States' Debt and Debt Relief

The deterioration in the fiscal performance of the states since the mid-1980s
is reflected in all major indicators, viz, fiscal deficit, revenue deficit and debt-GDP ratio. In
this paper, a baseline scenario is generated under some assumptions to ascertain the
dimensions of fiscal balance at present, and the likely trends in the medium term. Three sets
of alternative policy scenarios are also generated by superimposing alternative assumptions
over the baseline scenario to assess and prescribe policy initiatives. It is inferred that
lowering the primary deficit, besides a reduction in interest rates, should be an integral part
of any policy to make debt sustainable at the state level. An immediate focus of the fiscal
reforms should be on achieving revenue balance or, at least reducing its imbalance.

ABHA PRASAD, RAJAN GOYAL, ANUPAM PRAKASH

The issue of states' debt has assumed greater significance especially since the mid-1990s, with the debt-GDP ratio rising persistently to reach a high level of 28.1 per cent in 2002-03. In absolute terms, the outstanding debt of states increased almost fivefold to Rs 6,94,289 crore in 2002-03, up from a level of Rs 1,10,289 crore in 1990-91. If we take the concept of extended debt, i e, debt inclusive of probable devolvement of outstanding guarantees, the increase is even more striking. In fact, the high level of debt in conjunction with the level of contingent liabilities, and the rising incidence of delays/defaults on guarantees issued by states, depicts a much more worrisome scenario. The debt build-up at the sub-national level as an indicator of fiscal distress or vulnerability has a spill-over impact on sovereign ratings by credit rating agencies.

The deterioration in fiscal performance of the states since the mid-1980s was reflected in all major fiscal indicators, viz, fiscal deficit, revenue deficit and debt-GDP ratio (Graph). The situation started worsening more rapidly since 1987-88 when the surplus on the revenue account turned negative. Gross fiscal deficit as a ratio to GDP, which averaged 2.8 per cent in first half of 1980s, had risen to 3.0 per cent in 1986-87 and further to 3.3 per cent in 1990-91. This was followed by a brief period of consolidation with the GFD/GDP ratio falling to 2.4 per cent by 1993-94. In the subsequent years, there was a gradual increase in the deficit and after the implementation of pay revision awards, the deficit ratio recorded a sharp jump from 2.9 per cent in 1997-98 to 4.3 per cent in 1998-99 and further to 4.7 per cent in 1999-2000.

The average annual growth in outstanding debt for the 1980s and the 1990s remained the same at 16.4 per cent, though the growth in first half of the 1990s, at 14.4 per cent, was much lower than the second half of the 1990s, at 18.8 per cent.

Composition of Debt

The public debt of states comprises of internal debt (including market borrowings, loans from banks and financial institutions (FIs), special securities issued to the National Small Savings Fund (NSSF), loans from the centre; and small savings and provident funds, etc. Special securities issued to NSSF earlier formed part of the loans from the centre, and since 1999-2000, these were classified separately and treated as part of the internal debt of the states. The finance commission excludes the short-term

components of debt, viz, ways and means advances (WMA), reserve funds and deposits, in assessing the overall debt position of state governments. Although WMA and overdrafts are arrangements to overcome temporary liquidity mismatches, they tend to get rolled over almost continuously, thereby integrating with the budgetary process to become almost an additional or regular source of finance. More importantly, these come at a cost – WMA being at bank rate, while OD (up to 100 per cent of WMA limit) is at bank rate +3 per cent or (more than 100 per cent of WMA limit) is at bank rate +6 per cent.

Loans from the centre, which form the most important constituent of states' debt, are extended under two broad categories: Plan-loans and non-Plan loans. Under Plan loans, those pertaining to the centrally-sponsored scheme are the most prominent. Though state governments do not have direct access to external sources, the external assistance obtained from international financial institutions/foreign governments are passed on from the centre to the states as central plan assistance under the head additional central assistance (ACA), by recasting the original terms and conditions of the loan. Total loans from the centre amounted to Rs 2,33,688 crore in 2001-02, constituting 39.6 per cent of the total states' debt. The rate of interest on central loans, both plan and non-plan was raised continuously from 7.5 per cent in 1984-85 to 13 per cent during 1995-98. It was thereafter reduced to 12.5 per cent with effect from June 1998, and currently is at 10.5 per cent. The changes in interest rates on these loans reflect the government's efforts to align these rates with market related rates of interest. This component of the states' debt is completely controlled by the centre (through the consolidated fund of the state) funded through the general revenues of the state governments at rates of interest not determined by the market.

Loans from small savings collections, viz, 'Kisan Vikas Patra', National Savings Certificate, etc, which earlier formed the major part of the non-plan loan until 1998-99, are now shown separately as special securities issued to the NSSF. This is the component over which the centre has no control, and it almost doubled from Rs 26,416 crore in 1999-00 to Rs 59,022 crore in 2000-01. Although, the amounts lent by NSSF to the states do not appear on the centre's budget, the ultimate liability to repay the depositors remains that of the centre. Also, the cost of borrowing through this route is relatively higher as the costs of administering the schemes of small savings is added to the interest payable to

Graph: Key Deficit Indicators of State Governments

—◆— GFD —■— RD —▲— PD
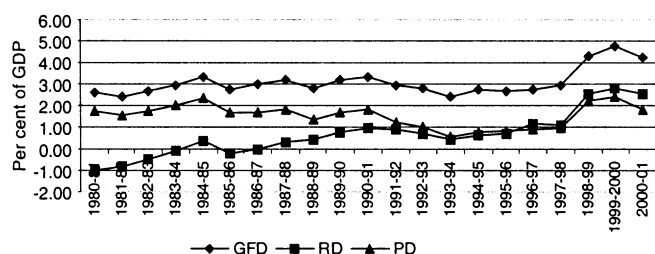
depositors. Partly reflecting the lower interest rates on small savings, the rate charged to states on the on-lent small saving component, which was 14 per cent per annum in 1998-99, has subsequently been reduced to 9.5 per cent at present, on the special securities issued to the NSSF.

Loans from banks and FIs have emerged as another important component, recording a tenfold increase from Rs 2,906 crore in 1991 to Rs 32,235 crore in 2001. These include loans from Life Insurance Corporation (LIC), General Insurance Corporation (GIC), National Bank for Agricultural and Rural Development (NABARD), Rural Electrification Corporation (REC), Industrial Development Bank of India (IDBI), Housing and Urban Development Corporation (HUDCO) and other financial institutions. These are meant for specific developmental projects like housing, rural roads, sanitation, power, transport, etc, and accounted for 6.5 per cent of the total liabilities as an end-March 2001. The competitive increase in plan size without matching resources resulted in an increase in negotiated loans contracted at high rates of interest, which varies for different states depending upon the assessment of their financial viability. Current rate of interest on negotiated loans from HUDCO and LIC are 10.5 per cent. This component of states' debt is not under the market borrowing programme (MBP) but Article 293[1] approval of the centre has to be sought by the state. Hence to that extent, it is controlled by the centre.

Public account liabilities are those in which the government acts as a banker accepting deposits, funds and even pays interest on them. These liabilities are unfunded implying huge risks on the budgets of states. The small savings schemes run by the states themselves and provident fund receipts form a part of the public accounts of state governments, as against the other components, which are routed through the consolidated fund of state governments. The accumulation in provident fund of employees registered a sharp growth in the closing years of the 1990s,

consequent to the pay revision, with the impounding of a part of the additional emoluments of employees. This component of the states' debt is also not at market determined rates of interest. Moreover, it is uncapped as the centre has no control on it. The share of this component was 17.3 per cent at the end of March 2002. On average, the interest rate on states' small savings collections is currently estimated at 10.5 per cent.

In recent years, market borrowings have emerged as the cheapest source of raising funds for state governments, with the average rate of interest declining continuously from 14.0 per cent in 1995-96 to 6.2 per cent by March 2003. As a result, its share in total liabilities of states has gone up from 14.2 per cent at end-March 1991 to 17.2 per cent at end-March 2003. However, this component of the states' debt is capped, as the market borrowing programme of states is finalised by the government of India in consultation with the Planning Commission, keeping in view the projections regarding investible resources and other monetary parameters, made by the Reserve Bank of India (RBI).

Apart from the borrowings routed through the budget, states have also resorted to several non-transparent off-budget borrowings. States have taken recourse to borrowings through public sector enterprises (PSEs) under their control, enabling them to float bonds against state government guarantees. Other special purpose vehicles mainly for infrastructure financing have also come into the picture. Although contingent liabilities do not form a part of the debt of states, in the event of default by the borrowing entity, the states will be required to meet debt service obligations. At the same time, non-adherence to the payment obligations committed by states, in respect of guarantees already provided by them, would have adverse implications on sovereign credibility. In addition, this may pose difficulties for states to raise resources from the market in future. The extant outstanding debt is, therefore, an incomplete picture. A more holistic measure would be the concept of extended debt, i e, consolidated debt, taking into account the 'risky' guarantees by assigning appropriate risk-weights in line with the probability of devolvement on the state budget. While this idea has merits, there are practical difficulties in assigning such weightages. TheTechnical Committee on State Government Guarantees estimated the composite burden of public debt and guarantees, including a third of the guarantees with debt (as shown in Table 2). From 2006-07 to 2015-16, repayment of power bonds is estimated to amount to Rs 2,900 crore per annum, which would further enhance the pressure of redemption on state governments.

Table 1: Composition of Total Debt
(Rs crore)

	1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1 Internal Debt								
a Market Loans	15,618	36,021	42,536	49,816	60,283	72,947	85,466	1,02,715
	(14.2)	(17.0)	(17.5)	(17.7)	(17.6)	(17.4)	(17.2)	(17.5)
b Loans from Banks and FIs	2,906	7,225	8,425	10,847	13,893	20,132	32,235	43,916
	(2.6)	(3.4)	(3.5)	(3.9)	(4.1)	(4.8)	(6.5)	(7.5)
c Special Securities issued to NSSF	-	-	-	-	-	26,416	59,022	94,670
	-	-	-	-	-	(6.3)	(11.8)	(16.1)
2 Loans and Advances from the.Central Government	74,117	1,31,505	1,49,053	1,72,729	2,03,786	2,16,194	2,24,590	2,35,564
	(67.2)	(62.0)	(61.2)	(61.4)	(59.6)	(51.5)	(45.1)	(40.2)
3 Small Savings, Provident Funds, etc	16,961	37,502	42,878	49,103	61,072	78,949	92,056	1,02,242
	(15.4)	(17.7)	(17.6)	(17.5)	(17.9)	(18.8)	(18.5)	(17.4)
Total Debt	1,102,89	2,12,225	2,43,525	2,81,207	3,41,978	4,20,132	4,98,092	5,86,687
Contingent Liabilities		52,631	63,409	73,751	97,454	1,32,029	1,68,712	1,66,116

Note: Figures in brackets are percentages to the total – Not Available.

A snapshot of the states' fiscal stability, sustainability and flexibility in terms of some simple indicative ratios is presented in Table 3.

Statewise Position

The statewise debt GSDP ratio is furnished in Annexes 1 to 3, which emphasises the deteriorating debt situation of state governments. The relative position of states can be better assessed by looking at the average ratio of interest payments to revenue receipts (IP-RR) along with the average debt to GSDP ratio (average of five years 1996-97 to 2000-01) (Table 4). Selectivity of IP-RR is on the grounds of conceptual simplicity as revenue receipts define the repaying capacity, while interest payments reflect the debt service of past debts. It is also a handy assessment of the level of interest payments that are to be financed through the current revenue receipts, and borrowings.

The classification of states in Table 4 reflects on the current servicing capacity vis-à-vis the overall debt situation. Except for Karnataka and Tamil Nadu, all the other major states displayed high levels of IP-RR. On the other hand, states like Punjab, Uttar Pradesh, Orissa, Bihar, Himachal Pradesh and Kerala depict a

Table 2: Extended Debt at the State Level: 1991-2000

Year	Debt -GDP Ratio	Guarantee-GDP Ratio	Extended Debt- GDP Ratio
1992-93	19.0	5.7	20.9
1993-94	18.6	5.7	20.5
1994-95	18.2	4.8	19.8
1995-96	17.9	4.4	19.3
1996-97	17.8	4.6	19.3
1997-98	18.5	4.8	20.1
1998-99	19.6	5.6	21.5
1999-00	21.7	6.8	24.0
2000-01	23.7	8.0	26.3
2001-02	25.7	7.2	28.1

Table 3: Indicators of State's Fiscal Stability and Flexibility – All States

Year	Debt/GDP	PD/GDP	IP/RR	Guarantee/GDP	SOR/AD
1990-91	19.4	1.8	13	6.5	43.5
1995-96	18	0.8	16	4.4	48.9
1996-97	17.9	0.9	16.7	4.6	46.7
1997-98	18.6	0.9	17.7	4.8	46.3
1998-99	19.4	2.2	20.3	5.6	42.1
1999-00	21.7	2.4	21.7	6.8	40.8
2000-01	23.7	1.8	21.7	8.0	45.3
2001-02	25.7	1.5	24.4	7.2	43.4

PD = Primary Deficit IP = Interest Payment RR = Revenue Receipt
SOR = States' Own Resources AD = Aggregate Disbursements.

grim scenario with both interest payments more than 15 per cent of revenue receipts and debt more than 30 per cent of GSDP. Gujarat and Maharashtra fall together in the bracket of low debt ratio but high interest payments ratio. For special category and smaller states, the IP-RR ratio remained less than 15 per cent level (on account of higher proportion of central transfers in their revenues), but debt was above 30 per cent of the respective GSDP (except Goa and Meghalaya), reflecting the weak fiscal position of these states.

What Led to Sharp Deterioration of State Finances?

There is a vast fiscal literature, which has investigated the various factors leading to the deterioration of state finances. The inability to contain wasteful expenditure including subsidies; reluctance to raise additional resources and competitive reduction in taxes are attributed as the main causes of fiscal deterioration [Kurian 1999]. Another study identifies the increase in the share of non-developmental expenditure, particularly rising interest payments, and sluggishness of central transfers as the principal causes of deterioration in state finances [Chakraborty 1999].

Rakesh Mohan (2000) points out that increasing debt service payments and inadequate returns from government spending are the major factors behind the deteriorating fiscal conditions of states. Since there is no link between the capacity to borrow and the return on services provided by government, there does not exist much incentive for the government to levy appropriate user charges. In fact, the lack of connection between fiscal health and ability to borrow has encouraged fiscally irresponsible behaviour on the part of the states.

Detailed analysis of fiscal trends by Govind Rao (2002) and Shankar Acharya (2002), illustrate the implementation of the fifth pay commission awards as a major cause of sharp deterioration in state finances. It has been further argued that the inadequate increase in central transfers coupled with slow growth in states' own (non-tax and tax) revenue had its impact on states' fiscal situation. While, slow growth in transfers reflects the precariousness of the centre's own finances, sluggishness of non-tax revenue has been the result of states' inability to affect proper cost recoveries from public services and generate adequate returns from public investments. The deceleration in tax revenue was mainly on account of the inability of states to tax services and agricultural income, as also competitive reduction in taxes through exemption schemes.

Anand et al (2001) identify both demand and supply side factors for the worsening fiscal situation. All populist factors appear on

Table 4: Categorisation of States Based on IP/RR and Debt/GSDP Ratios

	Debt- GSDP Ratio			
	Very High (Above 50 Per Cent)	High (30-50 Per Cent)	Medium (20-30 Per Cent)	Low (Below 20 Per Cent)
Very High (above 25 per cent)		Punjab, Uttar Pradesh, Orissa	West Bengal, Rajasthan	
High (15-25 per cent)	Bihar, Himachal Pradesh	Kerala	Haryana, Andhra Pradesh, Madhya Pradesh, Assam	Gujarat, Maharashtra
Medium (10-15 per cent)	Jammu and Kashmir, Nagaland	Tripura, Manipur	Goa	Tamil Nadu, Karnataka
Low (below 10 per cent)	Mizoram, Arunachal Pradesh, Sikkim		Meghalaya	

Note: Based on averages of IP to RR and Debt to GSDP ratios for five years (1996-97 to 2000-01). The debt figures for Bihar, Madhya Pradesh and Uttar Pradesh are inclusive of Jharkhand, Chhattisgarh and Uttaranchal, respectively, for 1999-2000 and 2000-01.

the demand side while softening of the budget constraint, implicit in constitutional restrictions on borrowings would appear on the supply side. Four factors are identified to cause softening of the hard budget constraint, viz, increased small savings, borrowing through state level public sector units (PSUs), accumulation of large arrears by state electricity boards to central agencies and rolling over of short-term accommodation provided by the RBI in the form of WMA.

The *RBI Study of State Budgets*, 2002-03, while drawing attention to the growing fiscal and revenue deficit and high debt levels of states, has pointed towards reasons such as inadequate increase in tax receipts, negative or negligible returns from public investments due to PSU losses, large subsidy payments, increase in expenditure on salaries due to pay revisions, higher pension outgo, etc.

From the foregoing survey of literature, prominent factors resulting in the deterioration of state finances could be identified. These include: inadequate increase in resources, growing proportion of non-developmental expenditure on wages, salaries and pensions, interest payments, lower user charges and slowdown in central transfers.

Since, there are large disparities in terms of the level of income and tax and expenditure policies pursued by respective state governments, the impact of various factors identified above would vary across states. Thus, there is a need to track the changes both over the period and across the states. Taking into account these considerations, in a recent empirical analysis, panel data was taken to study factors affecting state finances. The exercise attempted to quantify the relative strength of each of the above four factors which appeared to have worsened state finances during the past two decades. Results of the panel study for 15 major states are set out as below:[2]

Period 1980-81 to 1989-90:
GFD/GDP=0.06 IP/GDP+3.08 TFR–1.18 COSTR+0.88 WAGE/GDP
  (0.56) (4.03) (2.95) (2.15)

Period 1990-91 to 1999-00:
GFD/GDP=0.35 IP/GDP+2.50 TFR–0.35 COSTR+0.25 WAGE/GDP
  (2.18) (5.12) (3.75) (1.81)

Results indicate that all the factors (except interest payments), viz, user charges, wages and salaries and central transfers significantly influenced the fiscal outcome in both the 1980s and 1990s. Interest payments, on the other hand, came into prominence only in the 1990s. During the period up to the mid-1980s, interest rates on government borrowings were highly subsidised, since then, interest rates on government bonds were progressively aligned to market interest rates. The average interest rate on state government bonds rose from 6.75 to 9.75 per cent during the early 1980s, to 11.00 to 11.50 per cent in late 1980s, and further to 11.00 to 14.00 per cent during the 1990s. Similarly, reliance on market loans for financing fiscal deficit rose from 11 per cent

Table 5: Impact of Spread and Primary Deficit on Debt-GDP Ratio

Primary Deficit (PD) and Quantum Spread (QS)	Fiscal Imbalance (QS + PD)	Debt-GDP Ratio
PD = QS	0	Constant
PD > QS	> 0	Rising
PD < QS	< 0	Falling

in the 1980s to 16 per cent in the 1990s. Significant changes in the structure and cost of state government debt led to sharp increases in interest payments during the 1990s, despite the softening interest rates in the latter half of the 1990s. This is because states had to pay the cost on past borrowings or the inherited component of debt contracted at a higher cost.

Debt Dynamics and Role of Interest Payments

Debt is essentially the aggregate of borrowings made by the government to finance its fiscal deficit over the years. Therefore, higher the fiscal deficit larger would be additions to the debt stock. It is quite apparent from the empirical evidence that interest payments have been the key factor causing sharp increases in states' gross fiscal deficit and rapid growth in outstanding debt of state governments. Thus, efforts to contain growth in debt accumulation or to bring state government debt on a sustainable path would require a drastic reduction in the interest burden. This brings us to the following questions: What is the criterion for debt sustainability?
What are the dimensions of the interest burden at present? How much reduction in interest burden is required and what are the options available to reduce it so as to make debt sustainable? And more importantly, is the policy of debt restructuring to reduce burden alone sufficient to achieve the sustainable debt path? The present section attempts to answer these questions.

Criterion of Debt Sustainability

In simple terms, 'sustainability' is defined as the ability to maintain a constant debt-GDP ratio over a period of time. Sustainability is challenged when the debt-to-GDP ratio reaches an excessive value.[3] Blanchard et al define sustainable fiscal policy as the one that allows, in the short term, debt-to-GDP ratio to return to its original level after some excessive variation. Traditionally, debt sustainability is measured in terms of Domar's equation,[4] which states that public debt is sustainable as long as the rate of growth of income exceeds the interest rate or cost of public borrowings, subject to the condition that the primary balance is either positive or zero. This condition can be stated as below:
$$\Delta d = d (r - g) - z$$
where
z = primary balance as a share of GDP, d = debt-GDP ratio, g = income growth rate, and r = interest rate.

It may be noted that the above equation does not imply that this primary deficit has to be zero at all times if debt-GDP ratio has to remain constant. A stable debt-GDP ratio could be achieved with the primary deficit, provided it is lower than the spread between growth in GDP and the interest rate. To understand this point more clearly, the following three terms could be defined:
Rate Spread = GDP growth rate – Interest Rate
Quantum Spread = Debt (1) * Rate Spread
Fiscal Imbalance = Quantum Spread + Primary Deficit
It could be derived from Domar's condition of debt sustainability that if quantum spread together with primary deficit is zero, debt-GDP ratio would remain constant. Thus, the impact of spread and primary deficit on the debt-GDP ratio could be determined as per Table 5.

If the spread between interest and income growth rates narrows down or if the primary balance becomes negative, fiscal

imbalance (QS+PD) would be positive and addition to debt would take place at a rate faster than the growth rate of income. This would eventually reflect in rising debt-GDP ratio and debt would become unsustainable.

The essential condition, which emerges from above, is that fiscal imbalance must either be zero, or less, if the debt-GDP ratio has to stabilise or start falling.

Current Trends

Table 6 sets out the relative movements in the GDP growth rate, interest rate and gross primary deficit. The average interest rate has been proxied by the ratio of interest payments in period t, to the outstanding public debt in period t-1.

It can be seen from Table 6 that while the sufficient condition that primary balance should be zero or positive was never fulfilled, even the necessary condition that rate of interest should be lower than growth rate of income has been violated since 1997-98. As a result the growth rate of debt exceeded the rate of growth of GDP and there has been a persistent rise in the debt-GDP ratio since 1997-98. It may be mentioned that the failure of interest payments to fall commensurately with the fall in GDP growth rates and rise in primary deficit in the recent years, were the primary reasons for the sharp rise in the debt-GDP ratio. Notably, in the recent period, although interest rates have come down sharply, the average interest rate has not only been higher than the current market interest rate, it has also exceeded the GDP growth rate. This essentially reflect the overhang of high cost borrowings of the past, particularly, the first half of the 1990s.

Dimensions of Fiscal Imbalance

To ascertain the dimensions of fiscal imbalance at present, and to determine the likely trends in the medium term, if the present policy stance continues, we have generated a base-line scenario under following assumptions:

Real GDP growth rate	= 7 per cent
Inflation	= 4 per cent
Average Interest Rate on fresh borrowings	= 9.5 per cent
Primary Deficit	= 1.7 per cent of GDP

Although the Tenth Plan has targeted a real GDP growth rate of 8 per cent, a relatively conservative view has been taken by

Table 6: Trends in Indicators of Debt Sustainability of States

Year	Average Interest Rate	Nominal GDP Growth Rate	Primary Deficit-GDP Ratio	Debt-GDP Ratio
1990-91	9.2	17.0	1.8	19.4
1991-92	9.9	14.8	1.2	19.3
1992-93	10.5	14.6	1.0	19.0
1993-94	11.1	14.8	0.5	18.6
1994-95	12.1	17.9	0.8	18.2
1995-96	11.9	17.3	0.8	17.9
1996-97	12.1	15.2	0.9	17.8
1997-98	12.4	11.3	0.9	18.5
1998-99	12.8	14.3	2.2	19.6
1999-00	13.2	11.3	2.4	21.7
2000-01	12.3	8.6	1.8	23.7
2001-02	12.5	9.1	1.5	25.7
2002-03 RE	12.6	7.7	1.7	28.1

Note: + indicates a deficit.

assuming a growth rate of 7 per cent per annum throughout our projection period. Similarly, it has been assumed that the average interest rate on fresh borrowings by the states would continue at the current level of 9.5 per cent (borrowings under the market borrowing programme have been envisaged at 6 per cent and the remaining non-market borrowings including negotiated loans, loans and advances by the central government and small savings are assumed at 10.5 per cent). Lastly, it is assumed that the primary deficit, as a proportion of GDP, would stay at 1.7 per cent, the level of the revised estimates for 2002-03. These assumptions for the baseline scenario envisage the continuation of the prevailing policy stance and any deterioration from this indicative scenario would correspondingly call for larger re structuring efforts.

Base-line Scenario

This scenario shows that if the present policy stance continues, the level of fiscal imbalance would keep on rising and the debt-GDP ratio would not converge even after 15 years.

In the base year (2002-03), the average interest rate on fresh state government borrowings at 9.5 per cent is lower than the average interest cost of 12.2 per cent on outstanding debt. If the current rate of fresh borrowings continues, the overall average rate on the debt stock would come down to 10.1 per cent by 2007-08, and 9.6 per cent by the end of 2017-18. This is because, in each year, a part of the outstanding debt would get replaced by fresh debt and the overall interest rate on outstanding stock of debt would tend to align itself to the rate on fresh borrowings. Thus, the GDP growth rate would have a positive spread of 0.9 per cent over the overall average interest rate in the year 2007-08, and would rise further to 1.4 per cent in 2017-18. Accordingly, the quantum spreads would amount to Rs 12,019 crore and Rs 75,434 crore in the respective years. However, these amounts would be insufficient to neutralise the primary deficit in corresponding years, which under the assumption of 1.7 per cent of GDP, would grow at a faster pace. Thus, the size of the fiscal imbalance would continue to rise and debt-GDP ratio would not converge even after 15 years.

Thus, attaining sustainability would necessitate either of the following:
(i) Spread between interest rate and GDP growth rate is increased further to accommodate the prevailing primary deficit. For a given income level, this would essentially require debt-structuring measures such as debt-swaps and lowering of interest cost on fresh borrowings.
(ii) Alternatively, the level of the primary deficit itself has to be reduced to the level equivalent to the spread between the interest rate and GDP growth rate. This indicates the need for fiscal restructuring.

With a view to assess and prescribe probable policy initiatives to bring states' debt on the sustainable path, three sets of alternative policy scenarios have been generated by superimposing the alternative assumptions over the baseline scenario. The first two policy scenarios envisage debt-restructuring measures so as to increase the spread between interest rate and GDP growth rate. The last scenario envisages a reduction in the primary deficit, in addition to the debt-restructuring measures assumed in the preceding scenarios. Three scenarios are as below:
(1) Entire Central Government Debt is swapped with fresh market borrowings.

(2) (1) plus reduction in interest rate on non-market borrowings.
(3) (2) plus progressive reduction in primary deficit.

Policy Scenario 1: Debt Restructuring – Debt Swap

Debt restructuring involves a combination of debt conversion and debt reduction strategies by employing instruments like debt-swap, debt buy-back and debt relief. In case of debt-swap, there is a substitution of high cost, past debt with fresh debt at current market rates of interest. Though there is no reduction in the size of the debt, considerable reduction in the interest payments would reduce the size of future fresh borrowings.

Since there is no put or call option attached to the liabilities of state governments, restructuring of debt could be possible only in the case of central loans as is being done in the present case through the debt swap scheme (what is often termed as within the 'family' approach). The union government has announced a debt-swap scheme that would enable states to prepay their high cost debt. Under the mutually agreed scheme between the central and state governments, all state loans from the centre bearing coupons in excess of 13 per cent would be swapped with market borrowings and small savings proceeds at prevailing interest rates over a period of three years ending in 2004-05.[5]

The first scenario has been generated assuming that states are allowed to replace the entire liability owed to the centre through fresh low-cost market borrowings at the assumed rate of 6.0 per cent. As a result, overall interest rate on the debt stock comes down to 10.0 per cent in 2007-08 and further to 9.5 per cent by 2017-18. Accordingly, rate and quantum spread improves over the baseline scenario, however they continue to be inadequate to accomodate the primary deficit in the corresponding period. As a result, the size of the fiscal imbalance keeps on rising and debt-GDP ratio fails to converge even after a 15-year period. Thus, debt swap alone would not be a sufficient solution for bringing state debt onto a sustainable path.

Policy Scenario 2: Debt Restructuring – Debt Swap plus Reduction in Interest Rates

Non-market borrowings of the states, as set out above, mainly include plan and non-plan loans extended by the central government, negotiated loans raised from banks/FIs and small savings. Average interest rates on each of these components exceeds 10 per cent – far above the interest rate on market loans.[6] So another probable policy initiative could be to align the interest rates on this compcnent of state borrowings to the market rate. Under this scenario, in addition to the debt swap (policy scenario 1) interest rates on non-market borrowings are also reduced so that the average interest rate on these borrowings is only 100 basis points above the assumed market interest rate of 6.0 per cent.[7]

Under the above assumptions, the average interest rate on the debt stock falls sharply to 8.7 per cent in 2007-08 and further to 7.3 per cent by 2017-18. With the result, there is a considerable increase in rate and quantum spreads over the preceding policy scenario 1, but they still fall short of the primary deficits in the respective years. The improvement in spreads shows up in the falling fiscal imbalance and translates into slower growth in the debt-GDP ratio but the latter fails to converge even after a 15-year period.

Extended Scenario 2: It could be pointed out that in view of the softer interest rate regime, interest rates could fall below the assumed rate of 6 per cent. Under such a scenario, the spread could be higher and the debt-GDP ratio may converge. To examine this, further simulations with a lower interest rate on borrowings were carried out. Results show that if market interest rate falls to 3 per cent even then the debt-GDP ratio would converge only after 10 years. Further, if it is desired that the debt-GDP ratio must converge by 2007-08, coinciding with the term of the 12th Finance Commission, the market rate needs to be reduced to the unrealistically low level of 0.25 per cent. These results only further strengthen the earlier stated proposition that debt restructuring is no solution for bringing states' debt onto a sustainable path. Thus, the policy envisaging reduction in the interest burden by way of both debt-swaps and cut in interest rates on fresh borrowings in the future would not bring about the desirable result.

Policy Scenario 3: Debt and Fiscal Restructuring

Under this scenario, along with debt restructuring measures of scenario 2, policy initiatives towards fiscal restructuring have also been envisaged. This scenario assumes that the primary deficit of the states from the current level of 1.66 per cent of GDP is progressively reduced by 0.1 percentage points each year.

Accordingly, the primary deficit falls to 0.9 per cent of GDP by 2010-11. This amounts to about Rs 55,000 crore, which is also equal to the quantum spread in that year. Thus, the fiscal imbalance gets reduced to zero and the debt-GDP ratio converges at 31.8 per cent. Faster convergence could be achieved with higher fiscal correction. A higher reduction of 0.2 percentage points in the primary deficit each year would bring the states' debt on a sustainable path within a span of 5 years, i e, by 2007-08.

The following conclusions could be drawn from the above analysis:
(i) The impact of the debt-swap is only marginal and insufficient for attaining convergence of the debt-GDP ratio.
(ii) Aligning the interest rate on fresh non-market borrowings with the market interest rate reduces the overall interest cost and does slow down growth in the debt-GDP ratio considerably, but sustainability cannot still be achieved if the market interest rate continues to be assumed at the level of 6 per cent.
(iii) If the market interest rate falls to the 3.0 per cent level and interest on the non-market component of borrowings is kept 100 basis points above that, the debt-GDP ratio would converge after 10 years even without fiscal restructuring. If convergence has to be brought within 5 years, the market rate must fall to the unrealistically low level of 0.25 per cent.
(iv) Along with debt restructuring, if the primary deficit as a percentage of GDP is also reduced by 0.1 percentage points per annum, the debt-GDP ratio would converge by 2010-11 and in case the primary deficit is reduced by 0.2 percentage points, the debt-GDP ratio would converge by 2007-08.

It could be inferred from the above scenario analysis that lo:wering of the primary deficit besides reduction in interest cost should be the integral part of any policy for envisaging debt sustainability at the state level. Reduction in the primary deficit would call for fiscal restructuring by way of enhancing the tax revenue, user charges, returns on investments and by pruning subsidies, the size of the government, etc. Similarly, policy initiatives would also be required to lower the prevailing market

risk perception of state government bonds, which inter alia affects the cost of borrowings by the states. While the reduction in the primary deficit would itself have a salutary impact, other policy initiatives such as the creation of a sinking fund, transparency, adoption of stricter prudential norms, etc, would also be required to reduce the risk perception and thereby cost of borrowings.

Trends in key macroeconomic variables under different scenarios are presented in Annexures 4 to 7, and are summarised in Table 7:

Thus, the reduction in states' debt would require a two-pronged approach focusing on both quantum as well as cost of fresh borrowings. From the issuers' end, i e, the state governments, this would entail efforts to reduce the primary fiscal gap and putting mechanisms in place to lower subscribers risk perception on state paper, and thereby the cost of borrowings.

Most of the measures on reduction in primary fiscal gap such as reduction of wasteful expenditure, enhanced returns from state PSUs, increased revenues by appropriate user charges, expansion of tax base, pension reforms, disinvestment, etc, are well researched and documented and need not be enumerated to avoid repetition. As regards cost of borrowings, one needs to distinguish between market and non-market borrowings. Non-market borrowings which mainly include funds received from the central government, NSSF and states' own small savings are generally extended at administered interest rates. In recent years, there is a tendency to align these rates to the market benchmarks. Cost of market borrowings, on the other hand, reflects the risk perception of state paper apart from overall market conditions. In the following section, the issues related to administered interest rates on non-market borrowings and risk perception on state paper have been outlined.

Non-Market Borrowings

Central transfers: With regard to the reduction in the interest burden, an important area which needs to be addressed is the interest rate on funds for centrally sponsored schemes (CSS) and those for externally aided projects (EAP). Significantly, these two together account for a sizeable proportion of the total fresh loans and advances from the central government. It could be noted that the interest cost on central loans at present exceeds 10 per cent. Aligning the interest rate on these funds with the actual cost (of central government) could make a major dent in the interest burden of the states.

States' small savings: Similarly, states also need to focus on the interest rate offered by them on their own public account borrowings, which are far above market interest rates. Following the practice of the centre (on recommendation of the Reddy Committee,[8]) states could also align interest rates on their small savings schemes to market related rates. States, apart from small savings and PF collections, also hold deposits (in some cases with chequeable facility) under public accounts – thus functioning identically like a bank without the safeguards of prudential regulations or provisioning requirements. The proceeds from such schemes are merged into the cash balances of the states and are used to meet current expenditures. Often, this helps the state to avoid recourse to the WMA/OD facility. Borrowings of state level PSUs also has a direct bearing on their budgets, which should be controlled.

Market Borrowings

The ability of states to achieve this debt sustainability ultimately depends upon market willingness to subscribe to government securities. Acceptability of state paper by the market, at favourable rates of interest, would require a reduction in risk perception through enhanced fiscal discipline on the part of the states. Some of the measures that can be taken by states' in this regard are:

Setting up of consolidated sinking fund: At present some states have set up a consolidated sinking fund with the RBI to facilitate redemption liabilities on account of market borrowings.

Annexure 1: DEBT/GSDP Ratios of States
(Per cent)

States	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
1	2	3	4	5	6	7
Andhra Pradesh	19.0	19.1	20.8	20.8	23.5	25.9
Arunachal Pradesh	53.5	58.0	58.2	56.7	56.7	54.6
Assam	28.1	27.8	27.2	26.7	29.3	33.2
Bihar*	67.7	55.9	59.9	59.7	66.9	73.1
Goa	35.2	32.3	28.6	27.7	28.5	32.7
Gujarat	15.5	14.9	16.6	17.8	21.6	26.6
Haryana	19.4	18.3	19.7	21.8	23.9	24.5
Himachal Pradesh	45.4	44.2	44.9	53.4	54.0	60.8
Jammu and Kashmir	56.5	55.6	56.9	50.4	55.5	61.5
Karnataka	17.6	17.4	18.1	17.6	19.5	21.0
Kerala	26.1	25.7	26.0	27.9	32.3	34.6
Madhya Pradesh*	25.7	25.4	26.7	28.0	30.4	36.2
Maharashtra	11.6	12.3	13.3	14.6	15.9	17.3
Manipur	34.9	31.3	39.0	44.0	44.6	51.2
Meghalaya	21.7	22.0	22.4	24.2	26.5	28.9
Mizoram	44.5	47.2	52.9	58.6	62.7	62.2
Nagaland	51.8	52.5	51.1	57.8	64.5	-
Orissa	35.3	42.1	39.2	44.2	50.5	60.5
Punjab	35.3	34.5	35.3	37.4	37.9	40.7
Rajasthan	25.8	25.4	25.6	28.9	33.3	40.1
Sikkim	57.5	56.6	54.8	64.5	80.6	80.2
Tamil Nadu	16.0	15.8	15.7	16.4	18.7	20.9
Tripura	37.0	35.4	34.1	36.4	39.2	44.8
Uttar Pradesh*	28.2	26.9	29.2	31.5	35.2	36.7
West Bengal	20.8	22.1	22.5	24.8	28.9	33.7
Total	17.9	17.8	18.5	19.6	21.7	23.7

Note: The states of Bihar, Madhya Pradesh and Uttar Pradesh include the liabilities of newly formed states, viz, Jharkhand, Chhattisgarh and Uttaranchal, respectively.

Source: Report on Currency and Finance, Volume II and *State Finances,* various issues, Reserve Bank of India.

Table 7: Trends in Macroeconomic Variables – Projected

Indicator Year end	Initial Period 2003	Base Line Scenario		Policy Scenario 1		Policy Scenario 2		Policy Scenario 3	
		2008	2018	2008	2018	2008	2018	2008	2011
Real GDP	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Inflation	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Pr Def	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.2	0.9
Avg Int	12.2	10.1	9.6	10.0	9.5	8.7	7.3	8.8	8.0
D-Y Ratio	25.9	33.8	45.9	33.7	45.3	32.7	38.7	31.2	31.7
Rate Spread	-1.2	0.9	1.4	1.0	1.5	2.3	3.7	2.2	3.6
Quantum Spread	-7391	12,042	75,619	13,319	78,879	30,669	1,71,414	29,046	1,27,762

Likewise, states themselves could set up other debt amortisation funds towards redemptions, liabilities/loans other than market borrowings, i e, loans from banks and FIs, public account liabilities and liabilities on account of NSSF. The fund should not used for any other purpose except for redemption of such loans. Initially, to set up the fund, states may keep aside a modest 1 to 3 per cent of their fresh accretions of all such loans, particularly accretion on NSSF/public accounts. The fund should be clearly kept out of the purview of the states' consolidated fund and public account.

Ceiling on guarantees and guarantee redemption fund: Given the deterioration in state finances over the years, which has led to erosion in public investment, state governments have taken recourse to loan guarantees to promote investments. Although the contingent liabilities do not form a part of the debt burden of states, in the event of default by the borrowing entity, states are required to meet the debt service obligations. At the same time, non-adherence to payment obligations committed by states in respect of guarantees already provided by them would have adverse implications on sovereign credibility. In addition, this may pose difficulties for states to raise resources from the market in future. There is a provision of placing limits on guarantees under Article 293 and the Reserve Bank of India has taken several initiatives to contain the growth in guarantees extended by state governments, like encouraging states to impose ceilings on guarantees, introduction of guarantee fees and the constitution of a contingency fund or GRF (guarantee redemption fund). Goa, Gujarat, Karnataka, Rajasthan, Assam, Sikkim, and West Bengal have introduced ceilings on guarantees. The issue of imposing ceilings on guarantees is under active consideration in Tamil Nadu and Kerala. Likewise, Andhra Pradesh, Orissa, Haryana and Gujarat set up GRFs and earmarked guarantee fees towards the fund.

Transparency: Transparency at the sub-national level, with regard to budgeting, accounting and auditing practices, would enable investors to make informed judgments about the repaying capacity of the government. Uniform, consistent reporting formats would enable provision of consolidated data on important fiscal indicators. State governments should achieve a minimum set of standards of transparency within a stipulated time frame, and should be encouraged to increase the extent of reporting on contingent liabilities and at least, major tax expenditures and quasi fiscal activities (specially losses of state electricity boards, (SEBs).

Fiscal responsibility and political consensus: The advantage of a rule based fiscal policy in instilling investor confidence over a discretionary one, is well recognised. Fiscal consolidation is no longer dependent upon political consensus, if there are binding fiscal rules/legislation in force. States can consider implementing a mix of legislations relating to balanced budgets, caps on deficit/debt, restrictions on borrowings, etc. While the states of Karnataka, Punjab and Tamil Nadu have already enacted the fiscal responsibility legislation, Kerala has passed a fiscal accountability bill and Maharashtra has introduced the bill in its legislature.

Infrastructure financing: Whatever be the restrictions placed on the issuance of fresh debt, the inflows for infrastructure financing must not be curtailed; three-fourths of the combined developmental expenditure of the government is borne by the states, while the share of states in combined revenues is merely one-third. It would be useful if the fresh borrowings could be earmarked for infrastructure projects and repayments could be escrowed from

Annexure 2: Interest payments-Revenue Receipts Ratios – Statewise
(Per cent)

States 1	1995-96 2	1996-97 3	1997-98 4	1998-99 5	1999-00 6	2000-01 7
Andhra Pradesh	15.5	16.4	15.6	18.5	18.5	19.5
Arunachal Pradesh	5.6	6.6	7.2	7.7	7.8	12.6
Assam	14.4	14.5	14.8	11.6	19.7	15.3
Bihar	22.6	17.6	17.7	20.2	22.7	20.9
Goa	11.0	12.4	10.7	12.5	14.5	14.3
Gujarat	15.5	16.7	16.9	17.8	20.2	19.9
Haryana	11.1	11.8	13.9	18.2	23.5	22.7
Himachal Pradesh	16.3	15.7	17.1	21.5	16.1	26.2
Jammu and Kashmir	13.5	13.3	13.8	14.7	15.3	15.6
Karnataka	12.3	12.6	13.1	14.4	15.6	16.1
Kerala	17.0	18.0	18.1	20.1	24.6	25.9
Madhya Pradesh	13.4	13.7	14.7	16.2	16.2	17.6
Maharashtra	12.4	12.7	14.3	16.9	19.3	17.7
Manipur	8.3	8.1	9.1	10.2	12.3	17.0
Meghalaya	7.4	7.6	8.7	8.3	10.1	10.0
Mizoram	5.6	7.1	9.1	10.0	9.8	12.2
Nagaland	10.2	11.2	11.4	13.2	14.3	13.7
Orissa	23.9	25.2	27.9	32.6	21.0	33.1
Punjab	28.7	29.4	29.1	40.3	35.3	25.0
Rajasthan	16.2	20.5	22.6	26.1	28.9	26.9
Sikkim	3.1	2.9	3.1	3.6	4.5	9.1
Tamil Nadu	12.2	12.3	13.0	14.9	16.6	17.1
Tripura	9.5	10.7	11.1	11.1	12.9	13.8
Uttar Pradesh	21.9	25.3	26.7	31.7	30.5	30.1
West Bengal	21.9	23.6	26.7	31.4	40.8	36.1
Total	16.0	16.7	17.7	20.3	21.8	21.7

Note: As the new states of Chhattisgarh, Jharkhand and Uttaranchal were created on different dates during 2000-01, the figures for the financial year are not given.

Source: State Finances, various issues, Reserve Bank of India.

Annexure 3: Statewise Primary Deficit
(Rs crore)

States 1	1995-96 2	1996-97 3	1997-98 4	1998-99 5	1999-00 6	2000-01 7
Andhra Pradesh	888	973	275	3,062	1,875	3,513
Arunachal Pradesh	-3	17	61	-16	-20	89
Assam	165	-486	-497	-182	650	675
Bihar	-97	-526	-555	507	3,246	2,510
Goa	7	4	7	125	163	201
Gujarat	418	748	1,290	3,357	3,984	4,856
Haryana	430	384	307	1,243	775	773
Himachal Pradesh	236	259	830	1,163	-408	1,047
Jammu and Kashmir	-344	-323	-149	390	494	1,322
Karnataka	409	736	216	1,495	2,264	1,832
Kerala	379	439	1,128	1,566	2,584	1,620
Madhya Pradesh	475	550	161	2,292	1,773	301
Maharashtra	2,095	2,506	3,539	3,789	6,823	3,751
Manipur	47	102	109	15	524	57
Meghalaya	2	-33	66	78	113	136
Mizoram	36	78	58	59	85	274
Nagaland	152	86	91	107	86	165
Orissa	467	523	511	1,431	2,508	1,038
Punjab	-125	-170	629	1,463	558	1,560
Rajasthan	1,341	953	655	2,908	2,536	974
Sikkim	11	23	26	94	25	-28
Tamil Nadu	-37	969	358	2,655	2,671	1,952
Tripura	-55	11	76	-22	105	219
Uttar Pradesh	1,056	1,895	2,887	6,116	4,546	2,724
West Bengal	1,080	1,457	1,598	4,159	7,497	5,671
NCT Delhi	462	500	412	527	851	893
Total	9,493	11,675	14,087	38,380	46,309	37,830

Notes: 1 '-' indicates surplus.
2 As the new States of Chhattisgarh, Jharkhand and Uttaranchal were created on different dates during 2000-01, the figures for the financial year are not given.

Source: Article on State Finances, various issues, Reserve Bank of India.

Annexure 4: Baseline Projections

Year	Debt	Old Debt	Debt Relief	PD/ GDP	Primary Deficit	Interest Payments	Fresh Debt	AVG INT (Tot Liab)	Avg Int (Fresh Borr)	Mkt Int	GDP Growth	Rate Spread	Quantum Spread	Fiscal Imbalance	Debt-GDP Ratio
2003-04	860788	664741	30000	1.66	51733	83855	166047	11.6	9.5	6.0	11.0	-0.6	-4083	55817	27.6
2004-05	1012651	794635	30000	1.66	57424	94439	188016	11.0	9.5	6.0	11.0	0.0	248	57176	29.3
2005-06	1183234	943119	27000	1.66	63741	106843	213115	10.6	9.5	6.0	11.0	0.4	4549	59192	30.8
2006-07	1375359	1133538		1.66	70752	121372	241820	10.3	9.5	6.0	11.0	0.7	8783	61969	32.3
2007-08	1593141	1317593		1.66	78535	139248	275548	10.1	9.5	6.0	11.0	0.9	12042	66493	33.7
2007-09	1839891	1526229		1.66	87174	159576	313662	10.0	9.5	6.0	11.0	1.0	15669	71504	35.0
2007-10	2119326	1762616		1.66	96763	182672	356710	9.9	9.5	6.0	11.0	1.1	19716	77047	36.4
2007-11	2435620	2030314		1.66	107407	208887	405306	9.9	9.5	6.0	11.0	1.1	24239	83168	37.6
2007-12	2793459	2333324		1.66	119221	238618	460135	9.8	9.5	6.0	11.0	1.2	29300	89921	38.9
2007-13	3198104	2676134		1.66	132336	272309	521970	9.7	9.5	6.0	11.0	1.3	34972	97364	40.1
2007-14	3655456	3063784		1.66	146893	310459	591672	9.7	9.5	6.0	11.0	1.3	41332	105560	41.3
2007-15	4172135	3501927		1.66	163051	353629	670209	9.7	9.5	6.0	11.0	1.3	48472	114579	42.5
2007-16	4755568	3996906		1.66	180987	402446	758662	9.6	9.5	6.0	11.0	1.4	56489	124498	43.6
2007-17	5414079	4555834		1.66	200895	457616	858245	9.6	9.5	6.0	11.0	1.4	65496	135399	44.7
2007-18	6157003	5186688		1.66	222994	519930	970315	9.6	9.5	6.0	11.0	1.4	75619	147375	45.8

Annexure 5: Policy Scenario 1: Debt Restructuring – Debt Swap

Year	Debt	Old Debt	Debt Relief	PD/ GDP	Primary Deficit	Interest Payments	Fresh Debt	AVG INT (Tot Liab)	Avg Int (Fresh Borr)	Mkt Int	GDP Growth	Rate Spread	Quantum Spread	Fiscal Imbalance	Debt-GDP Ratio
2003-04	860788	664741	30000	1.66	51733	83855	166047	11.56	9.50	6.00	11.0	-0.56	-4083	55817	27.6
2004-05	1012651	794635	30000	1.66	57424	94439	188016	10.97	9.50	6.00	11.0	0.03	248	57176	29.3
2005-06	1183234	943119	27000	1.66	63741	106843	213115	10.55	9.50	6.00	11.0	0.45	4549	59192	30.8
2006-07	1375359	1103538	30000	1.66	70752	121372	241820	10.26	9.50	6.00	11.0	0.74	8783	61969	32.3
2007-08	1591864	1287593	30000	1.66	78535	137970	274270	10.03	9.50	6.00	11.0	0.97	13319	65216	33.7
2007-09	1836059	1495005	30000	1.66	87174	157022	311054	9.86	9.50	6.00	11.0	1.14	18083	69090	35.0
2007-10	2111640	1728945	30000	1.66	96763	178818	352695	9.74	9.50	6.00	11.0	1.26	23149	73614	36.2
2007-11	2422738	1992951	30000	1.66	107407	203692	399787	9.65	9.50	6.00	11.0	1.35	28589	78818	37.4
2007-12	2773982	2320983		1.66	119221	232023	452999	9.58	9.50	6.00	11.0	1.42	34479	84743	38.6
2007-13	3171631	2657475		1.66	132336	265313	514156	9.56	9.50	6.00	11.0	1.44	39826	92510	39.8
2007-14	3621538	3038422		1.66	146893	303014	583116	9.55	9.50	6.00	11.0	1.45	45865	101028	40.9
2007-15	4130272	3469433		1.66	163051	345684	660839	9.55	9.50	6.00	11.0	1.45	52686	110365	42.1
2007-16	4705204	3956801		1.66	180987	393945	748403	9.54	9.50	6.00	11.0	1.46	60385	120601	43.2
2007-17	5354596	4507585		1.66	200895	448497	847011	9.53	9.50	6.00	11.0	1.47	69075	131820	44.3
2007-18	6087716	5129703		1.66	222994	510126	958013	9.53	9.50	6.00	11.0	1.47	78879	144114	45.3

Annexure 6: Policy Scenario 2 – Debt Restructuring, Debt Swap plus Reduction in Interest Rates on Non-Market Borrowings

Year	Debt	Old Debt	Debt Relief	PD/ GDP	Primary Deficit	Interest Payments	Fresh Debt	AVG INT (Tot Liab)	Avg Int (Fresh Borr)	Mkt Int	GDP Growth	Rate Spread	Quantum Spread	Fiscal Imbalance	Debt-GDP Ratio
2003-04	860788	664741	30000	1.66	51733	83855	166047	11.6	7.0	6.0	11.0	-0.6	-4083	55817	27.6
2004-05	1008500	794635	30000	1.66	57424	90288	183865	10.5	7.0	6.0	11.0	0.5	4399	53025	29.2
2005-06	1170260	939143	27000	1.66	63741	98019	204117	9.7	7.0	6.0	11.0	1.3	12916	50825	30.5
2006-07	1348198	1091090	30000	1.66	70752	107187	227090	9.2	7.0	6.0	11.0	1.8	21542	49210	31.6
2007-08	1544367	1261574	30000	1.66	78535	117633	252792	8.7	7.0	6.0	11.0	2.3	30669	47866	32.6
2007-09	1761111	1449503	30000	1.66	87174	129571	281608	8.4	7.0	6.0	11.0	2.6	40310	46864	33.5
2007-10	2000998	1657144	30000	1.66	96763	143124	313854	8.1	7.0	6.0	11.0	2.9	50598	46165	34.3
2007-11	2266849	1886956	30000	1.66	107407	158445	349893	7.9	7.0	6.0	11.0	3.1	61665	45742	35.0
2007-12	2561778	2171642		1.66	119221	175707	390136	7.8	7.0	6.0	11.0	3.2	73646	45575	35.7
2007-13	2889751	2454183		1.66	132336	195637	435567	7.6	7.0	6.0	11.0	3.4	86159	46177	36.2
2007-14	3254553	2768381		1.66	146893	217910	486172	7.5	7.0	6.0	11.0	3.5	99963	46930	36.8
2007-15	3660394	3117862		1.66	163051	242790	542532	7.5	7.0	6.0	11.0	3.5	115211	47840	37.3
2007-16	4111950	3506657		1.66	180987	270570	605293	7.4	7.0	6.0	11.0	3.6	132074	48913	37.7
2007-17	4614422	3939248		1.66	200895	301576	675173	7.3	7.0	6.0	11.0	3.7	150738	50157	38.1
2007-18	5173587	4420616		1.66	222994	336172	752972	7.3	7.0	6.0	11.0	3.7	171414	51579	38.5

Annexure 7: Policy Scenario 3 – Debt and Fiscal Restructuring

Year	Debt	Old Debt	Debt Relief	PD/ GDP	Primary Deficit	Interest Payments	Fresh Debt	AVG INT (Tot Liab)	Avg Int (Fresh Borr)	Mkt Int	GDP Growth	Rate Spread	Quantum Spread	Fiscal Imbalance	Debt-GDP Ratio
2003-04	857671	664741	30000	1.56	48617	83855	162930	11.6	7.0	6.0	11.0	-0.6	-4083	52700	27.5
2004-05	998246	791649	30000	1.46	50505	90070	176597	10.5	7.0	6.0	11.0	0.5	4274	46231	28.9
2005-06	1147766	929320	27000	1.36	52221	97298	191446	9.7	7.0	6.0	11.0	1.3	12509	39712	29.9
2006-07	1307070	1069559	30000	1.26	53703	105601	207511	9.2	7.0	6.0	11.0	1.8	20653	33050	30.7
2007-08	1476681	1222173	30000	1.16	54880	114731	224508	8.8	7.0	6.0	11.0	2.2	29046	25833	31.2
2007-09	1657141	1384660	30000	1.06	55665	124795	242481	8.5	7.0	6.0	11.0	2.5	37640	18025	31.6
2007-10	1848892	1557541	30000	0.96	55959	135792	261351	8.2	7.0	6.0	11.0	2.8	46494	9465	31.7
2007-11	2052261	1741238	30000	0.86	55644	147725	281023	8.0	7.0	6.0	11.0	3.0	55653	-9	31.7
2007-12	2267439	1966066		0.76	54583	160595	301373	7.8	7.0	6.0	11.0	3.2	65154	-10570	31.6
2007-13	2495001	2172207		0.66	52615	174946	322794	7.7	7.0	6.0	11.0	3.3	74472	-21857	31.3
2007-14	2734749	2390211		0.56	49554	190194	344538	7.6	7.0	6.0	11.0	3.4	84256	-34702	30.9
2007-15	2986255	2619889		0.46	45183	206323	366366	7.5	7.0	6.0	11.0	3.5	94499	-49316	30.4
2007-16	3248809	2860832		0.36	39250	223303	387976	7.5	7.0	6.0	11.0	3.5	105185	-65935	29.8
2007-17	3521357	3112359		0.26	31466	241083	408998	7.4	7.0	6.0	11.0	3.6	116286	-84820	29.1
2007-18	3802438	3373460		0.16	21493	259587	428978	7.4	7.0	6.0	11.0	3.6	127762	-106269	28.3

the revenue stream generated by such projects. The explicit tying up of repayments with the revenue stream would act as credit enhancement and would reduce the cost of funds for the states. States could also explore the possibilities of getting financing through public-private partnerships.

Securitisation: The balance sheets of state governments could also be cleaned through securitisation of past dues. Based on the Ahluwalia (2001) Committee recommendations, a scheme for one-time settlement of outstanding dues of the SEBs to central power sector undertakings (CPSUs) by way of securitisation and issuance of power bonds, to the CPSUs at 8.5 per cent tax-free bonds has been implemented. Similar schemes could be worked out in terms of overdues on guaranteed bonds/loans contracted earlier at higher costs – where states are constrained to service the repayments.

Statutory limit on size of state's debt/borrowings: In recent times, the issue of fixing limits on overall borrowings of the state governments has come into focus. The EFC had suggested that states cap their debt to 18 per cent of their IP/RR. In fact, the overall borrowings of states are constrained to a large extent. For example, states are allocated borrowing limits under the market borrowing programme in consultation with the Planning Commission; loans from the centre are also pre-determined as part of plan assistance; there are limits on WMA and overdraft. However, the special securities issued by NSSF and funds from the public account are not capped. Also the magnitude of funding from such sources is by and large beyond the control of state governments. States influence the collections under small savings through aggressive small savings drives and special incentives. In sum, therefore, a hard budget constraint operates at the state level. The spillover in the revenue deficit of state governments beyond the budgeted figure is accommodated mostly by reduction in capital expenditure. However, means of innovative financing exist through the route of extension of contingent liabilities and guarantees. States, however, are empowered to give guarantees based on some limit, as may be fixed from time to time by the legislature of the state, extended upon the security of the consolidated fund of the state. Thus, an implicit ceiling in state government guarantees is the size of the consolidated fund of the state. It would be better if an explicit cap on the level of states' debt is imposed. Respective states could consider placing a statutory limit on debt in terms of a ratio of their interest payments to revenue receipts. This would have a salutary impact on the risk perception of state borrowings/paper. It would in turn help states access funds at cheaper costs.

Concluding Observations

Given the high level of states outstanding liabilities, certain corrective measures are inevitable. Corrective measures leading to sustainability of debt can be effective only when state governments make a persistent attempt to put their finances on a sound footing by additional revenue effort, expenditure compression and re-prioritisation in line with the restructuring plans. An immediate focus of the fiscal reforms should be on achieving revenue balance or, at least, reducing the revenue imbalance to a minimum. Bailouts through write-offs/waivers can never be a long-term solution. Waivers of loans and interest should be strictly restricted so as to avoid moral hazard problems and encourage debt repayment discipline. Relief of debt should be incentivised by clearly linking it with simple monitorable reforms

or processes (Annexure 8). The process of incentivisation ought to be well thought of so as to fit for all states yet be flexible to adjust for state-specific problems/issues. The monitorable indicators should be uniform, transparent and "catch all" indicators – which can easily be amenable to both expenditure reduction and revenue enhancement.

In fact, it is the controlled component of debt that is focused and monitored and has to an extent been brought down during the 1990s. A drastic reduction in the component of debt which is at market related rates has been observed. It is the uncontrolled segment, the public account borrowings and the off-budget SPV borrowings, which are accessed at higher costs and where the slippages have occurred. A simplistic method of debt restructuring would be to bring down the interest rates on this component in alignment with market rates. However, it is established that debt relief measures alone are no panacea for sustainability of states fiscal situation, unless complimented with appropriate reductions in the primary deficit of the states.

Annexure 8
Debt Relief for State Governments through Finance Commissions

In successive finance commissions, the issue of giving debt relief to the states has been considered, and has been extended by the following ways: waiving of repayment and/or interest payment due, altering the terms of repayment, reducing interest rates and consolidating of loans. However, the quantum of relief is not very significant as shown in Table 8 below. As pointed out by McCarten, the share of debt relief in the GDP has reduced from 2.95 per cent in the Sixth Finance Commission to 0.17 per cent in the Eleventh Finance Commission, indicating a decrease in the relative commitment to central debt forgiveness over time. Nonetheless, successive finance commissions have established a tradition of unconditional debt forgiveness.

Table 8: Debt Forgiveness by Finance Commissions

Finance Commissions	Year of Report	Debt Relief (Rs Crore)
Sixth	1974	197
Seventh	1979	216
Eighth	1984	229
Ninth	1989	98
Tenth	1995	50
Eleventh	2000	340

Upto the Eighth Finance Commission, the statewise allocation of relief was linked to the proportion of the indebtedness of the respective states, relative to the size of their economies. However, the Tenth Finance Commission (TFC) introduced a performance linked debt relief scheme, which was continued by the EFC with certain modifications. The Tenth Finance Commission had recommended a scheme of general debt relief for all states linked to fiscal performance. Improvement of fiscal management was measured by comparing the ratio of revenue receipts (including devolution and grants from the centre) to total revenue expenditure in a given year with the average of corresponding ratios in the three immediately preceding years. The performance of each state was measured against its own past performance. Under another scheme proposed by TFC, viz, the scheme for encouraging retirement of debt from the proceeds of the disinvestment of equity holdings of state governments, not much headway could be made during the period 1995-00 as only Tamil Nadu could

avail of relief of about Rs 10 crore under this scheme. The EFC discontinued the schemes of debt relief based on disinvestment and fiscal stress, and focused only on debt relief linked to improvement in the revenue balance by increasing the extent of potential relief in the fiscal performance linked scheme.[EPW]

Address for correspondence:
rgoyal@rbi.org.in

Notes

[The views expressed are personal and do not pertain to the institution to which the authors belong. Authors are indebted to C Rangarajan for his encouragement. We express deep gratitude to Usha Thorat, Narendra Jadhav, H R Khan and G Padmanabhan for their comments and support. Our sincere thanks to A Prasad for his invaluable suggestions. Not to understate the contribution of the discussants for our paper, Tapas Sen and Subir Gokarn, for their indulgence.]

1 Under Article 293 of the Constitution, states indebted to the central government need prior permission of the government of India to undertake fresh borrowings.
2 *Reserve Bank of India Report on Currency and Finance, 2001-02,* empirically investigates the factors responsible for the worsening of state finances. The exercise uses data on 15 major states for the 20 -year period from 1980-81 to 1999-2000. In order to assess the impact of reforms, two sets of panel regressions have been run, viz, for pre-reform period i e, 1980-81 to 1989-90 and reform period i e, 1990-91 to 1999-2000. The following equation has been estimated for the pre-reform and reform period under the panel data framework:

GFD/NSDP = f (IP/NSDP, WS/NSDP, TFR, COSTR)

where

GFD-Gross fiscal deficit, IP-Interest Payments, WS –wages, Salaries and Pension,

NSDP- Net State Domestic Product, TFR-Transfer Ratio, COSTR- Cost Recovery or User Charges.

Equation has been estimated in double log form for both pre-reform and reform period.
3 In addition to debt-GDP ratio there are various other indicators which throw light on whether the fiscal policy is sustainable or not. Some of these are as follows:

Revenue to Debt-servicing ratio – sustainability is challenged when the debt-GDP ratio reaches an excessive value wherein government revenue is not enough to service the debt.

Need for structural reforms – a situation may be termed as sustainable, if the continuation of current fiscal policies do not warrant any structural reform.

Willingness of market to subscribe to public debt – sustainability would also imply that the government, in the future, would not face a situation in which the market is unwilling to subscribe to fresh public debt.
4 There are other approaches to test sustainability such as

(a) Inter-temporal budget constraint (IBC):

This approach requires the value of current public debt to be equal to the discounted sum of the future primary surpluses.

It may be noted that test conducted through the IBC approach is slightly different from the accounting approach in the sense that IBC unlike accounting approach, tests the solvency of the debt rather than sustainability. In fact, sustainability is not a sufficient condition for debt to be solvent. This is because the accounting condition for sustainability which requires g > r, does not ensure that debt would be finally repaid.

(b) Co-integration approach:

This is essentially an alternative tool to test the solvency/sustainability of public debt as understood in terms of the inter-temporal budgetary constraint. As per this method if revenue and expenditure series are co-integrated, they bear a long-run relationship and would have the tendency to converge. On the other hand, if the two series are not co-integrated, there is no long-run relationship between them and the gap between revenue and expenditure would keep on widening. This implies, if the two series are co-integrated, debt would follow a stationary path and

be solvent/sustainable.
5 Accordingly, Rs 1,00,000 crore high cost debt owed to the government of India is to be retired. In 2002-03, Rs 13,766 crore, of which Rs 10,000 crore was mobilised from the market, was paid by state governments. In 2003-04. Rs 23,000 crore has been mobilised in three tranches of market borrowings for this purpose.
6 Higher interest rates on non-market borrowings essentially reflect the higher risk premium. Risk premium is considerably low on the market loans raised under the market borrowing programme (MBP), as these are eligible securities for the maintenance of the Statutory Liquidity Ratio (SLR).
7 To start with, we experimented with small reductions in the interest rate on non-market borrowings, including small savings, which were made progressively larger.
8 The Expert Committee to Review the System of Administered Interest Rates and Other Related Issues, 2001 set up under the chairmanship of Y V Reddy, had recommended that interest rates on small savings schemes should be benchmarked to the secondary market yields of the government securities market. Accordingly, the central government, since 2002-03, is aligning the interest rates on various small saving schemes.

References

Acharya, S (2002): 'India's Macroeconomic Management in the 1990s', *Economic and Political Weekly,* April 20-27, Vol 37, No 16, pp 1515-38.

Anand, Mukesh, Amaresh Bagchi, Tapas K Sen (2001): 'Fiscal Discipline at the State Level: Perverse Incentives and Paths to Reform', paper presented at NIPFP Seminar on *India: Fiscal Policies to Accelerate Economic Growth,* May 21-22.

Ahluwalia, I J and I M D Little (eds) (1998): *India's Economic Reforms and Development,* Oxford University Press, New Delhi.

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

Chakravarty, P (1999): 'Recent Trends in State Government Finances – A Comment', *Economic and Political Weekly,* October 30-November 5, Vol 34, No 44, pp 3146-48.

Kurian, N J (1999): 'State Government Finances: A Survey of Recent Trends', *Economic and Political Weekly,* May 8-14, Vol 34, No 19, pp 1115-34.

McCarten, W J (2001): 'The Challenge of Fiscal Discipline in the Indian States', mimeo.

Mohan, R (2000): 'Fiscal Correction for Economic Growth: Data Analysis and Suggestions', *Economic and Political Weekly,* June 10-16, Vol 35, No 24, pp 2027-36.

Rao, M G (2002): 'State Finances in India: Issues and Challenges', *Economic and Political Weekly,* August 3-9, Vol 37, No 32, pp 3261-71.