

Borrowing, Debt Management and Contingent Liabilities: A Study of Indian State Governments

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I. Introduction

The economic reforms that were initiated in 1991 have severely curtailed the ability of the central government to direct investment through licensing to preferred sectors and locations. As a consequence the enabling environment (which includes provision of infrastructure services, health services, education etc) provided by states (sub national governments) has become a more critical determinant of investment flows. The provision of an enabling environment requires in most cases capital expenditures, which cannot be covered by current revenues. Prudent use of debt can potentially substantially enhance the ability of states to provide these services. The fiscal health of various state governments directly impacts their ability to borrow for investment. Since the mid nineties many state governments have slipped into a fiscal crisis and are financing their budgets by borrowing. Borrowing thus is increasingly being used to finance current expenditures and not for creation of long lived assets. In some states drastic measures like forced delay in salary payments are not uncommon responses to fiscal difficulties.

Given the bad fiscal situation that many state governments find themselves in they are forced to look for alternative ways of funding investments in long-term infrastructure projects. One avenue that has opened up for state governments towards this end are contingent liabilities created to reduce credit risk to investors in infrastructure and other sectors that contribute to the provision of public services. Many of these contingent liabilities take the form of guarantees of loans and bonds of state government owned companies (especially the power companies) and cooperatives. These contingent liabilities themselves have the potential of accentuating the fiscal difficulties of state governments as these are in the nature of risks assumed by the state governments.

In this paper we study the debt position and contingent liabilities of states and suggest some policy measures that are likely to help evolve a good debt management strategy. The paper is structured as follows. Section 2 we present a general discussion of the economic issues surrounding sub national debt and contingent liabilities. In section 3 we describe the institutional setup in India with respect to state government debt and contingent liabilities. Emerging empirical patterns with respect to state government debt and contingent liabilities are discussed in section 4. Section 5 concludes.

II. Some theoretical perspectives

The question of how much should a government borrow has predominantly been asked in the context of national governments. The government has to finance expenditures with either taxes or debt. The choice between debt and taxes would be irrelevant in a world where, taxes are lump sum, there is perfect certainty about future incomes, government spending, and rates of return, capital markets are perfect and households have infinite horizons. In this situation the present value of taxes is determined by the known and unchanging path of government spending and the timing of taxes does not matter. Borrowing does not allow the government to do away with taxes in a present value sense and the choice between taxation and borrowing does not matter in the sense that it would not have any real consequences, given the level of government expenditures.

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This result does not hold if features of real world taxes are taken into account basically because of the distortionary effect of these taxes. It is generally assumed that real world governments attempt to choose debt and taxes such that taxes (on consumption or income) are smoothed over time. The aim of such a strategy would be to avoid the extra distortions (apart from the distortions that are inevitable and inherent in the tax for example a labour income tax influences the choice of how much and when to work) likely to arise from volatile tax rates over time. The tax smoothing approach yields according to Barro (1999) two important policy implications. Firstly, a temporally high government expenditure leading to a budget deficit should be financed by borrowing rather than current taxation. Secondly, budget deficits should be high at times of temporary economic emergencies and be negative in economically sound environments. If public spending does not fall in good times then this would necessitate raising taxes, which would make tax smoothing impossible. None of the above mentioned arguments takes into account the federal nature of governments and the special problems this creates with respect to taxation, debt and expenditures.

It has been observed by many commentators [see Ter-Minassian (1997), Brixi and Schick(2002) among others] that world wide there is a growing tendency to decentralize expenditure responsibilities (i.e. make sub national governments more responsible for expenditures) while such a tendency is less obvious in the case of revenue raising responsibilities. This has tended to increase the mismatch between revenues and expenditures at the sub national level (many times referred to as the vertical gap). An added dimension of the problem is the presence of a horizon gap (which in fact also may be rising in some under developed countries possibly due to economic reforms) among sub national governments arising due to differences in fiscal capacities. Federations have always depended on some forms of inter governmental transfers to bridge both these gaps. These inter governmental transfers involve both tax sharing and a system of grants. The design of these transfers is one of the most complex aspects of fiscal federalism and has a profound influence on both the efficiency and distributional objectives of government policy. Given the increasing decentralization of expenditures these transfer mechanisms are under increasing stress in terms of their ability to deal with vertical and horizontal gaps. If the inter governmental transfer mechanism is unable to adequately deal with both these gaps then sub national governments are forced to depend increasingly on debt to finance their expenditures. Ter-Minassian and Craig (1997) have argued and we quote:

“The growth of sub national debt is frequently a symptom of an inappropriate design of intergovernmental fiscal relations in the country in question, involving, for example large vertical or horizontal imbalances or a system of inter governmental transfers lacking transparent criteria and conducive to ad hoc bargaining or ex post gap filling.” pg. 156.

Sub national governments are responsible for providing many services that require large investments. These capital expenditures cannot, in most cases, be met from current revenues (the problem is further accentuated if the design of inter governmental transfers is faulty) and so the need to borrow is overwhelming. If the ability of sub national governments to borrow is limited or curtailed then they would be forced to undertake capital expenditures only when they are able to accumulate the required resources. This would mean a considerable postponement of the provision of services (especially infrastructure services). Thus there is no doubt that prudently used debt can help sub national governments provide these services in a shorter time span.

The issuance of debt makes it possible to allocate tax receipts in the future for principal and interest payments, which allows the sharing the burden of these expenditures with future generations. If debt is being used to finance the creation of long-lived assets (infrastructure) then it makes sense for this debt to be of fairly long maturity.

There of course is the real possibility that sub national governments may need to borrow to finance even current expenditures. This could be true for various reasons including improper design of intergovernmental fiscal transfers and imprudent debt management in the past. In such a situation borrowing should be of very low maturity, as no long-lived asset is being created with the creation of a liability (debt).

The decision of whether to borrow (raise funds today that will be paid back some time later with interest) or not, is a difficult one for all agents in an economy given the uncertain nature of future outcomes. For national governments this decision has various added dimensions because of their power to tax, print money and control the banking system and credit markets.

This makes the debts of national governments in local currencies to be considered risk free (in terms of defaults on payments of interest and principal). Sub-national governments do not possess any of these powers and their debt is also considered to be risk free only to the extent that it is explicitly or implicitly guaranteed by the national government.

The issue of fiscal sustainability is generally discussed in terms of the laws of motion of government debt over time. On its balance sheet the debt build up of a sub national government arises from the difference between the primary deficit (difference between non interest government expenditures and government revenues) and interest payments.

If we represent the stock of government debt at time t by D_t , government expenditures (other than interest payments) at time t by G_t , the tax revenue by T_t , and the interest rate on government debt by r , then we can write the law of motion of debt as:

$$D_t = (1+r) D_{t-1} + G_t - T_t.$$

State governments can take administrative steps to curb expenditures and thus the primary deficit but interest payments are an outcome of past decisions and they can under normal circumstances be changed very slowly. Cohen (2002) defines solvency of a government as follows: "...a government is solvent if and only if it is able to generate in the future a stream of primary surpluses that are sufficient to repay (in present value terms) the stock of outstanding debt it has inherited from its predecessors." (pg. 145). Algebraically (assuming zero growth rate of revenues and a constant interest rate) it can be shown that a government will be solvent if the present discounted value of debt is zero. So long as the government can have a primary surplus that ensures that this condition will hold it can always find investors willing to refinance it. If we allow the revenues and expenditures to grow at a fixed rate and assume that the interest rate is higher than the growth rate then, the solvency condition implies debt should not be growing faster than tax receipts. In other words the debt to tax revenue ratio should be bounded.

In a sub national government context the counter part of tax receipts would be disposable revenue i.e. own revenue plus unconditional transfers from the center including grants that are not tied to particular projects. Herein possibly lies the principal difficulty in making an assessment of the fiscal sustainability of sub national government debt. A large part of sub national government revenues arise from fiscal transfers from the national government in the form of tax sharing and grants. If these transfers are not based on transparent criteria and are largely determined by ad hoc bargaining or a gap filling approach then the long-term movements of the resources available to sub national governments become less predictable. In addition if these transfers, especially the grants, may be influenced by political factors (see Grossman 1994), which in turn may be inherently unpredictable. Consequently a ratio-based approach to sustainability is likely to be of limited relevance unless all governmental fiscal transfers are completely transparent and predictable. In fact if resources available to sub national governments are largely unpredictable then even a well functioning secondary market for government securities would find it difficult to efficiently price sub national debt. This would be because of the inability of market participants to resolve the uncertainty surrounding future resources available to the sub national government leading possibly to excess volatility in prices of sub national government debt. In such a situation some system that limits and monitors sub national government debt becomes imperative. Ma (2002) has pointed out that many countries have set up a system for monitoring (through recording and assessing on a continuous basis) sub national government fiscal risks. The attempt is to set up a kind of an early warning system such that corrective action can be initiated in time.

The question of sustainability takes on an added dimension if the pension system for sub national government employees and small saving schemes involve the creation of a non funded debt owed by the state government. Such "pay as you go (PAYG)" systems can come under financial stress because of a very diverse set of reasons like demographic trends, general mismanagement of state government finances and cyclical downturns afflicting the economy. Pennacchi (2002) has suggested that there is an urgent need to move immediately to fully funded and well-defined contribution plan.

Like all debt contracts the debt of sub-national governments are plagued by agency problems. Noel (2000) argues that the nature of the agency problems differ according to the identity of the entity to which the sub national government is indebted. Consider first loans that sub national governments receive from the national government. In a federal set up it is very likely that the system of inter governmental fiscal transfers is such that the national government

transfers funds to sub national governments in the form of both capital grant allocations and loans. Loans from the national government are subject to what Noel calls an “ex post efficiency risk”. It arises because of a lack of incentive for the sub national government to exert adequate effort while under taking the project financed by the loan. This lack of incentive in turn arises because of the inability of the national government to make a credible threat of not refinancing debt. There is also the possibility that the sub national government may use the proceeds of the loan to fund activities other than those targeted by the loan in the absence of a good monitoring mechanism.

In the case where sub national governments borrow from private financial intermediaries and investors they may have an incentive not to repay the loans because of a belief that they will be bailed out by the national government, which results in moral hazard. Moral hazard in a federal system can arise through deficiencies in the decentralization system (i.e. partitioning of rights and responsibilities between the national and sub national governments), the design of the fiscal transfer mechanism and in the structure of the financial system. The problem is further accentuated if the financial intermediary, who lends to the sub national government, is owned by the national government. Moreover sub national governments may conceal information about themselves and the project financed by the loan to the lenders, giving rise to adverse selection. Added to this is the problem that arises because of weak accounting practices. This undermines both the quality and reliability of information made available by sub national governments. Generally speaking sub national governments rarely have adequate accounting frameworks that allow scientific asset-liability management. Consequently, it is difficult to take informed decisions regarding the maturity structure and interest rate of borrowings.

Given these constraints, Noel argues that agency problems can be considerably reduced in a system where the threat of non-refinancing is credible. This he argues can be achieved if the national government only makes capital grant allocations (through a system which uses transparent economic allocation criteria and has in place a good monitoring system) to sub national governments, which can finance only a part of the investment project. For the rest of the outlay the sub national governments should be forced to borrow from private financial intermediaries and investors, without an explicit or implicit guarantee from the national government. This line of thinking seeks to transfer the responsibility of disciplining sub national governments to financial markets. Lane (1993) has suggested that the following conditions need to be met if financial markets are to be expected to discipline sub national government borrowing:

- (a) There should be no regulation or legislation regarding financial intermediaries that puts sub national governments in a privileged borrower position.
- (b) Information about repayment capacity and outstanding debt of sub national governments should be available to all investors.
- (c) There should be no explicit or implicit guarantee by the national government of the sub national government loans.
- (d) The institutional structures should be such that there exists policy responsiveness to market signals and sub national government national governments should be warned well in advance before they reach a situation where they are unable to tap the market for more loans.

It is only under these circumstances that price of debt would reflect the net worth of various sub national governments. These are extremely stringent conditions that are very unlikely to be met in any under developed country and also in many developed nations. Condition “c” above is rarely met in any country developed or under developed because of the absence of a unambiguous legislation stating that sub national debt contracted through the market or with financial institutions (including banks) is not guaranteed by the central government. Or alternatively, the absence of a legislation that clearly sets out conditions under which (and this should be an extremely restrictive set of conditions like a natural calamity) under which sub national debt is implicitly guaranteed by the central government.

Another factor that re-enforces the impression that sub national debt is always guaranteed by the national government is the absence of a legislation or framework for sub-national government bankruptcy. If there exists considerable ambiguity about procedures to be adopted if a sub national government defaults on its debt (owed to creditors other than the national government), then this tends to reinforce the belief that the national government would bail out the sub national government. Assuming that under no circumstance lenders will be willing

to write off the debt completely, there clearly will be a need to restructure the debt. This will be difficult because of what Schwarcz (2002) refers to as the problem of “collective action”. All the creditors and the sub national government in question may find it difficult to agree to a restructuring plan. Schwarcz advocates a legal solution to this problem and argues that a properly structured bankruptcy law for sub national governments would in principle solve most of these problems and help the formation of an orderly and efficient market for sub national debt. This law should set out a clear framework that would govern the relationship between the defaulting sub national government and its creditors. Unlike bankruptcy laws meant for private firms which allows both debt restructuring and liquidation the bankruptcy law for sub national governments would aim at achieving a debt restructuring solution. The reason is obvious, liquidating a sub national entity is out of question.

Schwarcz makes the analogy between bankruptcy laws pertaining to private firms, in order to emphasize the possibility that like a basically healthy private firm can experience financial distress because of high debt so can a potentially healthy sub national government. In this case bankruptcy laws advocate a restructuring for the concerned firm. If on the other hand the financial distress is due to an essentially bad investment decision then the law requires liquidation. This option is of course not relevant for sub national governments so the legal solution aims at providing incentives for creditors with possibly diverging interests to reach a voluntary understanding on the terms of restructuring the sub national debt. The aim of such a legal framework would be economic rehabilitation of the debt ridden sub national government. Schwarcz’ legal solution involves the following procedures. Firstly, the sub national government (and not its creditors) must be free to decide when to commence a debt restructuring proceeding. Secondly, once such a proceeding begins an automatic stay should suspend repayment of the sub national governments debt until a restructuring plan is agreed to. The restructuring plan would necessarily involve issuance of more debt and this new debt should be given an unambiguous priority over other creditors. This scheme Schwarcz argues is likely to be successful in overcoming all the problems with sub national debt alluded to earlier by strengthening the credibility of the national governments threat of not bailing out sub national governments.

Shah (2004) has pointed out that only two developing countries (South Africa and Hungary) have regulatory framework for declaring local government bankruptcy. In no other country do such legislations exist and Schwarcz’ arguments should merely be seen as a potential legal backdrop which would ensure that markets would in fact discipline sub national government borrowings.

Petersen (2001) has pointed out an important legal consideration for classifying various types of sub national debt is whether the obligator is the sub national government itself, or some other legal entity. If the obligator is the sub national government itself, then, implicitly it pledges its tax and non-tax revenues. This is also referred to as a “General Government Obligation” because the government uses its general revenues to support interest and debt service payments. In this case, neither the assets created from implementation from the project nor revenues arising from the project are specifically tied to the repayment of the debt and the interest there on. On the other hand one can have a situation where only revenues arising from the implementation of a particular project are pledged towards repayment of interest and principal. This is called a “Limited Obligation” type debt. In most under developed countries the “General Government Obligation” type debt is the most common. If sub national governments are to be forced to depend on the market for loans then it seems logical to favor the “Limited Obligation” type debt because in this case the only information that investors would have to evaluate while buying (or selling) the debt would be related to the implementation of the project and its revenue earning capability. They would not be forced to take a view on the entire fiscal situation of the sub national government, as would be the case in a “General Governmental Obligation” type debt.

In the context of under developed countries the securities markets in general are likely to be under-developed. If sub national governments have to be forced to turn to the market to raise debt then market institutions need to be strengthened. Both the primary and secondary markets would have to be developed. In the primary markets procedures relating to auctions and on tap issues would need to be established. The auction market is a system by which securities are bought and sold at the best possible price through competitive bidding. This way of selling securities allows the market to determine the yield on securities and helps establish the coupon

rate. An On-tap issue on the other hand is a system where after the initial primary auction the issue remains open to yet further subscriptions. The time period over which the issue would remain open can either be pre announced or cover a period until pre announced volume is sold. For a continuous price discovery process, which responds to new information and proves to be a disciplining force on sub national governments, an efficiently working secondary market is of utmost importance. Given that in under developed countries capital markets in general are under developed both these markets may not exist. Moreover, traditionally interest rates on sub national debt may have been administratively determined and the movement towards a market determined interest rate regime might possibly be achieved only over an extended period, if at all.

This basically rules out complete reliance on the market for disciplining sub national borrowing. Ter-Minassian and Craig (1997) have enumerated three other methods that have been frequently used to control sub national borrowing. First, they mention the "Co-operative Approach to Debt Controls. In this system the limits to sub national debt are set by a process negotiation between the national and sub national governments. It is intended that through such a process sub national governments are consulted in evolving national macroeconomic objectives and are also made aware of the fiscal implications of these objectives. An advantage of such an approach is that it facilitates the exchange of information between various levels of government and it makes the policy makers at the sub national levels aware of the national implications of their policy choices. Ter-Minassian and Craig (1997) claim that such a system is most likely to work well in countries (for example the Scandinavian countries), which have a "culture of fiscal discipline". The next system is "a Rule based Approach to the Control of Sub-national Borrowing". A large number of countries (such as Germany, Spain and Japan) and have used this method through legislations. In some cases these legislations specify limits on the absolute of indebtedness of sub national governments or set rules, which regulate to what use funds raised through debt can be used. In some other cases these rules set limits based on a maximum allowed debt service ratio. A rules based approach has the advantage of being completely transparent but at the same time it suffers from inflexibility. There is also the possibility that it may encourage sub national governments to adopt practices aim at working around the rules. These practices could include fostering off budget expenditures and debts and building up arrears to suppliers, which are difficult to detect or monitor, but would have an impact on debt ceiling calculations. To counter this the rules based approach needs to be backed up by a sound and uniform accounting standard for sub national governments, which sets strict limits on off budget expenditures and debts. The third approach to controlling sub national debt listed by Ter-Minassian and Craig (1997) involves "Direct Controls of the Central Government over Sub National Borrowing". These controls may take many forms such as stipulating annual limits on over all debt, a formal procedure of authorization of planned borrowing and ex post monitoring. A very serious problem that may arise in such a system, especially in a democratic set up, is that politically it may become almost impossible for a national government to refuse to support a sub national government in the event of an impending default.

In a democratic set up an additional problem that arises is that one government (the political party in power) can threaten the solvency of its successors by bequeathing them an unsustainable debt, which arises due to what is called "fiscal populism" [the most celebrated analysis is by Buiter (1985) in context of a national government]. The increasing decentralization of expenditure responsibilities has in fact made such "fiscal populism" a feasible strategy to win elections and retain public office. One method tried in some countries (including India) to curb fiscal populism is to encourage sub national governments to pass what is called a "Fiscal Responsibility Legislation" (FRL). The FRL generally involves setting a constraint on a fiscal indicator (like the deficit or debt) at the sub national level. Such legislations restrain individual sub national governments from excessive deficits and enable all the sub national governments to agree not to run excessive deficits. Shah (2004) describes an FRL basically as a commitment device that limits the actions of sub national governments. Shah argues that it is too early to come to a definitive conclusion about the success or failure of FRLs because only a few developing countries have used them. According to Shah the available data on developing countries that have enacted FRLs suggests they are more likely to be successful when the sub national governments do not have a large debt problem to begin with. As a result, wherever required, a sub national debt restructuring program must precede the FRL. How well the FRL works as a commitment device depends on other institutional arrangements as well. For example

a faulty inter governmental fiscal transfer mechanism would be a big impediment to the success of a FRL. If the national government itself has not enacted a FRL for itself the sub national governments would lack to incentive to both enact and be bound by the FRL. Unless the national government sets a good example for fiscal prudence FRLs have little chance to achieving anything at the sub national level. Thus enacting FRLs alone are unlikely to over come the problems of “fiscal populism” and the ensuing sub national debt overhang. Webb (2004) studies the Latin American experience regarding FRLs. He argues that from the Latin American experience it is obvious that “FRLs are neither sufficient nor necessary for achieving fiscal prudence” (p16). Webb emphasizes the importance of the institutional framework (other than the FRL) within which sub national governments operate and the incentives therein for fiscal restraint.

In all the above mentioned systems of control over sub national government debt, uniform accounting standards and classification of expenditures is an important pre requisite to the success of the system. An added complication to the non-transparency of accounts maintained by sub national governments is their treatment of contingent liabilities. It is important that the sub national governments are able to identify possible sources of financial stress in the future. Contingent liabilities are fiscal risks that are realized when uncertain events occur. It is common for sub national governments to enter into arrangements with private sector enterprises or public or co-operative sector enterprises to build/own or operate projects. The sub national government may provide equity funding or subsidies or guarantees related to demand for output, supply of inputs and on debt of the enterprise. Such obligations are of the form of contingent liabilities and are not directly reflected in the budget (they are many times referred to as off budget items) of sub national governments. If any of the projects financed on this basis runs into financial trouble the state government would be called upon to pay up. Cohen (2002) has argued that governments potentially have two ways to dealing with contingent liabilities. Firstly, the government could just wait till the contingent liability becomes an actual liability (i.e. in case of a guarantee wait till it is actually exercised) at which point debt can be raised by the extent of the guarantee. As contingent liabilities have (if at all) to be met at an uncertain future date, in a democratic set up this may be the preferred method as it would, under all probability, be a different government that would have to deal with the situation.

Secondly, the government could set up an independent trust fund that would itself have a limited liability. At the first stage when such a fund is set up it would need to have a capital base that is equal to total contingent liabilities of the government. This would have to initially serve as an upper limit on the extent of contingent liabilities that a government can undertake. If the contingent liabilities have to be increased then the government would have to contribute more to this trust fund either by raising more taxes or debt. In either case the government would be forced to report the costs involved and also internalize them in its decision-making.

III. *The institutional setup in India*

The basic structure of the Indian constitution is federal with some important unitary attributes. There is a distinct unitary attribute with respect to powers of taxation (tax on income other than agricultural income, customs, excise duties, corporation tax among others are taxes which the center levies) while the expenditure responsibilities (especially with respect to law and order, public health, sanitation, roads and bridges, agriculture, water supply and irrigation, urban services among others are the responsibilities of the states) display the essential federal structure of the constitution. Vithal and Sastry (2001) argue that in this situation both adequacy (i.e. sufficient resources being available to state governments for them to be able to carry out their constitutionally determined expenditure responsibilities) and elasticity (i.e. growth of resources in response to growing needs of state governments) are essential elements of federal finance in India. A feature of Indian States that further accentuates difficulties faced in devising such a transfer mechanism is the wide variation in the endowment of resources (natural, economic and human) and general levels of economic development achieved by states over the years.

The constitution has created the institution of the “Finance Commission” to look into the rules by which the proceeds of taxes are to be shared between the center and various states, and, the principles that should govern the grants in aid given to states by the center. The workings of the various finance commissions have been subject to continuous and intense scrutiny. Hemming, Mates and Potter (1997) have argued that “Not only does the grant system

still leave vertical imbalances – which necessitates borrowing-but also does not fully address horizontal imbalances among states”(Pg. 533).

Rao (2000) opines and we quote: “In spite of the many contributions by the Finance Commissions (FCs), it is necessary to admit that 50 years of experimentation has not been very successful in designing an equitable and efficient transfer system in India. Although the transfers recommended by the FCs have shown a progressive pattern, it would be incorrect to conclude that they have substantially impacted to offset revenue and cost disabilities. More important the transfer system has failed to promote prudent fiscal management at both central and state levels.” (pg. 158).

The Planning Commission, which was created by a resolution of the government of India in 1950, on the other hand decides on the Plan Assistance given to states. In the early 1950s the Planning Commission was responsible for over 65 percent of the total transfer of resources from the center to the states. Currently both these bodies account approximately for one half each of the total transfers. In a recent study by a team of World Bank economists it has been pointed out and we quote: “The emphasis on enlarging the aggregate size of State Plans and the system of financing such plans through a package of central grants and loans, plus loosely controlled domestic borrowing, has fed into a spiral of debt accumulation by states, unrelated to the debt bearing capacity of each state.”[World Bank (2004) pg. 63].

Rao (1997) has pointed out that one of the major flaws in the design of inter governmental transfers is the substantial violation of horizontal equity due to invisible transfers. These invisible transfers arise due to subsidized lending to states, subsidized credit to the private sector and inter state tax exportation. Rao restricts his analysis to invisible transfers arising from subsidized borrowing by states over the period 1980-81 to 1994-95. He finds that the effects of this single source of invisible transfers was so large that it in fact completely swamped the increase in progressivity of the explicit transfers. The entire inter governmental transfer mechanism has thus been unable to deal with issues of equity effectively.

Khemani (2003) studies inter governmental transfers in India over the period 1972-95. The study reports two extremely significant findings. Firstly, resources allocated among states by the planning commission are more influenced by political factors. Those states which have governments formed by the same party which is power at the center receive funds from the planning commission which are ten percent higher than the sample average. Secondly as regards the finance commission transfers (referred to as statutory transfers) no such difference is discernable. The planning commission transfers are more discretionary and thus open to political manipulation. Such manipulation seems to be not possible with respect to the finance commission transfers. Khemani concludes that constitutional rules that determine resource transfers from center to the states have a profound influence on the allocation outcome.

Singh and Vasishta (2004) attempt to identify the determinants of the actual inter governmental transfers (of both the Planning Commission and Finance Commission) in India over the period 1983-84 to 1992-93. They find that states with greater bargaining power or those that were politically more important and influential tended to receive larger per capita transfers and that the transfers of the Planning commission had more temporal variation. There thus is a general recognition among scholars that the inter governmental resource transfer mechanism has major flaws and needs to be revamped. Moreover with political factors playing a major role in the transfers it makes prediction of the amount of transfers received by states (and thus their ability to repay loans) in future periods extremely difficult.

Ahluwalia (2000) has persuasively argued that inter state disparities in growth rate of State Domestic Product (SDP) and other measures of economic development have increased pretty sharply after the reform of 1991. This is likely to put the entire federal transfer mechanism both in terms of adequacy and elasticity under considerable stress. The problem is further accentuated by the fact that the central governments fiscal situation itself has badly deteriorated in recent times. If the delivery of public services has to be carried out smoothly and their level enhanced over time, then the fiscal stability of state governments is critical. The fiscal stability of state governments is a function of both their current revenues and expenditures and the way in which they manage their debt.

The Constitution of India, article 293, allows state governments to raise loans upon the security of their respective consolidated funds subject to some conditions. Though overseas borrowing by state governments are banned there are no aggregate limits on domestic borrowing.

In case the central governments has advanced a loan to a state which is outstanding then that particular state is barred from taking any fresh loans without the consent of the central government. In addition, the central government is empowered by article 360 to declare a financial emergency if financial stability of a state is seen to be threatened. There is no constitutional definition of what constitutes financial stability and this term is open to a variety of interpretations. By declaring a financial emergency the central government is empowered to take over and completely control the taxation and budgetary revenue processes of a state government. To date this provision of the constitution has never been used and there is a large amount of ambiguity about the course of action if a state government actually defaults on its loans. The fact that many state governments have debt levels that may be unsustainable implies that the central government has not exercised effective control over state government borrowing.

State governments in India raise debt from various sources. We describe them in turn.

Ways and Means Advances (WMA): These are short-term (typically for three months) loans provided by the Reserve Bank of India (RBI) to enable states to bridge gaps that could arise for short periods between expenditures and receipts. RBI makes these loans while fulfilling its role as banker to the state governments. The aim is to prevent short-term expenditure and revenue mismatches from causing a disruption in the activities of state governments. Generally speaking these are not considered to be a part of the debt of states as these advances have a life of less than a year. It has been pointed out that many states continuously maintain an overdraft position so such over drafts should in certain cases be considered a part of state debt. From time to time the RBI has been revising the rules and procedures to be followed with respect to these advances. Recently a revised scheme has been put into effect since March 2003. The rate of interest on these advances has been fixed at 6 per cent for a period upto 90 days and one percent above the Bank rate for periods exceeding 90 days. In what follows we continue with the convention of not considering these advances to be a part of states' debt.

Loans from the Central Government: This accounts for the largest proportion of the total loans of states (and their total liabilities). Large part of these loans arise in the process of inter Governmental fiscal transfers through the planning commission. These are loans that are combined with grants that are given to state governments to finance state plans. These loans are largely formula based and thus may have very little to do with a states borrowing capability. In 1969 it was decided by the National Development Council that each state would receive 30 percent of total central assistance provided on account of the state plans every year, as a grant and the rest 70 percent as a loan. For the special category states (these are all states other than the 14 major states) since the Fifth Plan the pattern of assistance was 90 percent grant and 10 percent loan. Such a system has lead to an accumulation of debt as a consequence of the planning process. Apart from this there are ad hoc loans provided to states under special circumstances.

A large part of these loans arise through the process of transfers of resources to state governments from the center and not from a commercial relationship. The principal difficulty arises because plan size (which determines the size of loans from center) has never been linked to sustainable levels of state debt. No state government can or does refuse to take these loans because it does not see itself in a position to repay the loans nor does the central government refuse to give loans to state governments whose financial position is weak. Gupta (1992) has aptly summarized the situation as follows and we quote:

"Legally the states are under no obligation to ask for or accept loans from the Union Government. But factually the states are not in a position to exercise their legal freedom to decline Union loans. They can, dare not, forego to undertake the development projects in the States, and are, therefore, willingly compelled to accept the Union loans with or without strings attached to them. And once they accept the loan the process becomes unending. This makes states dependent on the Union and, in a sense; it amounts to infraction of State autonomy. But such has become the logic of Union-State fiscal relationship that the Union can neither refuse to give loan nor can it bring a distress warrant against the States." (Pg. 255-256).

These loans have at least to be partly serviced (interest and principal) from the funds received by states in terms of grants in aid or tax shares from the center (i.e. transfers arising from Finance Commission recommendations). The center thus is taking back as interest and debt

service, funds that are being transferred to the states. Both the creation of the debt is partly formula based and transfer of resources to states is also partly formula based. If these formulae are creating debt for states with no consideration of their repayment ability then the emergence of a fiscal crisis for some states on this count may be unavoidable. This would be especially true in a situation where the dispersion of states' ability to repay loans is increasing due to an increase in the dispersion of growth rates of state domestic products.

The rate of interest on loans from the center (both plan and non plan) had registered a steep rise from 7.5 percent in 1984-85 to 13 percent during 1995-1998 and more recently it has come down to 10.5 percent. These interest rates had been administratively fixed and to the extent the borrowing was formula based, states did not have the ability to refuse these loans because they were too expensive.

The Sixth Finance commission was asked into look into the debt position of states especially with respect to the debt owed to the central government. Though a general write off of debt owed to the central government was frowned upon, the commission did ultimately recommend a debt relief package that involved writing off of debt both in terms of a uniform write off for all states and a more selective write off which differed across states. Various succeeding finance commissions have recommended such write-offs in one form or another. The aim of all such debt relief measures is to ensure debt sustainability. For example the Tenth Finance commission introduced a scheme of general debt relief for all states that was linked to fiscal performance. An improvement in the ratio of revenue receipts to revenue expenditure was used as an index of fiscal performance. The relief was formula based subject to a maximum of 10 per cent of the amount due for repayment in any given year. The eleventh finance altered the formula slightly and enhanced the maximum eligible debt relief to 25 per cent of the amount due for repayment in any given year. The eleventh finance commission has estimated that the total relief would amount to Rs. 600 or Rs.700 crores over the entire period 2000-2005. The Union budget 2003-2004 has introduced a debt- swap scheme, which allows states pre pay the high interest rate debt owed to the center by swapping it with market borrowings and small saving proceeds at prevailing interest rates over a three year period ending 2004-2005.

The twelfth finance commission has suggested some drastic changes relating to debt position of states. It has recommended that outstanding central loans to states be consolidated and rescheduled for a term of 20 years at a rate of interest of 7.5 percent. This consolidation and rescheduling has been made subject to a state enacting a fiscal responsibility legislation, which should aim at completely eliminating the revenue deficit by 2008-9. The commission has also recommended a debt write off scheme, which is linked to a reduction in the revenue deficit of states. The commission has estimated that that these measures would imply a relief to states of Rs.21276 crores in terms of lower interest payments and Rs. 11929 crores in repayments. The commission has also estimated the maximum write off possible (assuming that all states are able to reduce their revenue deficits to zero) to be Rs. 32200 crore over five years. This is a huge increase in debt relief compared to what the earlier finance commissions had provided. The commission has also recommended that the center should not act as a financial intermediary for states and has encouraged them to borrow from the market directly instead. This implies that all the fiscal transfers (including plan assistance) would take place only in the form of tax sharing and grants. Thus the importance of these loans is expected to fall substantially over the next five years and over the next twenty years when the rescheduled debt is finally repaid this type of loan would cease to exist altogether.

Many of the agency problems motioned in the earlier section would be relevant with respect to these loans. The twelfth finance commission has rightly targeted these loans with a reform package. This is without doubt a move in the right direction.

Loans from Banks and Financial Institutions: States also raise loans from banks and financial institutions such as Insurance Companies, NABARD, IDBI, HUDCO etc for financing specific developmental projects. The states need to take approval from the center to take these loans. The interest rate charged by these financial institutions is arrived at through a negotiation process and in many cases is rather high compared to other loans. These loans are in principle purely commercial transactions and presumably while making the loan the lenders treat states as any other commercial borrower whose repayment ability is the most importance consideration in both the sanction of the loan and the interest rate charged thereon. The banking sector reforms in

India have aimed at strengthening the screening and monitoring abilities of banks. To the extent that banks have a natural advantage in performing both these functions, it would be a great advantage for all concerned for these types of loans to increase for at least two reasons. Firstly, the project being financed would be screened and if found suitable financed by the bank and further more its progress would be monitored. Secondly, the very fact that a bank finances a project would indicate to investors in general the health of a particular states finances. One major difficulty that arises in the Indian context with respect to such loans is due to the fact that most of the major financial intermediaries are owned by the central government. This creates difficulties for the central government to credibly signal a non-refinancing commitment in the face of a default. The way forward is to develop conventions that reinforce the credibility of the non-refinancing threat by the central government actually refusing to do so. If this is politically difficult then reducing the governments stake in the financial intermediaries, including banks, is the only way out.

Market Loans: The market-borrowing program of states is determined through a consultative process, which includes the planning commission, the RBI and the state government. Repayment ability of states most certainly would be a prime consideration but the entire process is rather non transparent and factors that determine the size of the market-borrowing program of states are not completely known to parties outside the consultative process. Generally speaking, the entire market-borrowing program of the state governments was conducted by the RBI at a common fixed coupon rate. Such a pooled borrowing program was thought to be unfair to some states who were possibly capable of borrowing on their own standing at a lower rate of interest. In January 1998 the first auction of a state government stock was held and the government of Punjab raised Rs. 60 crore through a 10 year stock. Later in the same year the Governments of Goa, Andhra Pradesh and Uttar Pradesh offered to sell 12.5% State Development loans on tap. In 1999-2000 formal regulations were put in place that allowed some states to borrow on their own standing to extent of 5 to 35 percent of the borrowing program. In table 3.1 we present data that shows that securities are sold predominantly through tap issuances and marginally through auctions.

As a direct outcome of interest rate decontrol and reform of the market for government securities the interest cost of the borrowing for states is market determined and in recent years has come down quite dramatically. In table 3.2 we present the weighted average yield of state government market loans. This yield is calculated on the basis of data pertaining to the secondary market prices of these securities. The downward trend is obvious. In table 3.3 we present the percentage of outstanding state government market loans with a maturity of less than 5 years. In general all states have been borrowing at lower maturities in recent years. This could be due to the fact that the market is aware that these borrowings are not necessarily being used to create long-lived assets. The falling yield could also be explained at least partly by the shortening maturities. In table 3.4 we present the interest rate profile of the state government stock of market loans. This represents the price to the governments. There is a distinct shift to an interest rate lower than 7 percent in 2004. Though data for each state government is not available on an average the interest cost of loans raised through the market has come down quite substantially.

The securities issued by the RBI on behalf of the state governments are held mostly by banks as a part of the Statutory Liquidity requirements which currently stands at 25 percent of demand and time liabilities of a bank. This market is thus as yet not completely governed by market forces. These requirements put state governments in a privileged borrower position vis-à-vis other borrowers. This vastly diminishes the extent to which markets can be expected to discipline state government borrowing. The abolition of the Statutory Liquidity Requirement for banks seems extremely unlikely in the immediate future though there are clear indications that it may come down substantially. We do not as yet have in place accounting standards that made it easy for investors to make an informed guess about the net worth of state governments. Moreover, how a situation of default of loans by a state government is going to be dealt with is extremely unclear. As things stand none of the four prerequisites outlined by Lane (1993) and also the legal framework required for the financial markets to exert a disciplining force on state government borrowing are met. Given these facts it would be extremely unrealistic to expect the market to discipline state government borrowing effectively. Any reform measure that envisages dramatic rise in market borrowing by states is likely to be a risky course of action unless explicit limits to borrowings are clearly prescribed.

As a direct outcome of the recommendations of the twelfth finance commission the importance of market loans is likely to increase in the coming years. The commission has not adopted a rule-based approach to setting limits on state government borrowing. The commission has recommended that overall annual borrowing limits on state governments (from all source including market loans) should be decided by an independent body like a "Loan Council" comprising of representatives from Ministry of Finance, Planning Commission and the Reserve bank of India. It is not immediately clear how this is different from the current consultative process in force for this purpose. A major criticism of this system is that it is completely opaque and easily influenced by political considerations. With an increased dependence on the market, the limits on loans should be decided on the basis of a "Rule Based approach". It is important to point out that the fiscal targets set out by the commission are in terms of ratios. For example, the commission recommends that the long-term goal for center and states is to achieve a debt to GDP ratio of 28 percent and the target for interest to revenue receipts for states is 15 percent by 2009-10. The commission does not recommend an explicit rule based approach (based possibly on similar ratios) to unambiguously determine annual limits on borrowings for states. Though there can be lots of immediate operational difficulties involved in immediately moving to such a system, the commission does not even make a recommendation to move to such a system in the medium to long term. It has completely over looked the fact that any recommendation that makes states more dependent on market borrowing needs a rule based approach to incremental borrowing in the absence of conditions that enable markets to effectively discipline state borrowing. This can be considered to be a serious shortcoming of the commission's recommendations.

Loans from Small Savings Collections: Another part of loans from the central government include loans raised through the Small Savings Schemes and Provident funds which is repayable over twenty years. A National Small Savings Fund (NSSF) has been established in the Public account of India with effect from 1.04.1999. All small savings collections (Kisan Vikas Patra, National Savings Certificates etc including Public Provident Fund) are credited to this fund. All withdrawals on account of the small saving schemes are also made from this fund. The balance in the fund is invested in central and state government securities as per norms prescribed from time to time. Before 2002-2003 the states share was 80 percent of the net collections. Since 2002-2003 all the net collections are being invested in state government securities. In this case too the center has no control on the extent of loans raised as they depend on the contributions of the residents to a state to various small savings schemes. Even though the center has no control over the extent of loans the responsibility to repay the investors in these schemes remains with the center. These loans too are some sense formula based and there is no consideration given to repayment ability of states. The interest rates on these schemes are administered and have been historically kept above the market interest rate.

Given that there exists an explicit central government guarantee on these loans all the agency problems discussed earlier would become relevant. Moreover all these saving schemes have various income tax incentives and thus any change in the status of these schemes and the incentives faced by investors wanting to invest in these schemes is linked to the over all personal income tax reforms.

Loans from State Provident fund: This is a provident fund scheme for state government employees where the state government does not contribute to the principal amount but pays cumulative interest. A certain portion of the salary of employees is deducted as contribution towards Provident fund and credited to the public accounts. Employees are allowed withdrawals, under specific rules, and the state government pays the employees a lump sum (contribution plus cumulative interest) on retirement. This is an unfunded debt and is a vital part of the state governments public accounts. In most states the receipts are more than disbursements. This surplus is used by the respective state governments to fund various expenditures. On an average the interest rate on these loans is about 10.5 percent. In this category too ability of states to repay the loans is of no consideration and the center has no control over the amount of loan. An urgent reform of the state provident fund is needed. Only a fully funded contribution plan, possibly with a small guaranteed pension, can reduce the burden of these expensive loans.

We now turn to an aggregate description of the nature of state government debt in India. We present in table 3.5 an aggregate view of the composition of total state government debt

between 1991 and 2003. The total debt of states has increased more than 6 times at current prices. The composition has changed dramatically over this period. Internal debt includes market loans, loans from banks and financial institutions and Special securities issued to NSSF. Total internal debt has risen dramatically from 1991 to 2003 from 17.2 % to about 25.6 percent of total debt. We do not have access to information on the breakup of internal debt between market loans and loans from banks and Financial Institutions. Prasad, Goyal and Prakash (2004) report that market loans increased from 14 per cent in 1991 to 17.5 percent in 2002 of total debt.

Loans from banks and financial institutions increased from 2.6 per cent to 7.5 per cent in the same period. The share of loans from small saving schemes and provident funds have remained rather steady while the share of loans from the central government has dropped significantly from 68.3 per cent in 1991 to 37.8 per cent in 2003. As a whole states were far less dependent on the central government for loans in 2003 than 1991. There of course is considerable inter state variation in the composition of debt across states. Nevertheless loans from the central government remain the single largest source of debt for all state governments. This structure is expected to change substantially over the next five years due to the recommendations of the twelfth finance commission. Due to the commissions recommendations it is expected that the importance of market loans would rise substantially.

The very fact that there is such diversity in the composition of loans can come in the way of implementing reforms. Reform relating to one source will hit some states harder than others making it very difficult to plan a reform program. The benefits of reform would be in terms of better-managed state finances (possibly leading to better provision of services) but unless states can be convinced that the costs involved in the reform process are not abnormally large or unevenly distributed, they are unlikely to back them and herein lies the principal difficulty in bring the states on board this complicated reform process. Notwithstanding this the twelfth finance commission has made major strides in reforming state debt. There of course is the possibility that these forces may slow further reforms in the future.

The debt swap scheme introduced in 2002 can be considered the first major step taken to reform the structure of state government debt. It encourages state governments to swap loans owed to the center with cheaper market loans and loans from small savings. The scheme is in fact replacing an involuntary loan (i.e. a formula based loan not hitherto related to repayment ability) with a loan that is based on repayment ability in case of market loans. In case of loans from small saving schemes a loan owed to the center is being converted with a loan owed to the directly to the NSSF and ultimately to the public at large. This is being done to take advantage of the lower market interest rates but the essential difference in the nature of loans being swapped is being overlooked. The finance commission recommends, as mentioned earlier, various debt relief schemes to states with respect to loans owed to the center. After the debt swap these of course will not be available to the extent that loans from the center declines. If the loans from center decline significantly in relative importance over time due to the current debt swap scheme or schemes announced in the future, and unfortunately some states face a situation where loans from either banks, market loans or from saving schemes and provident funds face default due to a fiscal crisis, then the road out of this situation seems extremely unclear both administratively and legally. Despite the fact that loans from the center are expensive they have a rescue package that the finance commission provides from time to time. None of the other loans have this feature. This of course is of little relevance in the future as the due the recommendations of the twelfth finance commission the center will now transfer resources to the states only in terms of tax shares and grants.

Another reform measure that is expected to have a direct bearing on the debt position of states is the enactment of FRLs in five states (Karnataka, Kerala, Tamil Nadu, Uttar Pradesh and Punjab) as well as the Government of India. While Madhya Pradesh, Maharashtra and Orissa have drafted a bill which is yet to be enacted. There is considerable variation in the exact provisions of the bills across states. Nevertheless, all the legislations impose quantitative and time bound targets on the revenue and fiscal deficits. They also mandate multi-year budget forecasts, which set out a planned movement towards these targets. It is too early to pass judgment on the success or failure of the legislations but given the inadequacies of the over all inter governmental fiscal transfer mechanism and the fact that not all states have enacted such a legislation its immediate influence on the states' debt position is unlikely to be significant.

The recent budget has envisaged a “pause” with respect to the centers own Fiscal Responsibility Legislation namely the Fiscal Responsibility and Budget Management Act 2003. The finance minister has in fact claimed the recommendations of the twelfth finance commission are to blame for this “pause”. The first serious attempt at restructuring fiscal transfers has itself affected the credibility of the centers own FRL. This would without doubt signal to states that their own FRLs and be “paused” when needed. For the FRLs, recommended so vehemently by the twelfth finance commission to be useful, the center first should be seen to be putting a hard budget constraint on itself before the hard budget constraint it seeks to impose of state governments becomes credible.

Contingent Liabilities: The contingent liabilities of state governments in India can be divided into two broad categories: explicit and implicit contingent liabilities. Explicit contingent liabilities are those where there exists a contractual obligation on part of the state government to act if a particular event occurs. Examples include all loan guarantees that a state government provides, while examples of implicit contingent liabilities include failures of inadequately funded provident funds and payments to be made if certain natural calamities occur. The most important component of contingent liabilities of states is loan guarantees (to state enterprises, the power sector and in respect of bonds issued by state public sector enterprises and other Special Purpose Vehicles). The Reserve Bank of India had instituted a technical committee to look into the fiscal risk imposed by guarantees on the state budgets in 1998. As per suggestions of the RBI many states have imposed either administrative or legislative ceilings on the extent of state government guarantees [West Bengal 2001, Assam and Sikkim in 2000, and Rajasthan and Karnataka in 1999]. States like Gujarat (1963) and Goa (1993) have had ceilings well before the RBI suggested these. A large number of states as yet do not have explicit ceilings. The total contingent liabilities of 17 reporting state governments were about 7.5 percent of GDP (about Rs.1,84,294 crore) in March 2004.

The Report of the Group to assess the Fiscal Risk of State Government Guarantees, Reserve Bank of India (2002) has pointed out that currently guarantee fees and commissions charged have no relationship with the underlying risks. They recommend the constitution of a Guarantee Redemption Fund by transferring at least 1 percent of outstanding guarantees to such a fund. The report points out that Orissa had started such a fund as far back as 1969. Gujarat, Andhra Pradesh, Karnataka and Rajasthan have also set up such a fund recently. The mere setting up such funds would only solve only half the problem. What is more important is the way in which these funds are managed and the ways in which risks underlying the guarantees are valued. The twelfth finance commission has also recommended that all states should impose a limit on their contingent liabilities through their FRLs and that states set up guarantee redemption funds.

A good example of the problems that indiscriminate state guarantees can create is the episode that occurred in the first week of January 2003 when the Debt Recovery tribunal in Mumbai authorized the Industrial Development Bank of India and the Industrial Finance Corporation of India to attach the offices of the secretaries of the cooperatives and textiles departments in Mantralaya (the state government head quarters) to recover Rs 50.69 crores in outstanding loans owed by the Sindkheda Cooperative Sugar Factory. The state government had guaranteed these loans. There are reports that even after such major embarrassments the State government of Maharashtra is expected to go ahead with plans to guarantee loans to the extent of Rs. 1500 crores to restructure the debt of 78 sugar co-operatives in the state (Business Standard, 9th January 2003). As recently as 16 th August 2004 the RBI (as reported in The Economic Times 17 th August 2004) has instructed banks to classify state government guaranteed loans and investments which have defaulted (remained overdue for more than 90 days) as “bad loans” and make the requisite provisioning. Prior to this notification such loans were classified as bad loans only if the guarantee was invoked. This was an extremely rare occurrence because majority of such loans were made by Public sector banks and for one arm of the government to initiate legal action against another required the central governments permission. In the recent past loans guaranteed by Bihar, Assam, Uttar Pradesh, and Madhya Pradesh (among others) have faced a default. The new norms would, according to the news report, imply an increase in interest rates charged on loans and bond guaranteed by state governments and banks would no longer voluntarily make such loans or subscribe to such bonds.

What still remain unclear are the implications for state government guaranteed bonds, which are classified as SLRs.

With the Central Government and the Reserve Bank of India not having effective control of the extent of indebtedness of state governments and the extent of their contingent liabilities, a credible fiscal adjustment effort at the national level can potentially be seriously jeopardized by the fiscal crisis faced by some state governments. The budgetary impacts of the twelfth finance commission's recommendations are a clear example of this.

IV. *Emerging empirical patterns*

In this section we provide a detailed empirical description of the state government debt and contingent liabilities. Our focus would primarily be on the sustainability of debt (and contingent liabilities) and inter state heterogeneities in this regard. The source of data are (a) the website of the EPW Research Foundation (b) Handbook of Statistics on State Government Finances, Reserve Bank of India, Mumbai 2004, and (c) The Reserve Bank of India website. Our data pertains period 1991-2004. The data for 2002-2003 is based on revised estimates and for 2003-2004 is based on the budget estimates.

In table 4.1 we present the major deficit indicators of state governments at an aggregate level. What is striking is that the gross fiscal deficit [defined as the difference between aggregate disbursements net of debt repayments and recovery of loans and revenue receipts and non debt capital receipts] as percentage of GDP has increased rather steadily from 3.3 percent in 1990-1991 to 4.2 percent in 2001-2002. The revised estimates for 2002-2003 are about 4.7 percent of GDP, which is substantially higher than the budget estimate, which stood at 4.2 percent of GDP. The budget estimates 2003-2004 are reported to be only 4 percent of GDP. One can safely assume that the revised estimates are likely to be substantially higher and the actual figures when eventually reported even more so.

The primary deficit [defined as the gross fiscal deficit less interest payments] as a percentage of GDP, on the other hand, has been rather unstable. It was 1.8 percent in 1990-91 then dropped steadily till 1995-96 when it was 0.8 percent. It then reached a peak of 2.4 percent in 1999-2000 and dropped to 1.5 percent in 2001-2002. The budget estimate of 2002-2003 was 1.2 percent while the revised estimate was 1.7 percent. The budget estimates of 2003-2004 are 1.0 percent of GDP. In this case too we can safely assume that both the revised and actual figures when available are likely to be much higher than the budget estimate. Several reasons have been put forward for the deteriorating fiscal position of states. The difference between the Gross Fiscal Deficit and the Primary deficit arises due to interest payments. From the figures quoted above the volatility and importance of interest payments on debt by state governments is obvious. The RBI Bulletin of November 2003 reports that the total outstanding debt of state governments rose from 25.7 percent of GDP in 2000-2001 to 28.1 percent in 2002-2003. In 1992-93 this ratio stood at 19 percent (the figures in Rupees are reported in table 2.1).

Lahiri and Fardoust (2003) have argued that, and we quote: "With stagnant revenues, the dynamics of deficit and in a liberalized interest rate regime and mounting expenditure on wages and salaries have lead to a steady erosion of the fiscal position of state governments" (pg.177-178). Stagnant revenues have been caused by both the tax reforms initiated at the center and the reluctance of state governments to undertake tax reforms themselves. Many authors including Lahiri and Fardoust (2003), Rao (2002) and Shankar Acharya (2002) have identified the implementation of the fifth pay commission recommendations by state governments as a major reason for the deteriorating fiscal situation after 1998. Low user charges for services resulting in very high subsidies, has also been cited as a reason.

Before proceeding, a point that has been made earlier regarding growing inter state disparities needs reiteration as this is likely to have relevance for and be reflected in the relative debt positions of states. Economic reforms have lead to a situation where poorer states have presumably been caught in a vicious cycle of fiscal crisis, low growth and rising poverty. Though the data presented in table 4.1 masks the inter state variation in fiscal deterioration it is the poorer states that have experienced the most severe fiscal deterioration. The inter state disparities have been further increased after 1991 as the divergence rates of growth between states has increased. Ahluwalia (2002) reports that among the 14 major states there has been a decline in growth rate in 7 states (Andhra Pradesh, Bihar, Haryana, Orissa, Punjab, Rajasthan and Uttar Pradesh) after 1991. The other seven (Gujarat, Maharashtra, Karnataka, Kerala, Madhya

Pradesh and West Bengal) had experienced an increase in growth rate, with Gujarat and Maharashtra growing in excess of 8 percent. This would lead to a large divergence among states in their ability to service their debt in the basis of the strength of their state's economy.

In table 4.2 we present the Debt to Net State Domestic Product Ratios of various states over the period 1995-96 to 2000-01. This ratio measures extent of indebtedness relative to the economic size of the state. The average, median and standard deviation have all increased quite substantially. Through out the period it is the relatively poorer states that have a very high ratio. The exception being Goa (a rich state), which had a debt to NSDP ratio of 0.42 (much above the average) in 1995-96 and was able to decrease it to 0.37 (much below the average) in 2000-01. Over the entire period it is relatively richer states that had a low ratio. The exception being Punjab, which had a ratio of 0.39 (above the average) in 1995-96 that rose to 0.46 (above average) in 2000-01. Except Goa, all states experienced a somewhat steep rise in this ratio and overall inter state disparities with regard to this ratio have increased.

We next consider the distribution of the absolute amount of debt in Rupees at current prices. In tables 4.3a we present the ten most indebted states over the period 1986 to 2003. The identity of these states seem to be dominated by states that are large in terms of, either population, area or SDP. There are both rich and poor states in this group. Though the ranks have changed somewhat their identity remains more or less stable over the years. These ten states account consistently for about 75 percent of the total debt of all states. In table 4.3b we present the ten least indebted states. These states can be considered to be the smaller ones in terms of population, area or SDP. The identity of these ten states has remained stable. They contributed about 12 percent of the total debt of all states in 1986. This percentage has dropped to about 5 percent since 1996. There thus is a distinct decline in the contribution of these small states to the total debt of states. Overall again the inter state disparities in the absolute amount of debt have increased across states. The identities of ten states with the highest debt to SDP and ten states with the lowest amount of absolute debt are similar. For example in 2001 there were seven common states namely, Sikkim, Arunachal Pradesh, Mizoram, Manipur, Nagaland, Tripura and Himachal Pradesh. These are extremely small states in terms of size, population and SDP and thus even small absolute debts lead to very high debt to GDP ratios.

It is important to monitor the fiscal health of state governments and if possible predict fiscal crises. In what follows we use some standard ratios that are commonly for this purpose. In some countries there is an administrative cap on these ratios which if crossed leads some penalties for sub national governments. Such a system is not in place in India. Most of the ratios used are static and backward looking and do not capture the dynamics of the evolution of debt and thus cannot be directly used to ascertain fiscal sustainability. There is very little that can be done about this shortcoming as long as governments maintain a record of their receipts and expenditures on a cash basis i.e. using traditional fiscal accounting.

In table 4.4 we present the outstanding debt to revenue receipts ratio. Revenue Receipts are defined as the sum of own tax revenue; share in central taxes received by the state, own non-tax revenue, and grants from the center (both plan and non plan). In Russia the administrative limit on this ratio 30 percent while in Brazil (which had experienced a sub national debt crisis in 1998) it is as high as 200 percent. In Columbia the limit for this ratio is 80 percent. The administrative caps in each country reflect the particular economic and legal environment in which the sub national governments raise debt. In the Indian context this ratio has risen steadily for most states between 1991 and 2003-04. In fact the mean, standard deviation, median, maximum and minimum of the distribution of this ratio across states has increased rapidly. The ratio exceeds 100 percent for all states except Arunachal Pradesh and Sikkim in 2004. In other words the stock of debt is more than the revenue receipts of all but two states in India. On this count there certainly is reason to worry. At the higher end of the distribution there are eleven states for which this ratio exceeds 2 or 200 percent. At the lower end of the distribution we have the relatively smaller states like, Sikkim, Arunachal Pradesh, Meghalaya, Goa and Nagaland.

Taking the ratio of debt to revenue receipts masks the structure if these receipts. This is important because a large part of the revenue receipts of some states consist of grants. The extent of these grants varies quite dramatically from state to state and from year to year. It could be argued that we could retain in the denominator that part of revenue receipts that are not tied to any particular project. Some grants would be tied to particular projects and thus they could be subtracted from revenue receipts so now the denominator would have revenues, which in some

sense the state could use on its own volition. In table 4.5 we present the ratio of debt to revenue receipts minus grants received under the following heads, (i) Central Plan Schemes, (ii) Centrally Sponsored Schemes and (iii) NEC/Special Plan Scheme received in a year. The denominator is referred to as disposable revenue. This ratio is not very different from the ratio of debt to revenue receipts. Grants tied to particular projects thus are not a very substantial part of revenue receipts. The top ends of the distribution are roughly similar to the distribution of debt to revenue receipts.

It could be argued that the debt should be divided by those revenues that are related to the level of economic activity of the state. The states own tax revenue, non tax revenue and share of central taxes, would fall in this category. All grants should thus not be considered while evaluating the sustainability of debt both because they are not related to economic activity within the state and because they are highly variable and depend a lot on political and other factors. We present in Table 4.6 the ratio of debt to revenue receipts minus all grants. This ratio behaves very differently from the two considered earlier. There seems to be dramatic increase in this ratio for states at the higher end of the distribution after 1999-2000. The identities of states with a very high ratio (for Nagaland, Mizoram, Himachal Pradesh, Manipur, Tripura, West Bengal, and Jammu and Kashmir this ratio exceeded 5 in 2004 and 2003) changes substantially compared to the earlier ratios. This reflects the importance of grants in the revenue receipts of these states. States with a low ratio (for Sikkim, Goa and Delhi the ratio was below 2 in 2004 and 2003) the identities remained the same.

We consider next the ratio of gross interest payments to (a) revenue receipts, (b) revenue receipts minus grants received under the following heads, (i) Central Plan Schemes, (ii) Centrally Sponsored Schemes and (iii) NEC/Special Plan Scheme received in a year (disposable revenue), and (c) revenue receipts minus all grants in tables 4.7, 4.8 and 4.9 respectively. This would indicate whether the state in question could service the debt without seriously affecting its other expenditure responsibilities. Between 1991 and 2004 all three ratios have increased very substantially. The distribution of the first two ratios is roughly similar. In 2004 the ratio of interest payments to revenue receipts exceeded 30 percent for West Bengal Himachal Pradesh, Orissa, Uttar Pradesh, Rajasthan and Gujarat. Especially West Bengal and Himachal Pradesh seem to be real trouble with interest payments accounting for more than 45 percent of disposable revenue. Very little would remain to carry out other expenditures in these two states. They by all counts can be considered to be near a debt crisis. At the lower end of the distribution were states that were small and belonged to the Special category group (for Sikkim, Meghalaya, Arunachal Pradesh, and Goa, the ratio was less than 0.15 in 2004. On an average there was a significant rise in the ratio after 2001.

The ratio of interest payments to revenue receipts minus all grants would reflect the ability of states to service their debt, in some sense, on their own economic strength. For the states of Himachal Pradesh, Nagaland, Mizoram, West Bengal, Manipur, Tripura and Jammu and Kashmir this ratio was in excess of 50 percent in 2004 reflecting the fact that over half their own non grant revenues were consumed by interest payments on debt. These states clearly have a debt crisis. These seven states accounted for about 15 percent of the total outstanding debt of all states. By no stretch of imagination can the problem be called small. The dependence of these states on grants from the center to carry out other important expenditures is obvious. If the current level of grants to these states are not maintained in the foreseeable future the probability that some of these states may be unable to meet their interest payment on outstanding debt is rather large. The problem gets worse when we add debt service charges. All these states are likely to need a rather large debt relief package other than that which is automatically provided by the finance commission. At the lower end of the distribution we have a heterogeneous group of smaller states like, Sikkim, Goa, Delhi and larger ones like Karnataka, Tamil Nadu and Maharashtra.

In table 4.10 we provide the structure of outstanding liabilities of the seven states that have interest payments to revenue receipts minus grants exceeding 50 percent. Any relief package from the center will affect only those loans that are owed to the central government and they are not the most important source of funds in many of these states. In fact even in an extreme case scenario if the center writes off all loans to these states the immediate problem may be solved but this would under no circumstance ensure that such a situation would not occur again. Any restructuring of the internal debt (consisting of market loans and loans from banks and financial institutions) would require some official procedure for doing this, including a

bankruptcy code for state governments, which is not in place yet. The loans taken from small savings and provident funds are in the nature of unfunded debt and legally no state government can afford to default on this debt. Again there is considerable ambiguity on how a situation where a default is unavoidable is to be dealt with.

Having looked at the structure of liabilities of states that are possibly already facing a fiscal crisis let us look at the structure of liabilities of states that are in relatively good fiscal health in terms of the ratio of interest payments and debt service to current revenue. In table 4.11 we present the structure of liabilities of Tamil Nadu, Karnataka, Maharashtra, Delhi, Madhya Pradesh, Kerala, Goa, and Sikkim which are states whose ratio of interest payments plus debt service is less than 30 percent of revenue receipts minus all grants. There does not seem to be any systematic difference in the structure of liabilities of the two groups. The fault thus is not in the structure of liabilities but in the fact that some states have a far greater amount of debt than they can hope to service with available resources. We need to recognize that this situation has arisen even after (or possibly because of) the fact states governments do not actually have the flexibility of determining either the amount or structure of the debt. The fiscal crisis that some states face is not entirely of their own making.

The states on the other hand have full freedom to decide the extent of contingent liabilities they want to create. The Reserve Bank of India Bulletin (November 2003 pg. 763) reports that the extent of these outstanding contingent liabilities of states increased from 6.8 percent of GDP in March 2000 to 8.1 percent of GDP in March 2002 and reduced to 7.2 percent of GDP in March 2002. These are daunting figures. Information on the inter state distribution of these liabilities is available in table 1 of the report of The Technical Committee on State Government Guarantees, Reserve Bank of India submitted in 1999. We reproduce this information in table 4.10. In this case too larger and richer states like Maharashtra, Andhra Pradesh, Gujarat, Punjab, Karnataka and Rajasthan accounted for above 60 percent of total guarantees in 1999. The report also mentions that on an average in 1999 the ratio of state government guarantees to revenue receipts was 42 percent and the ratio of government guarantees to the consolidated fund was 29.5 percent. A sector wise break up of the guarantees for more recent years is not available from any standard data source. There is no doubt that the amount of guarantees is very large and in many states it is large enough to trigger a fiscal crisis in the event that these guarantees are invoked. There is an urgent need to formulate uniform rules and guidelines regarding the extent of guarantees a state government is allowed to give.

V. *Conclusions*

A prudent debt management strategy will help states provide infrastructure and other services over a shorter time span which would help create an investor friendly environment and increase growth prospects. The main difficulty is to create an institutional environment in which the incentives faced by state governments are such that they are not attracted towards or inadvertently pushed towards unsustainable debt. The problem is made extremely intricate due to the various complications that arise in the design of federal transfers. Solutions are neither unique nor straightforward and every solution seems to have different set of dangers associated with it. If one is starting from a position of a large debt overhang (as is the case in the Indian context) then reforms of the rules under which state governments borrow could potentially put pressure on the fiscal position of the national government. Which in turn would make either postponing these reforms or abandoning them completely, politically safe.

There is no denying the fact that, in the Indian context, some states are close to facing a debt crisis (in the sense that interest payments account for more than half their revenue receipts minus plan and non-plan grants). There is a high probability that in the near future some states too would be afflicted by it. The twelfth finance commission has tried to put in place a clear road map of reforms that would possibly prevent fiscal crisis. The steps the commission has recommended are bold with far reaching consequences. As an immediate side effect the fiscal position of the national government has come under stress as direct consequence of its recommendations. As the finance commission is statutory body the national government is bound by its recommendations.

The commission has recognized the need to reexamine the entire federal fiscal transfer mechanism and has recommended that the center transfer funds to states only in terms of tax shares and grants alone. The plan is to do away with all loans from the center to states in twenty

years. The commission has recognized that the problem arose due to debt being forced upon state governments without any regard to their ability of repay them and that this should be avoided at all costs. The debts that state governments raise should fundamentally be related to their ability to repay them irrespective of to whom they are owed. Given the obvious incentive problem with regard to debt owed to the central government it would be in the long term interest of all parties concerned to dramatically reduce their importance gradually and ultimately do away with such loans altogether. To the extent that market loans do not suffer from incentive problems they are an attractive option. The problem is that the infrastructure needed to develop a competitive and efficient market for sub national debt is not in place.

In the medium term a rule based control on state government borrowing seems to be a workable option. Rules that would prohibit states from raising loans to fund current expenditures and a maximum specified debt service to revenue ratio look particularly attractive. Currently, it is too early to pass judgment on the success or failure of the FRLs but given the inadequacies of the over all inter governmental fiscal transfer mechanism and the fact that not all states have enacted such a legislation its immediate influence on the states' debt position is likely to be negligible. Further more with the central government itself putting its own FRL on "pause" the states have little incentive to be serious about their own FRLs. In the longer term though with proper institution building the FRLs are may possibly be successful.

The entire system of fiscal transfers needs to be made more transparent and predictable so that the uncertainty about the exact amount of resources a state would have at its disposal in the future can be substantially reduced. One possible way of achieving this would be to do away with the distinction between plan and non-plan assistance to states. Accounting procedures and disclosure norms for state government finances need a major overhaul. In addition a kind of a bankruptcy code for states has to in place to deal with defaults.

There is an urgent need to force state governments to abandon the current provident fund scheme for state government employees that creates an un-funded debt and move to a fully funded scheme. The same is true of contingent liabilities arising out of loan guarantees provided by states. The states governments should consider the creation of a trust fund that would manage these guarantees. Unless this is done state budgets would always be at risk from unforeseen events like defaults on debts guaranteed by it.

Table3.1: Distribution of primary issue of state government securities by tap and auction methods.

	2001-02				2002-03			2003-04		
	Gross Allocation	By auction	By tap	By tranche	Gross allocation	by auction	by tap	Gross Allocation	By acuction	By tap
Andhra Pradesh	2,055	0.23	0.34	0.43	3,226	0.17	0.89	3,226	0.15	0.85
Arunachal Pradesh	27	0.19	0.41	0.41	34	0.00	1.00	131	0.00	1.00
Assam	531	0.00	0.57	0.43	888	0.00	1.03	943	0.00	1.00
Bihar	1,116	0.00	0.61	0.39	1,200	0.00	1.11	2,131	0.00	1.00
Chhattisgarh	269	0.25	0.43	0.32	449	0.00	1.03	742	0.00	0.87
Goa	89	0.00	0.33	0.67	155	0.00	1.00	240	0.00	1.00
Gujarat	1,406	0.31	0.27	0.42	2,469	0.18	0.85	3,333	0.08	0.92
Haryana	295	0.00	0.39	0.61	714	0.00	1.06	1,165	0.00	1.00
Himachal Pradesh	376	0.00	0.57	0.43	684	0.00	1.02	882	0.00	1.00
Jammu and Kashmir	280	0.16	0.59	0.25	576	0.12	0.91	522	0.00	1.00
Jharkhand	370	0.00	0.68	0.32	409	0.00	1.11	575	0.00	1.00
Karnataka	1,135	0.35	0.30	0.35	1,510	0.13	0.93	2,779	0.00	1.00
Kerala	966	0.21	0.79	0.00	1,134	0.39	0.70	1,931	0.23	0.77
Madhya Pradesh	713	0.21	0.41	0.39	1,097	0.23	0.81	2,405	0.09	0.91
Maharashtra	1,290	0.22	0.39	0.39	1,000	0.51	0.57	6,449	0.11	0.89
Manipur	45	0.00	0.56	0.44	69	0.00	1.12	192	0.00	1.00
Meghalaya	88	0.00	0.43	0.57	87	0.00	1.00	166	0.00	1.00
Mizoram	44	0.00	0.48	0.52	118	0.00	1.00	101	0.00	1.00
Nagaland	156	0.00	0.50	0.50	167	0.00	1.07	227	0.00	1.00
Orissa	838	0.00	0.44	0.56	1,202	0.00	1.09	2,119	0.00	0.99
Punjab	419	0.31	0.21	0.48	1,062	0.08	0.99	2,056	0.09	0.91
Rajasthan	1,192	0.00	0.33	0.67	2,264	0.00	1.05	2,714	0.00	1.00
Sikkim	10	0.00	0.00	1.00	20	0.00	1.00	62	0.00	1.00
Tamil Nadu	1,160	0.28	0.21	0.51	2,139	0.13	0.96	2,851	0.09	0.91
Tripura	57	0.00	0.00	1.00	113	0.00	1.07	229	0.00	1.00
Uttar Pradesh	2,449	0.00	0.52	0.48	2,938	0.00	1.10	5,540	0.00	0.97
Uttaranchal	212	0.00	0.19	0.81	934	0.00	1.02	1,366	0.00	1.00
West Bengal	1,119	0.22	0.36	0.41	2,405	0.06	0.98	5,729	0.06	0.94
Total	18,707	0.15	0.42	0.43	29,064	0.10	0.96	50,805	0.06	0.94

Source: Reserve Bank of India Annual Reports, various years.

Table 3.2 :Weighted Average Yield of State Government Market Loans.

YEAR	RANGE	YIELD
1995-96	14	14
1996-97	13.75-13.85	13.83
1997-98	12.30-13.05	12.82
1998-99	12.15-12.50	12.35
1999-00	11.00-12.25	11.89
2000-01	10.50-12.00	10.99
2001-02	7.80-10.53	9.2
2002-03	6.60-8.00	7.49
2003-04	5.78-6.40	6.13

Source: Reserve Bank of India Annual Reports, various years

Table 3.3: Percentage Outstanding of State Government Market loans with a maturity of less than 5 years.

		2001	2002	2003	2004
1	Sikkim	16.1	23.1	32.0	56.1
2	Uttar Pradesh	0.0	24.8	29.3	39.8
3	Meghalaya	17.2	19.4	25.0	39.3
4	Kerala	23.4	25.0	29.2	38.5
5	Madhya Pradesh	22.5	25.8	31.3	37.7
6	Orissa	24.4	26.4	30.7	37.5
7	Bihar	26.1	28.5	34.8	37.1
8	Nagaland	18.2	19.2	22.4	36.6
9	Assam	21.6	23.3	26.1	35.0
10	Tripura	23.6	17.9	20.8	34.8
11	Andhra Pradesh	19.0	19.1	20.6	34.7
12	Rajasthan	18.3	20.0	21.9	33.9
13	Harayana	13.9	25.2	26.4	32.7
14	Tamil Nadu	17.3	24.7	25.8	32.0
15	Manipur	24.6	25.2	28.4	31.4
16	Goa	11.1	13.3	14.9	31.0
17	Punjab	21.0	25.6	25.0	29.8
18	Mizoram	18.2	22.6	19.9	29.6
19	Karnataka	17.7	17.0	18.5	29.0
20	West Bengal	23.3	25.6	27.2	27.4
21	Maharashtra	21.2	24.6	30.7	27.4
22	Gujarat	19.0	18.4	17.8	26.1
23	Jammu and Kashmir	21.7	21.7	20.3	25.3
24	Himachal Pradesh	22.5	12.5	11.3	19.8
25	Arunachal Pradesh	18.9	18.8	22.1	16.0
26	Total	21.6	23.0	25.3	32.1

Source: Source: Reserve Bank of India Annual Reports, various years

Table 3.4: Interest rate Profile of The State Government Stock of Market Loans

	2003	2004
Less than 7 per cent	14.72	39.52
7.00-7.99	8.29	6.15
8.00-8.99	6.02	4.46
9.00-9.99	4.07	3.02
10.00-10.99	10.94	8.11
11.00-11.99	12.82	9.51
12.00-12.99	23.5	16.99
13.00 and above	19.65	12.26
Total (Rs. Crore)	1,33,066	1,79,465

Source: Source: Reserve Bank of India Annual Reports, various years

Table:3.5 Composition of total outstanding debt of State Governments

	1991	1996	1997	1998	1999	2000	2001	2002	2003
a) Internal Debt (market loans and loans from banks and Financial Institutions)	17.18	20.36	21.19	21.11	22.55	23.46	24.58	25.62	25.62
Special securities Issued to NSSF						6.29	11.85	16.12	19.70
b) Loans and Advances from Central Govt.	68.25	61.96	61.21	61.42	59.59	51.46	45.09	40.63	37.78
c) Small saving and Provident Funds etc.	14.57	17.67	17.61	17.46	17.86	18.79	18.48	17.63	16.90
Total Debt (Rs.Crores)	108203	212226	243528	281209	341979	420133	498092	589218	683168

Source: Handbook on Statistics on State Government Finances, Reserve Bank of India, Mumbai, 2004.

Table 4.1 : Major Deficit Indicators of State Governments (Rs. Crores)

YEAR	Gross Fiscal DEFICIT	NET FISCAL DEFICIT	REVENUE DEFICIT	CONVENTIONAL DEFICIT	PRIMARY DEFICIT	NET RBI CREDIT
1	2	3	4	5	6	7
1990-91	18,787	14,532	5,309	-72	10,132	420
	(3.3)	(2.6)	(0.9)	(0.0)	(1.8)	(0.1)
1991-92	18,900	15,746	5,651	156	7,956	-340
	(2.9)	(2.4)	(0.9)	(0.0)	(1.2)	(-0.1)
1992-93	20,891	15,769	5,114	-1,829	7,681	176
	(2.8)	(2.1)	(0.7)	(-0.2)	(1.0)	(0.0)
1993-94	20,596	16,263	3,813	462	4,795	591
	(2.4)	(1.9)	(0.4)	(0.1)	(0.6)	(0.1)
1994-95	27,697	23,507	6,156	-4,468	8,284	48
	(2.7)	(2.3)	(0.6)	(-0.4)	(0.8)	(0.0)
1995-96	31,426	26,695	8,201	-2,849	9,494	16
	(2.6)	(2.2)	(0.7)	(-0.2)	(0.8)	(0.0)
1996-97	37,251	33,460	16,114	7,041	11,675	898
	(2.7)	(2.4)	(1.2)	(0.5)	(0.9)	(0.1)
1997-98	44,200	39,135	16,333	-2,103	14,087	1,543
	(2.9)	(2.6)	(1.1)	(-0.1)	(0.9)	(0.1)
1998-99	74,254	66,209	43,642	3,520	38,381	5,579
	(4.3)	(3.8)	(2.5)	(0.2)	(2.2)	(0.3)
1999-00	91,480	79,309	53,797	3,113	46,309	1,312
	(4.7)	(4.1)	(2.8)	(0.2)	(2.4)	(0.1)
2000-01	89,532	84,698	53,569	-2,346	37,830	-1,092
	(4.3)	(4.0)	(2.5)	(-0.1)	(1.8)	(-0.1)
2001-02	95,986	91,439	59,233	-2,552	33,497	3,451
	(4.2)	(4.0)	(2.6)	(-0.1)	(1.5)	(0.2)
2002-03	1,02,882	91,933	48,314	5,186	30,629	—
(B.E)	(4.0)	(3.6)	(1.9)	(0.2)	(1.2)	
2002-03	1,16,730	1,02,902	61,302	5,317	42,584	-3,100
(R.E)	(4.7)	(4.2)	(2.5)	(0.2)	(1.7)	(-0.1)
2003-04	1,08,861	97,395	49,008	6,593	26,573	—
(B.E)	(4.0)	(3.5)	(1.8)	(0.2)	(1.0)	
RE: Revised Estimates BE: Budget Estimates —: Not Available. (-)Indicates surplus.						
Notes:	1. Overall surplus or deficit referred to here as conventional deficit represents the difference between aggregate disbursements and aggregate receipts. Aggregate receipts include (i) revenue receipts (ii) capital receipts excluding ways and means advances and overdrafts from Reserve Bank of India (RBI) and (iii) Net receipts under Public Account excluding withdrawals from Cash Balance Investment Account and Cash Balances. Aggregate disbursements include (i) revenue expenditure and (ii) capital disbursements excluding repayments of ways and means advances and overdrafts from RBI; additions to Cash Balance Investment Account and Cash Balances are excluded.					
	2. Revenue deficit is the difference between revenue expenditure and revenue receipts.					
	3. GFD is the difference between aggregate disbursements net of debt repayments and recovery of loans, and revenue receipts plus non-debt capital receipts.					
	4. Net Fiscal Deficit is the difference between Gross Fiscal Deficit and Net Lending.					
	5. Primary deficit is GFD minus interest payments.					
	6. Figures in brackets are percentages to GDP at current market prices.					
	7. All figures are rounded-off.					
Source :	Reserve Bank of India Bulletin November 2003.					

Table 4.2: Debt/NSDP Ratio Across the States

STATES/UTS	1995-96	STATES/UTS	1996-97		1997-98		1998-99		1999-00		2000-01
Bihar	0.75878	Arunachal pradesh	0.65028	Bihar	0.66533	Sikkim	0.71895	Sikkim	0.89314	Nagaland	-
J and K	0.65582	J and K	0.64629	J and K	0.66117	Bihar	0.66890	Bihar	0.73979	Mizoram	-
Sikkim	0.64789	Sikkim	0.63747	arunachal pradesh	0.65327	Mizoram	0.64091	Nagaland	0.70558	Sikkim	0.88392
arunachal pradesh	0.59138	Bihar	0.61751	Sikkim	0.61166	arunachal pradesh	0.63280	Mizoram	0.68556	Bihar	0.80856
Nagaland	0.56763	Nagaland	0.57491	Mizoram	0.58121	Nagaland	0.63086	J and K	0.63561	Orissa	0.71489
Himachal Pradesh	0.51315	Mizoram	0.51475	Nagaland	0.55536	Himachal Pradesh	0.60100	arunachal pradesh	0.63490	J and K	0.70514
Mizoram	0.48545	Himachal Pradesh	0.50331	Himachal Pradesh	0.50793	J and K	0.56927	Himachal Pradesh	0.60739	Himachal Pradesh	0.68230
Goa	0.42344	Orissa	0.49277	Orissa	0.45205	Orissa	0.51114	Orissa	0.58692	Arunachal pradesh	0.61157
Tripura	0.41003	Tripura	0.39040	Manipur	0.44539	Manipur	0.49844	Manipur	0.49755	Manipur	0.57453
Orissa	0.40319	Punjab	0.38991	Punjab	0.39947	Punjab	0.42101	Punjab	0.42655	Tripura	0.48253
Manipur	0.40284	Goa	0.38489	Tripura	0.37320	Tripura	0.39986	Tripura	0.42452	Rajasthan	0.45766
Punjab	0.39833	Manipur	0.35907	Goa	0.33826	Uttar Pradesh	0.35948	Uttar Pradesh	0.40153	Punjab	0.45705
Uttar Pradesh	0.32298	Assam	0.31644	Uttar Pradesh	0.33522	Goa	0.32252	Rajasthan	0.37571	Uttar Pradesh	0.41655
Assam	0.31805	Uttar Pradesh	0.30681	Assam	0.30736	Rajasthan	0.32209	Kerala	0.35443	Madhya Pradesh	0.41025
Madhya Pradesh	0.29261	Madhya Pradesh	0.28741	Madhya Pradesh	0.30186	Madhya Pradesh	0.31536	Madhya Pradesh	0.34066	Assam	0.37927
Rajasthan	0.29242	Rajasthan	0.28684	Rajasthan	0.28869	Kerala	0.30748	Assam	0.33841	Kerala	0.37910
Kerala	0.28627	Kerala	0.28062	Kerala	0.28670	Assam	0.30103	Goa	0.32770	Goa	0.37496
Meghalaya	0.24971	Meghalaya	0.25421	Meghalaya	0.25848	Meghalaya	0.27574	West Bengal	0.31493	West Bengal	0.36802
West Bengal	0.22937	West Bengal	0.24332	West Bengal	0.24601	West Bengal	0.26954	Meghalaya	0.30096	Meghalaya	0.32415
Haryana	0.22082	Andhra	0.21124	Andhra	0.23277	Haryana	0.24799	Haryana	0.27198	Gujarath	0.31822
Andhra	0.21121	Haryana	0.20817	Haryana	0.22506	Andhra	0.23005	Andhra	0.26052	Andhra	0.28648
Karnataka	0.19775	Karnataka	0.19535	Karnataka	0.20414	Gujarath	0.20871	Gujarath	0.25650	Haryana	0.27760
Gujarath	0.18025	Tamil Nadu	0.17849	Gujarath	0.19551	Karnataka	0.19580	Karnataka	0.21699	Karnataka	0.23414
Tamil Nadu	0.17931	Gujarath	0.17233	Tamil Nadu	0.17548	Tamil Nadu	0.18280	Tamil Nadu	0.20854	Tamil Nadu	0.23295
Maharashtra	0.12989	Maharashtra	0.13882	Maharashtra	0.15043	Maharashtra	0.16554	Maharashtra	0.17968	Maharashtra	0.19606
Delhi	0.05913	Delhi	0.07772	Delhi	0.09066	Delhi	0.09529	Delhi	0.11437	Delhi	0.13350
average	0.36260		0.35843		0.36703		0.38817		0.42694		0.44623
std	0.17888		0.17155		0.17155		0.18160		0.20031		0.20018
median	0.32052		0.31162		0.32129		0.32231		0.36507		0.39476

Source: Website of EPW Research Foundation and Handbook of Statistics on State Government Finances, RBI.

Table 4.3a : The ten most indebted states and their shares in total debt of all states.

1986	1991	1996	1997	1998
Uttar Pradesh	Uttar Pradesh	Uttar Pradesh	Uttar Pradesh	Uttar Pradesh
Maharashtra	Maharashtra	Maharashtra	Maharashtra	Maharashtra
Bihar	Bihar	Bihar	Bihar	West Bengal
West Bengal	West Bengal	West Bengal	West Bengal	Bihar
Andhra Pradesh	Punjab	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh
Madhya Pradesh	Andhra Pradesh	Punjab	Punjab	Punjab
Rajasthan	Madhya Pradesh	Tamil Nadu	Rajasthan	Rajasthan
Gujarat	Gujarat	Madhya Pradesh	Tamil Nadu	Tamil Nadu
Tamil Nadu	Rajasthan	Rajasthan	Madhya Pradesh	Madhya Pradesh
Karnataka	Tamil Nadu	Gujarat	Gujarat	Gujarat
52281 (0.75)	108203 (0.75)	212226 (0.74)	243528 (0.74)	281209 (0.75)

Table 4.3a (cont)

1999	2000	2001	2002	2003
Uttar Pradesh	Uttar Pradesh	Uttar Pradesh	Uttar Pradesh	Uttar Pradesh
Maharashtra	Maharashtra	West Bengal	West Bengal	West Bengal
West Bengal	West Bengal	Maharashtra	Maharashtra	Maharashtra
Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh
Bihar	Bihar	Bihar	Bihar	Gujarat
Rajasthan	Rajasthan	Rajasthan	Gujarat	Bihar
Punjab	Tamil Nadu	Gujarat	Rajasthan	Tamil Nadu
Tamil Nadu	Punjab	Tamil Nadu	Tamil Nadu	Rajasthan
Madhya Pradesh	Madhya Pradesh	Punjab	Punjab	Punjab
Gujarat	Gujarat	Madhya Pradesh	Madhya Pradesh	Madhya Pradesh
341979(0.75)	420133(0.74)	498092(0.74)	589218(0.75)	683168(0.75)

Source:Website of EPW Research Foundation

Note: The figure in the last row is in Rs. Crore and the value in parenthesis is the percentage contribution of these ten states in the total debt of all states.

l. Table 4.3b: The ten least indebted states and their shares in total debt of all states.

1986	1991	1996	1997	1998
Assam	Haryana	Himachal Pr	Himachal Pr	Himachal Pr
J & Kashmir	Himachal pr	NCT Delhi	NCT Delhi	NCT Delhi
Haryana	Goa	Goa	Goa	Goa
Himachal Pr	Tripura	Nagaland	Nagaland	Nagaland
Manipur	Nagaland	Tripura	Tripura	Tripura
Nagaland	Manipur	Arunachal Pr	Arunachal Pr	Manipur
Tripura	Arunachal Pr	Manipur	Manipur	Arunachal Pr
Meghalaya	Meghalaya	Meghalaya	Mizoram	Mizoram
Sikkim	Sikkim	Mizoram	Meghalaya	Meghalaya
Mizoram	Mizoram	Sikkim	Sikkim	Sikkim
6212 (0.12)	7044 (0.07)	9816 (0.05)	11688 (0.05)	14211 (0.05)

Table 4.3b (cont)

1999	2000	2001	2002 (RE)	2003 (BE)
Himachal Pr	Himachal Pr	Himachal Pr	Himachal Pr	Jand Kashmir
NCT Delhi	NCT Delhi	NCT Delhi	NCT Delhi	NCT Delhi
Goa	Goa	Goa	Tripura	Tripura
Tripura	Tripura	Tripura	Goa	Goa
Nagaland	Nagaland	Nagaland	Nagaland	Nagaland
Manipur	Manipur	Manipur	Manipur	Manipur
Arunachal Pr	Arunachal Pr	Mizoram	Meghalaya	Meghalaya
Mizoram	Mizoram	Meghalaya	Mizoram	Mizoram
Meghalaya	Meghalaya	Arunachal Pr	Arunachal Pr	Arunachal Pr
Sikkim	Sikkim	Sikkim	Sikkim	Sikkim
18201 (0.05)	22052 (0.05)	26838 (0.050)	32012 (0.05)	37076 (0.05)

Source:Website of EPW Research Foundation

Note: The figure in the last row is in Rs. Crore and the value in parenthesis is the percentage contribution of these ten states in the total debt of all states.

Table 4.4: Ratio of debt to revenue receipts

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
West Bengal	1.92	1.92	1.89	1.91	1.90	2.09	2.21	2.44	3.05	3.62	3.25	4.01	4.36	4.63
Bihar	2.14	2.22	2.04	2.05	2.22	2.25	2.26	2.32	2.50	2.25	2.97	3.85	3.88	3.83
Orissa	2.09	2.15	2.10	2.19	2.23	2.41	2.49	2.68	3.31	3.11	3.19	3.59	3.10	3.43
Himachal Pradesh	1.61	1.47	1.56	1.23	1.77	1.73	1.77	1.83	2.47	1.74	2.58	2.49	2.90	3.23
Rajasthan	1.57	1.59	1.52	1.55	1.61	1.60	1.89	1.96	2.46	2.73	2.47	3.01	3.13	3.16
Uttar Pradesh	1.83	1.83	1.72	1.90	1.98	1.97	2.14	2.28	2.80	2.79	2.68	2.98	3.06	3.12
Punjab	3.47	2.12	3.40	3.20	2.29	2.63	2.78	2.71	3.63	3.17	2.97	3.64	3.06	3.11
Gujarat	1.84	1.52	1.33	1.22	1.24	1.30	1.32	1.35	1.46	1.65	1.89	2.31	2.73	2.95
Kerala	1.85	1.82	1.78	1.84	1.89	1.86	1.86	1.81	2.18	2.54	2.74	2.98	2.62	2.65
Madhya Pradesh	1.44	1.42	1.28	1.35	1.39	1.42	1.42	1.42	1.70	1.75	1.92	2.71	2.49	2.58
Haryana	1.47	1.42	1.51	1.19	0.80	1.15	1.08	1.29	1.73	2.00	2.00	2.10	1.99	2.01
Tamil Nadu	1.08	0.96	1.10	1.16	1.21	1.18	1.19	1.20	1.37	1.46	1.57	1.74	1.92	1.98
Andhra Pradesh	1.26	1.26	1.30	1.34	1.48	1.54	1.51	1.44	1.68	1.73	1.83	1.95	2.09	1.97
Karnataka	1.19	1.12	1.13	1.15	1.25	1.16	1.18	1.22	1.38	1.45	1.49	1.77	1.89	1.92
Maharashtra	1.13	1.16	1.18	1.10	1.06	1.10	1.13	1.27	1.43	1.52	1.51	1.75	1.86	1.87
Mizoram	0.26	0.39	0.55	0.56	0.61	0.66	0.76	0.82	0.99	0.93	1.33	1.55	1.41	1.85
NCT Delhi				0.45	0.39	0.65	0.84	0.97	1.11	1.28	1.29	1.42	1.64	1.82
Tripura	0.96	0.97	1.15	1.06	1.02	0.91	0.95	1.04	1.10	1.24	1.35	1.41	1.68	1.68
Manipur	0.89	0.95	0.93	0.82	0.86	0.82	0.74	1.00	1.28	1.33	1.62	1.44	1.47	1.65
Assam	2.38	1.86	1.70	1.31	1.60	1.62	1.51	1.44	1.52	1.77	1.81	1.98	1.73	1.59
Jammu and Kashmir	3.09	2.27	1.93	1.82	1.40	1.40	1.38	1.37	1.40	1.40	1.61	1.42	1.56	1.56
Nagaland	1.05	0.95	0.97	1.06	1.26	1.20	1.22	1.19	1.33	1.44	1.34	1.49	1.58	1.55
Goa	2.99	2.80	2.46	2.19	2.03	1.43	1.58	1.27	1.47	1.56	1.52	1.40	1.28	1.39
Meghalaya	0.59	0.59	0.62	0.64	0.76	0.63	0.66	0.81	0.86	0.93	0.92	1.09	1.05	1.03
Arunachal Pradesh	0.95	0.82	0.91	0.91	0.94	0.84	0.87	0.93	0.94	0.89	1.01	0.93	0.75	0.85
Sikkim	0.90	0.91	0.92	0.96	0.45	0.29	0.27	0.27	0.35	0.45	0.85	0.45	0.40	0.43
All States	1.63	1.54	1.54	1.52	1.51	1.55	1.59	1.65	1.94	2.03	2.09	2.29	2.34	2.39
average	1.60	1.46	1.48	1.39	1.37	1.38	1.42	1.47	1.75	1.80	1.91	2.13	2.14	2.22
standard deviation	0.79	0.59	0.62	0.61	0.56	0.59	0.61	0.61	0.81	0.78	0.72	0.95	0.94	0.98
median	1.47	1.42	1.33	1.23	1.32	1.35	1.35	1.32	1.46	1.61	1.71	1.86	1.90	1.94
Maximum	3.47	2.80	3.40	3.20	2.29	2.63	2.78	2.71	3.63	3.62	3.25	4.01	4.36	4.63
Minimum	0.26	0.39	0.55	0.45	0.39	0.29	0.27	0.27	0.35	0.45	0.85	0.45	0.40	0.43

Source: Handbook on Statistics on State Government Finances, Reserve Bank of India, 2004.

Table 4.5: Ratio of Debt to Disposable Revenue.

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
West Bengal	1.98	2.04	1.96	1.99	1.95	2.16	2.29	2.54	3.21	3.75	3.38	4.20	4.53	4.79
Bihar	2.27	2.48	2.31	2.32	2.37	2.47	2.29	2.40	2.53	2.39	3.11	4.02	4.13	4.04
Orissa	2.37	2.45	2.38	2.47	2.42	2.61	2.68	2.83	3.53	3.27	3.37	3.73	3.29	3.68
Rajasthan	1.75	1.76	1.67	1.73	1.78	1.74	2.07	2.10	2.64	2.92	2.63	3.20	3.38	3.56
Punjab	3.62	2.19	3.57	3.36	2.36	2.70	2.86	2.76	3.74	3.27	3.03	3.72	3.29	3.34
Uttar Pradesh	2.03	2.02	1.95	2.10	1.98	2.05	2.22	2.37	2.94	2.91	2.75	3.08	3.26	3.33
Himachal Pradesh	1.72	1.65	1.68	1.31	1.90	1.83	1.86	1.91	2.59	1.81	2.75	2.62	3.04	3.33
Gujarat	1.94	1.55	1.37	1.30	1.29	1.33	1.35	1.39	1.48	1.69	1.92	2.37	2.88	3.10
Madhya Pradesh	1.59	1.54	1.41	1.49	1.51	1.58	1.53	1.54	1.85	1.84	2.03	2.84	2.79	2.97
Kerala	1.97	1.91	1.90	1.94	2.02	1.95	1.95	1.87	2.28	2.63	2.83	3.17	2.83	2.77
All States	1.75	1.65	1.66	1.64	1.59	1.63	1.66	1.72	2.02	2.11	3.02	2.39	2.50	2.56
Andhra Pradesh	1.36	1.37	1.40	1.46	1.58	1.63	1.61	1.51	1.75	1.81	1.91	2.02	2.21	2.12
Haryana	1.54	1.49	1.59	1.25	0.82	1.18	1.11	1.34	1.79	2.08	2.06	2.15	2.08	2.12
Assam	2.56	1.98	1.79	1.37	1.81	1.71	1.58	1.49	1.60	1.86	1.90	2.11	2.02	2.05
Tamil Nadu	1.15	1.01	1.17	1.23	1.26	1.22	1.21	1.24	1.42	1.51	1.62	1.79	1.96	2.02
Karnataka	1.27	1.19	1.21	1.24	1.34	1.21	1.23	1.27	1.43	1.54	1.57	1.87	1.99	2.01
Tripura	1.01	1.03	1.20	1.15	1.16	1.02	1.04	1.15	1.22	1.34	1.46	1.54	1.96	2.00
Maharashtra	1.20	1.23	1.24	1.16	1.10	1.14	1.17	1.30	1.47	1.55	1.55	1.80	1.93	1.94
Mizoram	0.28	0.42	0.57	0.62	0.63	0.74	0.82	0.91	1.12	1.03	1.46	1.72	1.60	1.85
NCT Delhi				0.45	0.39	0.65	0.84	0.97	1.11	1.29	1.31	1.43	1.65	1.84
Manipur	0.94	1.02	0.98	0.89	0.94	0.88	0.80	1.08	1.37	1.54	1.74	1.51	1.65	1.81
Nagaland	1.15	1.08	1.02	1.15	1.40	1.29	1.30	1.35	1.49	1.63	1.47	1.60	1.75	1.78
J & K	3.28	2.29	2.05	1.92	2.12	1.67	1.44	1.45	1.44	1.43	1.66	1.45	1.60	1.60
Goa	3.10	2.90	2.55	2.26	2.10	1.45	1.61	1.29	1.48	1.58	1.55	1.42	1.30	1.41
Meghalaya	0.64	0.63	0.67	0.71	0.82	0.67	0.69	0.84	0.92	0.98	0.99	1.17	1.21	1.32
Arunachal Pradesh	1.01	0.86	0.95	0.97	1.02	0.88	0.91	1.01	1.01	0.96	1.10	1.02	1.00	1.04
Sikkim	0.90	0.99	1.00	0.96	0.45	0.29	0.27	0.27	0.35	0.45	0.85	0.46	0.42	0.45
average	1.71	1.56	1.58	1.49	1.48	1.46	1.49	1.55	1.84	1.89	2.00	2.23	2.30	2.39
standard deviation	0.83	0.63	0.67	0.66	0.60	0.62	0.64	0.63	0.85	0.81	0.74	0.99	0.98	1.01
median	1.59	1.54	1.41	1.31	1.46	1.39	1.39	1.37	1.49	1.66	1.82	1.95	2.00	2.03
Maximum	3.62	2.90	3.57	3.36	2.42	2.70	2.86	2.83	3.74	3.75	3.38	4.20	4.53	4.79
Minimum	0.28	0.42	0.57	0.45	0.39	0.29	0.27	0.27	0.35	0.45	0.85	0.46	0.42	0.45

Source: Handbook on Statistics on State Government Finances, Reserve Bank of India, 2004.

Table4.6: Ratio of Debt to Revenue receipts minus all grants (plan and non plan)

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
Nagaland	2.61	2.48	2.28	3.09	2.83	3.71	3.06	2.38	2.66	2.74	10.43	9.98	12.24	10.07
Mizoram	0.52	1.03	1.31	1.56	1.65	2.38	2.15	1.97	2.24	2.34	7.73	12.49	9.14	8.50
Himachal Pradesh	3.18	2.88	2.91	2.71	2.89	3.54	3.54	2.94	3.80	2.49	6.37	6.43	7.20	7.69
Manipur	2.32	2.53	2.28	2.29	2.00	2.37	1.95	2.23	2.92	3.02	6.65	7.62	6.51	6.43
Tripura	2.37	2.32	2.57	2.42	2.41	2.70	2.32	2.10	2.37	2.52	4.84	5.39	6.29	6.22
West Bengal	2.32	2.28	2.28	2.34	2.22	2.38	2.56	2.75	3.64	4.27	4.16	5.02	5.17	5.29
Jammu and Kashmir	6.42	5.33	4.85	4.68	4.38	4.21	4.01	3.30	3.28	3.50	5.37	5.14	5.45	5.24
Orissa	2.90	2.99	2.86	2.99	2.89	3.09	3.14	3.52	4.03	4.39	4.02	4.35	4.23	4.62
Bihar	2.62	2.86	2.63	2.65	2.70	2.60	2.46	2.94	2.81	2.70	3.28	4.38	4.57	4.44
Rajasthan	2.05	2.06	1.94	2.03	2.08	1.88	2.28	2.42	2.91	3.22	3.12	3.63	3.78	3.88
Uttar Pradesh	2.43	2.42	2.31	2.45	2.48	2.32	2.50	2.60	3.21	3.17	3.02	3.41	3.55	3.65
Punjab	3.82	2.27	3.89	3.57	2.42	2.80	2.97	2.84	3.90	3.41	3.26	3.87	3.53	3.53
Gujarat	2.02	1.63	1.45	1.36	1.34	1.38	1.45	1.45	1.54	1.80	2.13	2.55	3.15	3.38
Arunachal Pradesh	2.71	2.43	2.62	2.40	2.62	2.96	2.78	2.53	2.51	2.15	4.86	5.98	3.32	3.30
Meghalaya	1.53	1.39	1.42	1.58	1.68	1.47	1.41	1.44	1.62	1.65	2.83	3.10	3.16	3.29
Madhya Pradesh	1.77	1.71	1.55	1.65	1.66	1.64	1.63	1.62	1.96	2.00	2.16	3.12	3.09	3.24
Assam	3.57	3.44	2.83	2.49	2.67	2.80	2.57	2.27	2.46	2.75	2.82	3.12	3.09	3.01
Kerala	2.18	2.09	2.07	2.11	2.19	2.04	2.02	2.03	2.38	2.78	2.95	3.34	3.04	2.96
Andhra Pradesh	1.48	1.49	1.53	1.61	1.70	1.83	1.79	1.62	1.87	1.97	2.06	2.29	2.43	2.42
Karnataka	1.32	1.24	1.27	1.31	1.39	1.24	1.28	1.31	1.49	1.63	1.67	2.00	2.15	2.20
Haryana	1.60	1.54	1.65	1.29	0.83	1.23	1.14	1.38	1.86	2.18	2.16	2.26	2.17	2.19
Tamil Nadu	1.22	1.08	1.25	1.32	1.34	1.28	1.29	1.30	1.48	1.60	1.71	1.87	2.08	2.16
Maharashtra	1.25	1.27	1.29	1.22	1.14	1.19	1.23	1.36	1.51	1.61	1.59	1.86	2.04	2.03
NCT Delhi				0.45	0.41	0.69	0.90	1.08	1.24	1.43	1.42	1.54	1.78	1.96
Goa	4.07	3.43	2.95	2.52	2.34	1.57	1.73	1.35	1.52	1.62	1.59	1.44	1.33	1.44
Sikkim	2.26	2.39	2.31	2.55	0.63	0.40	0.33	0.34	0.43	0.57	1.71	0.62	0.58	0.61
All States	2.01	1.90	1.91	1.90	1.80	1.83	1.87	1.93	2.24	2.38	2.49	2.76	2.89	2.95
average	2.42	2.26	2.25	2.18	2.03	2.14	2.10	2.04	2.37	2.44	3.61	4.11	4.04	3.99
standard deviation	1.19	0.94	0.87	0.87	0.85	0.94	0.86	0.77	0.92	0.89	2.21	2.71	2.57	2.26
median	2.32	2.28	2.28	2.31	2.14	2.18	2.08	2.07	2.38	2.42	2.98	3.37	3.24	3.34
Maximum	6.42	5.33	4.85	4.68	4.38	4.21	4.01	3.52	4.03	4.39	10.43	12.49	12.24	10.07
Minimum	0.52	1.03	1.25	0.45	0.41	0.40	0.33	0.34	0.43	0.57	1.42	0.62	0.58	0.61

Source: Handbook on Statistics on State Government Finances, Reserve Bank of India, 2004.

Table 4.7: Ratio of Interest payments to revenue receipts

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
West Bengal	0.15	0.18	0.18	0.20	0.19	0.22	0.24	0.27	0.31	0.41	0.36	0.44	0.50	0.55
Himachal Pradesh	0.14	0.15	0.17	0.14	0.17	0.16	0.16	0.17	0.22	0.16	0.26	0.28	0.43	0.47
Orissa	0.17	0.20	0.19	0.21	0.22	0.24	0.25	0.28	0.33	0.21	0.33	0.40	0.29	0.33
Uttar Pradesh	0.15	0.18	0.17	0.17	0.23	0.22	0.25	0.27	0.32	0.30	0.30	0.32	0.34	0.33
Rajasthan	0.14	0.15	0.15	0.16	0.16	0.16	0.21	0.23	0.26	0.29	0.27	0.32	0.32	0.31
Gujarat	0.16	0.15	0.16	0.15	0.15	0.16	0.17	0.17	0.18	0.20	0.20	0.26	0.30	0.30
Bihar	0.17	0.21	0.21	0.20	0.23	0.23	0.18	0.18	0.20	0.23	0.21	0.27	0.28	0.26
Punjab	0.17	0.10	0.15	0.32	0.23	0.29	0.29	0.29	0.40	0.35	0.25	0.36	0.29	0.26
Andhra Pradesh	0.11	0.11	0.12	0.12	0.14	0.15	0.16	0.16	0.19	0.18	0.19	0.21	0.25	0.24
Haryana	0.13	0.14	0.14	0.12	0.08	0.11	0.12	0.14	0.18	0.24	0.23	0.21	0.22	0.23
Maharashtra	0.10	0.12	0.12	0.12	0.12	0.12	0.13	0.14	0.17	0.19	0.18	0.21	0.21	0.22
Kerala	0.14	0.17	0.16	0.18	0.18	0.17	0.18	0.18	0.20	0.25	0.26	0.27	0.23	0.22
Tamil Nadu	0.09	0.08	0.10	0.12	0.12	0.12	0.12	0.13	0.15	0.17	0.17	0.19	0.20	0.20
NCT Delhi						0.04	0.07	0.09	0.12	0.12	0.13	0.15	0.16	0.19
Madhya Pradesh	0.11	0.11	0.12	0.12	0.14	0.13	0.14	0.15	0.16	0.16	0.18	0.20	0.19	0.19
Assam	0.15	0.04	0.16	0.15	0.20	0.14	0.15	0.15	0.12	0.20	0.15	0.18	0.21	0.18
Karnataka	0.11	0.11	0.11	0.11	0.13	0.12	0.13	0.13	0.14	0.16	0.16	0.18	0.20	0.18
Mizoram	0.07	0.03	0.07	0.04	0.06	0.06	0.07	0.09	0.10	0.10	0.12	0.17	0.12	0.16
Jammu and Kashmir	0.19	0.24	0.18	0.12	0.19	0.14	0.13	0.14	0.15	0.15	0.16	0.16	0.16	0.15
Tripura	0.08	0.09	0.10	0.11	0.10	0.09	0.11	0.11	0.11	0.13	0.14	0.14	0.15	0.15
Nagaland	0.10	0.11	0.11	0.10	0.13	0.10	0.11	0.11	0.13	0.14	0.14	0.15	0.16	0.14
Manipur	0.08	0.07	0.09	0.08	0.09	0.08	0.08	0.09	0.10	0.12	0.17	0.16	0.13	0.14
Goa	0.11	0.18	0.15	0.15	0.13	0.11	0.12	0.11	0.13	0.15	0.14	0.14	0.12	0.12
Arunachal Pradesh	0.04	0.05	0.04	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.13	0.10	0.09	0.11
Meghalaya	0.05	0.05	0.06	0.07	0.08	0.07	0.08	0.09	0.08	0.10	0.10	0.11	0.12	0.11
Sikkim	0.07	0.08	0.09	0.10	0.05	0.03	0.03	0.03	0.04	0.04	0.09	0.05	0.04	0.04
All States	0.13	0.14	0.15	0.15	0.16	0.16	0.17	0.18	0.20	0.22	0.22	0.24	0.25	0.25
average	0.12	0.12	0.13	0.14	0.14	0.14	0.14	0.15	0.18	0.19	0.19	0.22	0.22	0.22
standard deviation	0.04	0.06	0.04	0.06	0.06	0.06	0.06	0.07	0.09	0.08	0.07	0.09	0.10	0.11
median	0.11	0.11	0.14	0.12	0.14	0.13	0.13	0.14	0.16	0.16	0.17	0.19	0.20	0.20
Maximum	0.19	0.24	0.21	0.32	0.23	0.29	0.29	0.29	0.40	0.41	0.36	0.44	0.50	0.55
Minimum	0.04	0.03	0.04	0.04	0.05	0.03	0.03	0.03	0.04	0.04	0.09	0.05	0.04	0.04

Source: Handbook on Statistics on State Government Finances, Reserve Bank of India, 2004.

Table 4.8: Ratio of interest payments to Disposable Revenue

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
West Bengal	0.16	0.19	0.19	0.21	0.20	0.23	0.24	0.28	0.33	0.42	0.38	0.46	0.52	0.57
Himachal Pradesh	0.15	0.17	0.18	0.15	0.18	0.17	0.16	0.18	0.23	0.17	0.28	0.30	0.45	0.48
Orissa	0.19	0.22	0.21	0.24	0.24	0.26	0.27	0.30	0.35	0.22	0.35	0.42	0.31	0.35
Uttar Pradesh	0.17	0.20	0.20	0.19	0.23	0.23	0.26	0.28	0.33	0.32	0.31	0.33	0.36	0.35
Rajasthan	0.15	0.17	0.17	0.18	0.18	0.18	0.23	0.24	0.28	0.31	0.29	0.34	0.35	0.35
Gujarat	0.17	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.18	0.21	0.20	0.27	0.32	0.31
Bihar	0.19	0.23	0.24	0.23	0.24	0.25	0.18	0.18	0.20	0.24	0.22	0.28	0.30	0.28
Punjab	0.18	0.10	0.15	0.33	0.24	0.29	0.30	0.30	0.41	0.36	0.26	0.36	0.31	0.28
All States	0.14	0.15	0.16	0.16	0.17	0.17	0.17	0.18	0.21	0.23	0.31	0.25	0.27	0.27
Andhra Pradesh	0.12	0.12	0.13	0.14	0.15	0.16	0.17	0.16	0.19	0.19	0.20	0.22	0.27	0.25
Haryana	0.13	0.15	0.15	0.13	0.08	0.11	0.12	0.14	0.19	0.24	0.23	0.22	0.23	0.24
Assam	0.16	0.04	0.17	0.16	0.23	0.15	0.15	0.15	0.12	0.21	0.16	0.19	0.24	0.24
Kerala	0.15	0.18	0.17	0.19	0.19	0.18	0.19	0.19	0.21	0.25	0.27	0.29	0.25	0.23
Maharashtra	0.11	0.12	0.13	0.12	0.12	0.13	0.13	0.15	0.17	0.20	0.18	0.22	0.22	0.22
Madhya Pradesh	0.12	0.12	0.13	0.14	0.16	0.15	0.15	0.16	0.18	0.17	0.19	0.21	0.21	0.22
Tamil Nadu	0.10	0.09	0.10	0.13	0.12	0.13	0.13	0.13	0.15	0.17	0.18	0.19	0.21	0.20
NCT Delhi						0.04	0.07	0.09	0.12	0.13	0.13	0.15	0.17	0.19
Karnataka	0.12	0.11	0.12	0.12	0.13	0.13	0.13	0.14	0.15	0.17	0.17	0.18	0.21	0.19
Tripura	0.08	0.09	0.10	0.12	0.12	0.11	0.12	0.12	0.12	0.14	0.15	0.15	0.18	0.18
Nagaland	0.11	0.12	0.12	0.11	0.14	0.11	0.12	0.13	0.15	0.16	0.15	0.16	0.17	0.17
Manipur	0.08	0.07	0.10	0.09	0.10	0.09	0.09	0.10	0.11	0.14	0.18	0.17	0.14	0.16
Mizoram	0.08	0.04	0.07	0.05	0.06	0.06	0.08	0.10	0.11	0.11	0.13	0.19	0.13	0.16
Jammu and Kashmir	0.20	0.24	0.19	0.13	0.29	0.16	0.14	0.15	0.15	0.16	0.16	0.16	0.17	0.15
Arunachal Pradesh	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.08	0.08	0.08	0.14	0.11	0.12	0.14
Meghalaya	0.06	0.06	0.06	0.07	0.09	0.08	0.08	0.09	0.09	0.11	0.11	0.12	0.13	0.14
Goa	0.11	0.18	0.16	0.15	0.13	0.11	0.13	0.11	0.13	0.15	0.15	0.14	0.12	0.12
Sikkim	0.07	0.09	0.10	0.10	0.05	0.03	0.03	0.03	0.04	0.04	0.09	0.05	0.04	0.05
average	0.13	0.13	0.14	0.15	0.15	0.14	0.15	0.16	0.18	0.19	0.20	0.22	0.23	0.23
standard deviation	0.04	0.06	0.05	0.06	0.06	0.07	0.07	0.07	0.09	0.07	0.07	0.09	0.09	0.09
median	0.12	0.12	0.15	0.14	0.15	0.14	0.13	0.15	0.16	0.17	0.18	0.20	0.21	0.22
Maximum	0.20	0.24	0.24	0.33	0.29	0.29	0.30	0.30	0.41	0.36	0.35	0.42	0.45	0.48
Minimum	0.05	0.04	0.05	0.05	0.05	0.03	0.03	0.03	0.04	0.04	0.09	0.05	0.04	0.05

Source: Handbook on Statistics on State Government Finances, Reserve Bank of India, 2004.

Table 4.9: Ratio of Interest Payments to Revenue Receipts minus Grants (Plan and non plan)

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
Himachal Pradesh	0.27	0.29	0.31	0.31	0.28	0.33	0.31	0.28	0.33	0.23	0.65	0.72	1.07	1.11
Nagaland	0.26	0.28	0.27	0.28	0.28	0.31	0.28	0.23	0.26	0.27	1.06	0.99	1.20	0.94
Mizoram	0.14	0.09	0.16	0.13	0.15	0.20	0.20	0.22	0.23	0.25	0.71	1.36	0.76	0.71
West Bengal	0.18	0.21	0.22	0.24	0.23	0.25	0.27	0.30	0.38	0.48	0.46	0.55	0.59	0.63
Manipur	0.20	0.18	0.23	0.24	0.20	0.24	0.21	0.20	0.23	0.28	0.70	0.86	0.57	0.56
Tripura	0.19	0.21	0.22	0.24	0.24	0.28	0.26	0.22	0.24	0.26	0.50	0.52	0.58	0.55
Jammu and Kashmir	0.39	0.56	0.44	0.32	0.60	0.41	0.39	0.33	0.34	0.38	0.52	0.58	0.57	0.51
Orissa	0.23	0.27	0.25	0.29	0.29	0.31	0.32	0.37	0.40	0.30	0.42	0.49	0.40	0.44
Arunachal Pradesh	0.12	0.14	0.13	0.13	0.16	0.20	0.21	0.19	0.21	0.19	0.60	0.66	0.41	0.44
Uttar Pradesh	0.20	0.23	0.23	0.22	0.29	0.26	0.30	0.30	0.36	0.35	0.34	0.37	0.39	0.39
Rajasthan	0.18	0.19	0.19	0.21	0.21	0.19	0.25	0.28	0.31	0.34	0.34	0.39	0.39	0.38
Assam	0.22	0.07	0.26	0.28	0.33	0.25	0.25	0.23	0.19	0.31	0.24	0.28	0.37	0.35
Meghalaya	0.13	0.13	0.13	0.16	0.19	0.17	0.16	0.16	0.16	0.18	0.31	0.33	0.35	0.35
Gujarat	0.17	0.17	0.17	0.17	0.17	0.16	0.18	0.18	0.19	0.22	0.22	0.29	0.35	0.34
Bihar	0.21	0.27	0.27	0.26	0.28	0.26	0.19	0.22	0.23	0.27	0.23	0.31	0.33	0.30
Andhra Pradesh	0.13	0.13	0.14	0.15	0.16	0.18	0.19	0.17	0.21	0.21	0.22	0.25	0.29	0.29
Punjab	0.19	0.10	0.17	0.35	0.25	0.31	0.31	0.31	0.43	0.38	0.27	0.38	0.33	0.29
Haryana	0.14	0.16	0.16	0.13	0.09	0.12	0.13	0.15	0.19	0.26	0.24	0.23	0.24	0.25
Kerala	0.17	0.19	0.19	0.20	0.20	0.19	0.20	0.20	0.22	0.27	0.28	0.31	0.27	0.24
Madhya Pradesh	0.14	0.14	0.14	0.15	0.17	0.15	0.16	0.17	0.19	0.19	0.20	0.23	0.23	0.24
Maharashtra	0.11	0.13	0.14	0.13	0.13	0.13	0.14	0.15	0.18	0.21	0.19	0.23	0.23	0.24
Tamil Nadu	0.10	0.09	0.11	0.14	0.13	0.13	0.13	0.14	0.16	0.18	0.19	0.20	0.22	0.22
Karnataka	0.12	0.12	0.12	0.13	0.14	0.13	0.14	0.14	0.16	0.18	0.18	0.20	0.22	0.21
NCT Delhi						0.04	0.07	0.10	0.13	0.14	0.14	0.16	0.18	0.21
Goa	0.14	0.22	0.18	0.17	0.15	0.12	0.14	0.11	0.13	0.15	0.15	0.14	0.13	0.13
Sikkim	0.16	0.21	0.23	0.26	0.07	0.04	0.04	0.04	0.05	0.06	0.18	0.07	0.06	0.06
All States	0.16	0.17	0.18	0.19	0.19	0.19	0.20	0.21	0.24	0.26	0.26	0.29	0.31	0.31
average	0.18	0.19	0.20	0.21	0.21	0.21	0.21	0.21	0.23	0.25	0.37	0.43	0.41	0.40
standard deviation	0.06	0.10	0.07	0.07	0.10	0.09	0.08	0.08	0.09	0.09	0.22	0.30	0.27	0.24
median	0.17	0.18	0.19	0.21	0.20	0.19	0.20	0.20	0.21	0.25	0.28	0.32	0.35	0.34
Maximum	0.39	0.56	0.44	0.35	0.60	0.41	0.39	0.37	0.43	0.48	1.06	1.36	1.20	1.11
Minimum	0.10	0.07	0.11	0.13	0.07	0.04	0.04	0.04	0.05	0.06	0.14	0.07	0.06	0.06

Source: Handbook on Statistics on State Government Finances, Reserve Bank of India, 2004.

Table 4.10 : Structure of Liabilities as of 2003 of states facing fiscal crisis.

	WEST BENGAL	NAGALAND	MIZORAM	HIMACHAL PRADESH	TRIPURA	MANIPUR	J&K
a) Internal Debt (market loans and loans from banks and Financial Institutions)	57.70	51.59	48.17	52.91	29.83	36.49	31.04
Special securities Issued to NSSF	32.82	1.51	0.62	7.33	0.00	0.79	4.47
b) Loans and Advances from Central Govt.	35.82	25.00	24.30	25.15	24.82	37.54	41.20
c) Small saving and Provident Funds etc.	6.49	23.37	27.53	21.93	45.35	25.97	27.75
Total Debt (Rs.Crores)	69241	2580	1609	11249	3272	2272	11002

Source: Handbook of Statistics on State Government Finances, RBI 2004.

Note: figures are percentages except in the last row.

Table 4.11: Structure of Liabilities as of 2003 of states in relatively good fiscal health.

	TAMIL NADU	KARNATAKA	MAHARSHTRA	DELHI	MADHYA PRADESH	KERALA	GOA	SIKKIM
a) Internal Debt (market loans and loans from banks and Financial Institutions)	51.62	43.66	50.98	64.96	39.22	39.17	41.03	42.34
Special securities Issued to NSSF	15.12	16.70	33.57	64.96	15.19	8.92	15.42	2.90
b) Loans and Advances from Central Govt.	30.95	39.23	36.68	35.04	37.69	23.15	43.46	31.21
c) Small saving and Provident Funds etc.	17.43	17.11	12.33	0.00	23.09	37.68	15.48	26.45
Total Debt (Rs.Crores)	39753	32021	63543	11120	35251	29987	3003	862

Table 4.10: Guarantees of State Governments (Rs. Crores)

STATE	1992	1993	1994	1995	1996	1997	1998	1999 SEPT.
Andhra Pradesh	3633	5021	5326	5848	4343	7947	9885	10469
Assam	1008	1022	1022	945	1430	1430	1430	1430
Bihar	1359	1477	1652	73	1184	525	525	525
Gujarat	4514	5190	5387	6501	6519	6602	7274	7299
Haryana	1264	1526	1856	1811	2362	3749	4119	4119
Himachal Pradesh	370	482	502	495	798	989	1299	1299
J&K	459	443	480	275	599	599	599	599
Karnataka	3057	2255	3640	3862	4669	4887	6122	6517
Kerala	1744	2296	2320	3229	2082	2069	2466	2866
Madhya Pradesh	677	720	1890	287	440	3485	3485	3485
Maharashtra	7351	6132	7305	7706	8127	7636	9933	12851
Meghalaya	159	167	169	170	161	156	151	170
Orissa	1090	1333	1357	1484	1716	1919	2094	2292
Punjab	1303	1225	1517	2360	2525	6691	7044	7292
Rajashtan	2727	3143	3573	3929	4758	5754	6154	6454
Tamil Nadu	2895	3205	3604	2128	3456	4339	4339	4637
Uttar Pradesh	4257	4852	5135	5300	4730	4338	4503	4643
West Bengal	2450	2193	2299	2246	2893	2380	2480	2680
Total	40318	42682	49035	48469	52792	65495	73902	79625
Percentage to total debt outstanding of all States	32.44	30.39	30.63	26.26	24.87	26.96	26.27	23.30

Source: Report of The Technical Committee on State Government Guarantees, Reserve Bank of India, 1999.

References

- Ahluwalia M.S. (2000) "Economic Performance of States in Post Reforms Period" *Economic and Political Weekly*, 35(19) pp 1637-1648.
- Barro R.J. (1999) "Notes on Optimal Debt" mimeo
- Buiter W (1985) "A guide to Private Sector Debt and Deficits" *Economic Policy*, pp 14-79.
- Cohen D. (2002) "Fiscal Sustainability and a Contingency Trust Fund" in Brixi H and Schick A (ed) Government at Risk: Contingent Liabilities and Fiscal Risk, The World Bank, Washington D.C. pp143-157
- Fardoust S. and Lahiri A.K. (2003) "Indian States the Road to Reform" in Howes S., Lahiri A.K. and Stern N. (eds) *State Level Reforms in India : Towards More Effective Government*, Macmillan, New Delhi.
- Grossman P.J. (1994) "A Political Theory of Intergovernmental Grants" *Public Choice*, 78, pp 295-303.
- Gupta R.K (1992) Center-State Fiscal Relations under Indian Constitution, Deep and Deep Publications, New Delhi.
- Hemming R., Mates N and Barry Potter (1997) "India" in Ter-Minassian T. (eds) Fiscal Federalism in Theory and Practice International Monetary Fund, Washington, pp. 527-539.
- Khemani S. (2003) "Partisan Politics and Intergovernmental Transfers in India" Policy Research Working Paper 3016, The World Bank, Washington D.C.
- Lane T.D (1993) "Market Discipline" Staff Papers, International Monetary Fund, Vol. 40, pp.53-88.
- Ma, J (2002) "Monitoring Fiscal Risks of Subnational Governments: Selected Country Experiences in Brixi P.H. and Schick A (eds) *Government at Risk: Contingent Liabilities and Fiscal Risk*, The World Bank, Washington. Pp 393-418.
- Noel M. (2000) "Building Subnational Debt Markets in Developing and Transition Economies" Policy Research Working Paper 2339, The World Bank.
- Pennacchi G.G. (2002) "Pension Guarantees: A Methodology for Assessing Fiscal Risk" in Brixi P.H. and Schick A (eds) *Government at Risk: Contingent Liabilities and Fiscal Risk*, The World Bank, Washington. pp 283-310.
- Petersen J.E. (2001) "Subnational Debt, Borrowing Process, and Creditworthiness" mimeo, World Bank Institute.
- Prasad A, Goyal R. and Prakash A (2004) "States Debt and Debt Relief", *Economic and Political Weekly*, vol 39 no.26 pp2726-37.
- Rao M.G. (1997) "Invisible Transfers in Indian Federalism" *Public Finance*, Vol.52(3-4) pp.429-448.
- Rao M.G. (2000) "Principles of Inter-governmental Transfers: Have the Finance Commissions Followed Them?" in Srivastava D.K. (eds) Fiscal Federalism in India Contemporary Challenges: Issues Before the Eleventh Finance Commission, Har-Anand Publications Pvt. Ltd. New Delhi.
- Rao, M.G. (2002) "State Finances in India: Issues and Challenges" *Economic and Political Weekly*, Vol. 37 no.32, pp 3261-71.
- Report of the Advisory Committee on Ways and Means Advances to State Governments, Reserve Bank of India, 2003.
- World Bank (2005) State Fiscal Reforms in India: Progress and Prospects, Macmillan India Ltd. Delhi.
- Report of The Technical Committee on State Government Guarantees, Reserve Bank of India, 1999.
- Report of the Eleventh Finance Commission Akalank Publication, New Delhi, 2000.
- Schwarcz S.L. (2002) "Globalization, Decentralization, and the Subnational Debt Problem" Duke Law School Working Paper no. 17
- Shah, A. (2004) "Fiscal Decentralization in Developing and Transition Economies: Progress, Problems and Promise" Policy Research Working Paper no.3282, World Bank, Washington D.C.
- Shankar Acharya (2002) "India's Macroeconomic Management in the 1990s", *Economic and Political Weekly*, Vol. 37 no. 16, pp1515-8.
- Singh N. and G. Vashishtha (2004) " Patterns in Center-State Fiscal Transfers: An Illustrative Analysis, *The Economic and Political Weekly*, November 6, pp. 4897-4903.
- Ter-Minassian T and Jon Craig (1997) "Control of Subnational Government Borrowing" in Ter-Minassian T. (eds) Fiscal Federalism in Theory and Practice International Monetary Fund, Washington pp156-172
- Ter-Minassian T. (1997) eds. Fiscal Federalism in Theory and Practice International Monetary Fund, Washington.
- Vithal B.P.R and Sastry M.L. (2001) *Fiscal Federalism in India*, Oxford University Press, New Delhi.
- Vithal B.P.R and Sastry M.L. (2002) *The Gadgil Formula: For Allocation of Central Assistance for State Plans*, Monohar, New Delhi.
- Webb S.B. (2004) "Fiscal responsibility Laws for Subnational Discipline : The Latin American Experience" World Bank Working Paper no. 3309, Washington D.C.

Important Conclusions.

I. Empirical regularities.

1. At an aggregate level the gross fiscal deficit as percentage of GDP has increased rather steadily from 3.3 percent in 1990-1991 to 4.2 percent in 2001-2002. The primary deficit as a percentage of GDP, on the other hand, has been rather unstable.
2. The total outstanding debt of state governments rose from 25.7 percent of GDP in 2000-2001 to 28.1 percent in 2002-2003. In 1992-93 this ratio stood at 19 percent.
3. It is the poorer states that have experienced the most severe fiscal deterioration. The inter state disparities have been further increased after 1991 as the divergence rates of growth between states has increased. This would lead to a large divergence among states in their ability to service their debt in the basis of the strength of their state's economy.
4. Except Goa, all states experienced a somewhat steep rise in the Debt to Net State Domestic Product Ratio and overall inter state disparities with regard to this ratio have increased.
5. There are eleven states for whom the outstanding debt to revenue receipts ratio exceeds 2.
6. Between 1991 and 2004 the ratio of interest payments to revenue receipts have increased very substantially. In 2004 the ratio of interest payments to revenue receipts exceeded 30 percent for West Bengal Himachal Pradesh, Orissa, Uttar Pradesh, Rajasthan and Gujarat.
7. As the structure of liabilities does not seem to vary between states close to a debt crisis and states which are not in danger of falling into a debt crisis. The fault does not lie in the structure of liabilities but in the fact that some states have a far greater amount of debt than they can hope to service with available resources.
8. The Reserve Bank of India Bulletin (November 2003 pg. 763) reports that the extent of these outstanding contingent liabilities of states increased from 6.8 percent of GDP in March 2000 to 8.1 percent of GDP in March 2002 and reduced to 7.2 percent of GDP in March 2002.
9. Between 1991 and 2003 the total debt of states has increased more than 6 times at current prices. The composition has changed dramatically over this period. Internal debt [which includes market loans, loans from banks and financial institutions and Special securities issued to NSSF] has risen dramatically from 1991 to 2003 from 17.2 % to about 25.6 percent of total debt. Share of loans from the central government has dropped significantly from 68.3 per cent in 1991 to 37.8 per cent in 2003 but it still remains the single largest source of debt.

II. Recommendations

1. There is a need to reexamine at entire federal fiscal transfer mechanism. If this transfer mechanism is unable to deal both the vertical and horizontal gaps then state governments would be forced to depend increasingly on debt to finance expenditures.
2. The entire system of fiscal transfers needs to be made more transparent and predictable so that the uncertainty about the exact amount of resources a state would have at its disposal in the future can be substantially reduced. One possible way of achieving this would be to do away with the distinction between plan and non-plan assistance to states.
3. Loans from the national government are subject to an "ex post efficiency risk". It arises because of a lack of incentive for the sub national government to exert adequate effort while under taking the project financed by the loan. This lack of incentive in turn arises because of the inability of the national government to make a credible threat of not refinancing debt. The threat of non-refinancing can be made credible in a system where national government only makes capital grant allocations (through a system which uses transparent economic allocation criteria and has in place a good monitoring system). The 12 th finance commissions recommendation that the center transfer funds to states only in terms of tax shares and grants alone and not through loans should be vied in this light.
4. The financial markets in India are not in position to discipline state government borrowing. The following measures need to be taken if markets can depended to enforce discipline on states.
5. Abolish SLR.
6. Improve accounting standards and bring uniformity in the way state governments present their budgets.
7. Have a mechanism in place such that policy responds to market signals
8. Evolve a clear procedure of rescheduling debt in case a state government either defaults or is close to defaulting its interest and debt repayment obligations.
9. In the medium term, while the institutions needed for market discipline are being built, a rule-based control on state government borrowing seems to be a workable option. Rules that would prohibit states from raising loans to fund current expenditures and a maximum specified debt service to revenue ratio look particularly attractive.
10. Currently, it is too early to pass judgment on the success or failure of the FRLs but given the inadequacies of the over all inter governmental fiscal transfer mechanism and the fact that not all states have enacted such a legislation its immediate influence on the states' debt position is likely to be negligible. Further more with the central government itself putting its own FRL on "pause" the states have little incentive to be serious about their own FRLs. In the longer term though with proper institution building the FRLs are may possibly be successful.
11. There is an urgent need to force state governments to abandon the current provident fund scheme for state government employees that creates an un-funded debt and move to a fully funded scheme.
12. The states governments should consider the creation of a trust fund that would manage contingent liabilities especially loan guarantees. Unless this is done state budgets would always be at risk from unforeseen events like defaults on debts guaranteed by it.