A STUDY OF
DEBT SUSTAINABILITY AT STATE LEVEL
IN INDIA

The views expressed in the Report do not represent that of the Reserve Bank of India

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EXECUTIVE SUMMARY

Studies on debt sustainability in India have addressed the issue at state-level, if at all, only at an aggregate level across all states, or at an even higher level of aggregation including the Centre. Since the constituent states of the Indian Union are highly heterogeneous in terms of economic size, there is a need for state-specific assessment of debt sustainability status. As public debt accumulates, there is legitimate concern over whether the borrowing government will be in a position to service its debt. Ultimately, when financial markets perceive the debt stock of any government as unsustainable, further lending to that government will cease. Many state governments in India are dangerously close to such a situation, and it is this which motivates the present study. The intent here is not to apportion blame but to address the situation as it presently exists, and to identify the fiscal correction avenues that call for priority attention in each state.

By 2002-03, the debt of major states stood at 41 percent of their combined GSDP, higher by 15.7 percentage points than the average for the quinquennium 1992-97. This overall change covers a wide range. Among the major states, the rise in Bihar was 33 percent, as against a fall in Goa by nearly 1 percent. Among special category states the disparity was even wider, between Mizoram, which saw a 39.7 increase in debt ratio, and Arunachal Pradesh and Jammu and Kashmir, which actually saw a decline, albeit from high initial levels.

The worrying aspect of the trajectory of debt among the major states is that the more indebted states prior to 1997 in general saw larger increases in their debt ratio. Excluding Goa, the rank correlation coefficient between rankings by levels in 1992-97, and the ranking by change to 2002-03, works out to 0.73, and is statistically significant.

The interest rate on state debt crossed over the nominal growth rate of GSDP during the period 1997-02. The interest rate on debt of major states, at 10.4 percent on average in 1997-02, was higher than the nominal growth rate of GSDP, of 9.9 percent. This is in contrast to 1992-97, when the interest rate was at 9.9 percent, as against nominal GSDP growth of 16.1 percent. There was a similar crossover for special category states, from average interest of 10.3 percent and nominal GSDP growth of 13.3 percent in 1992-97, to 11.7 and 11.5 percent respectively in 1997-02. Thus, states will now have to carry overall primary surpluses in order to stabilise debt as a percent of GSDP. Fiscal correction at state level is no longer an option, but has become an imperative for credibility in financial markets.

After operationalising the analytics of debt sustainability for subnational governments, states are grouped and ranked by the indicators selected. The selected indicators are the change in debt/GSDP starting from the average for 1992-97; the sign of the primary revenue balance in aggregate over 1997-02; own tax buoyancy, estimated over the period 1980-02; and the annual growth in non-interest revenue expenditure over 1997-02.

The study identifies states in need of expenditure compression and improvement in own revenue collection effort, and lists four other institutional changes required. These are introduction of guarantee caps and fiscal responsibility legislation, and participation in the Consolidated Sinking Fund and the Guarantee Redemption Fund. Fiscal responsibility legislation has to explicitly prohibit budgetary malpractices, whereby unproductive expenditures are merged with productive capital outlays. Loss cover for non-departmental state PSUs is extended through incremental equity contributions to share capital under the head of non-Plan capital outlays, and servicing of off-budget borrowing, including capitalised interest, is routed under the head of Plan capital outlays.

Budget documents do not at present provide the full picture on state liabilities broken down by source, along with all contingent liabilities, the latter with a detailed breakdown that would enable risk assessment. This is a fundamental requirement. Disclosure imposes market discipline on governments, and enhances credibility and acceptability of the Government debt in the market.

It can be nobody's case that states are entirely responsible for the fiscal situation in which they find themselves. In a fiscal federation, the ultimate responsibility for macroeconomic control rests with government at the national level. The provision for this is enshrined under Article 293(3) of the Constitution. Central control of state borrowing upto now has been partial, and has not extended to borrowing against small savings collections, or direct borrowing from the public through small savings schemes floated by the state government. It is only when the coverage of

Article 293(3) comprehensively extends to all avenues of possible borrowing that enabling conditions for unsustainable debt paths will have been eliminated. If the TFC recommendation for centrally-set comprehensive borrowing cap, is operationalised, this may now be possible. However caps set in accordance with the TFC formula may be at odds with the fiscal deficit correction path set out in FRBMs as enacted by states.

A STUDY OF DEBT SUSTAINABILITY AT STATE LEVEL IN INDIA

1. INTRODUCTION

There is growing awareness today in India of the urgent need to contain public debt at sustainable levels at the level of both the Centre and states. In recent years, the debt problem at state level has become the priority area of concern. In addition to budgetary debt, states have also increasingly resorted to off-budget borrowings through guarantees. In the months to come, some states may well find financial markets unwilling to absorb their securities. The repercussions could extend by contagion to all states.

Recognizing the magnitude of the problem, the Comptroller and Auditor General of India (CAG) and Finance Commissions in their various reports have sounded warnings about the unsustainability of finances of state governments. The Reserve Bank of India (RBI) as the banker and debt manager to state governments has repeatedly stressed (in its Annual Reports and other publications), the need to address the underlying issues relating to debt sustainability.

Studies on debt sustainability in the Indian context have tended to be confined to the Central Government, or to state finances only at a consolidated level. State-wise analysis is conspicuous by its absence. While the issue of debt sustainability is a concern across all the states, their heterogeneity in terms of size, level of income, and their financial position measured by various fiscal indicators and ability to raise resources on their own, calls for varied policy initiatives. This report attempts to provide exactly such a state-specific assessment of sustainability status, and the kind of corrective action called for in each.

Recognising that debt is approaching unsustainable levels, a few state governments have proactively undertaken fiscal adjustment programmes. Many state governments, however, tend to postpone fiscal reforms as long as the adverse affects of debt accumulation do not have any discernible impact on their day-to-day functioning. This kind of postponement is damaging, because if market perceptions of unsustainability are not anticipated and addressed, there could be a sudden cessation of market lending.

Against the above backdrop, the objective of the present study is to examine and assess the underlying debt path across the individual states using an analytical framework. The exercise groups states by sustainability status, and the types of corrective actions called for. This report does not attempt any risk assessment of contingent debt at state-level.

The organisation of the report is as follows. Section 2 presents the analytics of debt sustainability for subnational governments in a fiscal federation. Operationalisation of the analytics for state governments in India is done in section 3. An overview of the debt position of the states is presented in section 4. Based on the analytical framework of section 2, a state-wise assessment is carried out in section 5. Policy recommendations are set out in Section 6. The empirical literature on India is set out in annex 1. Annex 2 provides an overview of the observations of the RBI over the years.

2. ANALYTICS OF DEBT SUSTAINABILITY

2.1 DEBT AND DEFICITS

Continuous government borrowing to cover fiscal imbalances results in ever rising public debt, the servicing of which must eventually come out of public revenues in subsequent years. As public debt accumulates, there is legitimate concern over whether the borrowing government will be in a position to service its debt. Ultimately, when financial markets perceive the debt stock of any government as unsustainable, further lending to that government will cease. Many state governments in India are dangerously close to such a situation, and it is this which motivates the present report.

In order to calibrate the sustainability status of state debt, it is first necessary to set out the simple dynamics of public debt. Public debt, D, defined as the unredeemed face value of the accumulated stock of government non-monetary financial liabilities, is customarily normalised by GDP for comparison over time. In the context of states in India, the normalising denominator has to be the Gross State Domestic Product (GSDP).[1] Thus, in year t:

$$d_t = \frac{D_t}{GSDP_t}$$

The special (and simplifying) features of subnational public debt are that there are no possibilities of seignorage or external borrowing, and by extension, no need to obtain that subset of public debt that corresponds to non-monetised debt. The dynamics of debt in the context of state governments in India can thus be stated very simply. The debt stock is added to by the fiscal deficit incurred in each year, thus:

$$d_t = \frac{D_t}{GSDP_t} = \frac{D_{t-1}}{GSDP_{t-1}(1 + n)} + f_t \qquad (1)$$

where in year t,

n = nominal rate of growth of income.

f = fiscal deficit/GSDP.

Two points to note are that the rate of growth of GSDP (n) in the equation above is the nominal, not the real rate of growth, and that the fiscal deficit (f) is the net new borrowing in each period, net of repayment of past debt. The fiscal deficit is the excess of total expenditures over total non-debt receipts. Non-debt receipts are the sum of revenue receipts on the current account, and receipts if any from sale of government assets on the capital account. It follows quite simply from equation (1) above that, for constant values of f and n, the debt ratio will stabilise at the level d, thus:

$$d = \frac{f\,(1 + n)}{n}$$

To illustrate, if there is a 3 percent limit on the fiscal deficit as a percent of GDP, following the Maastricht Treaty imposed by consensus on (EU) member countries, and if n is 10 percent, d will stabilise at 33 percent of GSDP. States with higher starting values of d will decline to this level, but the decline will be asymptotic, stretching upto infinity. A state with debt at 40 percent of GSDP will reach 34 percent after 20 years.[2] This is important to remember. Stabilising the fiscal deficit at some percent of GSDP will not immediately stabilise debt/GSDP at the corresponding level.

There is no theoretical basis for designating any particular debt/GSDP value as superior or preferable to any other. The bound on debt/GSDP is imposed by the fact that tax revenues are costly to raise, as tax administration officials the world over will testify,[3] and always politically difficult. Thus, sustainability is closely related to revenue-raising

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1 Some caveats about the use of the GSDP as a normaliser are listed in section 5.

2 Where d_t and d_0 are the targeted and initial values, the time t is given by the formula

$$t = \frac{\log [\, d_0 - 0.33] / \log [\, d_t - 0.33]}{\log 1.1}$$

for the assumed values of f and n.

3 In the language of economics, there is no allocatively non-distortionary tax, and the economic costs of tax collection are increasing and strictly convex in the tax rate.

capacity, which again is a state-specific matter, and could in principle be crossed for a state with weak revenue-raising capability even at very low levels of debt/GSDP.

2.2 SOLVENCY, STABILITY AND SUSTAINABILITY

Solvency is a term denoting positive net worth, while sustainability relates more to the sufficiency of liquid assets to meet current or committed obligations. In the public debt context, the term sustainability embodies concern about the ability of the government to service its debt. A government which does not generate enough current revenues for debt service must either default on its obligations, or borrow more in order to service past debt as well as to cover its ongoing imbalances. Continual borrowing of this kind is known as a Ponzi game, and will show up in the time path of the debt/GSDP ratio. Clearly solvency and sustainability are closely related, in that an unsustainable time path will ultimately threaten the solvency of the state.[4]

It follows from the above that the time path of debt/GSDP is an important indicator of the sustainability status of the state. Where debt/GSDP shows signs of stabilising at some particular level, the debt path for that reason is seen as more sustainable independently of the level at which the debt ratio has been stabilised, because stabilisation is in itself an indicator of fiscal control. What matters critically from a sustainability perspective is whether debt is being added to over time. Therefore, in what follows, the conditions that lead to stabilisation of debt/GSDP will be defined. It should be remembered that even where the debt is stable as a percent of GSDP, it is still increasing in absolute terms over time in proportion to GSDP. Stabilisation is always

4 The transversality condition for public solvency is basically equivalent to the intertemporal budget constraint that public debt should be non-positive at the close of a finite period of time. This infinite horizon constraint is stated in discounted terms for the debt stock D_t, for all $t > t_0$:

$$\lim t \rightarrow \infty \ \ PDV_{t0}\,(D_t) \ = \ \pi_{j=0}^{t-t_0} \left(\frac{1}{1 + i_{t0+j}} \right) \ D_t \leq 0$$

The intertemporal budget constraint can be expressed in terms of a strict equality to zero; the less than zero case corresponds to supersolvency. What the discounting process does is to remove from the time-path of debt over time, that portion of accretions to the stock attributable to interest on inherited debt. The infinite horizon constraint requires that there should be some time in the future understood to mean a constant percent of the gross domestic product, which serves as a measure of the debt carrying capacity of the economy. Where the debt stock is stable in absolute terms, it will decline over time as a proportion to GSDP.

2.3 *DEBT/GSDP STABILISATION AND THE PRIMARY DEFICIT*

Splitting public expenditure into interest on inherited debt and non-interest expenditures, the overall fiscal deficit can be defined as the algebraic sum of the interest due on inherited debt, and the primary deficit, defined as the excess of residual non-interest expenditures over total non-debt receipts. The primary deficit can clearly also be negative, denoting a primary surplus. It is termed primary, because it arises on account of fiscal flows in the current year, not including expenditure on inherited debt from the past.

The absolute fiscal deficit F is the total borrowing (net of repayment) required to service inherited debt and cover the primary deficit, P, thus[5]:

$$F_t = P_t + i\,D_{t-1}$$

In terms of ratios to GDP:

$$f_t = p_t + \frac{i\,D_{t-1}}{GSDP_{t-1}\,(1+n)}$$

$$\Rightarrow \quad f_t = p_t + \frac{i\,d_{t-1}}{(1+n)} \qquad (2)$$

where

p_t = primary deficit (P)/GSDP in year t.

From equation (1) we have:

$$d_t = \frac{D_{t-1}}{GSDP_{t-1}(1+n)} + f_t$$

Substituting from equation (2) we have:

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when the government can in principle obtain enough non-debt receipts so as to liquidate its debt stock entirely.

5 The interest rate, i, is the average interest payable in year t on the debt stock accumulated upto the close of year (t-1).

$$\Rightarrow \quad d_t - d_{t-1} = \left[\frac{D_{t-1}(1+i)}{GSDP_{t-1}(1+n)} - \frac{D_{t-1}}{GSDP_{t-1}} \right] + p_t$$

If the primary deficit is at zero, and i = n, the difference between d_t and d_{t-1} will be reduced to zero, and debt will have been stabilised.

Thus, with a zero primary deficit, borrowing to pay interest on inherited debt will not in and of itself raise the debt stock, as long as i = n.

Using the summation approximation,

$$d_t - d_{t-1} = d_{t-1}(i - n) + p_t$$

If $[d_t - d_{t-1}] = 0$, as will be the case for stabilisation, we require:

$$p_t = - d_{t-1}[i - n]$$

$$\Rightarrow \quad p_t = d_{t-1}[n - i] \qquad (3)$$

If $[n - i] = 0$

$$\Rightarrow \quad p_t = 0$$

Thus, a zero primary deficit is required for stabilisation of debt as a percent of GSDP, if the nominal rate of growth of GSDP is equal to the interest rate on inherited debt. If the interest rate is higher, a zero primary deficit will not suffice; there is need for a negative primary deficit, which is to say, a primary surplus, for stabilisation. It is possible to stabilise debt/GSDP with a positive primary deficit if and only if $[n - i] > 0$. In all other cases a zero primary deficit or a primary surplus are necessary for debt stabilisation.

This is an important condition. What it gives us, in operational terms, is the ability to assess during any ongoing fiscal year, whether at the conclusion of that year the debt stock will be higher or lower as a percent of GSDP. If there is a primary deficit, it is likely that the debt/GSDP will be higher at the close of the fiscal year, unless the growth rate of GSDP during the year is higher than the nominal rate of interest on the inherited debt stock.

The nominal rate of growth of GSDP can be higher either if the real rate rises, which would be a welcome development for any state, or if the inflation rate rises, which would not be welcome. Since either will lower the debt ratio, there are sometimes irresponsible calls for “inflating your way out of a debt squeeze”. It is now clear from experience world over that inflation as a policy by which to stabilise debt/GSDP carries harmful consequences, and is not to be seized as a way out under any circumstances.

To illustrate, under the Maastrict fiscal rule, f = 0.03. From equation (2) we have:

$$f_t = p_t + \frac{i\, d_{t-1}}{(1 + n)}$$

$$\Rightarrow \quad p_t = f_t - \frac{i\, d_{t-1}}{(1 + n)}$$

If i = n at its assumed value of 10 percent, and $d_{t-1} = 0.4$

$$p_t = .03 - \frac{.04}{(1 + n)}$$

Thus, a primary surplus of approximately one percent of GSDP (0.9 percent to be exact) will be required to honour the Maastricht fiscal deficit cap of 3 percent of GSDP, with the values of all the parameters as assumed in the example. Clearly, states starting at lower debt/GSDP ratios will have a lower primary surplus requirement. What is clear is that, if the readiness of states for a debt correction path is to be assessed, even along the lines of so simple a strategy as imposition of the Maastricht deficit cap, the critically relevant parameter is the magnitude and sign of the primary balance in recent years.

3. OPERATIONALIZATION OF THE ANALYTICS

3.1 DEBT SUSTAINABILITY

As argued in the previous section, a rising debt path is unsustainable by definition unless corrected. Clearly, therefore, a first examination of states is called for by the trajectory of debt over the last decade. This was initially done with quinquennial averages of debt/GSDP for the periods 1992-97 and 1997-02, corresponding to the Eighth and Ninth Plan respectively. Data on all states, in terms of actuals rather than pre-actual estimates, is necessarily available only with a time-lag. Subsequently, actuals for 2002-03 became available for all states, showing an alarming rise over the average for 1997-02. For all other flow measures, the time series covers the period upto 2001-02.

On the basis of the analytics in the previous section, the sign of the overall primary deficit is an alternative and (under certain assumptions) perfectly substitutable indicator of the direction of the debt path, with the magnitude indicating the extent of the movement in that direction. The primary deficit has two constituents of differing significance from a debt sustainability perspective. The primary revenue deficit indicates the use of net borrowing to finance current non-interest expenditure, with no potential scope for generating debt-financing income, unlike capital expenditure, the residual component of the overall primary deficit. Accordingly the primary revenue deficit is looked at year-wise from 1997. This is followed by a further grouping of states on the basis of own revenue performance. This is the step-wise procedure adopted in this report to address the sustainability issue, which is fundamentally about the ability of a state to service its debt from its future revenue stream. The procedure enables recommendations for each state as to which side of fiscal correction, revenue effort or expenditure compression, should be given priority in its bid to enhance its sustainability status.

In what follows, definitional issues in terms of defining the debt stock at state level, and constituents of the primary deficit, are dealt with in that order. Interest payments and Central transfers are factors that impact heavily but exogenously on the fiscal status of any state. The interest rate concession on state debt owed to the Centre, introduced by the Twelfth Finance Commission, reduces the rate by 300 basis points to 7.5 percent, conditional on enactment of FRBM legislation carrying five requisite features. There is also a provision for write-offs of principal repayments owed by states to the Centre, carrying an independent set of conditionalities.[6] At the same time, the TFC suggests withdrawal of future lending by the Centre to states. All but the last of these changes are conditional upon fiscal correction by the state. The only parameters that lie within the corrective capabilities of any state are its own revenue, aggregating across tax and non-tax, and its non-interest expenditure. The sequence in terms of which states are categorised, and their correction requirements identified, is set out in this section, and the actual assessment on this basis is carried out in section 5.

3.2 DEFINING STATES' DEBT

States' debt consists of all liabilities that require payment of interest and or principal by the state government at some future date. In this study, the terms debt and liability have been used interchangeably. Debt is defined to include internal debt, loans and advances from the Centre and all public account liabilities such as provident funds, reserve funds and deposits.[7] This yields the total of explicit debt. Capital receipts held in suspense accounts, remittances and other miscellaneous receipts which are of a non-debt nature are not included in the debt definition.

The exclusion of implicit liabilities from conventional debt statistics is based on the presumption that all contingent liabilities are eventually vacated by the solvent borrower with no implication for the financial health of the state government. But a clear idea of the magnitude of contingent liabilities is essential for accurate reflection of the net worth and strength of the public sector (RBI, 1999). Therefore, two measures of debt are

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[6] For problems of internal consistency between these sets of conditionalities, see Rajaraman and Majumdar, 2005.

reported in the tables that follow: conventional debt normalised by GSDP (d_1), and an augmented measure (d_2), which adds on the full extent of contingent liabilities to explicit debt.

3.3 DECOMPOSING THE OVERALL PRIMARY DEFICIT

The following equations further decompose the role of the primary deficit, as identified in the previous section into its constituents. As said in the last section, the special and simplifying features of state level public debt in India are that there is no possibility of *seignorage* or external borrowings.

Primary Deficit = Primary Revenue Deficit + Capital Expenditure

Primary Revenue Deficit = Non Interest Revenue Expenditure – Revenue Receipts

Non-interest Revenue Expenditure = Wages + Pensions + Police + Other

Revenue Receipts = Tax Receipts + Non-tax Receipts + Share in Central Taxes + Grants

Tax Receipts_t = Tax Receipts_{t-1} * [1 +(n * Tax Buoyancy)]

Non-tax Receipts_t = Non-tax Receipts_{t-1} * [1 + (n * Non-tax Buoyancy)]

where n is the nominal growth rate of GSDP

The debt stabilisation condition can now be restated as

[Primary Revenue Deficit + Capital Expenditure]/GSDP = d_{t-1} [n-i], where it is understood that budgetary processes impact directly only on d_1, the explicit debt of the state government.

To re-state the stabilisation condition, there is an accommodation possibility for a positive primary deficit if and only if n, the rate of growth of nominal GDP, is greater than i, the nominal rate of interest on the debt stock. In all other cases, a non-positive

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[7] This definition is wider than that used in RBI publications hitherto, which excludes reserve funds and deposits. These accounted for 4 percent of GDP at market prices in aggregate, as on 31 March 2003.

primary deficit, equal to zero, or negative (a surplus) is a necessary condition for debt stabilisation.

To satisfy the stabilisation condition as defined above, fiscal adjustment has to be in either or both of the sub components of the primary deficit. Since the primary revenue deficit constitutes the floor to the overall primary deficit, that is the first sustainability indicator to look. The primary revenue deficit measures the extent to which the additional debt build-up in the current year, independent of interest on inherited debt, is going towards current expenditures rather than towards build-up of assets through the capital account, which potentially[8] can yield a return through which the debt can be serviced.

3.4 *INTEREST PAYMENTS*

Interest payments in any year are obtained from the product of the interest rate and the closing debt stock of the previous year.

$IP_t = i * D_{t-1}$, where i is the average rate of interest payable by the state.

Since the marginal interest rate is determined by overall macro-economic conditions and the average rate on the debt stock of a state reflects the time-pattern of accumulation from past fiscal operations, interest payments on the inherited debt stock have to be taken as exogenously given for any given state. This remains the case even after the conditional rate reduction on state debt owed to the Centre, consequent upon the report of the TFC. The focus here is on what states can do with the fiscal parameters that do come under their control.

3.5 *REVENUE RECEIPTS*

Central transfers have two components. There are statutory shares of Central taxes, as laid down by successive Finance Commissions, and non-statutory grants, as per the recommendations of the Planning Commission and/or Ministry of Finance. Statutory

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8 Capital expenditure can be subverted into a channel for loss cover of losses of non-departmental state PSUs; see section 5.3.

transfers are a joint outcome of the tax collections at the Centre, and the formula recommended by the Finance Commission. Non-statutory transfers on the other hand are the sum of entitlements under Centrally Sponsored Plan Schemes, and Central assistance for State Plans. Although there is an element of discretion at the margin, the transfers under these programmes are largely formula-driven. Thus, the level of Central transfers is broadly exogenous in nature as far as states are concerned, or at least not subject to unilateral control by states. In view of the foregoing, central transfers have been taken as given and no policy prescription has been attempted in this regard.

Own revenues of the states, on the other hand, are amenable to revenue effort by the states. In what follows therefore, after a first classification of states by the primary revenue deficit, a further categorisation will be done by buoyancy of own revenue receipts. Buoyancy calculations are confined to own tax revenues, for reasons that will be elaborated upon in section 5, where the actual assessment of states is presented. This will further divide states with high primary revenue deficits into those which have low own revenue buoyancy, and those which carry high primary revenue deficits despite reasonably high own revenue buoyancy. States in the second category clearly carry high primary revenue deficits on account of high revenue expenditure.

3.6 INDICATORS

Following from the above, the assessment of the debt sustainability is done with indicators in the sequence listed below:

Indicators
1. Average change in debt-GSDP ratio between the two quinquennia 1992-97 and 1997-2002 (d_1), and further to 2002-03.
2. *Average change in extended debt including contingent liabilities between 1992-97 and 1997-2002 (d_2) .*
3. Annual primary revenue balance in absolute terms, 1997-2002.
4. Average buoyancy of own tax, 1980-2002.
5. A 2´2 matrix of change in debt and revenue buoyancy.
6. Final grouping based on change in debt, sign (+/-) of average primary revenue balance over 1997-02, and revenue buoyancy.
7. Within-group ranking by growth rates of non-interest revenue expenditure.

3.7 WHAT HAS ENABLED UNSUSTAINABLE DEBT IN STATES?

Normally, borrowing by subnational governments in any federal setting is subordinated to prior approval by the national government, for reasons of macroeconomic control. In India, this subordination is enshrined under Article 293 (3) of the Constitution. Any state government which is indebted to the Central Government, and this is the case for all of them at present, requires prior approval before borrowing from financial markets. Central approval is embedded in the procedure for sale of state government securities, and therefore cannot be violated. However, the size of Plan spending by states is bilaterally negotiated between the state government and the Planning Commission, with the portion uncovered by Central loan/grant assistance and by the states' own resources, therefore, left for states to cover through loans from other sources, such as institutional lenders like the insurance companies. This has been one route through which state debt has reached unsustainable levels. No systematic sustainability analysis is done before the negotiated limits for additional borrowing by each state are approved, and there are no systematic procedures in place to ensure that the limits are not exceeded.

Yet another channel not subordinated to overall macroeconomic control has been the automatic entitlement of states to loans against small savings collections within the jurisdiction of each state. Until 1998-99, this borrowing was routed through the budget of the Central government, and was therefore a part of states' loans from the Central government. It is only after 1999-00 that borrowing against small savings is separately recorded as debt to the National Small Savings Fund (NSSF), which is outside the budget of the Central government, and is nested in the Public Account.[9]

The availability of this borrowing option which is not constitutionally controlled at the Centre under Article 293 (3) has been a very clear enabling factor for fiscal profligacy in states. The lack of control extended all the way back, even when state borrowing was routed through the Central budget. The advantage after 1999-00 is that the

[9] For a discussion of the contribution of this change in budgetary accounting practices towards reduction of interest rates, see Rajaraman (2004b).

data on borrowing against small savings are separately recorded, independently of state borrowing from the Centre.

TABLE 3.1 : COMPOSITION OF OUTSTANDING DEBT (2002-03)

(percent)

	States	As a percentage of total debt					
		Debt to NSSF	Internal debt excl. NSSF	Debt to central govt.	Provident funds	Reserve funds & deposits	Total
	1	2	3	4	5	6	7
I	**Non Special Category**						
1	Gujarat	29.8	18.2	29.5	6.4	16.2	100.0
2	West Bengal	29.6	24.3	31.1	5.4	9.6	100.0
3	Maharashtra	23.5	12.2	25.8	8.2	30.3	100.0
4	Rajasthan	21.3	27.2	23.0	20.5	8.0	100.0
5	Punjab	20.9	28.0	31.0	16.4	3.7	100.0
6	Haryana	18.8	24.8	26.9	23.5	6.1	100.0
7	Goa	16.0	23.4	37.3	12.6	10.7	100.0
8	Uttar Pradesh	15.3	19.8	31.4	11.4	22.2	100.0
9	Bihar	15.2	20.0	33.0	14.8	17.1	100.0
10	Karnataka	14.7	23.5	32.7	14.4	14.7	100.0
11	Tamil Nadu	14.0	34.8	27.0	15.6	8.7	100.0
12	Andhra Pradesh	12.3	36.3	35.2	7.6	8.7	100.0
13	Madhya Pradesh	11.5	19.2	27.9	17.9	23.5	100.0
14	Kerala	6.8	28.1	19.3	37.8	8.0	100.0
15	Orissa	6.6	31.0	30.2	24.0	8.1	100.0
	Total	**18.5**	**23.6**	**29.2**	**13.6**	15.1	100.0
II.	**Special Category**						
1	Assam	14.7	38.4	31.4	13.9	1.5	100.0
2	Himachal Pradesh	7.3	44.9	21.7	21.2	5.0	100.0
3	Jammu and Kashmir	5.8	34.4	53.4	35.9	-29.5@	100.0
4	Sikkim	2.7	38.7	29.3	27.9	1.4	100.0
5	Meghalaya	1.8	39.8	23.4	16.5	18.6	100.0
6	Nagaland	1.0	45.1	36.3	21.1	-3.5@	100.0
7	Manipur	0.8	33.5	37.3	21.5	6.9	100.0
8	Mizoram	0.5	40.5	18.4	24.1	16.5	100.0
9	Arunachal Pradesh	0.2	14.5	47.5	27.2	10.6	100.0
10	Tripura	0.0	32.0	23.1	44.5	0.3	100.0
	Total	**7.3**	**38.5**	**32.5**	**23.4**	**-1.7@**	100.0
III	**Reorganised New States**						
1	Uttaranchal (spl category)	20.0	41.9	18.4	11.5	8.2	100.0
2	Jharkhand (non Spl category)	18.1	17.6	31.3	13.5	19.5	100.0
3	Chattisgarh (non spl category)	11.9	20.9	25.2	16.1	25.9	100.0
	Total	**16.2**	**23.7**	**26.5**	**14.1**	19.6	100.0
IV	**Total All States**	**17.7**	**24.5**	**29.3**	**14.2**	14.3	100.0

Source: 1. <u>State Finances</u>, various issues, Reserve Bank of India.
2. Comptroller and Auditor General of India

Notes : **@** The reduction in debt is mainly on account of deposits.

Table 3.1 shows the debt composition of states in all categories as of end-March 2003. States are ranked by percent to total debt of debt to the NSSF. The NSSF share has risen in just the four years 1999-2003 to amount to as much as 20 percent or more of the total debt stock in five states: Gujarat; West Bengal; Maharashtra; Rajasthan and Punjab. Major states where debt to NSSF amounted to between 10 to 20 percent are all the rest barring Kerala and Orissa.

No fiscal correction in states with unsustainable debt will be possible without subordination of all borrowing including from financial institutions and the NSSF to caps under Article 293(3). The Report of the Twelfth Finance Commission supports this recommendation, and recommends operationalisation of this through a Centrally-constituted Loan Council. The problem with this however, is the inconsistency between such an exogenous control on net new borrowing, and the apparent freedom given to states to set their own fiscal deficit correction path in their FRBM legislation.

4. DEBT POSITION OF STATES: AN OVERVIEW

4.1 MAGNITUDE

Before assessing individual states on the basis of the procedure set out in section 3, a few stylised facts are presented in this section. During the period 1997-02 the average debt-GSDP ratio across major states, at 31.9 percent, was 6.6 percentage points higher than in the previous five-year period (table 4.1). Among the special category states, the debt-GSDP ratio increased by 1.6 percentage points to 42.8 percent.

The debt position deteriorated further in 2002-03 as a ratio to GSDP. Five among the major states, Bihar, Orissa, Punjab, Rajasthan and Uttar Pradesh recorded a level of debt-GSDP ratio of more than 50 percent. This level was also crossed in seven special category states viz., Arunachal Pradesh, Himachal Pradesh, Jammu and Kashmir, Manipur, Mizoram, Nagaland and Sikkim. Orissa and Bihar have crossed the 70 percent level, as have Himachal Pradesh, Mizoram and Sikkim among the special category. Growth rates of GSDP and debt are shown in table 4.2.

4.2 DEBT SERVICE BURDEN OF STATE GOVERNMENTS

For all states together the interest bill as a proportion to revenue receipts exceeded 25 percent. Among the major states, the number of states where the interest payments-revenue receipts ratio exceeded 15 percent (the recommended level by the Twelfth Finance Commission) rose from 8 in 1992-97 to 14 during 1997-2002 and further to 15 during 2002-03. Among special category states, the number was 2 in 1992-97, 2 in 1997-02, and 4 in 2002-03 (table 4.3).

Apart from interest payments, bunching of repayment obligations is also becoming a matter of major concern. Nearly one third of the outstanding market loans of the states governments are falling due for redemption in the next 5 years, and more than half would be due for redemption between 6 to 10 years (table 4.4).

TABLE 4.1 : DEFICITS AND DEBT OF STATES AS A PERCENTAGE OF GSDP

		1992-97 (Average)			1997-02 (Average)			2002-03		
	States	**RD**	**GFD**	**Debt**	**RD**	**GFD**	**Debt**	**RD**	**GFD**	**Debt**
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
I	**Non Special Category**									
1	Andhra Pradesh	1.1	3.2	22.4	1.7	4.2	27.2	1.9	4.7	34.1
2	Bihar	2.0	3.5	37.8	1.9	3.8	47.3	4.3	8.7	71.2
3	Goa	-1.1	2.8	41.6	2.3	4.6	32.8	2.1	4.7	40.6
4	Gujarat	0.2	2.2	20.5	3.6	5.5	28.6	2.6	4.4	38.0
5	Haryana	0.9	2.6	20.0	2.1	4.2	24.6	1.0	2.2	30.1
6	Karnataka	0.3	3.1	20.3	1.8	4.0	24.1	2.3	4.6	32.4
7	Kerala	1.3	3.4	28.0	3.9	5.5	34.0	4.9	5.9	40.3
8	Madhya Pradesh	0.3	2.3	22.0	2.1	3.3	23.0	1.4	4.9	41.8
9	Maharashtra	0.4	2.5	17.9	2.3	3.9	24.1	3.2	4.8	29.8
10	Orissa	2.1	5.2	41.7	5.5	8.2	53.7	3.5	6.3	70.8
11	Punjab	2.3	4.4	36.2	4.2	6.0	41.5	5.0	5.8	50.8
12	Rajasthan	1.1	4.4	28.9	3.4	5.9	37.7	4.5	7.0	53.5
13	Tamil Nadu	1.3	2.5	19.7	2.4	3.4	22.0	3.2	4.4	27.8
14	Uttar Pradesh	1.7	4.3	34.2	3.7	5.7	37.6	2.6	4.9	53.1
15	West Bengal	1.7	3.3	24.2	5.0	7.0	33.4	5.2	6.3	47.4
	Total	**1.1**	**3.2**	**25.3**	**3.1**	**5.0**	**31.9**	**3.2**	**5.2**	**40.9**
II	**Special Category States**									
1	Arunachal Pradesh	-18.8	3.5	66.7	-8.2	8.3	60.4	-3.9	10.7	63.9
2	Assam	-0.5	1.8	32.1	1.4	3.3	31.6	0.9	2.6	39.7
3	Himachal Pradesh	1.9	7.2	41.9	6.4	10.9	55.1	9.3	14.7	73.5
4	Jammu and Kashmir	-8.0	1.6	58.9	0.7	8.5	46.3	-4.0	7.6	51.6
5	Manipur	-6.8	4.0	42.1	2.2	11.0	56.5	2.5	7.0	65.9
6	Meghalaya	-3.5	3.7	23.8	-0.4	5.7	32.9	-1.9	3.7	41.3
7	Mizoram	-8.1	7.1	58.1	2.5	15.8	78.2	6.0	17.4	97.8
8	Nagaland	2.7	12.5	48.0	0.3	9.6	53.3	2.6	10.6	66.1
9	Sikkim	-8.9	10.0	60.1	-4.6	10.3	71.3	-17.2	0.9	76.5
10	Tripura	-3.3	3.9	41.2	-0.3	6.6	39.1	1.2	7.7	45.3
	Total	**-2.6**	**3.5**	**41.2**	**1.6**	**6.9**	**42.8**	**1.3**	**7.0**	**52.7**
III	**Reorganised New States***									
1	Chattisgarh				0.4	1.7	35.6	0.3	2.8	34.4
2	Jharkhand				-0.2	5.4	38.7	1.0	6.6	41.4
3	Uttaranchal				0.3	2.2	37.7	3.4	6.5	47.2
	Total				**0.2**	**2.2**	**37.3**	**1.1**	**4.9**	**37.7**

Source: 1. State Finances, various issues, Reserve Bank of India.
2. Central Statistical Organisation.

Notes : * Data pertain to 2000-01 to 2001-02.
GFD : Gross Fiscal Deficit; **RD :** Revenue Deficit

Table 4.5 shows the average interest rate on the accumulated stock, averaged again over the quinquennia 1992-97, and 1997-02, and also for the year 2002-03. It is very clear that across all states, there has been a decisive crossover from an earlier period when nominal growth rates of GSDP exceeded the interest rate on debt ($n > i$, or $(n - i) > 0$) to the present situation where nominal growth rates are below the interest rate on the debt stock (n < i, or (n - i) < 0). The significance of the sign of (n – i) was shown in equation (3), section 2. What has happened is that states have moved to a regime where a zero primary deficit will not by itself be sufficient to stabilise the debt/GSDP ratio. States will actually have to have a primary surplus in order to stabilise debt/GSDP. This under-

TABLE 4.2 : GROWTH RATES OF GSDP, REVENUE RECEIPTS AND OUTSTANDING DEBT

		1992-97 (Average)			1997-02 (Average)			2002-03		
	States	**GSDP**	**RR**	**Debt**	**GSDP**	**RR**	**Debt**	**GSDP**	**RR**	**Debt**
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
I	**Non Special Category**									
1	Andhra Pradesh	16.0	12.3	16.7	11.0	14.5	18.6	6.1	5.3	15.6
2	Bihar	9.3	11.3	10.4	13.4	14.9	21.9	11.6	13.2	10.8
3	Goa	19.1	21.5	7.8	14.7	18.9	16.7	3.3	-2.1	10.5
4	Gujarat	21.0	15.9	13.4	8.3	10.7	22.4	8.7	11.8	17.5
5	Haryana	15.2	25.5	15.1	11.1	5.1	19.6	9.3	13.9	16.5
6	Karnataka	15.1	15.1	17.1	10.3	9.8	19.6	7.8	5.5	14.5
7	Kerala	16.8	16.6	17.6	11.4	8.2	18.7	10.3	17.4	16.6
8	Madhya Pradesh	18.4	12.7	12.1	12.3	11.3	17.0	-1.3	19.5	12.5
9	Maharashtra	18.9	14.6	16.8	8.3	9.5	18.6	11.1	3.4	15.0
10	Orissa	13.0	11.9	15.2	10.5	11.0	18.3	3.2	19.7	13.2
11	Punjab	14.7	11.9	14.0	9.9	11.0	16.9	7.1	24.0	13.6
12	Rajasthan	16.9	13.1	17.6	9.4	10.4	19.1	-2.6	7.6	16.9
13	Tamil Nadu	16.9	12.1	16.4	10.8	9.6	17.3	3.5	10.7	12.8
14	Uttar Pradesh	13.0	12.1	14.9	11.8	9.4	17.7	3.9	8.7	10.8
15	West Bengal	13.6	12.0	15.7	13.8	13.0	25.8	6.8	-0.1	21.2
	Total	**16.1**	**13.1**	**15.7**	**8.8**	**9.5**	**17.7**	**6.4**	**9.4**	**14.8**
II	**Special Category States**									
1	Arunachal Pradesh	14.6	12.8	11.2	10.1	5.7	6.7	2.5	4.8	16.0
2	Assam	11.5	10.5	7.3	9.4	9.2	13.5	7.8	13.9	15.5
3	Himachal Pradesh	15.7	16.5	18.9	14.1	16.0	22.1	6.7	-1.5	24.0
4	Jammu and Kashmir	14.2	18.3	1.5	11.5	13.7	13.5	5.7	3.0	9.1
5	Manipur	14.1	12.6	8.5	11.1	8.1	21.6	10.1	12.8	24.8
6	Meghalaya	13.2	12.9	18.6	12.6	9.5	22.3	9.2	14.7	19.4
7	Mizoram	15.3	10.9	20.6	11.1	6.3	20.9	13.1	17.7	20.1
8	Nagaland	17.2	12.5	18.6	15.1	11.6	15.0	6.8	-6.5	34.7
9	Sikkim	16.0	15.9	14.0	14.3	15.5	21.9	7.6	15.1	7.4
10	Tripura	13.7	13.0	12.3	17.1	12.7	21.5	15.0	0.7	20.4
	Total	**13.3**	**13.3**	**8.9**	**11.5**	**11.1**	**16.4**	**7.8**	**6.5**	**18.1**
III	**Reorganised New States**									
1	Chattisgarh (non spl. Category)							16.1	23.8	14.1
2	Jharkhand (non spl. Category)							8.2	21.4	13.7
3	Uttaranchal (spl. Category)							6.7	17.8	26.2
	Total							**11.2**	**21.5**	**16.1**

Source: 1. State Finances, various issues, Reserve Bank of India.
2. Comptroller and Auditor General of India and Central Statistical Organisation.

Notes : GSDP : Gross state domestic product at current prices; **RR:** Revenue receipts.

1. The data for Bihar, Madhya Pradesh and Uttar Pradesh pertain to the periods 1992-96 and 1996-2000.
2. Debt includes internal debt, loans and advances from Centre, provident funds, reserve funds and deposits.

scores the importance given to the sign of the primary balance in the assessment of states performed in section 5.

Another notable feature of table 4.5 is that interest rates paid by special category states on their debt stock has consistently been higher than interest rates for major states, and that this gap has been growing.

4.3 COMPOSITION OF STATES' DEBT

The components of states' debt were listed in table 3.1. The further decomposition of internal debt into market loans, negotiated loans from financial institutions, and Ways and Means Advances (WMA)/Overdrafts from the RBI is not published in state government budget documents of all states. Where they are so published, there are discrepancies with respect to market borrowings and WMA/Overdraft outstandings as available in RBI records. Until these sources are reconciled, the further break-up of internal debt into its sub components will not be possible. Traditionally, the major part of the states' debt was owed to the Centre. Over the years, the share of Central loans in the states' debt has declined. This has been due to: i) increasing recourse to market loans and loans from financial institutions, ii) changes in the accounting procedure in 1999-00 under which proceeds from small savings which were treated as loans from Centre are being shown as part of internal debt iii) debt swap scheme initiated in 2002-03 under which states have been permitted to prepay their high cost loans to the Centre through additional market borrowings and a portion of small savings receipts (table 4.6). Special securities issued to National Small Saving Funds (NSSF) have emerged as the most important source of funds for the states, accounting for more than 50 percent of incremental liabilities in 2002-03.

Box 1: Debt Swap Scheme

Under the debt swap scheme (DSS) for States offered from the Government of India, loans from the Centre bearing coupon rates in excess of 13 percent were swapped against small savings proceeds and open market borrowings (OMB), as shown below. A debt swap scheme cannot reduce the stock of debt. It can merely change the composition such that the overall interest burden is reduced.

$$\textbf{Debt Swap}_t = k_t * x_{t-1} + f * (OMB) \qquad \text{---------------------} \qquad (1)$$

where k_t is the fraction swappable from small saving loans in year 't'.

$k_1 = 0.2$ in 2002-03 (t=1)

$k_2 = 0.3$ in 2003-04 (t=2)

$k_3 = 0.4$ in 2004-05 (t=3)

x_{t-1} = incremental small savings collections of the State in the year 't-1'.

f = share of the entitlement of any state to aggregate OMB assigned for the debt swap [equal to share of the state in aggregate stock of high cost debt held by all states; defined as debt carrying coupon rates of 13 percent or higher].

Under the DSS, states swapped high cost loans (bearing coupons in excess of 13 percent) amounting to Rs.13,719 crore during 2002-03 against additional market borrowings of Rs.10,000 crore, and the remainder against small savings according to the formula above. During 2003-04, states swapped Rs.44,566 crore with additional market borrowings of Rs.26,623 crore (as per RBI records) and 30 percent of the small saving transfers. Thus, of the total debt swapped amounting to Rs.58,285 crore, about 61 percent was financed through additional market borrowings at interest rates below 6.5 percent and the remainder through issue of special securities to the National Small Savings Fund (NSSF) with the interest rate fixed at 9.5 percent. As per the Union Budget for 2004-05, recoveries from the states include a sum of Rs.11,000 crore under the DSS for the current fiscal year. The average interest on the debt stock aggregated across states has shown a decline from 10.5 percent in 2001-02 to 10 percent by the budget estimates for 2004-05.

Box 2: New Debt Relief Scheme by Twelfth Finance Commission

The Twelfth Finance Commission (TFC) offers conditional write-offs on debt repayments owed by States to the Centre and concessions on the interest rate applicable on that stock. Although, the previous Finance Commission (Eleventh Finance Commission) also recommended a Fiscal Reforms Facility conditional upon revenue deficit correction, the scheme mooted by the TFC is far more sweeping. There are two separate sets of conditionalities for the interest concessions, and the debt write-off. Interest rate reduction to 7.5 per cent requires enactment of fiscal responsibility legislation (FRBM Acts), with five required features, and the debt write-off scheme is linked to absolute reduction of the revenue deficit.

The required features of fiscal responsibility legislation include: elimination of the revenue deficit by 2008-09; reducing the fiscal deficit to 3 per cent of GSDP or its equivalent, defined as the ratio of interest payment to revenue receipts; setting out annual reduction targets of revenue and fiscal deficits; bringing out annual statements giving prospects for the state economy and related fiscal strategy; and bringing out special statements along with the budget giving in detail the number of employees in government, public sector, and aided institutions and related salaries.

The debt repayment write-offs carry a set of four separate conditionalities. For year t, the yearly write off is obtained by applying a given ratio for each state to the absolute reduction in the revenue deficit in year (t-1), relative to year (t-2). There is also a minimum condition. The write-off in year t is enabled only if the absolute fall in the revenue deficit in year (t-1) relative to year (t-2) exceeds the amount of the interest concession in year t. Both these apply to the absolute revenue deficit. There is also a requirement that the absolute fiscal deficit should be capped at the absolute amount in 2004-05. However, if a state achieves zero revenue deficit by 2008-9, it gets a full write-off in 2009-10 regardless of where its fiscal deficit is.

TABLE 4.3 : INTEREST BURDEN OF STATE GOVERNMENTS

		1992-97 (Average)			1997-02 (Average)			2002-03		
	States	**IP/RR**	**IP/SQR**	**IP/RE**	**IP/RR**	**IP/SQR**	**IP/RE**	**IP/RR**	**IP/SQR**	**IP/RE**
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
I	**Non Special Category**									
1	Andhra Pradesh	14.1	23.0	12.9	18.6	27.3	16.5	26.7	38.0	23.5
2	Bihar	21.7	54.4	19.3	19.6	50.0	17.4	27.8	104.1	22.9
3	Goa	13.2	18.4	14.0	13.1	14.9	11.7	15.9	17.8	14.6
4	Gujarat	15.6	19.8	15.3	20.2	25.2	15.8	27.7	36.6	23.1
5	Haryana	11.5	13.6	11.1	19.9	23.3	17.1	22.5	26.4	20.8
6	Karnataka	11.9	16.2	11.7	15.3	21.1	13.5	20.4	28.1	17.5
7	Kerala	17.3	25.0	15.8	23.2	32.1	17.7	27.7	36.9	20.0
8	Madhya Pradesh	12.9	21.8	12.6	15.2	25.1	13.1	18.7	32.1	17.2
9	Maharashtra	12.2	15.2	11.7	17.9	21.2	14.9	22.9	26.1	17.6
10	Orissa	22.2	52.7	19.6	31.0	71.8	22.9	34.2	75.3	28.8
11	Punjab	25.6	31.2	21.7	33.1	39.1	24.4	31.0	35.2	23.2
12	Rajasthan	16.8	28.7	15.7	27.3	45.7	21.6	32.9	55.0	25.3
13	Tamil Nadu	11.6	16.2	10.7	16.0	21.2	13.5	19.8	25.5	16.1
14	Uttar Pradesh	20.0	40.6	17.7	28.6	56.5	21.6	25.4	48.1	21.4
15	West Bengal	20.6	36.1	17.8	35.8	68.0	22.9	52.8	99.6	33.1
	Total	**16.1**	**24.8**	**14.9**	**22.4**	**33.3**	**17.9**	**26.9**	**39.5**	**21.7**
II	**Special Category States**									
1	Arunachal Pradesh	5.5	45.8	7.7	9.1	106.4	10.4	11.3	111.0	12.2
2	Assam	15.9	50.6	16.2	15.8	47.9	14.6	18.3	47.4	17.5
3	Himachal Pradesh	16.0	57.4	14.9	21.8	66.9	17.1	32.0	110.2	22.8
4	Jammu & Kashmir	15.1	108.6	19.0	15.1	90.0	15.0	16.4	88.4	18.1
5	Manipur	8.6	92.5	10.2	13.0	168.5	12.2	19.2	210.5	18.0
6	Meghalaya	7.2	42.8	8.1	9.7	54.2	9.9	11.7	63.6	12.6
7	Mizoram	5.9	75.0	6.6	11.6	175.6	10.8	13.0	164.3	11.8
8	Nagaland	11.0	129.6	10.4	13.5	181.1	13.4	15.3	202.4	14.2
9	Sikkim	5.9	54.5	6.6	11.5	64.0	12.5	9.9	36.0	12.6
10	Tripura	10.1	107.3	11.1	12.5	105.5	12.6	15.5	103.1	14.8
	Total	**12.7**	**66.4**	**13.9**	14.4	70.4	13.6	**18.3**	**78.1**	**17.5**
III	**Reorganised New States**									
1	Chattisgarh (non spl. category)				15.7	26.8	16.1	14.9	24.7	14.6
2	Jharkhand (non spl. category)				12.9	26.0	13.1	12.8	29.2	12.2
3	Uttaranchal (spl. category)				14.4	37.3	14.2	17.2	39.6	15.0
	Total				**14.4**	**28.4**	**14.9**	**14.4**	**29.2**	**13.6**
IV	**Total All States**	**15.8**	**26.1**	**14.8**	**21.4**	**34.5**	**17.5**	**25.3**	**40.8**	**20.9**

Source: Ibid.

Notes : IP : Interest payments; **SQR :** States own revenue;
RE : Revenue expenditure; **RR :** Revenue receipts.

1. The data for Bihar, Madhya Pradesh and Uttar Pradesh pertain to the periods 1992-96 and 1996-2000.

TABLE 4.4 : RESIDUAL MATURITY PROFILE OF OUTSTANDING STATE GOVERNMENT MARKET LOANS (AT END-MARCH 2004)

(Percent)

	States	**Percentage to total amount outstanding**			
		0-5 years	**6-10 years**	**Above 10 years**	**Total amount outstanding (Rs crore)**
	1	**2**	**3**	**4**	
1	Andhra Pradesh	34.7	59.3	6.0	17,090
2	Arunachal Pradesh	16.0	44.7	39.3	262
3	Assam	35.0	54.1	11.0	4,496
4	Bihar	37.1	51.9	11.0	10,243
5	Chhattisgarh	0.0	66.4	33.6	1,445
6	Goa	31.0	53.5	15.5	843
7	Gujarat	26.1	59.5	14.4	10,846
8	Himachal Pradesh	19.8	65.2	15.0	2,839
9	Haryana	32.7	52.9	14.4	3,825
10	Jammu and Kashmir	25.3	65.9	8.9	2,277
11	Jharkhand	0.0	83.1	16.9	1,523
12	Karnataka	29.0	54.6	16.4	9,645
13	Kerala	38.5	52.7	8.8	8,221
14	Maharashtra	27.4	52.4	20.2	13,655
15	Madhya Pradesh	37.7	46.8	15.5	8,867
16	Manipur	31.4	41.0	27.6	529
17	Meghalaya	39.3	44.6	16.1	700
18	Mizoram	29.6	53.8	16.6	422
19	Nagaland	36.6	49.4	14.0	1,098
20	Orissa	37.5	47.0	15.5	8,681
21	Punjab	29.8	55.3	15.0	6,059
22	Rajasthan	33.9	54.0	12.1	12,282
23	Sikkim	56.1	28.7	15.2	296
24	Tripura	34.8	46.1	19.2	792
25	Tamil Nadu	32.0	57.4	10.6	11,537
26	Uttaranchal	0.0	76.3	23.7	2,543
27	Uttar Pradesh	39.8	46.2	14.0	23,739
28	West Bengal	27.4	54.0	18.6	14,711
	Total	**32.1**	**53.9**	**14.0**	**1,79,465**

Notes: The breakdown by residual maturity is given in percentages, to the total, summing to 100.

TABLE 4.5 : AVERAGE INTEREST COST AND GSDP GROWTH

	States	1992-97 (Avg.) Interest rate*	1992-97 (Avg.) GSDP	1997-02 (Avg.) Interest rate*	1997-02 (Avg.) GSDP	2002-03 Interest rate*	2002-03 GSDP
	1	2	3	4	5	6	7
I	**Non Special Category**						
1	Andhra Pradesh	9.7	16.0	11.1	11.0	12.9	6.1
2	Bihar	10.5	9.3	7.5	13.4	8.8	11.6
3	Goa	7.1	19.1	9.6	14.7	9.9	3.3
4	Gujarat	10.9	21.0	11.1	8.3	11.1	8.7
5	Haryana	10.9	15.2	12.2	11.1	11.4	9.3
6	Karnataka	10.3	15.1	10.6	10.3	10.2	7.8
7	Kerala	10.4	16.8	10.3	11.4	10.2	10.3
8	Madhya Pradesh	9.3	18.4	10.1	12.3	8.1	-1.3
9	Maharashtra	8.9	18.9	9.6	8.3	9.3	11.1
10	Orissa	10.0	13.0	10.4	10.5	10.3	3.2
11	Punjab	10.2	14.7	11.5	9.9	10.1	7.1
12	Rajasthan	10.5	16.9	11.4	9.4	10.8	-2.6
13	Tamil Nadu	9.4	16.9	10.9	10.8	10.9	3.5
14	Uttar Pradesh	9.3	13.0	10.4	11.8	7.6	3.9
15	West Bengal	10.5	13.6	12.1	13.8	11.7	6.8
	Total	**9.9**	**16.1**	**10.4**	**9.9**	**10.1**	**6.4**
II	**Special Category**						
1	Arunachal Pradesh	5.9	14.6	9.3	10.1	11.4	2.5
2	Assam	9.9	11.5	10.2	9.4	10.2	7.8
3	Himachal Pradesh	11.7	15.7	11.7	14.1	12.4	6.7
4	Jammu & Kashmir	10.7	14.2	14.9	11.5	14.9	5.7
5	Manipur	9.5	14.1	10.2	11.1	13.7	10.1
6	Meghalaya	11.8	13.2	10.4	12.6	10.1	9.2
7	Mizoram	8.3	15.3	10.0	11.1	8.1	13.1
8	Nagaland	11.9	17.2	12.1	15.1	10.4	6.8
9	Sikkim	11.8	16.0	12.7	14.3	10.9	7.6
10	Tripura	10.7	13.7	12.3	17.1	11.1	15.0
	Total	**10.3**	**13.3**	**11.7**	**11.5**	**11.8**	**7.8**
III	**Reorganised New States**						
1	Chattisgarh (non spl. Category)			7.4		7.6	N.A.
2	Jharkhand (non spl. Category)			7.4		7.9	8.2
3	Uttaranchal (spl. category)			11.8		10.8	N.A.
	Total			8.2		**8.3**	**11.2**

Source : Ibid.

Notes : * The interest rate is the average, worked out as the percent of interest payments of the current year to the closing stock of the outstanding liabilities of the previous year.

1. GSDP growth rates for Bihar, Madhya Pradesh and Uttar Pradesh pertain to the pre-partition states for 1992-97, post-partition for 1997-02.
2. Interest rates in the 1997-02 column for Bihar, Madhya Pradesh and Uttar Pradesh cover the period 1997-2000.

TABLE 4.6: OUTSTANDING CENTRAL DEBT SWAPPED
(Upto Dec. 20, 2004)

(Rs crore)

	States	2002-03	2003-04	2004-05
	1	2	3	4
I	**Non Special Category**			
1	Andhra Pradesh	1161	2708	2556
2	Bihar	788	1839	1137
3	Goa	66	262	78
4	Gujarat	1745	4116	3017
5	Haryana	530	1263	1134
6	Karnataka	831	2017	2016
7	Kerala	462	1165	979
8	Madhya Pradesh	588	1507	1227
9	Maharashtra	0	6525	6700
10	Orissa	475	864	702
11	Punjab	992	2423	1437
12	Rajasthan	1034	1928	2379
13	Tamil Nadu	942	2473	2012
14	Uttar Pradesh	2021	4885	3476
15	West Bengal		5507	3126
	Total	**11634**	**39483**	**31976**
II	**Special Category States**			
1	Arunachal Pradesh	20	121	5
2	Assam	293	815	430
3	Himachal Pradesh	290	689	568
4	Jammu and Kashmir	177	585	349
5	Manipur	20	114	5
6	Meghalaya	20	92	14
7	Mizoram	15	74	8
8	Nagaland	16	91	3
9	Sikkim	1	52	9
10	Tripura	53	172	62
	Total	**905**	**2804**	**1453**
III	**Reorganised New States**			
1	Chattisgarh	210	496	381
2	Jharkhand	321	679	475
3	Uttaranchal	649	1103	0
	Total	**1180**	**2278**	**857**
IV	**Total All States**	**13719**	**44566**	**34285**

5. ASSESSMENT OF STATES

5.1 THE ANALYTICAL FRAMEWORK

After the general overview in the previous section, this section will present the assessment of states, based on the analytical framework developed in section 3. It needs to be emphasised once again that this report aims at an objective identification of the sustainability of the debt path in the different states, with a focus on fiscal parameters within the control of states. Clearly, in a federal framework, there are many exogenous factors outside the control of state bearing upon their fiscal status. These include shares of Central tax revenue; the terms of loans obtained from the Centre; the interest rates on market borrowings; and expenditure decisions taken by the Centre, as happened after the implementation of the Fifth Pay Commission salary structure, which had an immediate impact on the salary expenditure of states. The intent here is not to apportion blame but to address the situation as it presently exists, and to identify the fiscal correction avenues that call for priority attention in each state.

The sequence in which the sustainability assessment will be done is listed below. The justification for the sequence adopted has been presented in section 3.

1. Decadal change in indebtedness from the quinquennial average for the period 1992-97, for explicit debt (d_1). As already seen in section 4, there was a sharp rise between the quinquennial average for 1997-02, and the debt level in 2002-03 (table 4.1). For total debt including contingent liabilities, added in at full face value (d_2), the change is assessed only in terms of quinquennial averages for 1992-97 and 1997-02, for that subset of states for which data on contingent liabilities were available. Because these data are not available for all states, they are not used further for grouping or ranking purposes.
2. Annual movement in the primary revenue balance for the period 1997-02 in absolutes.
3. Buoyancy of own tax revenue of states, calculated over the period 1981-2002.

4. Matrix categorisation of states by quinquennial change in debt and own tax buoyancy.
5. Final categorisation and ranking of states in ascending order by sustainability, after decomposition of expenditure growth by non-interest revenue and capital expenditure.
6. For ranked states, breakdown by major economic components of non-interest revenue expenditure.
7. Finally, projection of debt/GSDP upto 2007-08 on the basis of the compound growth rate for the period 1990-91 to 2001-02.

The purpose of the exercise, in a situation where all states are in varying stages of fiscal stress and unsustainable paths, is to identify groups by the type of correction needed. The groups distinguish between those in need principally of revenue correction; and those in need of expenditure compression, by type of expenditure needing compression. The final projection exercise is designed to show where states will be if no correction is attempted, and debt continues to grow at the rates of the last ten years.

Three points needed to be noted at this juncture about GSDP as the normaliser in the state context. First, GSDP is available only at factor cost, whereas the normalising denominator should correctly be the equivalent market prices aggregate. Thus, the sum of state debt, normalised by the sum of GSDP of all states, will be higher than if normalised by the national GDP at market prices. Second, the GSDP also poses a conceptual difficulty, because it varies in sectoral composition and hence taxability across states, and the notion of sustainability is closely related to the taxable capacity of the state. Third, there is no alternative however, to using the GSDP, since states in India vary so greatly in economic size. When dealing with the primary deficit further down, the absolute figures will be presented. These indicate the absolute imbalance in each state resulting from current fiscal operations in any year, and the non-normalised absolute quantum by state indicates the threat posed by each to national fiscal and macroeconomic stability.

5.2 *STATE-WISE CHANGE IN INDEBTEDNESS OVER 1992-02*

Of the fifteen states not in the special category, all with a single exception recorded an increase in explicit debt as a percent of GSDP (d_1) over the decade, between the quinquennial average for 1992-07 and the average for 1997-02 (table 5.1). The single exception is Goa, which reduced its debt by an impressive 9 percentage points of GSDP. Between the 1992-97 average, and 2002-03, all saw an increase in explicit debt, with the exception of Goa. Even Goa reversed its debt decline between the 1997-02 average, and 2002-03. Thus, in the major states, the problem of increase in indebtedness is generic. The weighted average across these fifteen states shows an increase from a cross-state average of 25 percent in 1992-97 to a cross-state average of 32 percent in 1997-02, and further to 41 percent in 2002-03.

The averages for the three states Bihar, Madhya Pradesh and Uttar Pradesh stop at 1999-2000 because of the partitioning of these states. It is only when the reconstituted figures are available for earlier years for the area now covered by these three parent states that a correct assessment of the change in debt/GSDP comparable to that done for the other states will be possible. For the present, there is no alternative to estimating the change in the debt/GSDP ratio, for 2002-03 for these three states as presently defined, over the average over 1992-97 in the pre-partition states.

The correlation between a ranking by the initial average of debt/GSDP for 1992-97, and a ranking by the quantum of change to 2002-03, can be visually seen to be very high. This is a matter of considerable importance, because as pointed out in both sections 2 and 3, sustainability is about the direction of change over time, but is also about levels. The median increase of 14.6 percentage points of GSDP (for Punjab state) very clearly splits the states into two groups. States where the initial debt level was high also saw higher rates of increase in levels, falling in the 15-33 percent point range. States where the initial level was around the 20 percent mark also experienced lower increase, in the 0-12.5 percent range. There are exceptions in both groups. The biggest exception of course is Goa, which had the highest starting point along with Orissa, at nearly 42 percent, but declined to 41 percent. Excluding Goa, the rank correlation coefficient between rankings by levels in 1992-97, and the ranking by change to 2002-03, works out to 0.73, using the small sample formula, and this is highly statistically significant with a t-value of 3.75.

The initial categorisation of states into two groups is therefore done at the median of the change to 2002-03, since this is closely correlated with initial levels. Goa, the exception, remains at 41 percent, higher than Gujarat, at 38 percent. But the trajectory of change in Goa clearly places the state in a different sustainability category from Gujarat. Demonstration of the ability to reduce indebtedness is what lends credence to the ability of any state to sustain its debt. The converse, a rise in indebtedness, poses sustainability issues, since any projection into the future can only be based on observed behaviour in the recent past.

In the special category states, the overall increase is lower, at 11 percentage points of GSDP, but the level in 2002-03 is much higher than in the major states, at 53 percent of GSDP. Once again, there are two clear groups divided at whether the change was above or below 10 percent. The rank correlation coefficient is actually negative for the special category states, but it is not statistically significant. There are two states which show a decline, including Jammu and Kashmir, but two points need to be noted about this category of states in general. The first is their heavy dependence on resource transfers from the Centre, which carry both inter-state discretionarity and volatility over time, so that inter-state differences do not necessarily accurately reflect differentials in fiscal prudence. The second is that GSDP, the normalising denominator, could also carry systematic biases in some states.

TABLE 5.1 : STATES' DEBT- GSDP RATIOS

(Percent)

	States	1992-97	1997-02	2002-03	Change (3-2)	Change (4-2)
	1	2	3	4	5	6
I.	**Non Special Category**					
1	Bihar	37.8	47.3	71.2	**9.4**	**33.4**
2	Orissa	41.7	53.7	70.8	**12.0**	**29.0**
3	Rajasthan	28.9	37.7	53.5	**8.8**	**24.5**
4	West Bengal	24.2	33.4	47.4	**9.1**	**23.2**
5	Madhya Pradesh	22.0	23.0	41.8	**1.0**	**19.8**
6	Uttar Pradesh	34.2	37.6	53.1	**3.4**	**18.9**
7	Gujarat	20.5	28.6	38.0	**8.1**	**17.5**
8	Punjab	36.2	41.5	50.8	**5.3**	**14.6**
9	Kerala	28.0	34.0	40.3	**6.0**	**12.3**
10	Karnataka	20.3	24.1	32.4	**3.8**	**12.1**
11	Maharashtra	17.9	24.1	29.8	**6.2**	**11.9**
12	Andhra Pradesh	22.4	27.2	34.1	**4.8**	**11.7**
13	Haryana	20.0	24.6	30.1	**4.6**	**10.1**
14	Tamil Nadu	19.7	22.0	27.8	**2.3**	**8.1**
15	Goa	41.6	32.8	40.6	**-8.8**	**-0.9**
	Total	**25.3**	**31.9**	**40.9**	**6.6**	**15.5**
II.	**Special Category**					
1	Mizoram	58.1	78.2	97.8	**20.0**	**39.7**
2	Himachal Pradesh	41.9	55.1	73.5	**13.2**	**31.6**
3	Manipur	42.1	56.5	65.9	**14.4**	**23.8**
4	Nagaland	48.0	53.3	66.1	**5.4**	**18.2**
5	Meghalaya	23.8	32.9	41.3	**9.1**	**17.5**
6	Sikkim	60.1	71.3	76.5	**11.2**	**16.4**
7	Assam	32.1	31.6	39.7	**-0.6**	**7.5**
8	Tripura	41.2	39.1	45.3	**-2.1**	**4.1**
9	Arunachal Pradesh	66.7	60.4	63.9	**-6.3**	**-2.8**
10	Jammu and Kashmir	58.9	46.3	51.6	**-12.5**	**-7.3**
	Total	**41.2**	**42.8**	**52.7**	**1.6**	**11.4**
III.	**Reorganised New States***					
1	Chattisgarh#	**N.A.**	35.6	34.4	**N.A.**	**N.A.**
2	Jharkhand#	**N.A.**	38.7	41.4	**N.A.**	**N.A.**
3	Uttaranchal@	**N.A.**	37.7	47.2	**N.A.**	**N.A.**

Source: 1. State Finances, various issues, Reserve Bank of India.
2. Central Statistical Organisation and Comptroller and Auditor General of India.

Notes: * **:** Data pertain to 2000-01 to 2001-02.

N.A : Not Applicable; **# :** Non Special Category States; **@ :** Special Category State

1. The data for pre-partition Bihar, Madhya Pradesh and Uttar Pradesh pertain to the periods 1992-96 and 1996-2000. For the year 2002-03, the data pertain to the post-partition state.
2. The totals for each category are weighted means.
3. States are ranked in descending order by the magnitude of change in debt/GSDP between 1992-97 and 2002-03.

Table 5.1 thus gives us two clear groupings in each category of states. Table 5.2 ranks states by an augmented measure of debt, including contingent liabilities (d_2), but data on contingent liabilities are not available for all states. Keeping in mind the fact that the averages are drawn from a reduced set, and that the data here stop at 2001-02, contingent liabilities in the non special category states on average add on 8 percentage points of GSDP to the average for explicit debt over 1997-02, and the rise with respect to 1992-97, is also higher, at 8.5 percent, versus 6.6 percent for explicit debt, d_1. In the special category states, contingent liabilities are very high for the few states listed, but the average is lower only because the excluded states on which data were not available carry higher levels of explicit debt. In Himachal, contingent liabilities (obtainable from the

TABLE 5.2 : STATES' EXTENDED DEBT-GSDP RATIOS*

(Percent)

	States	**1992-97**	**1997-02**	**Change**
	1	**2**	**3**	**(3-2)**
I	**Non Special Category**			
1	Orissa	48.9	62.7	13.8
2	Rajasthan	39.0	50.1	11.1
3	Maharashtra	23.5	34.5	11.0
4	Punjab	43.9	53.5	9.6
5	Gujarat	30.5	40.1	9.6
6	West Bengal	28.1	37.0	8.9
7	Kerala	35.8	44.3	8.5
8	Haryana	28.4	36.4	8.0
9	Bihar	40.7	48.3	7.6
10	Karnataka	28.1	34.1	6.0
11	Andhra Pradesh	30.9	36.6	5.6
12	Madhya Pradesh	23.7	28.6	4.8
13	Tamil Nadu	24.8	28.5	3.7
14	Uttar Pradesh	39.6	41.0	1.4
	Total	**31.4**	**39.9**	**8.6**
II	**Special Category**			
1	Himachal Pradesh	52.9	73.9	21.0
2	Meghalaya	33.7	39.0	5.4
3	Assam	38.9	36.5	-2.4
4	Jammu and Kashmir	65.7	52.6	-13.1
	Total	**38.4**	**38.6**	**0.2**

Source : Ibid.

Notes : * Includes besides explicit debt the full face value of state Government guarantees for those states for which the data are available.

1. See notes to table 5.1.

difference between the figures in the two tables) amount to 19 percent of GSDP. In general, the ranking by increase in augmented debt corresponds to the ranking by rise in explicit debt.

In what follows, the contingent liability burden is not used as a device for grouping states by sustainability status, but clearly this is a serious problem which needs to be separately addressed. The first and most important requirement, evident from the truncated list in table 5.2, is the need for information on the extent of contingent liabilities in all states.

5.3 THE PRIMARY REVENUE BALANCE 1997-02

The primary revenue balance, which is the sign-reversed deficit, in absolute amounts is set out in table 5.3 as the core indicator of the direction of the debt path. Positive figures in the table indicate primary revenue surpluses, so that the listing of states in this table will be inversely related to the listing in the debt table 4.1. The absolute figures in table 5.3 are additive across states, and over time for a state, as a measure of the cumulative fresh addition to the absolute debt stock on the revenue account. In the 15 major states, the primary balance was in surplus in 1997-98 and earlier years (not shown in the table), and turned into a deficit only thereafter. The primary revenue deficit that suddenly emerged in 1998-99, amounting in aggregate to more than 10 thousand crore, as well as individually in all states barring Goa, was clearly precipitated by the salary hike of the Fifth Pay Commission, but was worked down to an aggregate deficit of approximately 2300 crore by 2001-02 (adding on the surpluses of Jharkhand and Chhattisgarh to the total for non special category states).

TABLE 5.3 : PRIMARY REVENUE BALANCE*

(Rs. Crore)

	States	1997-98	1998-99	1999-00	2000-01	2001-02	1997-02 (Avg.)
	1	2	3	4	5	6	7
I	**Non Special Category**						
1	Andhra Pradesh	1450	-40	1868	198	1702	1036
2	Haryana	101	-543	172	884	569	237
3	Karnataka	1117	401	-313	525	-602	226
4	Bihar	1272	522	-688	-587**	410**	185
5	Rajasthan	1315	-753	-815	706	82	107
6	Goa	104	3	-31	-14	27	18
7	Madhya Pradesh	1191	-1037	-794	1091**	-914**	-93
8	Uttar Pradesh	65	-3180	-700	1166**	2038**	-122
9	Punjab	365	-312	-91	7	-603	-127
10	Orissa	387	-780	-1336	360	5	-273
11	Tamil Nadu	400	-1315	-1689	-312	774	-428
12	Kerala	163	-584	-1672	-889	-116	-620
13	Maharashtra	324	-253	615	-2609	-1759	-737
14	Gujarat	866	-601	-809	-3171	-2526	-1248
15	West Bengal	116	-1906	-5118	-2332	-2481	-2344
	Total	**9236**	**-10378**	**-11399**	**-4976**	**-3392**	**-4182**
II	**Special Category**						
1	Jammu and Kashmir	1401	265	303	-414	1822	675
2	Assam	926	611	-49	86	181	351
3	Arunachal Pradesh	232	248	279	173	137	214
4	Tripura	142	233	163	130	308	195
5	Nagaland	103	123	127	194	267	163
6	Sikkim	82	-2	70	178	227	111
7	Meghalaya	73	87	112	166	95	106
8	Manipur	144	199	-155	91	30	62
9	Mizoram	126	118	153	-92	-114	38
10	Himachal Pradesh	-157	-524	491	-532	181	-108
	Total	**3071**	**1357**	**1492**	**-22**	**3134**	**1807**
III	**Reorganised New States**						
1	Jharkhand#				N.A.	889	889
2	Chhattisgarh#				559	164	361
3	Uttaranchal $				108	402	255
	Total				**667**	**1455**	**1061**

Source : Ibid.

Notes : * **:** (-) Indicates Primary Revenue Deficit

****** **:** The data pertain to reorganised Bihar, Madhya Pradesh and Uttar Pradesh.

N.A. : Not Available; **# :** Non Special Category States; **$:** Special Category State.

1. The data for Bihar, Madhya Pradesh and Uttar Pradesh pertains to the period 1996-2000.
2. States are ranked in descending order by average Primary Revenue Balance (last column).

The reduction of the aggregate primary revenue deficit by 2001-02 is by no means uniform across states. West Bengal, Gujarat and Maharashtra show no improvement in the primary revenue deficit, at high levels of 2-3 thousand crore annually. In 2001-02, these three states by themselves carried a combined primary revenue deficit amounting to 6700 crore, three times the aggregate across all states. West Bengal and Gujarat also fell in the group with higher than average increase in debt/GSDP in 1997-02. Madhya Pradesh, Punjab and Karnataka also show high primary revenue deficits in 2001-02 of between 500-1000 crore, but these have not been steadily high. The figures for Madhya Pradesh show considerable year-to-year volatility complicated by the partitioning of the state. Orissa, which had the second-highest debt increase, after Bihar, shows a commendable improvement to primary revenue surpluses in 2000-01 and 2001-02, but nevertheless carries a deficit in aggregate over the period.

In the final grouping of states in section 5.6, the sum of the primary revenue balance across the five years 1997-02 is taken, so as to even out any postponement of expenditures that could distort the balance for any one year taken in isolation.

The primary revenue deficit is only one constituent of the overall primary fiscal deficit, which is what determines the direction of movement of debt/GSDP. Thus, there are states showing a primary revenue surplus, that nevertheless show a rise in debt/GSDP in 1997-02 relative to 1992-97. The other constituent of the overall primary deficit is capital expenditure. High rates of growth of capital expenditure are unfortunately not necessarily indicative of growth-promoting outlays on roads and other infrastructure. As mentioned in section 3, there is the practice of budgetary cover for PSU losses taking the form of incremental equity contributions towards the share capital of the PSU through the capital account of the budget. Elimination of this budgetary malpractice will only be possible if it is explicitly prohibited in fiscal responsibility legislation, so that loss cover for PSUs can only be extended from the revenue account, through an explicit grant.

Thus the debt stabilisation issue in these states does not lend itself to simple categorisation in terms of any single indicator. There are states like Orissa where there is recent evidence of fiscal correction to what has been a runaway decadal increase, and states like Gujarat where there is no evidence of fiscal correction to what was a high debt increase, albeit lower than in Orissa. From a sustainability perspective, Gujarat is clearly on a more precipitous trajectory than Orissa. States vary also in terms of the source from which their problem has arisen. In some it may be revenue failure, in others, failure at expenditure compression. These distinctions will further need to be made before states are grouped by the type of correctives needed.

The special category states are more uniform in terms of the primary revenue balance, which has been consistently positive in all states. This contrasts with their diversity in terms of change in debt levels. The magnitude of the primary revenue surplus does however show inverse correlation with the change in debt levels in table 5.1.

5.4 OWN TAX BUOYANCY 1980-02

Own tax buoyancies are shown in table 5.4 calculated for the period 1980-81 to 2001-02. Buoyancies were calculated over a long twenty-year period so as to yield robust estimates of the underlying revenue-generating properties of the system. No buoyancies are presented for own non-tax revenue, because the raw figures require correction for three types of budgetary practices, listed below. This is not an exhaustive list of adjustments called for in non-tax revenues to get a smoothed series, but only a listing of the major sources of distortion.

1. Non-tax revenues from state lotteries are often reported gross, with payment of prize money reported separately in revenue expenditure and not netted out in non-tax receipts.[10] This does not affect the estimation of revenue or overall fiscal deficits, but it does introduce spikes and bulges in the unadjusted non-tax revenue series, since lotteries have been introduced fairly recently in most states. Even in a pre-existing

[10] This does distort growth rates of revenue expenditure as well, but prize money payments constitute a much smaller percent of total revenue expenditure than lottery receipts in non-tax revenue.

lottery, there can be revenue spikes with corresponding expenditure spikes on account of changes in the parameters of the lottery, such as a move to single-digit lotteries. Data on lottery receipts and expenditure were available for only a few states for the entire twenty-year series over which the estimation of buoyancies was done.

2. Interest and other non-tax revenues due from state PSUs are most usually never received, but there may be an episodic routing through the budget of bunched interest payments, as a purely notional entry offset against matching explicit subsidy commitments paid to the PSU on the expenditure side of the budget. Again, this is an example of a matched receipt-payment pair that does not distort deficit estimates, but does introduce spikes into the unadjusted non-tax revenue series.
3. When the Central Government grants a loan waiver to a state, the waiver is entered in the budget as a non-tax receipt. This causes a distortion not only in the raw-non-tax series, but also in the deficit estimates.

Clearly, the own revenues of states will be impacted by the underlying non-tax buoyancies as much as by own tax buoyancies, but since tax revenues constitute 80 percent of total own revenues aggregating across all states, the tax buoyancy parameter can with some justification be taken as the major indicator of own revenue effort.

There are some surprises in the state rankings in table 5.4. Some of the highest own tax buoyancies are in states like Bihar and Orissa, which also top the list of states where there has been the highest debt increase (for the buoyancy calculations, the three new states have been merged with their parent states). It cannot immediately be concluded however that expenditure increase in these states is at fault. Besides own non-tax revenue, there are three other elements to the total revenues of a state. These include:
Share of Central taxes
Central grants

State shares of Central taxes have varied over time because of underlying variations in the buoyancies of Central taxes and the rate of the growth of the national economy; because of the switch in the sharing formulae away from tax-specific to general pool sharing; and because of altered shares of states from one Finance Commission to the next. This report does not go into the adverse incentives embedded in the Finance Commission practice of awarding "gap-filling" grants, or on the impact of the incentive fund instituted by the Eleventh Finance Commission on the fiscal effort of states starting 2000-01, which was the first year of the EFC award period. Those issues which are critical to the fiscal behaviour of states, lie beyond the scope of the present report.

TABLE 5.4 : BUOYANCY OF STATES' OWN TAX REVENUES*

	States	Own Tax Revenue
	1	2
I	**Non Special Category**	
1	Bihar	1.17
2	Orissa	1.13
3	Uttar Pradesh	1.08
4	Kerala	1.07
5	Goa	1.07
6	Rajasthan	1.07
7	Madhya Pradesh	1.07
8	Karnataka	1.04
9	Gujarat	1.04
10	Tamil Nadu	1.02
11	Haryana	1.00
12	Maharashtra	0.97
13	West Bengal	0.97
14	Andhra Pradesh	0.94
15	Punjab	0.94
II	**Special Category**	
1	Tripura	1.28
2	Arunachal Pradesh	1.23
3	Assam	1.16
4	Himachal Pradesh	1.10
5	Meghalaya	1.08
6	Jammu and Kashmir	1.06
7	Sikkim	1.00
8	Manipur	0.94
9	Mizoram	0.92
10	Nagaland	0.63

Source : Ibid

Notes : * The calculated buoyancies are for the period 1981-2002, estimated through a simple double-log specification with no structural breaks.

1. The states of Bihar, Madhya Pradesh and Uttar Pradesh include the newly formed states of Jharkhand, Chhattisgarh and Uttaranchal, respectively.
2. The states are ranked in descending order on the basis of states own tax buoyancies.

With Central grants again, there is a panoply of formulae governing state shares of an assortment of Centrally Sponsored Schemes, and Central assistance for state plans. Although the discretionary component in all Central transfers, aggregating across tax shares and grants, has historically remained rather stable, at 15 percent of total transfers (Rajaraman, 2004a), there is enough room within this for large alterations in the flows to any particular state to impact upon its debt path in an exogenous manner. These issues lie outside the scope of the present report.

The own tax buoyancies of table 5.4 show a fairly narrow range from 1.17 to 0.94. If grouped on either side of a buoyancy divide at one, only four out of fifteen states lie below a buoyancy of one. The buoyancy of own tax revenues in the special category states is even better, with only three states having a buoyancy less than one out of the ten states (excluding the new special category state of Uttaranchal, which has been merged with Uttar Pradesh for the buoyancy estimates). The range here is however wider.

5.5 MATRIX CLASSIFICATION OF STATES BY DEBT ACCUMULATION AND OWN TAX BUOYANCY

Table 5.5 brings together the grouping of states by debt growth, and the grouping by own tax buoyancy estimates.

Among the non special category states, clearly the most unsustainable cell is where debt has grown by more than 14.6 percentage points of GSDP, and own tax buoyancy is under one. The states in the cell are West Bengal and Punjab. The most sustainable cell with debt growth under 12.3 percentage points and own tax buoyancy greater than one includes Karnataka, Kerala, Tamil Nadu and Haryana, in addition to Goa. The figures for Madhya Pradesh and Uttar Pradesh show the growth in debt from the pre-partition average over 1992-97.

In the special category states, the assignment is more tentative for reasons spelled out earlier. The grouping here places Manipur, Mizoram and Nagaland in the most unsustainable cell. In the most sustainable cell are Assam, Tripura, Arunachal Pradesh, and Jammu and Kashmir.

TABLE 5.5: OWN TAX BUOYANCY AND DEBT/GSDP GROWTH*

(percent)

Debt-GSDP* Category	**Own Tax Revenue**	
	Buoyancy < 1	**Buoyancy 1**
Non Special Category		
Above 14.6	West Bengal, Punjab	Bihar, Orissa, Rajasthan, Uttar Pradesh, Madhya Pradesh, Gujarat
Below 12.3	Maharashtra, Andhra Pradesh	Karnataka, Kerala, Tamil Nadu, Haryana, Goa
Special Category		
Above 16.4	Mizoram, Manipur, Nagaland	Himachal Pradesh, Meghalaya, Sikkim
Below 7.5		Assam, Tripura, Arunachal Pradesh, Jammu & Kashmir

Source : Ibid

Notes : * Percentage increase in Debt/ GSDP in 2002-03 over the average for 1992-97.

1 The calculated buoyancies are for the period 1981-2002.

2. The buoyancy estimates for Bihar, Madhya Pradesh and Uttar Pradesh include the newly formed states of Jharkhand, Chhattishgarh and Uttaranchal, respectively, but the debt increase figures are for the increase over 1996-2000.

The matrix in table 5.5 uses only debt growth and own tax buoyancies to group states. There is one other indicator bearing on sustainability status, and that is the change in the primary revenue balance recorded in table 5.3. This is included to yield a final grouping of states in the next and final sub-section.

5.6 FINAL GROUPING OF STATES

Table 5.6 lists non-special category states in seven groups in descending order by unsustainability.

The first three have high debt/GSDP growth (above the median), and the remaining four have low debt growth (below the median).

TABLE 5.6 : EXPENDITURE COMPOSITION, REVENUE BUOYANCY, PRIMARY REVENUE BALANCE AND DEBT

	States	**Annual Growth Rate (1997-02)**	
		NIRE	**CE**
	1	**2**	**3**
	Non Special Category		
	Group 1(Debt/GSDP growth > 14.6% , PRD 97-02,Buoyancy < 1)		
1	West Bengal	18.2	15.8
2	Punjab	13.0	13.0
	Group 2(Debt/GSDP growth > 14.6%, PRD 97-02, Buoyancy 1)		
3	Gujarat	17.6	17.1
4	Madhya Pradesh	15.6	15.6
5	Orissa	14.3	12.9
6	Uttar Pradesh	13.2	11.9
	Group 3(Debt/GSDP growth > 14.6%, PRS 97-02, Buoyancy 1)		
7	Bihar	19.1	19.7
8	Rajasthan	13.9	12.4
	Group 4 (Debt/GSDP growth,£ 12.3%, PRD 97-02, Buoyancy < 1)		
9	Maharashtra	13.2	12.1
	Group 5 (Debt/GSDP growth,£ 12.3%, PRD 97-02, Buoyancy 1)		
10	Kerala	11.9	10.6
11	Tamil Nadu	10.8	9.6
	Group 6 (Debt/GSDP growth £ 12.3% , PRS 97-02, Buoyancy < 1)		
12	Andhra Pradesh	11.8	10.4
	Group 7 (Debt/GSDP growth £ 12.3%,PRS 97-02, Buoyancy 1)		
13	Goa	22.1	22.4
14	Karnataka	12.9	12.2
15	Haryana	5.3	3.6
	Total	**12.1**	**10.7**

TABLE 5.6 (CONTD…)

	States	Annual Growth Rate (1997-02)	
		NIRE	CE
	1	2	3
	Special Category		
	Group 1 (Debt/GSDP growth 16.4% , PRD 97-02, Buoyancy 1)		
1	Himachal Pradesh	16.6	14.4
	Group 2 (Debt/GSDP growth 16.4% , PRS 97-02, Buoyancy < 1)		
2	Manipur	17.0	16.5
3	Mizoram	13.0	11.8
4	Nagaland	11.1	10.1
	Group 3 (Debt/GSDP growth 16.4% , PRS 97-02, Buoyancy 1)		
5	Sikkim	13.9	13.1
6	Meghalaya	13.5	13.0
	Group4 (Debt/GSDP growth £ 7.5% , PRS 97-02, Buoyancy < 1)		
7	Jammu and Kashmir	17.3	17.6
8	Tripura	15.1	14.6
9	Assam	14.3	14.1
10	Arunachal Pradesh	11.3	11.0
	Total	**12.1**	**14.0**

Source : Ibid

Notes : NIRE : Non Interest Revenue Expenditure; CE : Capital Expenditure
PRS: Primary Revenue Surplus, PRD: Primary Revenue Deficit

1. The expenditure growth figures for Bihar, Madhya Pradesh and Uttar Pradesh pertain to the periods 1996-2000. See also notes to table 5.6.
2. High debt growth states are those above the line in each category (table 5.1); PRS/PRD refer to the sign (+/-) of the average primary revenue balance (table 5.3), and buoyancies are for own tax revenue over the period 1980-2001.

Within the high debt growth group, states with primary revenue deficits are placed in the more unsustainable group, and within these, states with lower own tax buoyancy are ranked higher.

The justification for using the primary revenue deficit to rank states within high debt growth is because revenue expenditures do not hold out any promise of returns to assets in the sense in which capital expenditures do, potentially at any rate.[11] Finally, within each group, states with higher annual growth rates over 1997-02 of non-interest

[11] The caveat about the misdirection of capital expenditures towards loss cover for non-departmental PSUs needs to be sounded again here. Also, Devarajan et.al. 1996, in an important and counter-intuitive finding, show that in developing countries, current expenditure has more of a growth impact than capital expenditure. Clearly, the composition of each matters. These issues are not gone into here in any depth, although the composition of non-interest revenue expenditure is looked at.

revenue expenditure (NIRE) are given a higher unsustainability rank. Non-interest revenue expenditure has a number of commitments like wages and pensions, which are as difficult to compress in the short-run as interest.

The highest ranked state in the non-special category group, with the most unsustainable debt path is West Bengal. The lowest ranked, with the most sustainable debt path, is Haryana, not Goa. Even though Goa has had a decline in debt, the decline was from a high level, and it is clear that it still has high rates of growth of non-interest revenue expenditure, with a primary revenue surplus sustained by high own tax buoyancy, and (presumably) high growth of other revenues.

Within the special category states, Himachal Pradesh is ranked the most unsustainable, and Arunachal Pradesh is the most sustainable.

The next set of tables shows the composition of non-interest revenue expenditure (NIRE) of states ranked by their sustainability status. A quick eyeballing of the numbers in these tables shows that the more unsustainable states suffer from a large salary and pension bill.

The wage/salary component has been estimated (see notes to the table), in the absence of systematic data on economic classification of expenditure in state budgets. The procedure adopted overstates the wage component in non-plan expenditures (which also include food and power subsidies and all expenditures on operations and maintenance), but excludes the salary component of Plan expenditures. It is expected therefore that the estimate should be a reasonable approximation to the true share of wages and salaries.

TABLE 5.7 : COMPOSITION OF NON INTEREST REVENUE EXPENDITURE (1997-02)

(Percent)

	States	Salaries*	Pensions	Police	Other**	Total
	1	**2**	**3**	**4**	**5**	
I	**Non Special Category**					
1	West Bengal	59.3	10.6	7.0	23.2	100.0
2	Punjab	55.3	11.4	10.0	23.3	100.0
3	Gujarat	69.4	8.5	4.4	17.7	100.0
4	Madhya Pradesh	56.4	8.0	6.2	29.4	100.0
5	Orissa	48.9	10.6	5.3	35.2	100.0
6	Uttar Pradesh	53.1	7.5	8.4	31.1	100.0
7	Bihar	59.1	10.7	9.7	20.5	100.0
8	Rajasthan	60.8	11.8	5.9	21.6	100.0
9	Maharashtra	60.6	6.0	5.9	27.5	100.0
10	Kerala	49.3	17.4	4.1	29.3	100.0
11	Tamil Nadu	58.4	13.6	5.0	23.0	100.0
12	Andhra Pradesh	57.6	10.8	5.1	26.5	100.0
13	Goa	53.6	5.2	2.5	38.6	100.0
14	Karnataka	53.0	10.1	4.8	32.0	100.0
15	Haryana	56.9	8.6	6.0	28.4	100.0
	Total	**57.6**	**10.1**	**6.2**	**26.2**	**100.0**
II	**Special Category**					
1	Himachal Pradesh	47.2	10.4	4.2	38.2	100.0
2	Manipur	53.0	10.5	12.8	23.6	100.0
3	Mizoram	51.6	3.4	8.8	36.2	100.0
4	Sikkim	50.2	3.3	7.8	38.8	100.0
5	Meghalaya	55.8	4.9	9.4	29.9	100.0
6	Nagaland	48.8	5.5	17.0	28.6	100.0
7	Jammu and Kashmir	58.9	8.3	15.4	17.4	100.0
8	Tripura	50.6	8.5	10.6	30.3	100.0
9	Assam	48.8	10.1	11.7	29.4	100.0
10	Arunachal Pradesh	43.1	4.9	8.0	43.9	100.0
	Total	**51.8**	**8.5**	**11.1**	**28.7**	**100.0**

Source : Ibid

Notes : 1. The data for Bihar, Madhya Pradesh and Uttar Pradesh pertain to the periods 1996-2000.

* Estimated as a sum of Non Plan expenditure towards social services, economic services and administrative service

** Estimated as a sum of expenditures towards district administration, public works, plan expenditure towards social and economic services.

Two points need to be noted in this connection. Even in states where the wage/salary bill is very high, there is no need to look for an absolute reduction in the wage bill as part of the solution to unsustainable debt. The pressing need in such states is for containment of the growth of net staff size, which will still permit gross staff addition equal to the annual attrition through retirement. The second point is that the size of government staff in India, at 1.4 as a percent of population, is low as against the Chinese figure of 2.8 (Schiavo-Campo, 1998). From a governance perspective, what is important is to motivate and train staff to higher levels of performance, and to reduce the high share of C and D category staff, which is at 95 percent of the total (Beschel 2003). An excessive emphasis on reduction of numbers through VRS and other schemes is likely to drive out talent and exacerbate the governance problem.

TABLE 5.8 : AVERAGE GROWTH RATES OF NON INTEREST REVENUE EXPENDITURES (1997-02)

	States	Pensions	Salaries	Police	Other	Average
	1	**2**	**3**	**4**	**5**	**(2+3+4+5)**
I	**Non Special Category**					
1	West Bengal	29.9	13.2	14.0	18.5	18.9
2	Punjab	27.9	4.4	9.8	38.2	20.1
3	Gujarat	21.8	19.1	9.7	11.4	15.5
4	Madhya Pradesh	24.0	17.9	15.5	10.0	16.9
5	Orissa	32.3	15.7	12.8	7.9	17.2
6	Uttar Pradesh	31.5	12.0	12.8	8.2	16.1
7	Bihar	27.1	16.5	20.4	27.0	22.8
8	Rajasthan	29.5	10.7	12.4	10.7	15.8
9	Maharashtra	28.5	12.1	11.7	11.8	16.0
10	Kerala	21.2	9.3	13.2	7.8	12.9
11	Tamil Nadu	24.7	8.8	14.3	3.9	12.9
12	Andhra Pradesh	19.2	3.9	13.6	25.7	15.6
13	Goa	41.1	17.5	13.9	31.3	25.9
14	Karnataka	19.6	11.7	15.6	11.1	14.5
15	Haryana	26.9	11.7	16.1	-7.7	11.7
	Total	**22.7**	**9.6**	**11.1**	**9.4**	**13.2**
II	**Special Category**					
1	Himachal Pradesh	33.3	12.7	13.5	13.8	18.3
2	Manipur	36.7	21.8	18.3	3.4	20.0
3	Mizoram	24.4	9.3	13.5	17.0	16.1
4	Sikkim	42.7	14.4	16.9	10.9	21.2
5	Meghalaya	24.9	13.7	11.8	11.2	15.4
6	Nagaland	24.3	10.1	12.3	8.3	13.7
7	Jammu and Kashmir	46.3	15.0	26.8	17.2	26.3
8	Tripura	32.2	18.3	19.5	3.0	18.3
9	Assam	29.5	12.4	14.7	13.0	17.4
10	Arunachal Pradesh	38.1	3.8	15.5	16.9	18.6
	Total	**31.3**	**12.3**	**18.2**	**12.0**	**18.5**

Source : Ibid
Notes : See notes to table 5.7.

As table 5.8 shows, it is pensions that have experienced the highest growth rate over 1997-02, at 22.7 percent and 31.3 percent for major and special category states, as against 13.2 percent and 18.5 percent growth respectively for total NIRE over the same period.

TABLE 5.9 : PROJECTED OUTSTANDING DEBT OF STATE GOVERNMENTS*

(Rs crore)

	States	CAGR (%)	2002-03 (Accounts)	2003-04	2004-05	2005-06	2006-07	2007-08	Share %
	1	2	3	4	5	6	7	8	9
I	**Non Special Category**								
1	Andhra Pradesh	17.7	54,849	64583	76045	89541	105431	124142	**7.3**
2	Bihar	12.5	40,378	45429	51113	57507	64701	72795	**4.3**
3	Goa	12.8	3,263	3680	4151	4681	5280	5955	**0.3**
4	Gujarat	17.4	52,579	61703	72411	84977	99724	117030	**6.8**
5	Haryana	17.2	19,841	23246	27235	31909	37384	43800	**2.6**
6	Karnataka	16.7	36,950	43136	50357	58788	68631	80121	**4.7**
7	Kerala	18.7	33,835	40149	47641	56531	67080	79598	**4.7**
8	Madhya Pradesh	13.5	34,686	39356	44655	50667	57489	65230	**3.8**
9	Maharashtra	18.1	87,877	103743	122474	144586	170692	201510	**11.8**
10	Orissa	16.4	31,614	36807	42853	49892	58087	67628	**4.0**
11	Punjab	15.9	38,522	44655	51765	60007	69561	80637	**4.7**
12	Rajasthan	17.4	46,704	54842	64399	75620	88797	104270	**6.1**
13	Tamil Nadu	17.0	42,813	50095	58615	68583	80248	93896	**5.5**
14	Uttar Pradesh	15.8	103,291	119647	138593	160539	185960	215407	**12.6**
15	West Bengal	20.2	79,205	95180	114378	137447	165170	198484	**11.6**
	Total	**16.7**	**706,407**	**826252**	**966684**	**1131278**	**1324237**	**1550503**	**90.7**
II	**Special Category**								
1	Arunachal Pradesh	10.6	1,274	1409	1559	1724	1906	2108	**0.1**
2	Assam	10.0	14,066	15475	17025	18730	20607	22671	**1.3**
3	Himachal Pradesh	20.0	11,722	14067	16880	20256	24308	29170	**1.7**
4	Jammu and Kashmir	7.3	8,495	9113	9776	10487	11249	12068	**0.7**
5	Manipur	16.1	2,327	2703	3140	3647	4236	4920	**0.3**
6	Meghalaya	18.4	1,795	2126	2516	2979	3526	4174	**0.2**
7	Mizoram	16.0	1,979	2295	2662	3087	3581	4153	**0.2**
8	Nagaland	20.3	2,774	3338	4016	4831	5813	6993	**0.4**
9	Sikkim	18.7	882	1047	1242	1474	1749	2076	**0.1**
10	Tripura	16.0	3,157	3662	4247	4927	5715	6630	**0.4**
	Total	**12.3**	**48,472**	**55234**	**63063**	**72143**	**82691**	**94963**	**5.6**
III	**Recognised New States**								
1	Chhattisgarh#	12.7	12,081	13615	15344	17293	19489	21964	**1.3**
2	Jharkhand#	13.0	13,686	15466	17476	19748	22315	25216	**1.5**
3	Uttaranchal$	20.6	6,447	7775	9377	11309	13638	16448	**1.0**
	Total	**14.3**	**32215**	**36856**	**42198**	**48350**	**55443**	**63629**	**3.7**
IV	**Total All States**		**787093**	**918342**	**1071944**	**1251770**	**1462370**	**1709095**	**100.0**

Notes: * Debt from 2003-04 to 2007-08 is projected on the basis of compound growth rates over 1990-91 to 2001-02, starting from the base year 2002-03.

CAGR : Compound annual growth rate

 # : Non special category state; **$:** Special category state

Finally, table 5.9 shows for the states listed alphabetically, debt projections to the year 2007-08, through application of the compound rate of growth over the period 1990-2003. Aggregate debt of major states (including Jharkhand and Chhattisgarh) will be 1.6 million crore, and that of special category states (including Uttaranchal) will be nearly 95 thousand crore. These are daunting figures. Clearly, the rate of growth of debt in all states has to be brought down if this frightening prospect is to be averted.

The table also shows the percent share of states in total debt. West Bengal, in Group 1 of the unsustainability ranking, and Uttar Pradesh in Group 2, together account for nearly one-quarter of total state-level debt. From a national perspective, fiscal correction needs to be especially sharply focused on these two states.

6. POLICY RECOMMENDATIONS

6.1 RESTORING DEBT SUSTAINABILITY

The most worrying feature of states' debt emerging from the assessment of section 5 is that the more indebted among the major states prior to 1997 in general saw larger increases in debt, going upto 2002-03. The debt/GSDP range moved up from 18 to 42 percent among major states for 1992-97, to 28 to 71 percent in 2002-03. States such as Haryana, Maharashtra and Tamil Nadu which were at or near the low end of the range in 1992-97, remain at or near the low end of 28 percent in 2002-03. Orissa, which was at 42 percent in 1992-97, remains at the high end of the new range, at 71 percent. With the passage of time, the only difference is that the distance between the two has widened.

All of the states, with some possible exceptions, are in need of fiscal correction. The differences lie only in the degree and urgency of the corrective action called for. Even Haryana saw an increase in average debt/GSDP over the last decade, but the primary revenue surpluses consistently reported in the state budget in the three years upto 2001-02, and the low rates of growth of both non-interest revenue expenditure and capital expenditure, point towards stabilisation of debt.

This section identifies the type of corrective action most urgently called for on the revenue and expenditure fronts, by state. The next section identifies states in need of institutional reform. Four types of such reform are listed. These are participation in the Consolidated Sinking Fund (CSF) and in the Guarantee Redemption Fund (GRF); enactment of ceilings on guaranteed debt; and enactment of fiscal responsibility legislation. The last of these has been incentivised by the TFC conditional interest rate concession on state debt owed to the Centre.

The final section deals with external support needed from the Centre for state-level fiscal correction. Central control of state borrowing under Article 293(3) of the

Constitution has to extend comprehensively to all avenues of borrowing. The TFC endorsement of this is yet to be operationalised. Other forms of Central support that could improve the fiscal credibility of states are also listed. Finally, in its capacity as a lender to state governments, the Centre bears the responsibility of ensuring that the cross-state pattern of the Centre's own lending is in accordance with sustainability status. If the TFC recommendation for cessation of Central lending to states is fully accepted, this will not be an issue.

Table 6.1 provides an (alphabetical) listing of states, with an identification of those requiring any of four types of revenue and expenditure correction. All states need to raise their revenue buoyancy, but those which need to pull up their own tax buoyancy to a minimum of one, are marked in the table. These are the states where the annual growth of own tax revenue has fallen below their nominal annual growth rate of GSDP, averaged over the period 1980-2002. It is possible that these states might have achieve a buoyancy of one or more in the last few years, but the need in these states is to sustain own tax buoyancy at that level over a long period. All states to varying degrees have suffered tax revenue losses on account of competitive tax concessions to attract new industrial investment. This problem has been sought to be addressed since 1999-2000 through inter-state agreements, which have faced enforcement problems. With the introduction of a VAT in all states, these concessions will be eliminated in any case, so that the prospects for a complete phase-out are good. But the revenue losses from prior concessions remain legally in place and unchallengeable.

Reduction of non-interest revenue expenditure to a benchmark level of 9 percent, which was the average nominal growth rate of GSDP across all states over the period 1997-02, is required for all states barring Haryana, the only state with no mark in any of the four columns.

TABLE 6.1. : FISCAL MANAGEMENT : CORRECTIONS REQUIRED

	States	Raising own tax buoyancy to one	Restraining annual NIRE growth at 10 percent	Raising returns on capital outlay to 5 percent	Raising interest receipts on loans to 5 percent
I	**Non Special Category**				
1	Andhra Pradesh	✓	✓	✓	
2	Bihar		✓	✓	✓
3	Goa		✓		
4	Gujarat		✓		
5	Haryana				
6	Karnataka		✓	✓	✓
7	Kerala		✓		✓
8	Madhya Pradesh			✓	✓
9	Maharashtra	✓	✓		
10	Orissa		✓	✓	
11	Punjab	✓	✓		
12	Rajasthan		✓	✓	
13	Tamil Nadu				✓
14	Uttar Pradesh			✓	✓
15	West Bengal	✓	✓		✓
II	**Special Category**				
1	Arunachal Pradesh		✓	✓	
2	Assam		✓		✓
3	Himachal Pradesh		✓	✓	✓
4	Jammu and Kashmir		✓	✓	
5	Manipur	✓	✓	✓	✓
6	Meghalaya		✓	✓	✓
7	Mizoram	✓	✓	✓	✓
8	Nagaland	✓	✓	✓	✓
9	Sikkim		✓	✓	
10	Tripura		✓	✓	

Notes: Own tax buoyancy was estimated over the period 1980-2002. The non-interest revenue expenditure (NIRE) benchmark of 10 percent is obtained from the average nominal growth rate of GSDP across all states over the period 1997-02. Return on capital outlay is estimated from non-tax receipts for 2001-02, adjusted for lottery and interest receipts, to the sum of capital outlay over 1980-2001, at 2001-02 prices, using the national accounts deflator. Interest receipts in 2001-02 are estimated as a percent to accumulated loans over 1980-2001, at 2001-02 prices using the national accounts deflator.

Non-tax revenue buoyancy has not been estimated in this report, for reasons given in detail in the previous section. But the table marks those states where non-tax non-interest revenue, adjusted for lottery receipts, in a single year (2001-02), fell below 5 percent of total capital outlay, aggregated over the period since 1980-81, at 2001-02 prices, using the nation-wide national accounts deflator. This is a very crude measure of the productivity of capital expenditure. Some forms of capital outlay, on village road connectivity and other such pure public goods, cannot be subjected to user charges. But the return in terms of non-tax non-interest revenue does provide the best available macro measure of the productivity of capital outlays. The table also marks those states where interest receipts were below 5 percent of aggregate loans, aggregated over the same period.

Unproductive capital expenditure is a major problem in all states. There is the practice of providing cover for losses of non-departmental state PSUs through incremental contributions to share capital from the capital account of the budget. This has assumed added momentum after 1997-98, with adoption of the salary scales of the Fifth Pay Commission by non-departmental state PSUs. Incremental equity contributions are included in capital outlays, not in loans and advances, which is technically correct, but non-transparently blends in loss cover with expenditure on outlays on physical capital. Although these are included under the non-Plan head rather than the Plan head, it would be incorrect to assume that all non-Plan expenditures are of this kind. Indeed, non-Plan capital outlays of the right kind, towards physical capital, should be encouraged, because capital all over the country is poorly maintained for lack of sufficient non-Plan provision for upgradation.

Another type of unproductive capital expenditure is debt servicing of off-budget borrowing through budgetary capital outlays, this time under the Plan head. These off-budget borrowing by Special Purpose Vehicles (SPVs) are amortised through the budget, and classified under the sectoral head (irrigation, for example) under which the SPV falls. Even interest on SPV loans is capitalised and serviced through these kinds of outlays, against which there is no corresponding build-up of state assets.

No recommendation can clearly be made therefore about the quantum of capital expenditure,[12] since productive asset-building capital expenditure is needed in all states. Clearly a qualitative shift is urgently called for towards capital expenditure that will be growth-promoting, and self-financing, in terms of yielding user charges and other budgetary non-tax revenues, in subsequent years. Budgetary cover through the capital account for loss-making non-departmental state PSUs has to be specifically prohibited in the design of fiscal responsibility legislation. Such subventions have to be transparently recorded in the revenue account of the budget, where they properly belong.

The problem of PSU losses remains, and needs to be addressed upfront. Every state needs to launch an immediate survey of its PSUs, with privatisation prospects identified and acted upon. The remainder need to be restructured in such a way as to eliminate accumulated losses over a specified period of time. This is a vitally urgent need, rendered additionally so because of the invisible contribution these enterprises have made over the years toward the debt sustainability problem at state level. If a restructuring towards eventual commercially viable operation is not possible, the enterprises need to be merged with other viable entities, or closed down.

6.2 INSTITUTIONAL REFORMS AT STATE LEVEL

Most state governments have initiated some fiscal reforms over the last five years. It is possible that the incentive fund specified by the Eleventh Finance Commission played a role in this starting with the fiscal year 2000-01, the first year of the award period. These institutional reforms include joining the consolidated sinking fund (CSF) and the Guarantee Redemption Fund (GRF) with the Reserve Bank of India; setting ceilings on guarantees; and initiating power sector reforms. A few state governments also enacted fiscal responsibility legislation, prior to the TFC incentive scheme. Table 6.2 marks states which have instituted these reforms, upto the date of this report. It is recommended here that all states join the CSF and GRF, and introduce ceilings on

[12] The difference between terminal targets (or path targets if any) between the fiscal deficit as a percent of GSDP, and the revenue deficit, as a percent of GSDP, in effect defines the amount of

guarantees. A Working Group on fiscal responsibility legislation at state level constituted in October 2003 drafted a model which was discussed at the fourteenth Conference of the State Finance Secretaries in August 2004, and is soon to be finalised.

A fundamental requirement is provision as a part of budget documents of the full picture on state liabilities broken down by source, along with all contingent liabilities, the latter with a detailed breakdown that would enable risk assessment. At present, debt figures are simply not provided as a part of budget documents in all states. The figures used in this report have been compiled from the RBI database, obtained by aggregating the flow addition through net borrowing to debt stock in each year. The most recent published figure for debt stock of states is for 1996-97 from the Combined Finance and Revenue Account.

6.2.1 CONSOLIDATED SINKING FUND

Table 6.2 identifies the fourteen states that have voluntarily joined the CSF, a scheme set up with the Reserve Bank of India to facilitate redemption liabilities on account of market borrowings, following the recommendations of the Tenth Finance Commission. The amounts under the CSF are utilized as amortization funds for the redemption of open market loans, commencing from the fifth year after the CSF is set up. The Fund cannot be utilized for any purposes other than redemption of open market loans. State governments can contribute 1 to 3 percent of the outstanding market loans each year to the Fund, or more at their discretion. There is no ceiling on contributions. The CSF has been criticised on the grounds that it is meaningful only to those states which do not have a revenue deficit. The setting up of a CSF does impose an immediate burden on the revenue account, but strengthens market willingness to absorb its securities.

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permissible capital expenditure.

TABLE 6.2. : INSTITUTIONAL REFORMS : PRESENT STATUS

	States	CSF	GRF	Guarantee ceiling	FRBM
I	**Non Special Category**				
1	Andhra Pradesh	✓	✓		✓
2	Bihar				
3	Goa	✓	✓	✓	
4	Gujarat		✓	✓	
5	Haryana	✓	✓		✓
6	Karnataka		✓	✓	✓
7	Kerala			✓	✓
8	Madhya Pradesh				
9	Maharashtra	✓			✓
10	Orissa	✓	✓		✓
11	Punjab			✓	✓
12	Rajasthan		✓	✓	✓
13	Tamil Nadu			✓	✓
14	Uttar Pradesh				✓
15	West Bengal	✓		✓	
II	**Special Category**				
1	Arunachal Pradesh	✓			
2	Assam	✓		✓	✓
3	Himachal Pradesh				
4	Jammu and Kashmir				
5	Manipur				
6	Meghalaya	✓			
7	Mizoram	✓			
8	Nagaland				
9	Sikkim	✓	✓	✓	
10	Tripura	✓			✓
III	**New Reorganised States**				
1	Chhattisgarh	✓			
2	Jharkhand				
3	Uttaranchal	✓			

Source: RBI State Finances.

6.2.2 GUARANTEE REDEMPTION FUND

Eight states have joined the Guarantee Redemption Fund (GRF) (table 6.2). The Report of the Technical Committee on State Government Guarantees (1999) had recommended that each State should set up a contingency fund or make some provision for discharging the devolvement on guarantees provided by them, with guarantee fees collected and credited to the fund. States which carry contingency liabilities would gain greatly in credibility by joining the Fund.

6.3 EXTERNAL SUPPORT TO STATE-LEVEL CORRECTIVES

6.3.1 COMPREHENSIVE CAP ON STATE BORROWING

Fiscal responsibility legislation enacted by states can be strengthened by enacting a formal ceiling on incremental borrowing by law. The Constitution under Article 293 (3) requires all states indebted to the Central Government to take prior approval from the Centre for market borrowings. [*A state may not without the consent of the Government of India raise any loan if there is still outstanding any part of a loan which has been made to the state by the Government of India or by its predecessor Government, or in respect of which a guarantee has been given by the Government of India or by its predecessor Government]*. The limit on market borrowings of the state government each year is fixed by the ministry of finance in consultation with the Planning Commission. As already mentioned in section 3, the borrowing limit extends only to market borrowings and borrowing from the Centre as a part of plan assistance. States are also free to take what are called negotiated loans from institutional lenders like LIC and GIC. Although the total quantum of this borrowing is in principle limited by the size of Plan expenditure agreed to by the Planning Commission, a systematic procedure for ensuring that the limits are adhered to has been introduced only very recently. The Loan Council recommended by the TFC, if operationalised, will provide a more effective cap, but one that may be at odds with the fiscal deficit correction path in the states' individual FRBM legislation.

Finally, the limit does not encompass borrowing from the National Small Saving Funds (NSSF) against small savings collections in the state, and states' own small savings deposit collection schemes. States influence the collection under the small savings through aggressive marketing of small saving schemes. In order to impose a hard budget constraint on the states, the overall borrowings including borrowing from all sources should be capped. Where there is unforeseen variation in autonomous borrowings such as small savings flows, corresponding adjustments need to be made under discretionary borrowings.

The only other option to a formal state-specific ceiling covering global borrowing from all sources, is to let the market determine risk premia on state debt. In the Indian context, however, this will lead to fiscal collapse in the highly indebted states. A formal ceiling may in effect be the only way by which to restore sustainability in these states.

6.3.2 RATIONALIZATION OF ALLOCATION OF MARKET BORROWINGS

There is no formula based approach at present to allocate market borrowings to different state governments. It is recommended that the overall market borrowing should be finalized in consultation with Reserve Bank of India as the debt manager and the monetary authority. The state-wise allocation needs to be formula based so as to avoid arbitrariness.

6.3.3 CENTRAL LOANS

By the Gadgil formula, Central assistance for Plans of (non-special category) states has been set at a loan to grant ratio of 70:30. After the TFC Report, there will be no further loan component to Central assistance.

6.3.4 NEGOTIATED LOANS FROM FINANCIAL INSTITUTIONS

Negotiated loans from institutional lenders like LIC and GIC have grown enormously in volume. As mentioned earlier, these loans are in principle sanctioned by the Planning Commission as a part of the agreed size of Plan spending for each state, but a systematic regulatory or monitoring mechanism for keeping these loans within agreed limits has came into place only very recently. No state-wise data are reported in budget documents on outstandings in respect of negotiated loans. Constituents of internal liabilities are in general not reported. These disclosure requirements need to be uniformly imposed on all states.

6.3.5 DEPOSITS

Although state governments are legally permitted to accept deposits from the public, this is tantamount to state governments functioning as banks, without the regulatory supervision to which commercial banks are subjected. These deposits are not trivial in quantum. It was seen in section 3 that reserve funds and deposits amount to 14 percent of aggregate liabilities of state governments. In the interests of fiscal prudence and sustainability, all deposits directly taken by state governments should comprehensively be included within the overall cap on borrowing.

6.3.6 DISCLOSURE AND TRANSPARENCY REQUIREMENTS

Adequate disclosure and transparency in accounting and budgeting practices would enable investors to make informed judgment about the financial health of the government. The need for information about negotiated loans has already been mentioned. Similarly, information on losses of State Electricity Boards, and all departmental and non-departmental PSUs need to be explicitly included in the budget documents. There should be standardization of the definitions used for computing debt, GFD and classification of the expenditure in revenue and capital categories. This would enable meaningful inter-state comparisons. Disclosure imposes market discipline on governments, and enhances credibility and acceptability of the Government debt in the market.

6.3.7 THE CSF & GRF

The total investment in the CSF, at less than Rs.3,000 crore, accounts for less than 2 percent of outstanding market borrowings of states. The design of the CSF could perhaps be altered to include a required portion of NSSF receipts. Also, a minimum set at

3 percent of outstanding debt rather than annual market borrowing would enhance the fiscal credibility of states. Without any violation of states' autonomy under the federal framework of the country, states should compulsorily be required to join the CSF facility. States with contingent liabilities should similarly be required to join the GRF.

6.3.8 FISCAL RESPONSIBILITY LEGISLATION

Under the co-ordinated approach to subnational fiscal responsibility legislation in a federal framework, uniform rules are prescribed under the surveillance of a central authority, so as to establish collective credibility for overall macroeconomic policy. Under the autonomous approach (a bottom-up approach), the initiative for adopting fiscal rules lies with individual sub national governments. There is now in place a blend of coordination and autonomy in the fiscal reform process in the states. In response to the TFC offer of interest rate reduction on state debt owed to Centre, conditional on enactment of FRBMs, the number states with such legislation had risen to twelve by July 2005. States are free to choose the date on which the fiscal deficit is reduced to a budget of 3 percent of GSDP, but all are required to eliminate their revenue deficit by 2008-09. Simulations of the expenditure compression implications of the first four state FRBMs enacted are reported in Rajaraman (2004b).

6.3.9 CASH MANAGEMENT

Mismanagement of cash flows, in terms of timing, is to some degree independent of the fiscal stress issue, and can occur even in states in a good overall fiscal position. A short-term cash crunch calls for ways and means advances, which impose additional costs on government finances. There are states which carry WMA or overdrafts almost throughout the year. These should be granted a one-time medium term loan or permission to raise debt to rectify this anomaly.

Each state should be required to make a standard analysis for monthly requirements and work out the seasonality in its expenditure pattern. This information would be useful to the Reserve Bank as an input in deciding the timings of floating tranches of the borrowing programme for the state governments in conjunction with other factors, such as liquidity conditions in the market, interest rate determination and synchronisation with Central Government borrowings.

6.4 SUSTAINABILITY AND THE MARKET

The various measures enumerated above under disclosure and transparency, standardization of fiscal measures, fiscal responsibility legislation and other institutional measures, revenue effort and expenditure compression all have their impact on fiscal credibility and reputation. But the principal requirement at this juncture is a comprehensive cap on borrowing by each state, which is formula-driven and objective. Market perceptions of the risk attached to state government loans are critical. Failure or tardiness on any of the recommendations in this report will not, under present institutional arrangements, translate into higher risk premia on interest rates for particular states perceived as carrying unsustainable debt. But it can translate into outright rejection by the market of the securities on offer. Before the market in effect imposes a zero cap of this kind on further borrowing by state governments, it is best that the measures enumerated in this report be implemented.

Box 3: Main Features of Statutory/Administrative Ceilings on Guarantees			
State	**Statutory/ Administrative (Year)**	**Ceiling**	**Other important features**
1. Assam	Administrative ceiling (2000)	The ceiling on guarantee issued by the Government is fixed at Rs.1500 crore.	
2. Goa	Statutory ceiling (1993)	The ceiling on guarantee issued by the Government is currently fixed at Rs.550 crore.	
3. Gujarat	Statutory ceiling (1963)	The ceiling on guarantees issued by the Government has been revised from time to time. As per the latest revision (March 2001), the ceiling on guarantees has been fixed at Rs.20,000 crore.	
4. Karnataka	Statutory ceiling (1999)	The total outstanding Government guarantee as on the first day of April of any year shall not exceed eighty percent of revenue receipts of the second preceding year as they stood in the books of the Accountant General of State Government. The ceiling on the Government guarantee shall not apply for any additional borrowing for implementation of the Upper Krishna Project.	The Government will charge a minimum of one percent as guarantee commission.
5. Rajasthan	Administrative ceiling (1999)	The total of loans and Government guarantee as on the last day of the any financial year shall not exceed twice the estimated receipts in the Consolidated Fund of the State for that financial year.	
6. Sikkim	Statutory ceiling (2000)	The total outstanding Government guarantee as on the first day of April of any year shall not exceed thrice the State's tax revenue receipts of the second preceding year as in the books of the Accountant General of State Government.	
7. West Bengal	Statutory ceiling (2001)	The total outstanding Government guarantee as on the first day of April of any year shall not exceed ninety percent of revenue receipts of the second preceding year as they stood in the books of the Accountant General of the State Government. The ceiling on the Government guarantee is not applicable to any loan raised by the West Bengal Infrastructure Development Finance Corporation Limited under the guarantee given by the Government and fully availed of by the Government itself for funding different infrastructure projects and for repayment of which there is specific provision in the budget of the State.	
8.Tamil Nadu	Statutory (2003)	(i) Cap total outstanding guarantees to 100 percent of the total revenue receipts in the preceding year or at 10 percent of GSDP, whichever is lower. (ii) Cap risk weighted guarantees to 75 percent of the total revenue receipts in the preceding year or at 7.5 percent of GSDP, whichever is lower.	
9. Punjab	Statutory (2003)	Cap outstanding guarantees on long-term debt to 80% of revenue receipts of the previous year and guarantees on short-term debt to be given only for working capital or food credit.	
10. Kerala	Statutory (2003)	Outstanding guarantees not to exceed Rs. 14, 000 crore	

REFERENCES

Acharya, S. (2002), "Macroeconomic Management in the 1990s", *Economic and Political Weekly* (April 20-27); XXXVII:16; 1515-38.

Ahluwalia, Montek S. (2002a), "India's Vulnerability to External Crisis: An Assessment." in Montek Ahluwalia, S.S. Tarapore and Y.V. Reddy (eds.) *Macroeconomics and Monetary Policy: Issues for a Reforming Economy*. Essays in Honor of C. Rangarajan (Oxford University Press); XVIII; 345.

Alesina, Alberto and Tamim Bayoumi (1996), "The Costs and Benefits of Fiscal Rules: Evidence from U.S. States," *NBER Working Paper No. 5614*.

Balasone, Fabrizo and Franco Daniele (2000), "EMU Fiscal Rules: A New Answer to an Old Question', Published in Public Finance Workshop Papers, (Research Department, Banca D Italia).

Blanchard, O. (1980), "Suggestions for a New Set of Fiscal Indicators", *OECD Working Paper No. 79*.

Blanchard, Olivier, Jean-Claude Chouraqui, Robert P. Hagemann and Nicola Sartor (1990), "The Sustainability of Fiscal Policy: New Answers to An Old Question', *OECD Economic Studies No. 15,* Autumn.

Bayoumi, Tamim and Barry Eichengreen (1995), "Restraining Yourself: The Implications of Fiscal Rules for Economic Stabilization," *IMF Staff Paper No. 42:1*; 32-48.

Bispham, J.A. (1987), "Rising Public Sector Indebtedness: Some More Unpleasant Arithmetic" in Michael J. Boskin, John, S. Flemming and Stefano, Gorini (eds), *Private Savings and Public Debt* (Basil Blackwell); XI; 424.

Buiter Willem, H. (1985), "Guide to Public Sector Debt and Deficit", *Economy Policy*, (November);13-79.

Buiter, Willem H. and Urjit R. Patel (1992), "Debt, Deficits and Inflation: An Application to the Public Finances of India", *Journal of Public Economics* (March); 47; 172-205.

Chalk, Nigel and Richard Hemming (2000), "Assessing Fiscal Sustainability in Theory and Practice", *IMF Working Papers No. 00/81*

Chandrasekhar, C.P. (2000), "Economic Reform and the Budget" *Economic and Political Weekly*, (April 1); XXXV:14;1140-1142.

Chouraqui, Jean-Chaude, Robert, P. Hagemann and Nicola Sartor (1990), "Indicators of Fiscal Policy: A Re-examination", *OECD Working Paper No.78.*

Corsetti, Giancarlo and Nouriel Roubini (1996), “European versus American Perspectives on Balanced-Budget Rules,” *The American Economic Review*, (May) 86:2; 408-413.

Devarajan, Shantayanan, V. Swaroop and H. Zou (1996), “The Composition of Public Expenditure and Economic Growth” *Journal of Monetary Economics*; 37; 313-44.

Domar, E. (1944), “The Burden of Debt and National Income’, *American Economic Review*; 34; 798-827.

Feldstein, Martin (2004), “Budget Deficits and National Debt” L.K. Jha Memorial Lecture at the Reserve Bank of India in Mumbai, India, 12 January.

Government of India, (1994), Report of the Tenth Finance Commission, 1995-2000 (New Delhi: Ministry of Finance).

________ (2000), Report of the (E.A.S. Sarma) Committee on Fiscal Responsibility Legislation, (New Delhi: Department of Economic Affairs, Ministry of Finance).

________ (2000c), Report of the Eleventh Finance Commission, 2000-2005 (New Delhi: Ministry of Finance) June.

________ (2003), The Fiscal Responsibility and Budget Management Act, (New Delhi: Ministry of Finance).

Goyal, Rajan, Jeevan Khundrakpam and Partha Ray (2004), “Is India’s Public Finance Unsustainable? Or, Are the Claims Exaggregated?”, *Journal of Policy Modeling* 26; 401-420.

Haque, Nadeem U. and Peter, J. Montiel (1992), “Fiscal Policy in Pakistan since 1970”, *IMF Working Paper No.*, *WP/92/97* (November).

Hamilton J. and M. Flavin (1986), "On the Limitations of Government Borrowing: A Framework for Empirical Testing", *American Economic Review;* 76; 808-819.

Hemming, Richard and Michael Kell (2001), “Promoting Fiscal Responsibility – Transparency, Rules and Independent Fiscal Authorities’. Presented at a workshop on *Public Finance* (Fiscal Affairs Department, IMF), Feb 1-3 2001; mimeo.

Horne, Jocelyn (1991), “Indicators of Fiscal Sustainability”, *IMF Working Papers WP/91/5* (January).

Howes, Stephen and Shikha Jha (2001), “State Finances In India: Towards Fiscal Responsibility” World Bank.

International Monetary Fund (1999), *Manual on Fiscal Transparency* (Washington, D.C.: Fiscal Affairs Department).

__________, (2001), *Report on the Observance of Standards and Codes: India --Fiscal Transparenc*y, (Washington, D.C.: Fiscal Affairs Department).

Jalan, Bimal, (1996), *India's Economic Policy: Preparing for the Twenty-first Centur*y (Penguin Books).

Kanagasabapathy, K., R.K. Pattanaik and Ms K.A. Jayanthi (1997), "Placing a Statutory Limit on Public Debt" *RBI Bulletin* (December); 983-1009.

Khundrakpam, J.K. (1998), "Sustainability of Central Government Debt", *RBI Occasional Papers 17:1*.

Kopits, George and S. Symansky (1998), "Fiscal Policy Rules', *IMF Occasional Paper No.162*.

Kopits George. (2001a), "Fiscal Rules: Useful Policy Framework or Unnecessary Ornament?' *IMF Working Paper No.145* (September).

________, (2001b), "Fiscal Policy Rules for India?", *Economic and Political Weekly* (March 3); XXXVI:9; 749-756.

Lahiri, A. and R. Kannan (2001), "India's Fiscal Deficits and Their Sustainability in Perspective". Paper presented at World Bank-NIPFP Seminar on Fiscal Policies for Growth.

Masson, P.R. (1985), "The Sustainability of Fiscal Deficit", *IMF Staff Papers No. 32:4* (December).

Millar, Jonathan (1997), "The Effects of Budget Rules on Fiscal Performance and Macroeconomic Stabilization" *Bank of Canada Working Paper 97-15*.

Mohan, Rakesh (2000), "Fiscal Correction for Economic Growth: Data Analysis and Suggestions" *Economic and Political Weekly* (June 10-16), XXXV:24; 2027-36.

Pattnaik, R K (1996), "Budget Deficit in India: Measurement, Analysis and Management" Ph D Thesis submitted to IIT Delhi.

Pattnaik, R K, S M Pillai and Sangeeta Das (2000), "Primer on Budget Deficit in India' *RBI Staff Studies*.

Pillai, S.M., S. Chatterjee, B. Singh, S. Das and A. Gupta (1997), "Fiscal Policy: Issues and Perspectives, *RBI Occasional Papers No. 18*.

Pinto, Brian and Farah Zahir (2004), "India: Why Fiscal Adjustment Now" *World Bank Policy Research Working Paper 3230* (March)

Poterba, J.M. and J. von Hagen (eds.), *Fiscal Institutions and Fiscal Performance* (The University of Chicago Press); 59-80.

Poterba, James M., (1996), “Do Budget Rules Work?”, *National Bureau of Economic Research, Working Paper 5550*; also in *Fiscal Policy: Lessons from Empirical Researc*h, ed. by Alan Auerbach (MIT Press, 1997).

Prasad, Abha, Rajan Goyal and Anupam Prakash (2004), “States Debt And Debt Relief” *Economic and Political Weekly*, XXXIX:26; 2726-2736.

Premchand, A. (2003), “Ethical Dimensions of Public Expenditure Management”, *Working Paper 03-14* (Andrew Young School of Policy Studies, Georgia State University).

Quintos, C. (1995), “Sustainability of the Deficit Process With Structural Shifts, *Journal of Business and Economic Statistics*, 13; 409-417.

Rajaraman, Indira and Abhiroop Mukhopadhyay (2000), “Sustainability of Public Domestic Debt in India”, in D.K. Srivastava, ed. *Fiscal Federalism in India: Contemporary Challenges – Papers for the Eleventh Finance Commission* (Har-Anand); 207-226.

Rajaraman, Indira (2004a) “Fiscal Restructuring in the Context of Trade Reform” *Economic and Political Weekly*, XXXIX:26; 2787-2794.

Rajaraman, Indira (2004b) “Fiscal Developments and Outlook in India” *Working Paper No. 15*, (New Delhi: NIPFP).

Rajaraman, Indira and Debdatta Majumdar (2005) “Equity and Consistency Properties of the Twelfth Finance Commission Recommendations” *Economic and Political Weekly*, XL:30 (July 30).

Rakshit, Mihir (2001), “Restoring Fiscal Balance Through Legislative Fiat: The Indian Experiment”, *Economic and Political Weekl*y (June 9); XXXVI:23; 2053-2062.

Rao, V.K.R.V. (1952), “Investment, Income and the Multiplier in an Underdeveloped Economy”, *Indian Economic Review* (February); 1:1; 55-67.

Rangarajan, C, Anupam Basu and Narendra Jadhav (1994), “Dynamics of Interaction Between Government Deficit and Domestic Debt in India”, in Amaresh Bagchi and Nicholas Stern (ed.) *Tax Policy and Planning in Developing Countries*, (Delhi: Oxford University Press); 135.

Rangarajan, C and D K Srivastava (2003), “Dynamics of Debt Accumulation in India’ *Economic and Political Weekly* (November 15-21); XXXVIII:46; 4851-4858.

Reddy, Y.V. (2000a), *Legislation on Fiscal Responsibility and the Reserve Banks’ Role: Some Issue*s, Speech delivered at the Workshop on Fiscal Responsibility of Government, held at India Habitat Center, New Delhi, February 15.

_________ (2000b), "Fiscal and Monetary Policy Interface: Recent Developments in India", *RBI Bulletin* (November); 1257-1268.

_________ (2000), "Managing Public Debt and Promoting Debt Markets in India", *RBI Bulletin* (October); 1083-1094.

Reserve Bank of India, Report on Currency and Finance, various issues.

____________, Annual Report, various issues.

____________(2001), Report of the Expert Committee to Review the System of Administered Interest Rates and Other Related Issues (Chairman: Y. V. Reddy). September.

Schiavo-Campo, Salvatore, (1998) "Government Employment and Pay: The Global and Regional Evidence" *Public Administration and Development;* 18; 457-78.

Seshan, A. (1987), "The Burden of Domestic Public Debt in India". *RBI Occasional Papers* (June) 8:1; 45-77.

Shenoy, B.R. (1955), A Note of Dissent", in "Second Five Year Plan: The Framework" (Publications Division, Ministry of Information and Broadcasting, Government of India); 163.

Spaventa, Luigi (1987), "The Growth of Public Debt", *IMF Staff Papers No. 34:4* (December)*;*

World Bank (2002), Global Development Finance, World Bank.

Zee, Howell H. (1988), "The Sustainability and Optimality of Government Debt" *IMF Staff Papers* (December); 658-685.

SURVEY OF LITERATURE IN INDIA

The analysis of fiscal sustainability assumed critical importance during the late 1980s, with sharp fiscal deterioration both at national as well as sub-national levels. The many contributions include Seshan (1987), Rangarajan, Basu, Jadhav (1989), Buiter and Patel (1992), Rajaraman and Mukhopadhyay (2000), and most recently, Rangarajan and Srivastava (2003).

ASSESSMENT OF SUSTAINABILITY

Seshan (1987) was the first to draw a pointed attention to the possibility of domestic debt in India reaching an unacceptably high level in the none too distant future. Subsequently, the Report of the Controller and Auditor General (CAG) of India (1988) also warned against the alarming growth in domestic debt. The initial studies, based on simple trend analysis, were criticised by Rangarajan, Basu and Jadhav (1989), on the grounds that they lacked 'analytical constructs' behind the findings. This study called for a comprehensive and much deeper analysis on measurement of budget deficit and debt. In their pioneering work the authors examined the dynamic nexus between the two. Using data for the 1970s and 1980s, the authors simulated two alternative scenarios for financing the deficit: a debt-financing scenario and a monetary-financing scenario. Under the debt-financing scenario, they concluded that "..the higher interest burden may invariably lead to a squeeze on budgetary capital outlays, thereby stifling economic growth." Under the monetary-financing scenario they concluded "resorting to monetary financing is likely to set in motion a vicious circle of large deficit, higher monetary financing, greater inflation leading again to a larger deficit".

Chelliah (1991) suggested that the first stage of fiscal adjustment should consist of measures to enable the Government to reduce the primary deficit to 2.5 percent of GDP by the year 2000/01. If that were done, the growth of public debt would slow down and the total deficit would be contained at around 8 percent of GDP in 2000/01.

Buiter and Patel (1992) using annual data for 18 years (1970-71 to 1987-88), with four alternative interest rates, demonstrated that discounted public debt in India is non-stationary. They pointed out that without a sharp reversal of the primary deficit to a primary surplus, avoiding repudiation or default would require eventual mobilization of large seignorage or inflation tax. Auerbach (1994) concluded that the fiscal problem could linger on for many years before exploding.

Following the tax gap approach developed by Blanchard-Chouraqui (1990) an attempt was made in Pattnaik (1996) to assess the sustainability of Central Government finances. The empirical findings are that under a medium-term perspective, fiscal sustainability requires that the debt-GDP ratio be brought down to 50 percent by the end of fiscal 2000 from the 1996-97 level of 54 percent. This is possible by gradual scaling down of the GFD to about 3.90 percent of GDP by 2002. Assuming a real growth rate of 7 percent, inflation rate of 5 percent and real effective interest rate of 7 percent, a primary balance relative to GDP was recommended as against a deficit of 1.90 percent in 1995-96. Lahiri and Kannan (2000), Acharya (2001, 2002) and Ahluwalia (2002) have also commented upon the unsustainable level of deficit and debt. A recent study by Pinto and Zahir (2004) observed that without fiscal adjustment debt-GDP ratio would be 110 percent in 2006-07 and with adjustment this ratio would be 92.5 Correspondingly the deficit rises to 11.4 percent and fall steadily to 7 percent. with reform. While assessing the debt sustainability for the state governments, Prasad, Goyal and Prakash (2003) discussed that the outstanding debt of the state governments would touch 34 percent in 2007-08 from the level of 26 percent in 2002-03. Another recent work by Goyal, Jeevan and Ray (2004) which assesses the inter-temporal budget constraint using co-integration techniques observes that government finances are unsustainable both at the Central and the state levels, though there is some signs of weak sustainability if combined finances are considered. As against these, Khundrakpam (1998) and Moorthy *et al* (2000) found that Indian public debt is sustainable in terms of Domar's stability condition.

MACROECONOMIC IMPACT

In recent years, there has been an intensive debate on the macroeconomic impact of fiscal deficit as the persistence of high levels of deficit and debt during the last decade has not had any adverse macroeconomic impact, was the case in 1990-91. One school of thought (Patnaik, 2001; Rakshit, 2000; Chandrashekhar 2000, Shetty, 2001) advocates that it would be appropriate in the Indian context to increase in government expenditure on investment even through monetisation of fiscal deficit. Another school of thought has questioned the efficacy of expansionary fiscal policy at the current juncture (Lahiri and Kannan, 2000., Acharya, 2001, and Srinivasan 2001). In this context, both the size and quality of fiscal adjustment assume critical importance (Reddy, 2001). The Report of the Economic Advisory Council (EAC, 2001) stresses that high fiscal deficits, by raising real interest rates, crowd out private investment, especially in the context of the government borrowing being predominantly used to finance revenue deficits. The EAC observed that the existing level of public debt is 'too high… and clearly unsustainable'. Ahluwalia (2002) observed that India's fiscal and debt indicators are comparable to or worse than that of Argentina, Brazil and Turkey, countries which have actually experienced a serious recent macroeconomic crisis. The author, nevertheless, concludes that India is not vulnerable to a repeat of its 1991 fiscal and balance-of-payments (BoP) crisis because of the build up of foreign exchange reserves, capital controls, flexible exchange rate system and widespread public ownership of banks. Pinto and Zahir (2004) argue for further fiscal adjustment to eliminate the threat to sustained growth stemming from the crowding out of public and private investment, and constraints imposed on the domestic financial system by the financing needs of the government budget. While commenting upon India's recent deficit on capital formation and growth, Feldstein (2004) observes that if India did not have its current Central Government deficit of some 6 percent of GDP the gross rate of capital formation could rise from 24 percent of GDP to 30 percent.

POLICY PRESCRIPTIONS

Most of the authors have suggested for fiscal adjustment in terms of expenditure containment and revenue augmentation It is also recognized that such consolidation can not be done overnight. It is emphasised that attention needs to be paid to quality of fiscal consolidation as also to its speed. It is critical to avoid the unnecessary cost in terms of growth and welfare of such an adjustment path (Lahiri and Kannan, 2000). For stabilisation of debt-GDP ratio at current or reduced levels, focus on primary balance becomes necessary (Rangarajan and Srivastava, 2003). A programme of robust fiscal reform is needed to contain the unsustainable public debt dynamics and help India achieve its long run growth and poverty reduction targets (Pinto and Zahir, 2004). At a micro level, policy prescriptions have been to cut non-interest government outlays to increase tax or other revenues and to reduce interest on government debt (Feldstein 2003).

The paper by Rajaraman and Mukhopadhyay, 2000, presents the first unbroken data series for the post-Independence period on public domestic debt in India. Public domestic debt is defined as non-monetised liabilities of government aggregated across Central and all state governments. The results of subjecting the debt series obtained to univariate time-series analysis using structural time-series models are that the series exhibits no natural tendency to stabilise at any level. The paper also examines the time-path of the nominal interest rate on domestic debt, and finds that it crossed over the nominal growth rate of the economy, for the first time after a gradual lifting of financial repression, during the period 1996-98. This crossover establishes a regime switch in terms of the sign requirement for the difference between the primary deficit and the sum of monetisation and foreign borrowing, in order for stabilisation of domestic debt/GDP to obtain. Given prudential macroeconomic limits on monetisation at 1.6 percent of GDP, and on (net) foreign borrowing at 0.4 percent of GDP, the required limits on the primary deficit (p) for stabilisation of public domestic debt for plausible future values of (n) and (i), using a base value ofnon-monetised domestic debt/GDP of 40 percent, was worked out at 1.6 percent of GDP. This is the consolidated value for the permissible primary deficit aggregating across Central and state governments.

RESEARCH CONTRIBUTIONS OF THE RESERVE BANK OF INDIA

Recognising that unsustainable public debt is likely to have a major adverse impact on monetary policy objectives, financial stability and public debt management, the Reserve Bank of India in successive Annual Reports since 1991 has been advocating fiscal prudence. The research conducted in the Department of Economic Analysis and Policy (DEAP), and published in the Report on Currency and Finance (RCF), particularly, for the years 1998-99, 2000-01 and 2001-02, has highlighted the issues relating to sustainability of public debt and deficit. The thrust of this analysis was to set out a methodology, to assess sustainability and to recommend policy for achieving fiscal prudence. The RCF 2000-01 assessed sustainability of Government debt with the help of unit root tests. These tests show that the discounted series of nominal stock of Government debt is non-stationary, implying that the debt path is unsustainable. The Report therefore concluded that continuation of the current fiscal stance would make the public debt of both the Central and state governments unsustainable unless corrective measures are undertaken to rein in the fiscal deterioration. The RCF 2001-02 found that during the 1990s, with a few exceptions, the Domar stability conditions were fulfilled.

The RBI Annual Reports for 2000-01 and 2001-02 recommend durable fiscal consolidation through revenue maximization. This in turn requires that the tax system be reformed through widening the tax base, simplification of tax rules, review of exemptions/ incentives and strict tax compliance.

FINANCE COMMISSIONS

Successive Finance Commissions (FC) have considered the matter of giving debt relief to states and have recommended a number of ways for providing such relief. The Second Finance Commission (SFC) observed that as loans from the Centre to states were for a variety of purposes, these loans could be consolidated in order to reduce interest charges, and rates of interest and terms of repayment could be rationalized. Following this, average rates interest on various loans by the Centre were consolidated resulting in some marginal benefit to the states. The sixth FC was the first to receive wider terms of reference regarding states' indebtedness, and also to conduct an assessment of the non-Plan capital gap of the states. The final scheme of debt relief, which emerged from the sixth Finance Commission's proposals, was an amalgam of uniform relief in respect of certain categories of loans and discriminatory relief based on certain principles in regard to others. The Commission considered consolidation of the numerous outstanding Central loans and simplification of their terms of repayment, and the combined impact of its several recommendations was to reduce the repayment obligations of the states. The seventh FC was required to take into account the purpose for which the Central loans have been utilized by the states. The Commission categorized the loans into non-productive, semi-productive and productive purpose. It recommended write-offs as well as consolidation and revision of repayment periods. The GOI, however, did not accept the recommendation to treat small savings as 'loans in perpetuity' though some relief on repayment was allowed. The eighth FC grouped the states for the purpose of debt relief into four categories and formulated debt relief differently for the seven hill states. The ninth FC recommended general debt relief in relation to Plan loans and linked the extent of relief to performance in respect of investment in two important sectors, power and road transport. On the basis of rate of return, states were divided and different rates of relief were recommended for different states. The Commission stated that the solution to government debt problem lies in borrowed funds (a) not being used for revenue expenditure and (b) being used efficiently and productively for capital expenditure. It suggested that there should be adequate depreciation provisions or that loans should be repaid out of the amortization fund. The corrective measures included enhancing the maturity period of Central loans to 20 years with a five-year initial grace period to take care of gestation of capital project and passing on the entire World Bank assistance to states as 70 percent loans and 30 percent grants. The Tenth FC recommended general debt relief for all states linked to fiscal performance and a scheme of specific relief for states with high fiscal stress. In addition it also recommended debt relief from the proceeds of disinvestment of state PSUs. The Eleventh FC recommended discontinuance of debt relief based on disinvestment and fiscal stress, and recommended debt relief linked to fiscal performance. Other suggestions included placing limits on guarantees given by the Centre and states through suitable legislation and overall limits to borrowing under articles 292 and 293, respectively. This limit was to include borrowings from Public Account and other sources. The Commission also recommended setting up if a sinking fund in each state for the amortization of debt. The EFC suggested that the proportion of the interest payments to revenue receipts for the states should be about 18 percent and the states should keep this as their medium term objective. The Twelfth Finance Commission recommendations for interest rate relief and repayment write-offs on state debt owed to the Centre are referred to at various points in this Report.

APPENDIX TABLE IV.1 : OUTSTANDING DEBT AS A PERCENTAGE OF GSDP

	States	Conventional Debt 1992-97 (Avg.)	Conventional Debt 1997-02 (Avg.)	Conventional Debt 2002-03	Extended Debt 1992-97 (Avg.)	Extended Debt 1997-02 (Avg.)	Extended Debt 2002-03
I	**All States**	**21.5**	**25.8**	**31.9**	**26.1**	**31.1**	**37.4**
II	**Non Special Category**						
1	Andhra Pradesh	22.4	27.2	34.1	30.9	36.6	43.7
2	Bihar	37.8	47.3	71.2	40.7	48.3	72.6
3	Goa	41.6	32.8	40.6	N.A.	N.A.	N.A.
4	Gujarat	20.5	28.6	38.0	30.5	40.1	51.8
5	Haryana	20.0	24.6	30.1	28.4	36.4	41.8
6	Karnataka	20.3	24.1	32.4	28.1	34.1	44.1
7	Kerala	28.0	34.0	40.3	35.8	44.3	53.8
8	Madhya Pradesh	22.0	23.0	41.8	23.7	28.6	53.4
9	Maharashtra	17.9	24.1	29.8	23.5	34.5	42.6
10	Orissa	41.7	53.7	70.8	48.9	62.7	83.1
11	Punjab	36.2	41.5	50.8	43.9	53.5	75.4
12	Rajasthan	28.9	37.7	53.5	39.0	50.1	70.4
13	Tamil Nadu	19.7	22.0	27.8	24.8	28.5	35.6
14	Uttar Pradesh	34.2	37.6	53.1	39.6	41.0	54.9
15	West Bengal	24.2	33.4	47.4	28.1	37.0	53.6
	Total	**25.3**	**31.9**	**40.9**	**31.4**	**39.9**	**51.1**
III	**Special Category States**						
1	Arunachal Pradesh	66.7	60.4	63.9	N.A.	N.A.	N.A.
2	Assam	32.1	31.6	39.7	38.9	36.5	42.8
3	Himachal Pradesh	41.9	55.1	73.5	52.9	73.9	87.0
4	Jammu and Kashmir	58.9	46.3	51.6	65.7	52.6	57.9
5	Manipur	42.1	56.5	65.9	N.A.	N.A.	N.A.
6	Meghalaya	23.8	32.9	41.3	33.7	39.0	46.3
7	Mizoram	58.1	78.2	97.8	N.A.	N.A.	N.A.
8	Nagaland	48.0	53.3	66.1	N.A.	N.A.	N.A.
9	Sikkim	60.1	71.3	76.5	N.A.	N.A.	N.A.
10	Tripura	41.2	39.1	45.3	N.A.	N.A.	N.A.
	Total	**41.2**	**42.8**	**52.7**	**38.4**	**38.6**	**44.1**
IV	**Reorganised New States**						
1	Chattisgarh (non spl category)		35.6	34.4	N.A.	N.A.	N.A.
2	Jharkhand (non Spl category)		38.7	41.4	N.A.	N.A.	N.A.
3	Uttaranchal (spl category)		37.7	47.2	N.A.	N.A.	N.A.
	Total		**37.3**	**37.7**	N.A.	N.A.	N.A.

Avg. : Average RE : Revised Estimates N.A. : Not applicable/available

GSDP : Gross State Domestic Product at Current Market Prices.

Notes: 1. Conventional debt includes internal debt, loans and advances from Centre, provident funds, reserve funds and deposits.

2. Extended includes conventional debt and contingent liabilities.

3. In this study, debt refers to conventional debt unless otherwise stated.

APPENDIX TABLE IV. 2 : GROWTH RATES OF GSDP, REVENUE RECEIPTS AND OUTSTANDING DEBT

	States	1992-97 (Avg.)			1997-02 (Avg.)			2002-03		
		GSDP	RR	Debt	GSDP	RR	Debt	GSDP	RR	Debt
I	**All States**	**15.9**	**13.1**	**15.2**	**10.8**	**10.8**	**18.6**	**8.2**	**9.7**	**15.0**
II	**Non Special Category**									
1	Andhra Pradesh	16.0	12.3	16.7	11.0	14.5	18.6	6.1	5.3	15.6
2	Bihar	9.3	11.3	10.4	13.4	14.9	21.9	11.6	13.2	10.8
3	Goa	19.1	21.5	7.8	14.7	18.9	16.7	3.3	-2.1	10.5
4	Gujarat	21.0	15.9	13.4	8.3	10.7	22.4	8.7	11.8	17.5
5	Haryana	15.2	25.5	15.1	11.1	5.1	19.6	9.3	13.9	16.5
6	Karnataka	15.1	15.1	17.1	10.3	9.8	19.6	7.8	5.5	14.5
7	Kerala	16.8	16.6	17.6	11.4	8.2	18.7	10.3	17.4	16.6
8	Madhya Pradesh	18.4	12.7	12.1	12.3	11.3	17.0	-1.3	19.5	12.5
9	Maharashtra	18.9	14.6	16.8	8.3	9.5	18.6	11.1	3.4	15.0
10	Orissa	13.0	11.9	15.2	10.5	11.0	18.3	3.2	19.7	13.2
11	Punjab	14.7	11.9	14.0	9.9	11.0	16.9	7.1	24.0	13.6
12	Rajasthan	16.9	13.1	17.6	9.4	10.4	19.1	-2.6	7.6	16.9
13	Tamil Nadu	16.9	12.1	16.4	10.8	9.6	17.3	3.5	10.7	12.8
14	Uttar Pradesh	13.0	12.1	14.9	11.8	9.4	17.7	3.9	8.7	10.8
15	West Bengal	13.6	12.0	15.7	13.8	**13.0**	25.8	6.8	-0.1	21.2
	Total	**16.1**	**13.1**	**15.7**	**8.8**	**9.5**	**17.7**	**6.4**	**9.4**	**14.8**
III	**Special Category States**									
1	Arunachal Pradesh	14.6	12.8	11.2	10.1	5.7	6.7	2.5	4.8	16.0
2	Assam	11.5	10.5	7.3	9.4	9.2	13.5	7.8	13.9	15.5
3	Himachal Pradesh	15.7	16.5	18.9	14.1	16.0	22.1	6.7	-1.5	24.0
4	Jammu and Kashmir	14.2	18.3	1.5	11.5	13.7	13.5	5.7	3.0	9.1
5	Manipur	14.1	12.6	8.5	11.1	8.1	21.6	10.1	12.8	24.8
6	Meghalaya	13.2	12.9	18.6	12.6	9.5	22.3	9.2	14.7	19.4
7	Mizoram	15.3	10.9	20.6	11.1	6.3	20.9	13.1	17.7	20.1
8	Nagaland	17.2	12.5	18.6	15.1	11.6	15.0	6.8	-6.5	34.7
9	Sikkim	16.0	15.9	14.0	14.3	15.5	21.9	7.6	15.1	7.4
10	Tripura	13.7	13.0	12.3	17.1	12.7	21.5	15.0	0.7	20.4
	Total	**13.3**	**13.3**	**8.9**	**11.5**	**11.1**	**16.4**	**7.8**	**6.5**	**18.1**
IV	**Reorganised New States**									
1	Chattisgarh (Non spl category)							16.1	23.8	14.1
2	Jharkhand (Non Spl category)							8.2	21.4	13.7
3	Uttaranchal (spl category)							6.7	17.8	26.2
	Total							**11.2**	**21.5**	**16.1**

Avg. : Average RE : Revised Estimates RR: Revenue Receipts

GSDP : Gross State Domestic Product at Current Market Prices.

Note: . Conventional debt includes internal debt, loans and advances from Centre, provident funds, reserve funds and deposits.

APPENDIX TABLE IV 3 : MAJOR DEFICITS OF STATES AS A PERCENTAGE OF GSDP

		1992-97 (Average)				1997-02 (Average)				2002-03			
	States	**GFD**	**RD**	**PD**	**PRB***	**GFD**	**RD**	**PD**	**PRB***	**GFD**	**RD**	**PD**	**PRB***
I	**All States**	**2.6**	**0.8**	**0.8**	**1.1**	**4.0**	**2.4**	**1.7**	**-0.1**	**4.0**	**2.3**	**1.2**	**0.5**
II	**Non Special Category**												
1	Andhra Pradesh	3.2	1.1	1.3	0.8	4.2	1.7	1.7	0.8	4.7	1.9	0.9	1.9
2	Bihar	3.5	2.0	-0.1	1.6	3.8	1.9	0.8	1.0	8.7	4.3	3.0	1.3
3	Goa	2.8	-1.1	0.1	3.8	4.6	2.3	1.9	0.4	4.7	2.1	1.1	1.6
4	Gujarat	2.2	0.2	0.2	1.8	5.5	3.6	2.9	-1.0	4.4	2.6	0.8	1.0
5	Haryana	2.6	0.9	0.7	1.0	4.2	2.1	1.7	0.4	2.2	1.0	-0.7	1.9
6	Karnataka	3.1	0.3	1.3	1.5	4.0	1.8	1.8	0.3	4.6	2.3	1.7	0.6
7	Kerala	3.4	1.3	0.9	1.2	5.5	3.9	2.5	-1.0	5.9	4.9	2.4	-1.4
8	Madhya Pradesh	2.3	0.3	0.5	1.5	3.3	2.1	1.3	-0.1	4.9	1.4	1.9	1.6
9	Maharashtra	2.5	0.4	1.1	1.0	3.9	2.3	1.9	-0.3	4.8	3.2	2.4	-0.8
10	Orissa	5.2	2.1	1.6	1.5	8.2	5.5	3.5	-0.7	6.3	3.5	-0.2	2.9
11	Punjab	4.4	2.3	1.1	1.0	6.0	4.2	1.9	-0.2	5.8	5.0	1.3	-0.4
12	Rajasthan	4.4	1.1	1.9	1.5	5.9	3.4	2.3	0.2	7.0	4.5	2.1	0.4
13	Tamil Nadu	2.5	1.3	0.9	0.3	3.4	2.4	1.4	-0.4	4.4	3.2	1.7	-0.5
14	Uttar Pradesh	4.3	1.7	1.5	1.1	5.7	3.7	2.4	-0.4	4.9	2.6	1.3	1.0
15	West Bengal	3.3	1.7	1.1	0.5	7.0	5.0	3.7	-1.8	6.3	5.2	1.7	-0.6
	Total	**3.2**	**1.1**	**1.0**	**1.1**	**5.0**	**3.1**	**2.2**	**-0.3**	**5.2**	**3.2**	**1.6**	**0.4**
III	**Special Category States**												
1	Arunachal Pradesh	3.5	-18.8	-0.1	22.4	8.3	-8.2	3.1	13.4	10.7	-3.9	4.4	10.1
2	Assam	1.8	-0.5	-1.1	3.5	3.3	1.4	0.5	1.4	2.6	0.9	-0.9	2.6
3	Himachal Pradesh	7.2	1.9	3.1	2.3	10.9	6.4	5.6	-1.1	14.7	9.3	7.3	-1.9
4	Jammu and Kashmir	1.6	-8.0	-4.5	14.1	8.5	0.7	2.5	5.4	7.6	-4.0	0.5	11.0
5	Manipur	4.0	-6.8	0.3	10.5	11.0	2.2	6.2	2.7	7.0	2.5	-0.2	4.7
6	Meghalaya	3.7	-3.5	1.4	5.8	5.7	-0.4	2.9	3.2	3.7	-1.9	0.2	5.4
7	Mizoram	7.1	-8.1	3.1	12.1	15.8	2.5	9.4	4.0	17.4	6.0	10.1	0.5
8	Nagaland	12.5	2.7	7.6	2.1	9.6	0.3	4.0	5.3	10.6	2.6	5.4	2.6
9	Sikkim	10.0	-8.9	3.8	15.1	10.3	-4.6	2.9	12.0	0.9	-17.2	-6.9	24.9
10	Tripura	3.9	-3.3	0.0	7.2	6.6	-0.3	2.6	4.3	7.7	1.2	3.5	3.0
	Total	**3.5**	**-2.6**	**-0.4**	**6.5**	**6.9**	**1.6**	**2.6**	**2.7**	**7.0**	**1.3**	**1.8**	**4.0**
IV	**Reorganised New States**												
1	Chattisgarh					1.7	0.4	-0.1	1.3	2.8	0.3	0.5	2.0
2	Jharkhand					5.4	-0.2	2.8	2.9	6.6	1.0	3.8	1.9
3	Uttaranchal					2.2	0.3	-0.1	2.0	6.5	3.4	2.5	0.7
	Total					**2.2**	**0.2**	**0.5**	**1.5**	**4.9**	**1.1**	**2.1**	**1.7**

GFD : Gross Fiscal Deficit, RD : Revenue Deficit, PD : Primary Deficit

PRB : Primary Revenue Balance; *(-) Indicates deficit

APPENDIX TABLE IV. 4 : COMPOSITION OF OUTSTANDING DEBT (AS PERCENTAGE OF TOTAL DEBT)

	1992-97 (Avg.)					1997-02 (Avg.)					
States	**ID**	**MB**	**CL**	**PF**	**Others****	**ID**	**MB**	**NSSF***	**CL**	**PF**	**Others****
1	**2**	**3**	**4**	**5**	**6**	**2**	**3**	**4**	**5**	**6**	**7**
I All States	**16.2**	**14.6**	**53.4**	**14.7**	**15.7**	**21.9**	**15.1**	**9.3**	**42.8**	**15.3**	**20.1**
II Non Special Category											
1 Andhra Pradesh	22.3	20.4	54.0	8.7	15.1	32.6	22.1	6.4	45.5	8.7	13.2
2 Bihar	19.0	19.0	54.4	20.9	5.7	17.7	16.6	9.6	41.8	13.9	26.6
3 Goa	7.9	5.9	77.2	9.0	5.9	21.8	12.8	7.5	55.0	14.0	9.2
4 Gujarat	10.3	9.7	59.8	8.6	21.3	22.5	10.5	14.7	46.9	7.9	22.8
5 Haryana	16.8	13.8	51.3	25.3	6.7	25.1	12.9	7.5	41.9	26.9	6.1
6 Karnataka	18.2	15.8	53.4	15.4	13.1	24.9	16.3	7.2	43.9	15.7	15.5
7 Kerala	23.5	20.1	40.4	30.5	5.6	27.7	19.0	4.0	28.0	36.0	8.3
8 Madhya Pradesh	14.6	12.0	43.7	29.5	12.2	20.1	15.7	6.1	41.4	27.4	11.2
9 Maharashtra	8.4	7.4	52.5	8.7	30.5	17.8	8.2	13.2	41.0	9.1	32.0
10 Orissa	25.1	22.5	43.2	21.4	10.2	29.7	21.4	3.8	37.1	23.8	9.4
11 Punjab	9.7	5.4	76.0	12.3	2.0	26.1	8.5	11.2	52.7	17.3	3.9
12 Rajasthan	19.7	17.6	46.3	20.7	13.3	30.5	18.2	10.9	36.1	22.1	11.3
13 Tamil Nadu	19.5	17.7	49.3	13.0	18.2	27.9	17.9	6.7	40.9	16.1	15.1
14 Uttar Pradesh	17.2	16.3	49.6	10.3	22.9	19.6	16.7	8.2	46.2	11.2	23.1
15 West Bengal	15.9	15.1	64.7	7.2	12.2	28.3	12.5	16.2	53.4	6.8	11.6
Total	**16.4**	**14.8**	**52.8**	**14.5**	**16.2**	**25.3**	**15.0**	**9.8**	**42.5**	**14.8**	**17.6**
III Special Category States											
1 Arunachal Pradesh	11.2	4.7	65.1	10.5	13.2	13.6	6.7	0.2	56.5	20.6	9.3
2 Assam	16.0	12.0	67.7	6.1	10.2	34.3	21.3	7.7	50.2	11.4	4.1
3 Himachal Pradesh	16.4	8.8	52.1	29.9	1.6	29.1	10.6	2.8	43.5	26.0	1.4
4 Jammu and Kashmir	15.0	8.3	73.4	19.2	-7.7	24.1	13.1	0.8	71.2	29.9	-25.2
5 Manipur	36.3	21.6	32.6	16.3	14.8	42.9	15.1	1.0	24.2	20.7	12.1
6 Meghalaya	27.0	21.7	53.1	12.0	8.0	33.8	28.0	0.4	32.1	14.6	19.5
7 Mizoram	19.0	4.3	36.8	17.5	26.7	30.8	11.1	0.7	25.6	23.2	20.4
8 Nagaland	40.6	25.5	33.3	30.0	-3.9	47.1	31.1	1.0	28.3	30.4	-5.9
9 Sikkim	37.9	20.3	47.0	15.1	0.0	36.7	27.6	0.6	36.3	25.3	1.8
10 Tripura	29.8	18.5	38.7	26.6	4.9	29.6	19.1	1.2	34.3	35.8	0.4
Total	**19.0**	**11.7**	**60.5**	**16.3**	**4.2**	**31.3**	**16.9**	**3.1**	**47.9**	**22.3**	**-1.4**
IV Reorganised New States											
1 **Chattisgarh (non spl category)**						23.8	14.2	7.3	26.7	18.3	31.1
2 **Jharkhand (non Spl category)**						28.5	15.9	12.9	36.4	15.2	19.9
3 **Uttaranchal (spl category)**						37.4	17.2	10.6	36.0	11.6	14.9
Total						**28.4**	**15.5**	**10.2**	**32.6**	**15.8**	**23.3**

APPENDIX TABLE IV. 5 : COMPOSITION OF OUTSTANDING DEBT (AS PERCENTAGE OF TOTAL DEBT)

(2002-03)

	States	Internal Debt	Market Borrowings	NSSF*	Central Loans**	Provident Funds	Others	Total
	1	2	3	4	5	6	7	(2+5+6+7)
I	**All States**	**42.2**	**17.0**	**17.7**	**29.3**	**14.2**	**14.2**	**100.0**
II	**Non Special Category**							
1	Andhra Pradesh	48.5	26.0	12.3	35.2	7.6	8.7	100.0
2	Bihar	35.2	17.7	15.2	33.0	14.8	17.1	100.0
3	Goa	39.4	18.8	16.0	37.3	12.6	10.7	100.0
4	Gujarat	48.0	14.6	29.8	29.5	6.4	16.2	100.0
5	Haryana	43.6	13.9	18.8	26.9	23.5	6.1	100.0
6	Karnataka	38.2	19.1	14.7	32.7	14.4	14.7	100.0
7	Kerala	34.9	19.3	6.8	19.3	37.8	8.0	100.0
8	Madhya Pradesh	30.7	15.8	11.5	27.9	17.9	23.5	100.0
9	Maharashtra	35.7	8.5	23.5	25.8	8.2	30.3	100.0
10	Orissa	37.7	21.8	6.6	30.2	24.0	8.1	100.0
11	Punjab	48.9	10.5	20.9	31.0	16.4	3.7	100.0
12	Rajasthan	48.5	21.1	21.3	23.0	20.5	8.0	100.0
13	Tamil Nadu	48.7	21.1	14.0	27.0	15.6	8.7	100.0
14	Uttar Pradesh	35.0	18.0	15.3	31.4	11.4	22.2	100.0
15	West Bengal	53.9	11.7	29.6	31.1	5.4	9.6	100.0
	Total	**42.1**	**16.5**	**18.5**	**29.2**	**13.6**	**15.1**	**100.0**
III	**Special Category States**							
1	Arunachal Pradesh	14.7	10.7	0.2	47.5	27.2	10.6	100.0
2	Assam	53.2	26.2	14.7	31.4	13.9	1.5	100.0
3	Himachal Pradesh	52.1	16.9	7.3	21.7	21.2	5.0	100.0
4	Jammu and Kashmir	40.2	21.3	5.8	53.4	35.9	-29.5	100.0
5	Manipur	34.3	15.2	0.8	37.3	21.5	6.9	100.0
6	Meghalaya	41.6	30.8	1.8	23.4	16.5	18.6	100.0
7	Mizoram	41.0	16.5	0.5	18.4	24.1	16.5	100.0
8	Nagaland	46.1	32.3	1.0	36.3	21.1	-3.5	100.0
9	Sikkim	41.4	27.5	2.7	29.3	27.9	1.4	100.0
10	Tripura	32.0	18.6	0.0	23.1	44.5	0.3	100.0
	Total	**45.8**	**21.8**	**7.3**	**32.5**	**23.4**	**-1.7**	**100.0**
IV	**Recognised New States**	**0.0**						
1	Chattisgarh (non spl category)	32.8	16.6	11.9	25.2	16.1	25.9	100.0
2	Jharkhand (non Spl category)	35.7	17.4	18.1	31.3	13.5	19.5	100.0
3	Uttaranchal (spl category)	61.9	28.6	20.0	18.4	11.5	8.2	100.0
	Total	**39.9**	**19.3**	**16.2**	**26.5**	**14.1**	**19.6**	**100.0**

APPENDIX TABLE IV. 6 : OUTSTANDING CENTRAL DEBT SWAPPED SO FAR*

(Rs. crore)

States	2002-03			2003-04			2004-05 (upto December 20, 2004)		
	SS	MB	Total	SS	MB	Total	SS	MB	Total
1	2	3	4	5	6	7	8	9	10
I All States	**3719**	**10000**	**13719**	**17943**	**26623**	**44566**	**20504**	**13781**	**34285**
II Non Special Category									
1 Andhra Pradesh	334	827	1161	1073	1634	2708	1434	1122	**2556**
2 Bihar	191	597	788	621	1218	1839	720	417	**1137**
3 Goa	21	45	66	142	120	262	78	0	**78**
4 Gujarat	598	1147	1745	1943	2173	4116	1768	1249	**3017**
5 Haryana	151	379	530	512	751	1263	652	483	**1134**
6 Karnataka	222	609	831	820	1197	2017	1189	827	**2016**
7 Kerala	118	344	462	494	671	1165	511	468	**979**
8 Madhya Pradesh	177	411	588	722	786	1507	829	398	**1227**
9 Maharashtra	-	-	0	2898	3627	6525	4854	1846	**6700**
10 Orissa	88	387	475	231	633	864	394	308	**702**
11 Punjab	275	717	992	1013	1411	2423	634	803	**1437**
12 Rajasthan	341	693	1034	832	1096	1928	1490	889	**2379**
13 Tamil Nadu	253	689	942	1136	1338	2473	1076	936	**2012**
14 Uttar Pradesh	573	1448	2021	1798	3088	4885	2227	1249	**3476**
15 West Bengal				2142	3365	5507	1333	1793	**3126**
Total	**3341**	**8293**	**11634**	**16377**	**23107**	**39483**	**19191**	**12786**	**31976**
III Special Category States									
1 Arunachal Pradesh	2	18	20	11	110	121	5	0	**5**
2 Assam	62	231	293	359	457	815	270	160	**430**
3 Himachal Pradesh	46	244	290	173	516	689	239	329	**568**
4 Jammu and Kashmir	0	177	177	196	389	585	177	172	**349**
5 Manipur	2	18	20	6	108	114	5	0	**5**
6 Meghalaya	3	17	20	15	77	92	14	0	**14**
7 Mizoram	2	13	15	8	66	74	8	0	**8**
8 Nagaland	2	14	16	4	87	91	3	0	**3**
9 Sikkim	1	-	1	7	45	52	9	0	**9**
10 Tripura	16	37	53	44	128	172	62	0	**62**
Total	**136**	**769**	**905**	**823**	**1981**	**2804**	**791**	**661**	**1453**
IV Reorganised New States									
1 Chattisgarh	61	149	210	203	293	496	275	107	**381**
2 Jharkhand	116	205	321	413	266	679	247	228	**475**
3 Uttaranchal	65	584	649	128	975	1103		0	**0**
Total	**242**	**938**	**1180**	**744**	**1534**	**2278**	**522**	**335**	**857**

SS: Small Savings; M B: Market Borrowings

APPENDIX TABLE IV. 7 : INTEREST BURDEN OF STATE GOVERNMENTS

1992-97

	States	AIR*	IP/ RR	IP/ SOR	IP/ RE	IP/ GSDP	PRB/ IP**
I	**All States**	**9.9**	**15.8**	**26.1**	**14.8**	**1.8**	**59.3**
II	**Non Special Category**						
1	Andhra Pradesh	9.7	14.1	23.0	12.9	1.9	45.5
2	Bihar	10.5	21.7	54.4	19.3	3.6	43.9
3	Goa	7.1	13.2	18.4	14.0	2.7	140.5
4	Gujarat	10.9	15.6	19.8	15.3	2.0	89.1
5	Haryana	10.9	11.5	13.6	11.1	1.9	55.1
6	Karnataka	10.3	11.9	16.2	11.7	1.8	82.3
7	Kerala	10.4	17.3	25.0	15.8	2.5	46.6
8	Madhya Pradesh	9.3	12.9	21.8	12.6	1.8	82.1
9	Maharashtra	8.9	12.2	15.2	11.7	1.4	71.7
10	Orissa	10.0	22.2	52.7	19.6	3.6	42.5
11	Punjab	10.2	25.6	31.2	21.7	3.2	19.7
12	Rajasthan	10.5	16.8	28.7	15.7	2.6	59.5
13	Tamil Nadu	9.4	11.6	16.2	10.7	1.6	13.8
14	Uttar Pradesh	9.3	20.0	40.6	17.7	3.0	40.2
15	West Bengal	10.5	20.6	36.1	17.8	2.2	25.1
	Total	**9.9**	**16.1**	**24.8**	**14.9**	**2.2**	**49.8**
III	**Special Category States**						
1	Arunachal Pradesh	5.9	5.5	45.8	7.7	3.5	647.4
2	Assam	9.9	15.9	50.6	16.2	3.0	116.4
3	Himachal Pradesh	11.7	16.0	57.4	14.9	4.1	52.2
4	Jammu and Kashmir	10.7	15.1	108.6	19.0	6.1	238.5
5	Manipur	9.5	8.6	92.5	10.2	3.7	282.6
6	Meghalaya	11.8	7.2	42.8	8.1	2.4	239.6
7	Mizoram	8.3	5.9	75.0	6.6	4.0	313.9
8	Nagaland	11.9	11.0	129.6	10.4	4.8	43.1
9	Sikkim	11.8	5.9	54.5	6.6	6.2	244.4
10	Tripura	10.7	10.1	107.3	11.1	3.9	183.8
	Total	**10.3**	**12.7**	**66.4**	**13.9**	**3.9**	**168.7**

AIR : Average Interest Rate; IP: Interest Payments; RR: Revenue Receipts

SOR: States own Revenue; RE: Revenue Expenditure; PRB: Primary Revenue Balance

- The average cost has been worked out taking into account the ratio of interest payments of the current year and the outstanding liabilities of the previous year.

** (-) Indicates Primary Revenue Deficit.

APPENDIX TABLE IV. 7 : INTEREST BURDEN OF STATE GOVERNMENTS (contd..)

	States	1997-02 AIR*	IP/ RR	IP/ SOR	IP/ RE	IP/ GSDP	PRB/ IP**
I	**All States**	**10.5**	**21.4**	**34.5**	**17.5**	**2.3**	**-2.6**
II	**Non Special Category**						
1	Andhra Pradesh	11.1	18.6	27.3	16.5	2.6	33.7
2	Bihar	7.5	19.6	50.0	17.4	2.9	42.8
3	Goa	9.6	13.1	14.9	11.7	2.7	15.4
4	Gujarat	11.1	20.2	25.2	15.8	2.6	-34.1
5	Haryana	12.2	19.9	23.3	17.1	2.5	13.0
6	Karnataka	10.6	15.3	21.1	13.5	2.1	17.8
7	Kerala	10.3	23.2	32.1	17.7	3.0	-31.5
8	Madhya Pradesh	10.1	15.2	25.1	13.1	2.0	-6.8
9	Maharashtra	9.6	17.9	21.2	14.9	2.0	-12.1
10	Orissa	10.4	31.0	71.8	22.9	4.8	-22.9
11	Punjab	11.5	33.1	39.1	24.4	4.1	-3.2
12	Rajasthan	11.4	27.3	45.7	21.6	3.6	6.0
13	Tamil Nadu	10.9	16.0	21.2	13.5	2.0	-17.9
14	Uttar Pradesh	10.4	28.6	56.5	21.6	3.5	-11.3
15	West Bengal	12.1	35.8	68.0	22.9	3.2	-53.2
	Total	**10.4**	**22.4**	**33.3**	**17.9**	**2.9**	**-8.4**
III	**Special Category States**						
1	Arunachal Pradesh	9.3	9.1	106.4	10.4	5.2	270.9
2	Assam	10.2	15.8	47.9	14.6	2.8	56.8
3	Himachal Pradesh	11.7	21.8	66.9	17.1	5.4	-22.9
4	Jammu and Kashmir	14.9	15.1	90.0	15.0	6.0	86.1
5	Manipur	10.2	13.0	168.5	12.2	4.4	70.2
6	Meghalaya	10.4	9.7	54.2	9.9	2.8	116.2
7	Mizoram	10.0	11.6	175.6	10.8	6.5	69.0
8	Nagaland	12.1	13.5	181.1	13.4	6.4	95.7
9	Sikkim	12.7	11.5	64.0	12.5	7.4	159.1
10	Tripura	12.3	12.5	105.5	12.6	4.0	110.2
	Total	**11.7**	14.4	70.4	13.6	4.3	64.0
IV	**Reorganised New States**						
1	Chattisgarh (non spl category)	7.4	15.7	26.8	16.1	1.7	108.7
2	Jharkhand (non spl category)	7.4	12.9	26.0	13.1	2.3	112.7
3	Uttaranchal (spl category)	11.8	14.4	37.3	14.2	1.8	95.5
	Total	8.2	**14.4**	**28.4**	**14.9**	**1.5**	**123.1**

APPENDIX TABLE IV. 8 : INTEREST BURDEN OF STATE GOVERNMENTS (2002-03)

	States	AIR*	IP/ RR	IP/ SOR	IP/ RE	IP/ GSDP	PRB**/ IP
I	**All States**	**10.1**	**25.3**	**40.8**	**20.9**	**2.8**	**17.2**
II	**Non Special Category**						
1	Andhra Pradesh	12.9	26.7	38.0	23.5	3.8	50.2
2	Bihar	8.8	27.8	104.1	22.9	5.7	23.6
3	Goa	9.9	15.9	17.8	14.6	3.6	42.8
4	Gujarat	11.1	27.7	36.6	23.1	3.6	28.0
5	Haryana	11.4	22.5	26.4	20.8	3.0	64.8
6	Karnataka	10.2	20.4	28.1	17.5	2.9	19.6
7	Kerala	10.2	27.7	36.9	20.0	3.5	-39.9
8	Madhya Pradesh	8.1	18.7	32.1	17.2	3.0	53.3
9	Maharashtra	9.3	22.9	26.1	17.6	2.4	-31.4
10	Orissa	10.3	34.2	75.3	28.8	6.5	45.4
11	Punjab	10.1	31.0	35.2	23.2	4.5	-9.3
12	Rajasthan	10.8	32.9	55.0	25.3	4.9	8.5
13	Tamil Nadu	10.9	19.8	25.5	16.1	2.7	-17.4
14	Uttar Pradesh	7.6	25.4	48.1	21.4	3.6	27.5
15	West Bengal	11.7	52.8	99.6	33.1	4.6	-12.6
	Total	**10.1**	**26.9**	**39.5**	**21.7**	**3.6**	**11.0**
III	**Special Category States**						
1	Arunachal Pradesh	11.4	11.3	111.0	12.2	6.3	161.3
2	Assam	10.2	18.3	47.4	17.5	3.5	74.4
3	Himachal Pradesh	12.4	32.0	110.2	22.8	7.3	-26.5
4	Jammu and Kashmir	14.9	16.4	88.4	18.1	7.0	156.3
5	Manipur	13.7	19.2	210.5	18.0	7.2	65.8
6	Meghalaya	10.1	11.7	63.6	12.6	3.5	155.8
7	Mizoram	8.1	13.0	164.3	11.8	7.4	17.8
8	Nagaland	10.4	15.3	202.4	14.2	5.1	49.9
9	Sikkim	10.9	9.9	36.0	12.6	7.8	321.0
10	Tripura	11.1	15.5	103.1	14.8	4.2	72.3
	Total	**11.8**	**18.3**	**78.1**	**17.5**	**5.3**	**75.7**
IV	**Reorganised New States**						
1	Chattisgarh (non spl category)	7.6	14.9	24.7	14.6	2.3	86.1
2	Jharkhand (non spl category)	7.9	12.8	29.2	12.2	2.9	65.1
3	Uttaranchal (spl category)	10.8	17.2	39.6	15.0	4.1	17.3
	Total	**8.3**	**14.4**	**29.2**	**13.6**	**2.8**	**61.0**

AIR : Average Interest Rate | IP: Interest Payments | RR: Revenue Receipts

SOR: States own Revenue | RE: Revenue Expenditure | PRBS: Primary Revenue Balance

* The average cost has been worked out taking into account the ratio of interest payments of the current year and the outstanding liabilities of the previous year.

** (-) Indicates Primary Revenue Deficit.