	0.00		
	Sectoral Share	0.29	0.14	0.26	0.11	0.16	0.05	0.00		
Tripura	Growth Rate (%)	90.6	69.0	14.10	23.51	14.87	41.89	1.95	13.05	5.08
	Contribution to Growth	19.83922	0.763084	27.77631	19.22084	17.7583	14.6341	0.008189		
	Sectoral Share	0.35	0.18	0.17	0.05	0.20	0.02	0.03		
Uttaranchal	Growth Rate (%)	10.25	6.82	10.12	19.19	13.31	2.44	36.31	11.04	15.85
	Contribution to Growth	32.17	11.31	15.70	8.04	23.44	0.55	8.81		

Table A 4.1
Fiscal Parameters
Arunachal Pradesh

Variable		1991-2009	1991-1995	1995-2000	2000-05	2005-09
Own Revenue	Growth (%)	7.57	9.47	-8.05	19.75	25.07
Receipts (Tax + Non Tax)	% of GSDP	8.66	8.89	5.66	6.05	13.26
Revenue from	Growth (%)	5.58	-0.45	1.82	7.74	17.42
Centre (Tax + Grants)	% of GSDP	57.96	56.94	57.61	49.22	67.09
Non- Debt	Growth (%)	0.46	5.59	-7.49	8.31	-16.21
Capital Receipts	% of GSDP	0.09	0.12	0.1	0.1	0.06
Primary	Growth (%)	5.85	0.88	0.86	9.11	18.63
Receipts	% of GSDP	66.71	65.95	63.37	55.37	80.41
Primary	Growth (%)	5.81	6.1	0.1	9.45	11.37
Expenditure	% of GSDP	66.47	64.13	63.97	61.31	74.42
Primary	Growth (%)	7.12	4.95	4.83	10.13	15.33
Revenue Expenditure	% of GSDP	48.77	42.43	43.95	46.33	57.78
Primary	Growth (%)	1.89	8.06	-10.28	7.16	-10.85
Capital Expenditure	% of GSDP	17.7	21.7	20.01	14.98	16.64
Primary Deficit	% of GSDP	-0.23	-1.82	0.6	5.94	-5.99
Interest Payment	% of GSDP	5.09	3.27	4.47	5.95	5.63
Fiscal Deficit	% of GSDP	4.86	1.45	5.07	11.89	-0.36
GSDP	Growth (%)	5.08	6.41	2.09	5.82	5.58

<sup>(2)</sup> Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively

Table A 4.2
Fiscal Parameters
ASSAM

Variable		1991-2009	1991-1995	1995-2000	2000-05	2005-09
Own Revenue	Growth (%)	7.35	-2.91	5.76	13.17	2.7
Receipts (Tax + Non Tax)	% of GSDP	6.6	6.35	5.49	6.12	7.9
Revenue from	Growth (%)	6.25	0.45	0.65	8.43	20.64
Centre (Tax + Grants)	% of GSDP	12.87	13.14	12.26	10.32	15.62
Non-Debt	Growth (%)	11.74	-4.65	7.37	86.62	-2.01
Capital Receipts	% of GSDP	0.24	0.04	0.04	0.64	0.06
Primary	Growth (%)	6.76	-0.68	2.28	12.71	14.54
Receipts	% of GSDP	19.7	19.53	17.8	17.08	23.58
Primary	Growth (%)	6.55	-2.24	4.74	10.85	19.53
Expenditure	% of GSDP	18.99	18.77	17.4	17.56	21.52
Primary Revenue	Growth (%)	6.61	0.51	5.21	7.3	19.52
Expenditure Expenditure	% of GSDP	16.38	15.81	15.45	14.94	18.65
Primary	Growth (%)	5.9	-16.29	1.2	26.52	18.69
Capital Expenditure	% of GSDP	2.61	2.97	1.95	2.61	2.87
Primary Deficit	% of GSDP	-0.71	-0.76	-0.39	0.47	-2.06
Interest Payment	% of GSDP	2.74	2.63	2.68	2.88	2.7
Fiscal Deficit	% of GSDP	2.03	1.87	2.29	3.35	0.64
GSDP	Growth (%)	5.7	2.97	3.68	5.56	4.97

(2) Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively

Table A 4.3
Fiscal Parameters

# **HIMACHAL PRADESH**

Variable		1991-2009	1991-1995	1995-2000	2000-05	2005-09
Own Revenue	Growth (%)	9.44	7.93	22.71	11.97	8.41
Receipts (Tax + Non Tax)	% of GSDP	8.15	7.28	8.85	6.48	9.64
Revenue from	Growth (%)	6.44	0.01	3.26	1.74	2.55
Centre (Tax + Grants)	% of GSDP	15.76	18.58	16.94	13.47	16.35
Non-Debt	Growth (%)	-1.21	11.08	59.94	-5.34	-4.95
Capital Receipts	% of GSDP	0.36	0.28	1.24	0.15	0.08
Primary	Growth (%)	7.34	2.5	12.42	5.19	4.61
Receipts	% of GSDP	24.27	26.13	27.03	20.1	26.07
Primary	Growth (%)	6.35	6.63	10.65	1.04	9.56
Expenditure	% of GSDP	26.22	28.86	31.5	24.02	24.41
Primary Revenue	Growth (%)	6.65	7.84	11.64	0.68	6.87
Expenditure	% of GSDP	21.63	23.13	25.53	20.35	20.12
Primary	Growth (%)	4.93	1.93	6.03	3.31	22.14
Capital Expenditure	% of GSDP	4.59	5.74	5.97	3.67	4.29
Primary Deficit	% of GSDP	1.96	2.73	4.47	3.92	-1.66
Interest Payment	% of GSDP	5.45	4.05	4.44	6.38	5.61
Fiscal Deficit	% of GSDP	7.41	6.78	8.91	10.3	3.95
GSDP	Growth (%)	8.02	5.06	8.76	5.78	5.58

Notes: (1) All calculation are done at constant price (1999-2000=100)

(2) Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively

Table A 4.4
Fiscal Parameters

# JAMMU KASHMIR

Variable		1991-2009	1991-1995	1995-2000	2000-05	2005-09
Own Revenue	Growth (%)	10.14	2.64	14.28	13.75	10.14
Receipts (Tax + Non Tax)	% of GSDP	7.47	5.86	6.05	6.9	9.64
Revenue from Centre (Tax +	Growth (%)	6.49	11.72	4.58	9.2	1.92
Grants)	% of GSDP	32.15	32.25	34.18	30.05	32.89
Non-Debt Capital	Growth (%)	-4.79	-38.19	2.44	-40.5	-16.68
Receipts	% of GSDP	0.03	0.07	0.04	0.03	0.01
Primary Receipts	Growth (%)	7.15	10.24	6.03	10.03	3.79
Filmary Receipts	% of GSDP	39.65	38.18	40.27	36.98	42.54
Primary	Growth (%)	7.8	2.39	11.72	4.44	4.37
Expenditure	% of GSDP	39.57	34.73	40.1	36.89	43.9
Primary Revenue	Growth (%)	7.58	4.27	17.58	0.71	0.77
Expenditure	% of GSDP	29.09	24.93	31.37	28.3	30.13
Primary Capital	Growth (%)	8.38	-1.74	-11.22	19.24	12.18
Expenditure	% of GSDP	10.47	9.8	8.73	8.59	13.78
Primary Deficit	% of GSDP	-0.08	-3.45	-0.17	-0.08	1.36
Interest Payment	% of GSDP	5.49	6.88	5.71	5.3	4.95
Fiscal Deficit	% of GSDP	5.41	3.43	5.54	5.22	6.31
GSDP	Growth (%)	6.59	4.49	6.66	5.74	3.6

Notes: (1)All calculation are done at constant price (1999-2000=100)

<sup>(2)</sup> Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively

Table A 4.5
Fiscal Parameters
MANIPUR

Variable		1991-2009	1991-1995	1995-2000	2000-05	2005-09
Own Revenue	Growth (%)	6.84	14.57	-5.77	10.21	18.37
Receipts (Tax + Non Tax)	% of GSDP	3.66	3.98	3.43	2.95	4.29
Revenue from	Growth (%)	6.54	-0.62	4.13	8.35	7.55
Centre (Tax + Grants)	% of GSDP	37.26	39.98	36.44	32.26	40.94
Non-Debt	Growth (%)	-6.33	-27.53	-23.42	-1.42	47.73
Capital Receipts	% of GSDP	0.04	0.13	0.03	0.01	0.02
Primary	Growth (%)	6.54	0.83	3.24	8.48	8.48
Receipts	% of GSDP	40.96	44.09	39.9	35.23	45.25
Primary	Growth (%)	6.49	-1.78	8.87	8.51	5.44
Expenditure	% of GSDP	42.91	43.22	46.87	37.67	44.85
Primary Revenue	Growth (%)	6	0.1	9.93	4.49	0.21
Expenditure	% of GSDP	31.69	32.35	35.08	31.09	29.9
Primary Capital	Growth (%)	7.25	-6.81	5.81	25.03	16.28
Expenditure	% of GSDP	11.23	10.87	11.79	6.58	14.95
Primary Deficit	% of GSDP	1.95	-0.87	6.97	2.44	-0.4
Interest Payment	% of GSDP	4.51	3.67	3.86	5.82	4.11
Fiscal Deficit	% of GSDP	6.46	2.8	10.83	8.26	3.71
GSDP	Growth (%)	6.8	3.28	6.78	7.54	5.86

<sup>(2)</sup> Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively

Table A 4.6
Fiscal Parameters
MEGHALAYA

Variable		1991-2009	1991-1995	1995-2000	2000-05	2005-09
Own Revenue	Growth (%)	7.82	4.18	1.41	9.22	5.69
Receipts (Tax + Non Tax)	% of GSDP	5.71	5.25	5.36	5.26	6.58
Revenue from	Growth (%)	6.13	-0.11	1.2	3.44	23.99
Centre (Tax + Grants)	% of GSDP	25.2	27.65	24.93	20.67	29
Non-Debt	Growth (%)	1.87	1.83	7.56	5.18	-10.07
Capital Receipts	% of GSDP	0.31	0.6	0.23	0.32	0.23
Primary	Growth (%)	6.4	0.63	1.3	4.61	20.28
Receipts	% of GSDP	31.22	33.5	30.52	26.24	35.82
Primary	Growth (%)	5.69	-3.83	4.8	3.43	19.83
Expenditure	% of GSDP	32.02	36.57	32.11	27.79	34.41
Primary Revenue	Growth (%)	6.15	-2.41	5.31	4.88	18.33
Expenditure	% of GSDP	25.71	28.22	25.51	22.31	28.29
Primary Capital	Growth (%)	3.88	-8.61	2.91	-1.98	27.06
Expenditure	% of GSDP	6.31	8.34	6.6	5.48	6.12
Primary Deficit	% of GSDP	0.8	3.07	1.59	1.55	-1.41
Interest Payment	% of GSDP	2.81	2.17	2.58	3.05	2.97
Fiscal Deficit	% of GSDP	3.61	5.24	4.17	4.6	1.56
GSDP	Growth (%)	6.54	2.53	6.42	5.75	4.33

<sup>(2)</sup> Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively

Table A 4.7 **Fiscal Parameters MIZORAM** 

Variable		1991-2009	1991-1995	1995-2000	2000-05	2005-09
Own Revenue	Growth (%)	5.67	-4.37	-7.88	14.65	-3.62
Receipts (Tax + Non Tax)	% of GSDP	4.93	5.6	4.49	3.79	6.1
Revenue from Centre (Tax +	Growth (%)	4.71	2.04	3.62	12.51	5.29
Grants)	% of GSDP	56.71	66.37	59.55	48.48	58.89
Non-Debt	Growth (%)	10.23	2.88	15.31	10.74	-3.02
Capital Receipts	% of GSDP	0.69	0.47	0.52	0.81	0.77
Primary	Growth (%)	4.85	1.55	2.94	12.63	4.35
Receipts	% of GSDP	62.33	72.44	64.56	53.08	65.76
Primary	Growth (%)	4.88	1.64	3.2	5.87	-0.32
Expenditure	% of GSDP	66.59	73.09	69.99	61.89	66.12
Primary Revenue	Growth (%)	4.89	2.5	2.49	2.98	3.48
Expenditure	% of GSDP	52.02	57.29	53.89	49.15	51.28
Primary Capital	Growth (%)	4.71	-1.5	5.74	17.11	-15.02
Expenditure	% of GSDP	14.57	15.8	16.1	12.74	14.84
Primary Deficit	% of GSDP	4.26	0.65	5.43	8.81	0.36
Interest Payment	% of GSDP	6.13	3.58	5.36	6.99	6.93
Fiscal Deficit	% of GSDP	10.39	4.23	10.79	15.8	7.29
GSDP	Growth (%)	5.82	2.33	3.15	4.89	3.98

Notes: (1) All calculation are done at constant price (1999-2000=100)
(2) Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively

Table A 4.8
Fiscal Parameters
NAGALAND

Variable		1991-2009	1991-1995	1995-2000	2000-05	2005-09
Own Revenue	Growth (%)	4.85	9.74	4.89	7.58	2.56
Receipts (Tax + Non Tax)	% of GSDP	3.07	4.4	3.4	2.59	2.86
Revenue from Centre (Tax +	Growth (%)	5.67	-1.14	2.67	5.74	8.56
Grants)	% of GSDP	35.44	41.84	40.06	34.72	31.42
Non-Debt	Growth (%)	-6.9	-0.56	-20.56	-1.87	-8.88
Capital Receipts	% of GSDP	0.19	0.51	0.29	0.15	0.06
Primary	Growth (%)	5.52	0.2	2.69	5.89	8.02
Receipts	% of GSDP	38.7	46.75	43.74	37.47	34.34
Primary	Growth (%)	4.62	4.63	0.66	0.64	5.46
Expenditure	% of GSDP	41.42	54.49	48.56	38.11	36.07
Primary Revenue	Growth (%)	4.05	5.28	0.91	1.84	3.44
Expenditure Expenditure	% of GSDP	32.15	43.78	39.29	29.72	26.53
Primary Capital	Growth (%)	6.54	2.01	-0.49	-3.51	11.56
Expenditure	% of GSDP	9.27	10.71	9.27	8.39	9.54
Primary Deficit	% of GSDP	2.72	7.74	4.82	0.64	1.73
Interest Payment	% of GSDP	4.58	5.13	5.26	4.9	3.74
Fiscal Deficit	% of GSDP	7.3	12.87	10.08	5.54	5.47
GSDP	Growth (%)	7.86	9.78	1.91	6.25	5.58

<sup>(2)</sup> Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively

Table A 4.9
Fiscal Parameters
SIKKIM

Variable		1991-2009	1991-1995	1995-2000	2000-05	2005-09
Own Revenue Receipts (Tax + Non Tax)	Growth (%)	9.62	-9.65	6.01	10.15	4.56
	% of GSDP	13.68	12.05	10.35	14.9	15.16
Revenue from Centre (Tax +	Growth (%)	8.24	2.03	3.92	6.35	28.91
Grants)	% of GSDP	54.09	50.26	51.86	50.29	60.3
Non-Debt Capital	Growth (%)	-10.8	43.19	-17.43	-11.51	29.88
Receipts	% of GSDP	0.12	0.42	0.17	0.08	0.02
Primary	Growth (%)	8.52	-0.05	4.21	7.11	24.07
Receipts	% of GSDP	67.89	62.73	62.37	65.27	75.48
Primary	Growth (%)	7.43	-2.04	5.53	9.34	15.28
Expenditure	% of GSDP	66.92	67.96	67.18	63.17	69.84
Primary Revenue	Growth (%)	6.76	0.98	9.34	7.73	8.56
Expenditure	% of GSDP	47.08	48.09	52.46	45.67	44.76
Primary Capital	Growth (%)	8.82	-9.31	-8.12	13.23	27.63
Expenditure	% of GSDP	19.84	19.87	14.71	17.51	25.08
Primary Deficit	% of GSDP	-0.98	5.23	4.81	-2.09	-5.65
Interest Payment	% of GSDP	6.69	5.88	6.72	7.6	6.14
Fiscal Deficit	% of GSDP	5.71	11.11	11.53	5.51	0.49
GSDP	Growth (%)	7.57	9.33	5.99	7.63	7.37

(2) Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively

**Table A 4.10 Fiscal Parameters** 

# **TRIPURA**

Variable		1991-2009	1991-1995	1995-2000	2000-05	2005-09
Own Revenue	Growth (%)	9.98	4.03	10.35	13.12	9.46
Receipts (Tax + Non Tax)	% of GSDP	4.13	3.48	3.6	4.52	4.29
Revenue from	Growth (%)	6.06	-0.7	3.42	5.59	4.46
Centre (Tax + Grants)	% of GSDP	28.48	34.74	31.14	24.87	28.33
Non-Debt	Growth (%)	5.76	-4.17	0.39	15.88	-15.32
Capital Receipts	% of GSDP	0.04	0.04	0.06	0.04	0.03
Primary	Growth (%)	6.51	-0.28	4.14	6.75	5.08
Receipts	% of GSDP	32.66	38.26	34.8	29.43	32.65
Primary	Growth (%)	6.18	0.03	6.25	1.81	13.05
Expenditure	% of GSDP	32.79	39.3	35.03	30.95	31.07
Primary Revenue	Growth (%)	5.12	-0.49	8.18	1.05	8.95
Expenditure	% of GSDP	25.3	32.87	28.51	24.17	21.98
Primary	Growth (%)	9.86	2.77	-2.04	4.92	23
Capital Expenditure	% of GSDP	7.49	6.43	6.52	6.78	9.1
Primary Deficit	% of GSDP	0.13	1.04	0.23	1.52	-1.58
Interest Payment	% of GSDP	3.96	3.76	3.86	4.23	3.81
Fiscal Deficit	% of GSDP	4.09	4.8	4.09	5.75	2.23
GSDP	Growth (%)	8.01	-0.28	10.39	6.13	5.21

Notes: (1) All calculation are done at constant price (1999-2000=100)
(2) Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively

Table A 4.11
Fiscal Parameters
UTTARAKHAND

Variable		2000-2009	1991-1995	1995-2000	2000-05	2005-09
Own Revenue	Growth (%)	21.3			34.61	10.62
Receipts (Tax + Non Tax)	% of GSDP	8.65			6.8	10.28
Revenue from	Growth (%)	21.05			24.14	18.35
Centre (Tax + Grants)	% of GSDP	11.89			8.73	14.67
Non-Debt	Growth (%)	54.39			92.81	73.66
Capital Receipts	% of GSDP	0.24			0.12	0.35
Primary	Growth (%)	21.38			29.1	15.85
Receipts	% of GSDP	20.78			15.65	25.3
Primary	Growth (%)	20.96			35.89	11.04
Expenditure	% of GSDP	21.55			17.35	25.25
Primary	Growth (%)	17.77			33.25	9.96
Revenue Expenditure	% of GSDP	16.87			14.88	18.61
Primary	Growth (%)	35.58			49.57	14.19
Capital Expenditure	% of GSDP	4.69			2.48	6.63
Primary Deficit	% of GSDP	0.77			1.71	-0.05
Interest Payment	% of GSDP	3.31			2.99	3.59
Fiscal Deficit	% of GSDP	4.08			4.7	3.54
GSDP	Growth (%)	7.83			7.44	8.42

(2) Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively

**Table A 4.12 Fiscal Parameters** 14 Non Special Category States\*

Variable		1991-2009	1991-1995	1995-2000	2000-05	2005-09
Own Revenue	Growth (%)	6.34	5.67	3.35	10.44	8.12
Receipts (Tax + Non Tax)	% of GSDP		8.93	8.16	9.52	9.63
Revenue from Centre (Tax +	Growth (%)	6.49	1.96	2.11	5.53	15.52
Grants)	% of GSDP		5.00	4.03	4.28	5.88
Non-Debt	Growth (%)	4.39	5.91	-17.00	3.46	20.24
Capital Receipts	% of GSDP		0.50	0.63	0.43	0.40
Primary	Growth (%)	6.35	4.43	2.47	8.86	11.15
Receipts	% of GSDP		14.43	12.54	14.23	15.90
Primary	Growth (%)	5.71	3.27	6.67	4.37	11.45
Expenditure	% of GSDP		15.55	14.34	15.01	15.83
Primary Revenue	Growth (%)	5.42	2.65	7.04	2.47	11.09
Expenditure	% of GSDP		12.81	12.07	12.54	12.52
Primary Capital	Growth (%)	6.59	6.02	4.82	13.94	12.67
Expenditure	% of GSDP		2.74	2.86	2.47	3.31
Primary Deficit	% of GSDP		1.12	1.79	0.78	-0.07
Interest Payment	% of GSDP		2.10	2.39	3.37	2.78
Fiscal Deficit	% of GSDP		3.22	4.18	4.15	2.71
GSDP	Growth (%)	5.52	6.26	6.12	5.59	7.03

<sup>(2)</sup> Data of 2007-08 and 2008-09 refers to Revised Estimate and Budgeted respectively
\*' 14 Non Special Category States are Andhra Pradesh, Bihar, Gujrat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharastra, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh and West Bengal.

# Chapter-V

# **Debt Sustainability and Conclusion**

## 5.1 Domar's sustainability condition and the states:

Domar model is derived in the chapter-II. On the basis of equation-8, it is proved that for debt-sustainability, the condition that has to be satisfied is:

Where, 'k' is the nominal rate of growth of public debt, 'r' is the average rate of interest paid and 'g' is the growth rate of GSDP.

It is also noticed that, rate of interest is falling in the last five years. So we have computed all the above parameters for the entire period i.e. 1991-2009 to have a better understanding of the process. The reason being that Domar model of debt sustainability is a long run concept. Table 5.1 gives the detail.

Table 5.1 reveals that in all the states,  $\mathbf{k} > \mathbf{r}$ , except Assam and therefore solvency condition is not satisfied. Only in Assam 'r' is greater than 'k' and therefore solvency condition is satisfied.

For sustainability condition 'g' must be greater than 'r'. But 'r' is greater than 'g' in Arunachal Pradesh and therefore sustainability condition is not satisfied<sup>4</sup>. In rest of the states sustainability condition is satisfied, because r < g.

Therefore, we can infer that only Assam's debt position is sustainable and solvency condition is satisfied. In Arunachal Pradesh both sustainability and solvency conditions are not satisfied. In rest of the states solvency condition is

<sup>&</sup>lt;sup>4</sup> Since interest rate paid by the states is reduced due to different measures suggested by the 12<sup>th</sup> Finance Commission and if the average interest rate of last four years is taken in all the states then, 'r' is also less than 'k'. In this situation also short run sustainability condition is satisfied and not the solvency condition as 'r' is less than 'k'.

not satisfied. Thus, debt sustainability in future or in a long term perspective, is uncertain as solvency is the necessary condition for debt sustainability and it is a long-term concept (Rath, 2005). Thus, in the long run, none of the states have a sustainable Debt-GSDP ratio except Assam. The table 5.1 further reveals that average nominal interest paid by the special category states (except Mizoram) during 1991-2009, is higher than the non-special category states. In a situation, when productivity of one rupee investment is low in special category states, then in a high interest regime, profit in the economy becomes low and even negative.

Table 5.1

Debt Sustainability Indicators

State	Nominal			Satisfaction of
	Growth rate of	Average	Nominal	Sustainability
	Debt	nominal Interest	Growth rate of	and solvency
	Stock(1991-	rate paid (1991-	GSDP(1991-	condition
	2009) (%)	2009) (%)	2009) (%)	
	k	r	g	
Arunachal				Both conditions
Pradesh	15.44	12.27	10.61	are not satisfied
Assam				Both conditions
71334111	10.52	10.62	11.23	are satisfied
Himachal				Sustainability is
Pradesh				satisfied but not
Tradesir	17.08	11.10	13.55	solvency
Jammu and				Sustainability is
Kashmir				satisfied but not
Kasılılı	11.91	10.07	12.12	solvency
				Sustainability is
Manipur				satisfied but not
	15.46	10.17	12.33	solvency
				Sustainability is
Meghalaya				satisfied but not
	16.04	10.12	12.07	solvency
				Sustainability is
Mizoram				satisfied but not
	16.80	8.78	11.35	solvency
Nagaland	13.83	12.26	13.38	Sustainability is

				satisfied but not
				solvency
				Sustainability is
Sikkim				satisfied but not
	15.33	12.37	13.10	solvency
				Sustainability is
Tripura				satisfied but not
	15.43	10.37	13.53	solvency
				Sustainability is
Uttarakhand*				satisfied but not
	17.29	10.53	12.44	solvency
14 Non Special				
Category States	14.70	9.59	11.05	

<sup>\*</sup> For Uttarakhand the time period is 2000-09.

Box 5.1 High Average Cost of Borrowing

Table 5.2 shows the average interest paid by different states in different subperiods. All special category states together paid consistently a higher average interest rate in all the sub-periods than the non-special category states. During 1992-95 only Manipur and Mizoram; in 1995-2000 Assam and Mizoram; in 2000-05 Meghalaya and mizoram; and in 2005-09 Mizoram paid an average interest rate lower than the non-special category states. This particular trend is because of the reason that most of the special category states could not availed of the debt relief recommended by the various finance commission. *This is another indicator of high cost of public borrowing in special category states*.

Table 5.2

Average Interest Rate paid by Different States

	1992-95	1995-2000	2000-05	2005-09	1992-2009
Arunachal	10.14	13.76	14.54	8.36	12.08
Pradesh					
Assam	10.82	10.34	10.99	9.03	10.32
Himachal	11.67	11.53	11.57	9.55	11.10
Pradesh					

Jammu and	10.70	11.32	10.68	8.00	10.07
Kashmir					
Manipur	9.33	11.04	12.48	6.72	10.15
Meghalaya	11.10	11.46	9.50	7.87	9.98
Mizoram	8.56	10.18	9.09	6.32	8.67
Nagaland	13.60	14.24	11.90	9.33	12.29
Sikkim	11.45	16.05	10.73	8.80	11.97
Tripura	10.37	11.99	10.81	6.74	10.13
Uttarakhand*	-	-	10.84	8.43	9.64
All special	10.54	11.23	11.12	8.45	10.42
category					
states					
14 Non	9.58	10.55	10.05	8.02	9.59
Special					
Category					
States					

## 5.2 Simulation exercise for Debt sustainability

On the basis of Domar debt sustainability model the equation as derived in chapter-II, is given as:

$$\frac{D_t}{Y_t} = \left(\frac{1+r}{1+g}\right) \frac{D_{t-1}}{Y_{t-1}} + K_t$$

$$\Rightarrow d_t = \left(\frac{1+r}{1+g}\right) d_{t-1} + K_t \dots (1)$$

Here,  $d_t$  and  $d_{t-1}$  are Debt-GSDP ratio in time 't' and 't-1'respectively, 'r' is the real interest rate paid and 'g' is the real growth rate.  $K_t$  is primary deficit to GSDP ratio in the year't'.

By taking average of a presumed base year period for up to which at least revised estimate data is available, debt sustainability of all the states can be worked out. The basis of the equation (1) is that, if a state has achieved primary surplus, debt sustainability is achieved or in other words Debt-GSDP ratio will decline. The primary surplus has to be maintained in the long run and in that case only, the debt-GSDP ratio will converge to a reasonable limit. On this logic, the states that have achieved real primary surplus in period 2005-09 are, Arunachal Pradesh, Assam, Himachal Pradesh, Manipur, Meghalaya, Sikkim, Tripura and Uttaranchal. The states that had primary deficit are Jammu and Kashmir, Mizoram and Nagaland. Since the data of 2008-09 is of budgeted one, we can take the average of the period 2005-08.

#### 5.3 Simulation Exercise

### Scenario-I

We can simulate the equation-1, by taking the following assumptions to find out the Debt-GSDP ratio for the year 2014-15.

- (1) The achieved primary deficit-GSDP ratio in the period 2005-08 is maintained in the long run;
- (2) The real compound growth rate of GSDP achieved in the period 2005-09 is maintained in the long run; and
- (3) The average real interest rate paid in the period 2003-08 is maintained in the long run.

Table 5.2 gives the detail on the parameters used in equation-1 on the basis of the above three assumptions. Debt-GSDP ratio of 2007-08 (RE) is taken as the base year (t-1) Debt-GSDP ratio.

Table 5.3 Debt Sustainability analysis with scenario-I

State	Average Real interest rate paid in 2003-08 (%)	Average Real Growth in GSDP achieved in 2005-09	Average Primary deficit Achieved in 2005-08 (% of GSDP)	Debt GSDP ratio of 2007-08	Projected Debt-GSDP ratio in 2014-15
Arunachal Pradesh	5.50	5.58	-0.72	66.00	59.18
Assam	5.57	4.97	-1.71	28.00	17.13
Himachal Pradesh	5.72	5.58	-2.32	58.78	42.27
Jammu and Kashmir	4.04	3.60	1.72	70.50	84.81
Manipur	3.74	5.86	0.196	58.6	52.15
Meghalaya	3.97	4.33	-1.47	38.78	27.17
Mizoram	2.71	3.98	1.175	101.91	101.43
Nagaland	4.96	5.58	2.78	43.5	60.86
Sikkim	5.50	7.37	2.15	72.2	78.13
Tripura	3.97	5.21	-2.49	48.4	27.72
Uttarakhand	5.32	8.42	1.13	42.41	41.88
14 non-special category states	3.42	8.45	-0.18	37.17	23.41

Table 5.4
Incremental Debt GSDP ratio (scenario-I)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-05
Arunachal							
Pradesh	-0.91	-0.91	-0.90	-0.90	-0.90	-0.90	-0.89
Assam	-1.52	-1.53	-1.54	-1.55	-1.56	-1.57	-1.58
Himachal							
Pradesh	-2.36	-2.36	-2.36	-2.36	-2.36	-2.36	-2.35
Jammu and							
Kashmir	2.02	2.03	2.04	2.05	2.05	2.06	2.07

Manipur	-0.98	-0.96	-0.94	-0.92	-0.90	-0.88	-0.87
Meghalaya	-1.60	-1.60	-1.59	-1.59	-1.58	-1.58	-1.57
Mizoram	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.06
Nagaland	2.52	2.51	2.49	2.48	2.47	2.45	2.44
Sikkim	0.89	0.88	0.86	0.85	0.83	0.82	0.80
Tripura	-3.06	-3.02	-2.99	-2.95	-2.92	-2.88	-2.85
Uttarakhand	-0.08	-0.08	-0.08	-0.08	-0.07	-0.07	-0.07

Table 5.3 reveals that Arunacahal's Debt-GSDP ratio will come to 59.18 percent in the year 2014-15. Assam has already achieved 28 percent in 2007-08 and its ratio will become 17.13 percent in the terminal year. The ratio for Himachal Pradesh will come to 42.27 percent and that of Jammu and Kashmirs' to 84.81 percent. Manipur's ratio will remain at 52.15 percent and Meghalaya's will decline to 27.67 percent. Mizoram's ratio will be stagnated at 101.43 percent. Ratio of Nagaland and Sikkim will move up to 60.86 and 78.13 percent respectively. In Tripura the ratio will decline to 27.72 percent and a marginal decline will occur in Uttarakhand.

The above table 5.3 further reveals that average real interest paid by the non-special category states is 3.42 percent in 2003-08, which is considerably higher than the interest rate paid by the special category states (except Mizoram). If they can obtain interest free loan at least an equivalent of outstanding amount due to central government then, real interest rate can be reduced substantially. In that situation by simulating equation-1, we can predict the future Debt- GSDP ratio of the states as given in table 5.5.

Table 5.5

Debt Sustainability analysis with scenario-I (a)

State	Averag e Real interest rate paid in 2003- 08 (%)	Central Governme nt Loan and Advanceas a % of total debt 2007-08	New interest rate after availing interest relief=Colum n 2-(column 2*column 3/100)	Averag e Real Growth in GSDP achieve d in 2005-09	Average Primary deficit Achieve d in 2005-08 (% of GSDP)	Debt GSDP ratio of 2007- 08	Projecte d Debt- GSDP ratio in 2014-15
Arunachal							
Pradesh	5.50	19.01	4.45	5.58	-0.72	66.00	55.47
Assam	5.57	12.70	4.86	4.97	-1.71	28.00	15.86
Himachal							
Pradesh	5.72	5.01	5.43	5.58	-2.32	58.78	41.28
Jammu and							
Kashmir	4.04	10.92	3.60	3.60	1.72	70.50	82.54
Manipur	3.74	21.19	2.95	5.86	0.20	58.60	49.47
Meghalaya	3.97	11.67	3.51	4.33	-1.47	38.78	26.64
M:						101.9	
Mizoram	2.71	11.30	2.40	3.98	1.18	1	99.41
Nagaland	4.96	11.79	4.38	5.58	2.78	43.50	58.96
Sikkim	5.50	13.08	4.78	7.37	2.15	72.20	74.86
Tripura	3.97	9.51	3.59	5.21	-2.49	48.40	26.77
Uttarakhan d	5.32	3.40	5.14	8.42	1.13	42.41	41.43

Table 5.6
Incremental Debt- GSDP ratio (scenario-I (a)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-05
Arunachal							
Pradesh	-1.56	-1.54	-1.52	-1.50	-1.48	-1.47	-1.45
Assam	-1.74	-1.74	-1.74	-1.73	-1.73	-1.73	-1.73
Himachal							
Pradesh	-2.53	-2.52	-2.51	-2.50	-2.49	-2.48	-2.47
Jammu and							
Kashmir	1.72	1.72	1.72	1.72	1.72	1.72	1.72

Manipur	-1.41	-1.38	-1.34	-1.30	-1.27	-1.23	-1.20
Meghalaya	-1.77	-1.76	-1.75	-1.73	-1.72	-1.71	-1.69
Mizoram	-0.37	-0.37	-0.36	-0.36	-0.35	-0.35	-0.34
Nagaland	2.29	2.26	2.23	2.21	2.18	2.16	2.13
Sikkim	0.41	0.40	0.39	0.38	0.37	0.36	0.35
Tripura	-3.24	-3.19	-3.14	-3.09	-3.04	-2.99	-2.95
Uttarakhand	-0.15	-0.15	-0.14	-0.14	-0.14	-0.13	-0.13

#### Scenario- II

Under the second scenario the following assumptions are made.

- (i) All the states are signatory to FRBM Act and are to bring Gross Fiscal Deficit to 3 percent of GSDP by 2009-10. In that case, primary deficit will be Gross Fiscal Deficit minus Interest payment. By taking the achieved interest payment as a percentage of GSDP in the period 2005-9 with the assumption that figure will continue in the 13th Finance Commission's award period, the primary deficit for all the years can be computed. We have assumed this figure to continue up to 2014-15. If, interest free loan of equivalent outstanding central government loan is given from 2010-11 onwards, then primary deficit can be reduced further.
- (ii) Growth rate of the period 2010-15 is 1 percentage point more than the achieved rate in 2005-09. This is possible if there is increase in developmental capital outlay and required primary surplus is achieved through compressing distorted revenue expenditure as suggested in chapter-IV; and
- (iii) The interest relief measure of 12th Finance commission is continued in the period 2010-15. In this case the real interest rate paid in any of the year in 2010-15 will not exceed that of 2007-08. Thus, interest rate paid in 2007-08 will become the base year interest rate in Equation-1. Further, If they can obtain interest free loan at least an equivalent of outstanding amount

due to central government then, real interest rate can be reduced substantially. The process of calculation is given in column 4 of table 5.7 (a) and 5.7 (b).

Under the scenario-II the debt position of the states in 2014-15 is computed in table 5.7 (a) and 5.7 (b).

Table 5.7 (a)
Debt Sustainability analysis with alternate scenario-II

		1	1		1					
Projected Debt-GSDP ratio in 2014-15	10		37.53	29.48	35.64	60.37		35.48	34.58	55.70
Debt GSDP ratio of 2007- 08	6		99	28	58 78		70.5	58.6	38.78	101.91
Primary deficit on the basis of assumption (i)(% of GSDP) (For period 2008-09 and 2009-10)	8	Col 5-Col 6	-2.63	0.30	-2 61		-1.95	-1.11	0.03	-3.93
Central Governm ent Loan and Advancea s a % of total debt 2007-08	7		19.01	12.70	5.01		10.92	21.19	11.67	11.30
Actual Interest payment as a percentag e of GSDP 2005-09	9		5.63	2.7	5.61		4.95	4.11	2.97	6.93
Fiscal Deficit	S		3	3	در	,	3	3	3	3
Effective Interest payment after availing interest free loan (%) (For period 2010- 11 to 2014-15)	4	Column 2- (column 2*column7/100)	3.45	5.42	4 95		5.20	1.84	3.57	1.45
Average Real Growth in GSDP achieved in 2005- 09+1 percentage	3		6.58	5.97	85 9		4.6	98.9	5.33	4.98
Average Real interest rate paid in 2007-08 (%) (For period 2008-09 and 2009-	7		4.26	6.21	5.21		5.84	2.33	4.04	1.63
State	1		Arunachal Pradesh	Assam	Himachal Pradesh	Jammu and	Kashmir	Manipur	Meghalaya	Mizoram

Table 5.7 (b)
Debt Sustainability analysis with alternate scenario-II

		T	1			1
Projected Debt-GSDP ratio in 2014-15	10		33.52	38.24	27.71	29.01
Debt GSDP ratio of 2007-08	6		43.5	72.2	48.4	42.41
Primary deficit on the basis of assumptio n (i)(% of GSDP)	<b>&amp;</b>	Col 5-Col 6	-0.74	-3.14	-0.81	-0.59
Central Governm ent Loan and Advancea s a % of total debt 2007-08	7		11.79	13.08	9.51	3.40
Actual Interest payment as a percentag e of GSDP 2005-09	9		3.74	6.14	3.81	3.59
Fiscal Deficit	5		3	3	3	3
Effective Interest payment after availing interest free loan (%)	4	Column 2- (column 2*column7/100)	4.53	4.88	3.00	5.38
Average Real Growth in GSDP achieved in 2005- 09+1 percentage	3		6.58	8.37	6.21	9.42
Average Real interest rate paid in 2007-08 (%)	7		5.13	5.62	3.32	5.57
State	1		Nagaland	Sikkim	Tripura	Uttarakhan d

Table 5.8
Incremental Debt- GSDP ratio (scenario-II )

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-05
Arunachal							
Pradesh	-4.06	-3.98	-4.33	-4.20	-4.08	-3.96	-3.85
Assam	0.36	0.37	0.15	0.15	0.15	0.15	0.15
Himachal							
Pradesh	-3.35	-3.31	-3.40	-3.35	-3.29	-3.24	-3.19
Jammu and							
Kashmir	-1.11	-1.13	-1.56	-1.57	-1.58	-1.59	-1.59
Manipur	-3.59	-3.44	-3.53	-3.37	-3.21	-3.06	-2.91
Meghalaya	-0.50	-0.50	-0.66	-0.65	-0.64	-0.63	-0.62
Mizoram	-7.12	-6.90	-6.89	-6.65	-6.43	-6.21	-6.00
Nagaland	-1.33	-1.31	-1.53	-1.50	-1.47	-1.44	-1.41
Sikkim	-4.97	-4.85	-5.15	-4.98	-4.82	-4.67	-4.52
Tripura	-3.12	-3.04	-3.09	-2.99	-2.90	-2.82	-2.73
Uttarakhand	-2.08	-2.01	-2.00	-1.93	-1.86	-1.79	-1.72

Table 5.7 (a) and 5.7 (b) reveals that under some fiscal reforms and adjustments, the debt parameter can be brought to 30 percent plus level in many states, except Jammu and Kashmir and Mizoram. The reforms can be done in the identified distortions in primary expenditure in chapter-4 particularly in the non-developmental economic service, non-interest-non-developmental revenue and non-developmental capital expenditure. If the identified distortions are corrected, interest free loan is provided and developmental capital outlay is increased, then the growth rate can be hiked and debt sustainability can be achieved in the short run and finally a reasonable Debt-GSDP ratio in the long run.

## Note on HIPC type debt relief measures

To have an attempt to argue in favour of a HIPC type debt relief measures for the special category sates, the reviewer has rightly put a question in page-4 in his report, which sates – "Does the debt service on these internal debt represent too large a share of public spending, exceeding for instance, the outlays on education health, road maintenance, water supply and other basic infrastructure?"

The reviewer has also given the suggested measures as an outcome of the above question. If the answer is yes, than debt relief may be given which would ultimately depend on many factors. If the answer is No, debt relief may not be the best way to stimulate the special category states.

On the basis of the reviewer's comment the following conclusions are derived as given in tables A5.1 to 5.12.

Arunachal Pradesh: Debt service as a percentage of GSDP is consistently increasing. It increased for 4.8% of GSDP in 1991-95 to 12.81 per cent in 2005-09. During the same time Developmental Capital Outlay declined from 20.78% of GSDP to 15.91%.

Assam: Here in Assam, Developmental Capital Outlay increased from 1.78% of GSDP to 3.26% between 1991-95 on 2005-09. During the same time debt service declined from 4.36% to 3.46% of GSDP.

Himachal Pradesh: There has been a consistent decline in developmental capital outlay. Whenever there was a decline in debt service, developmental capital outlay did not increase; rather it declined or increased marginally. Therefore, for any debt relief, conditionality may be attached to increase capital outlay in developmental activities.

Jammu Kashmir: Here, up to 2000-05, both developmental capital outlay and debt service declined simultaneously. Only in 2005-09, developmental capital outlay increased and debt service declined. The important point is that, percentage points increase in developmental capital outlay (3.72 point) was higher than the decline in debt service (0.56 point).

Manipur: Debt service as a percentage of GSDP was maximum in 2000-05 (17.94%) and as a result developmental capital outlay was the lowest level (6.26% of GSDP). However, in 2005-09 the situation improved, as debt service declined and developmental capital outlay increased to 12.60% of GSDP.

Meghalaya: Debt service of Meghalaya in 2005-09 was almost same as that of the period 1991-95 but developmental capital outlay was less in 2005-09 as compared to 1991-95.

Mizoram: During the entire period, developmental capital outlay remained constant (with the exception in 2000-05). Debt service almost doubled in 2005-09 as compared to 1991-95 as a percentage of GSDP.

Nagaland: Debt service had declined consistently but developmental capital outlay remained stagnated.

Sikkim: Between 1991-95 and 2005-09, developmental capital outlay increased by 5 percentage points and debt service declined by 1 point.

Tripura: Debt service has remained constant in the entire period, whereas developmental capital outlay increased by only 2 percentage points between 1991-95 and 2005-09.

Uttarakhand: Between 2000-05 and 2005-09, debt service declined by 1 percentage point and developmental capital outlay increased by two percentage points.

Thus, in five states, developmental capital outlay declined or remained constant and in six, an increase was noticed. Wherever developmental capital outlay increased, the increase was not substantial. Debt service increased in two states. A marginal decline in debt service was observed in eight states. Most important component in debt service was interest payment. As compared to the non-special category states, interest payment also carried a high proportion in GSDP in special category states. It was 6.63 percent in Mizoram and 5.63 percent in Arunachal Pradesh in contrast to 2.78 percent in non-special

category states. In other special category states also it was more than the non-special category states.

Thus, the impact of debt service on the developmental expenditure has been heterogeneous on the special category states. Therefore, as per the suggestion given by the reviewer, waving of debt is not the solution. To our understanding high interest burden is the significant obstacle to attain debt sustainability in these states. Further high average cost of borrowing refuels the high cost of service provisioning in special category states. Once relief measures are directed in this direction, then developmental capital expenditure can also be increased. Therefore, policy measure should be formulated how to lessen the interest burden.

## **Policy**:

- (1) Conditionality may be attached with growth public debt. It should not exceed market rate of interest or repo-rate.
- (2) Conditionality may also be attached for hike in developmental capital outlay
- (3) A contributory debt relief fund (in line with International Monetary Fund) may be devised through which the special category states may obtain interest free loan.

## 5.4 Conclusion and Policy Recommendations

The above calculations are made under stringent assumptions. Uncertainty plays a crucial role in different parameters used. Any deterioration in any of the parameters will have serious upward turn of the Debt-GSDP ratio in future.

Some analysts believe that risk of rising interest is there in India (Ianchovichina *et a*l. (2007). They argue that, high combined central and state

deficit are the significant macro economic risk in India for future interest rate. Further, recovery of the industrial sector and higher economic growth could also lead to increased demand for credit. However, the recent world recessionary trend may not affect the interest rate at least in the short run, as pointed out by Montek Singh Ahluawalia (The Hindu, 12th January 2009).

Further, the implementation of 6<sup>th</sup> pay Commission pay package will put further pressure on state finance. It is estimated that after implementation of pay package 20 percent increase in wage bill of the states will take place. Thus, there will be a hike in non-developmental revenue expenditure. In case of non-proportional increase in revenue, curtailment will be there in developmental capital outlay, which will result in reduction in growth of GSDP. This will further add-up to the observed declining trend in growth rate of GSDP in all states in 2005-09<sup>5</sup>. However with corresponding equal increase in central inflow to meet the enhanced salary burden and no compression in capital outlay then, growth rate can be increased by one percentage point. Thus, the process is vicious and we are to make alternative presumptions on the parameters.

Outstanding guarantee of the State governments also pose a challenge to Debt Sustainability in a situation when the borrower defaults<sup>6</sup>. The outstanding guarantee as a percentage of GSDP are 20 percent in Jammu and Kashmir, 10 percent in Himachal Pradesh, 5.82 percent in Uttarakhand, 4.36 percent in Mizoram, 4.13 percent in Sikkim, 3 percent in Manipur and 1.29 percent in Assam as on 2006-07<sup>7</sup>. Thus, the problem is quite serious in Jammu and Kashmir and Himachal Pradesh. The outstanding guarantee of other states is not available. Generally, the government guarantees the loan of Public Sector Undertakings. In some states the government does guarantee the loans of the

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<sup>&</sup>lt;sup>5</sup> See table A 4.1 to A 4.11 for detail.

<sup>&</sup>lt;sup>6</sup> Personal discussion with Prof Atul Sarma.

<sup>&</sup>lt;sup>7</sup> Computed from Reserve Bank of India (2008), Statement 43, p.219.

surrendered militants on political grounds. However data is not available on this and cannot be substantiated with facts. Finance commission may collect the data from the state governments on defaulted loan in this matter for a better policy formulation.

The special category states are special in the sense that they are late starters in the developmental process. The problem here is not the revenue generation as central inflow is quite high, but high cost of service provisioning, high average interest rate, high interest burden (as compared to non-special category states) and, quality and management of public expenditure. Thus, a new version of FRBM act may be evolved with provisions like third party monitoring (by incorporating NGOs and Civil society8) of capital outlay, making State Finance Commission statutory in the line of Central Finance Commission with the provisions that the budgetary proposal should be approved by them before being presented to the Legislature. A particular percentage of the primary expenditure (30 percent) may be capped for developmental capital outlay, such that the percentage is not tampered while deciding about primary deficit. If the states agree, then the Interest Free Debt Relief Fund may be recommended by the 13th Finance commission. The states are fast moving towards the market for their loan requirements. Therefore, immediate steps are necessary to correct the distortions in expenditure through incentive based policies such that high growth of GSDP is achieved, with a sustainable debt-income ratio in future.

<sup>&</sup>lt;sup>8</sup> Views expressed by Dr. Tana Showren, Reader, Department of History, Rajiv Gandhi University.

Table A 5.1
Developmental Expenditure Vs Debt Service Indicator (% GSDP)
Arunachal Pradesh

Indicator	1991-95	1995-00	2000-05	2005-09
Developmental Capital Outlay	20.78	18.98	14.05	15.91
Social Services Capital Outlay	3.82	3.27	2.34	3.24
Economic Services Capital Outlay	16.96	15.70	11.71	12.67
Discharge of Internal Debt	0.07	0.23	3.41	5.05
Repayment of Loans to the Centre	1.46	0.79	2.47	2.13
Loan repayment	1.53	1.02	5.88	7.18
Interest Payment	3.27	4.45	5.95	5.63
Total Debt Service	4.80	5.47	11.83	12.81

Table A 5.2 Developmental Expenditure Vs Debt Service Indicator (% GSDP) Assam

Indicator	1991-95	1995-00	2000-05	2005-09
Developmental Capital Outlay	1.78	1.41	1.92	3.26
Social Services Capital Outlay	0.19	0.15	0.08	0.44
Economic Services Capital Outlay	1.59	1.26	1.84	2.82
Discharge of Internal Debt	0.08	0.11	0.84	0.53
Repayment of Loans to the Centre	1.65	1.76	1.65	0.23
Loan repayment	1.73	1.86	2.49	0.76
Interest Payment	2.63	2.68	2.88	2.70
Total Debt Service	4.36	4.54	5.38	3.46

Table A 5.3
Developmental Expenditure Vs Debt Service Indicator (% GSDP)Himachal Pradesh

0021)22222000000					
Indicator	1991-95	1995-00	2000-05	2005-09	
Developmental Capital Outlay	5.62	4.88	3.53	3.98	
Social Services Capital Outlay	1.72	1.58	1.44	1.79	
Economic Services Capital Outlay	3.90	3.29	2.09	2.19	
Discharge of Internal Debt	6.69	0.15	3.20	3.43	
Repayment of Loans to the Centre	1.22	1.11	1.57	0.25	
Loan repayment	7.91	1.26	4.78	3.68	
Interest Payment	4.05	4.44	6.38	5.61	
Total Debt Service	11.97	5.70	11.16	9.28	

Table A 5.4
Developmental Expenditure Vs Debt Service Indicator (% GSDP)Jammu Kashmir

Indicator	1991-95	1995-00	2000-05	2005-09
Developmental Capital Outlay	8.67	7.21	7.09	11.81
Social Services Capital Outlay	3.00	2.38	1.73	4.16
Economic Services Capital Outlay	5.67	4.82	5.36	7.65
Discharge of Internal Debt	1.12	0.30	0.30	1.10
Repayment of Loans to the Centre	2.60	1.73	1.44	0.43
Loan repayment	3.72	2.03	1.74	1.53
Interest Payment	6.88	5.71	5.30	4.95
Total Debt Service	10.60	7.74	7.04	6.48

Table A 5.5
Developmental Expenditure Vs Debt Service Indicator (% GSDP)Manipur

Indicator	1991-95	1995-00	2000-05	2005-09
Developmental Capital Outlay	10.26	11.32	6.26	12.60
Social Services Capital Outlay	1.89	3.07	2.65	4.45
Economic Services Capital Outlay	8.37	8.25	3.61	8.15
Discharge of Internal Debt	5.74	0.46	0.55	0.71
Repayment of Loans to the Centre	3.64	2.22	11.57	2.78
Loan repayment	9.38	2.68	12.11	3.48
Interest Payment	3.67	3.86	5.82	4.11
Total Debt Service	13.04	6.54	17.94	7.60

Table A 5.6 Developmental Expenditure Vs Debt Service Indicator (% GSDP)Meghalaya

Indicator	1991-95	1995-00	2000-05	2005-09
Developmental Capital Outlay	6.52	5.16	4.00	5.46
Social Services Capital Outlay	2.09	1.78	1.61	2.16
Economic Services Capital Outlay	4.44	3.38	2.39	3.30
Discharge of Internal Debt	0.17	0.65	0.86	0.97
Repayment of Loans to the Centre	1.87	0.48	1.21	0.29
Loan repayment	2.04	1.13	2.07	1.26
Interest Payment	2.17	2.58	3.05	2.97
Total Debt Service	4.21	3.71	5.11	4.24

Table A 5.7
Developmental Expenditure Vs Debt Service Indicator (% GSDP)Mizoram

Indicator	1991-95	1995-00	2000-05	2005-09
Developmental Capital Outlay	13.53	13.35	10.60	13.86
Social Services Capital Outlay	2.71	2.55	3.72	3.98
Economic Services Capital Outlay	10.82	10.80	6.88	9.88
Discharge of Internal Debt	0.25	0.74	1.14	2.76
Repayment of Loans to the Centre	0.98	0.66	2.05	0.70
Loan repayment	1.23	1.40	3.19	3.46
Interest Payment	3.58	5.36	6.99	6.68
Total Debt Service	4.81	6.76	10.17	10.14

Table A 5.8
Developmental Expenditure Vs Debt Service Indicator (% GSDP)Nagaland

Indicator	1991-95	1995-00	2000-05	2005-09
Developmental Capital Outlay	8.75	7.88	7.49	8.10
Social Services Capital Outlay	2.92	3.33	3.19	3.11
Economic Services Capital Outlay	5.83	4.55	4.30	4.98
Discharge of Internal Debt	0.59	0.84	1.15	1.87
Repayment of Loans to the Centre	7.72	2.42	1.68	0.53
Loan repayment	8.31	3.26	2.83	2.41
Interest Payment	5.13	5.26	4.90	3.74
Total Debt Service	13.44	8.52	7.73	6.15

Table A 5.9
Developmental Expenditure Vs Debt Service Indicator (% GSDP)Sikkim

Indicator	1991-95	1995-00	2000-05	2005-09
Developmental Capital Outlay	18.59	13.77	16.67	23.52
Social Services Capital Outlay	5.60	4.68	6.71	7.78
Economic Services Capital Outlay	13.00	9.08	9.97	15.74
Discharge of Internal Debt	0.43	0.62	1.48	1.72
Repayment of Loans to the Centre	1.10	2.59	2.72	0.61
Loan repayment	1.53	3.21	4.21	2.34
Interest Payment	5.88	6.72	7.60	6.14
Total Debt Service	7.40	9.93	11.81	8.47

Table A 5.10
Developmental Expenditure Vs Debt Service Indicator (% GSDP)Tripura

Indicator	1991-95	1995-00	2000-	2005-09
Developmental Capital Outlay	6.14	6.41	6.50	8.19
Social Services Capital Outlay	1.38	2.45	2.46	3.33
Economic Services Capital Outlay	4.76	3.97	4.04	4.86
Discharge of Internal Debt	0.34	1.18	0.94	0.92
Repayment of Loans to the Centre	1.26	0.56	0.88	0.32
Loan repayment	1.60	1.74	1.82	1.24
Interest Payment	3.76	3.86	4.23	3.81
Total Debt Service	5.36	5.60	6.05	5.05

Table A 5.11
Developmental Expenditure Vs Debt Service Indicator (% GSDP)Uttrakhand

Indicator	1991-95	1995-00	2000-05	2005-09
Developmental Capital Outlay			2.22	6.12
Social Services Capital Outlay			0.39	1.18
Economic Services Capital Outlay			1.82	4.94
Discharge of Internal Debt			0.05	0.75
Repayment of Loans to the Centre			2.22	0.10
Loan repayment			2.27	0.85
Interest Payment			2.99	3.59
Total Debt Service			5.27	4.44

Table A 5.12 Developmental Expenditure Vs Debt Service Indicator (% GSDP)14 Non-Special Category States

Indicator	1991-95	1995-00	2000-05	2005-09
Developmental Capital Outlay	1.61	1.44	1.74	2.84
Social Services Capital Outlay	0.21	0.21	0.31	0.51
Economic Services Capital Outlay	1.40	1.23	1.43	2.32
Discharge of Internal Debt	0.15	0.11	1.06	0.85
Repayment of Loans to the Centre	0.57	0.52	0.88	0.28
Loan repayment	0.73	0.63	1.95	1.13
Interest Payment	2.10	2.39	3.37	2.78
Total Debt Service	2.83	3.02	5.31	3.91

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