State Finances in India: A Case for Systemic Reform

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March 2006

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Abstract

This paper provides a self-contained overview of the present problems of state finances in India. It begins with an overview of historical evolution and current institutional structures, including economic, political, administrative and fiscal aspects of India's federal system. The paper then reviews the current situation of India's state government finances, going on to consider various developments that have shaped the states' current fiscal situation, including the roles of national economic reform, the intergovernmental transfer system, tax reform, and local government reform. Policy options for reforming institutions of fiscal federalism system, borrowing mechanisms for the states, and governance are then discussed, with an emphasis on the principle that states should have appropriate incentives for fiscal discipline at the margins of revenue and expenditure.

JEL codes: H1, H7, P2

Keywords: fiscal policy, intergovernmental transfers, incentives, institutional reform

1. Introduction

India is a large and heterogeneous nation, with ancient traditions coexisting with modernity. It has successfully created and preserved the world's largest democracy, with over a billion people. It has held fourteen national elections, and only once, briefly, has the supremacy of democratic institutions in the country been threatened. One secret of India's success has been its balance of national unity with diversity at the subnational level. Within the framework of the Constitution, a variety of political approaches and ideologies have flourished. This variety has increased in the past two decades, with regional identities playing a greater role in state and national politics. At the same time, there has been a gradual movement towards at least a weak consensus with regard to economic policy, with the market being given a greater role than in the past. Arguably, economic policy changes have spurred more rapid growth.

At the same time, the political system has faced new challenges as a result of economic liberalization. Regional inequality has increased, and there is a growing threat of private affluence thriving as islands in the midst of public squalor, as governance has sometimes been reduced to handouts and retreat from responsibility. On the other hand, some states or regions have been able to become homes for world-class enterprises. More and more, attention has shifted from national policy to state government functioning. The Indian states provide stark contrasts in terms of their economic and political performance. However, one common development they have all shared is deterioration in their fiscal situations over the last decade. Understanding state finances in India, and how to repair them in the context of overall economic reform in India, will be a crucial task over the next few years, if India is to maintain a high growth trajectory. The past problems of countries like Argentina and Brazil are a stark reminder of the high social and economic costs of things going wrong at the level of subnational national finances.

This paper provides a broad, relatively self-contained overview of state finances in India. The structure of the paper is as follows. Section 2 gives an overview of historical evolution and current institutional structures, including economic, political and administrative aspects of India's federal system. Details of India's fiscal federal arrangements are provided. Section 3 reviews the current situation of India's state government finances, going on to consider various aspects in detail, including the roles of national economic reform, the intergovernmental transfer system, tax reform, and local government reform. Policy options for redesign of the intergovernmental transfer system, borrowing mechanisms for the states, and reform of governance are then discussed in Section 4, with an emphasis on the principle that states should have appropriate incentives for fiscal discipline at the margins of revenue and expenditure. We argue that substantial reform is required in all of these dimensions. Section 5 offers a summary conclusion regarding systemic reforms and their impacts.

2. Context and Background

The origin of many of India's federal institutions can be found in its history as a British colony. At the same time, the circumstances of independence, with its traumatic partition of the country, also played a major role in shaping the structure and working of the country's intergovernmental relations. Different ideological positions and economic circumstances have affected overall federal institutions, which are briefly reviewed in this section.[1]

Historical Development

In the nineteenth century, the British gradually took over a subcontinent that was politically fragmented and strife ridden. The Government of India Act of 1858 imposed direct sovereignty under the British Crown, with an *ad hoc* mixture of centralized (the Viceroy, an Executive Council, and a small number of district level British administrators) and decentralized (the Indian princely states) administrative structures. As Crown rule was consolidated, the British attempted administrative decentralization: municipal governments were introduced, and large sub-national units were split. As a nationalist political movement grew, financial decentralization was begun as a prelude to meeting the perceived need for local self-government. Initially, some expenditure categories (e.g., police, health, education) were assigned to the provincial governments, which received annual lump-sum grants, and now had separate budgets. Subsequently, further devolution of expenditure assignments and revenue authority, took place, along with arrangements for revenue sharing.

After World War I, the British responded further to competing interests in India. A 1918 report on constitutional reforms articulated a vision of India as a decentralized federation, and led to further authority being devolved to the provinces. The Indian government remained essentially unitary, but the subjects of administration and sources of revenue were divided into central and provincial jurisdictions. An initial proposal for assignment of tax authority would have required provincial contributions to fund the central government, but this was changed to ensure greater central fiscal autonomy, and the sharing of central income taxes with the provinces. The 1935 Government of India Act proposed relatively loose federal structures, and provided for the distribution of legislative jurisdictions with a three-fold division of powers into Federal, Provincial and Concurrent Lists. On the fiscal front, the Act provided a detailed assignment of tax authorities and revenue sharing scheme.

Indian independence overtook the implementation of the federal provisions of the 1935 Act, but the framers of the Indian Constitution relied heavily on this Act for the new constitutional framework. However, the effects of the partition of the country strengthened the desire for a strong center. The conception of federalism was shaped accordingly: a division of powers between center and states, but with residuary powers explicitly at the center, and central ability to impinge severely on the states in special circumstances. Thus, the Constitution incorporated centralizing features that were not in earlier British legislation, though closer to their practice in India. While the political structures envisaged in the 1935 Act were largely abandoned in the Constitution, the details of assignments of expenditure and revenue authorities, as well as of revenue sharing and grants were preserved.

[1] Further background may be found in Singh and Srinivasan (2005a) and Rao and Singh (2005).

Political and Administrative Structures

India has been a constitutional democracy since 1950, now comprised of 28 states, six "Union Territories" (UTs) and a National Capital Territory (NCT), Delhi. The states, plus the NCT and the UT of Pondicherry, have elected legislatures, with Chief Ministers in the executive role. The other UTs are governed directly by appointees of the center. Each state also has a Governor, nominally appointed by the President, but effectively an agent of the Prime Minister. The primary expression of statutory constitutional authority in India comes through the directly elected parliamentary-style governments at the national and state level, as well as nascent directly elected government bodies at various local levels. Overlapping political authorities at the central and state levels have been dealt with through intra-party bargaining, and, more recently, through explicit bargaining and discussion. The Inter-State Council (ISC) was created in 1990, and has become a forum where some political and economic issues of joint concern can be collectively discussed and possibly resolved. The ISC includes the Prime Minister, state Chief Ministers, and several central cabinet ministers as members. While the ISC is merely advisory, it has formalized collective discussion and approval of several important matters impinging on India's federal arrangements, including tax sharing and inter-state water disputes.

Political and economic centralization have been reflected in bureaucratic and judicial institutions. The Indian bureaucracy is provided constitutional recognition, through the provisions of Part XIV of the Constitution. Since each political layer of government requires its own administrative apparatus, any bureaucracy in a federation will have a federal character: state governments must be able to appoint and dismiss bureaucrats to implement state-level policies. This is true for India, with a central bureaucracy as well as an independent bureaucracy in each state. However, the key component of the bureaucracy is the Indian Administrative Service (IAS), whose members are chosen by a centralized process and trained together, though then assigned to particular states. At the national and state levels, the judiciary constitutes a distinct branch of government, though the legislative/executive branch influences appointments. At the local level, IAS members are vested with some judicial authority. The Supreme Court, at the top of the judicial hierarchy, has powers that include broad original and appellate jurisdiction and the right to rule on the constitutionality of laws passed by Parliament. There has been conflict between the Supreme Court and the legislature/executive over the scope of these powers, but in specific issues of center-state relations concerning taxation and property rights, the basic centralizing bias of the Constitution tilted the Court's interpretation towards the center. At the state level, below the Supreme Court, the High Courts superintend the work of all courts within the state, including district and other subordinate courts.

Fiscal Federal Institutions

Tax and expenditure assignments

The Indian Constitution, in its Seventh Schedule, assigns the powers and functions of the center and the states. The schedule specifies the exclusive powers of the center (the Union list) and the states (the State list), and those under joint jurisdiction (the

Concurrent list). All residuary powers are assigned to the center. The nature of the assignment of expenditure functions is fairly typical of federal nations, and broadly fits with economists' theoretical rationale.[2] The functions of the central government are those required to maintain macroeconomic stability, international trade and relations, and those having implications for more than one state. The major subjects assigned to the states comprise public order, public health, agriculture, irrigation, land rights, fisheries and industries and minor minerals. The states also assume a significant role for subjects in the Concurrent list, such as education and transportation, social security and social insurance.

The assignment of tax powers in India was based on a principle of separation, with tax categories being exclusively assigned either to the center or to the states. Most broad-based taxes have been assigned to the center, including taxes on income and wealth from non-agricultural sources, corporation tax, taxes on production (excluding those on alcoholic liquors) and customs duty. A long list of taxes is assigned to the states, but only the tax on the sale of goods has been significant for state revenues. This narrow effective tax base is largely a result of political economy factors that have eroded or precluded the use of taxes on agricultural land or incomes by state governments. The center has also been assigned all residual tax powers. The tax assignment system has some problematic features. The separation of income tax powers between the center and states based on source (agriculture vs. non-agriculture) has created avenues for evasion. Also, even though in a legal sense taxes on production (central manufacturing excises) and sale (state sales taxes) are separate, they tax the same base, causing overlapping and leaving less tax room to the states. Finally, the states were allowed to levy taxes on the sale and purchase of goods (entry 54 in the State list) but not services. This provided avenues for tax evasion, and delayed the design and implementation of a comprehensive value added tax (VAT).

The realized outcome of the Indian assignments of tax and expenditure authority, through their particular implementation, and the response of different levels of government and tax payers to the assignment, has been a substantial vertical fiscal imbalance. In 2002-2003, the states on average raised about 38 percent of government revenues, but incurred about 58 percent of expenditures. Transfers from the center made up the difference – though perverse fiscal incentives for the states in this system have, arguably, increased the imbalance. In fact, the ability of the states to finance their current expenditures from their own sources of revenue saw a long-run decline, from 69 percent in 1955-1956 to 52 percent in 2002-2003. In terms of total expenditure (including capital spending), the states were even more dependent on the center, with only 42 percent of their overall spending being covered by their own revenue receipts in 2000-01 (RBI Annual Reports). There are four main transfer channels to cover vertical imbalances, described next, in turn.

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[2] Economic theories of government are based on the idea that public (non-rival and non-exclusive) goods are not well provided by the market mechanism. In addition, if governments are not perfectly informed and intrinsically benevolent, subnational governments may be better able to judge the desired levels of local public goods, and, potentially, can be given more specific electoral incentives to do so than national governments.

Finance Commission Transfers

It was recognized in the Constitution that its assignment of tax powers and expenditure functions would create imbalances between expenditure and revenue, both vertical (between center and states) and horizontal (among different states). Therefore, it provided for the sharing of the proceeds of certain centrally levied taxes (e.g., non-corporate income tax, Article 270; and Union excise duty, Article 272) with the states, as well as grants to the states from the Consolidated Fund of India (under Article 275). Recent constitutional changes in this scheme have simplified this sharing arrangement, replacing it with an overall share of the consolidated fund. The shares of the center and the states, and their allocation among different states are determined by the Finance Commission, which is also a constitutional creation, and is appointed by the President of India every five years (or earlier if needed). Finance Commission transfers are mostly unconditional in nature. The Finance Commissions' approach to federal transfers has consisted of (i) assessing overall budgetary requirements of the center and states to determine the resources available for transfer from the center during the period of recommendation, (ii) projecting states' own revenues and non-plan current expenditures, (iii) determining the aggregate and individual states' share of the consolidated fund of the center, and (iv) using grants to fill projected expenditure-revenue gaps remaining after tax devolution.

Twelve Finance Commissions have made recommendations to the central government and, with a few exceptions, these have been accepted. The Commissions have developed an elaborate methodology for dealing with horizontal and vertical fiscal imbalances. In particular, the formula for tax devolution is quite complicated, as a result of attempts to capture simultaneously disparate (and even contradictory) factors such as poverty, 'backwardness', tax effort, fiscal discipline, and population control efforts. The result has been that the impact of Finance Commission transfers on horizontal equity (equalizing fiscal capacity across states) has been somewhat limited.[3] Despite the *ad hoc* nature of the tax-sharing formula, its persistence reflects the nature of precedent that has grown around the Finance Commission, even though it is not a permanent body, and lacks continuity in its staffing and its analysis. Grants recommended by the Finance Commissions have typically been based on projected gaps between non-plan current expenditures and post-tax devolution revenues. As with tax sharing, these grants have generally been unconditional, although some commissions have attempted to enhance outlays on specified services in the states by making closed-ended specific purpose non-matching grants. In either case, the incentive problems with this "gap-filling" approach are obvious. Some commissions did try to incorporate normative growth rates of revenues and expenditures in their calculations, but these attempts were selective and relatively unimportant. Table 1 provides statistics on the relative magnitudes of tax sharing and grants in the Finance Commission's transfers.

[Table 1 about here]

[3] See Rao and Singh (2005) and World Bank (2005). The exception is the so-called 'special category' states. These are hilly states on India's borders, with strategic importance as well as cost disabilities in public good provision.

Planning Commission Transfers

While the Finance Commission decides on tax shares and makes grants, a separate body, the Planning Commission, makes grants and loans (in the ratio 30:70 for the major states)[4] for implementing development plans. As development planning gained emphasis, the Planning Commission became a major dispenser of such funds to the states. As there is no specific provision in the Constitution for such plan transfers, the central government channeled them under the miscellaneous – and limited – provisions of Article 282. Before 1969, plan transfers were project-based. Since then, the distribution has been done on the basis of a consensus formula (see Table 2) decided by the National Development Council (NDC).[5] As with the Finance Commission formula, the Planning Commission tries to aggregate disparate objectives in its calculations, with the result that the overall impact is less than clear. One major contrast with the Finance Commission is the conditional nature of Planning Commission transfers. However, while the special category states receive plan transfers based on projects that they formulate and submit, the general category states' plan transfers are not related to the required size or composition of plan investments. Hence there is not even implicit matching of states' own resource commitments in this transfer channel, let alone an explicit matching formula. The process for determining plan transfers involves competing proposals from the Planning Commission and the states, with a certain amount of bargaining through the NDC, as well as in state-by-state discussions, to determine plan loans and grants. At the end of this process, the Planning Commission approves the state plans. At the margin, it is mainly the states' own resource position that determines their plan expenditures.

[Table 2 about here]

Central Ministry Transfers

Various ministries give grants to their counterparts in the states for specified projects, either wholly funded by the center (central sector projects) or requiring the states to share the cost (centrally sponsored schemes). Both these categories are reported together as central schemes in Table 1. The ostensible rationale for these programs is financing activities with a high degree of inter-state spillovers, or which are merit goods (e.g., poverty alleviation and family planning), but they are often driven by pork-barrel objectives. These projects are supposed to be monitored by the Planning Commission, and coordinated with the overall state plans – which is why they are typically listed under Plan transfers (e.g., Table 1) – but both monitoring and coordination are relatively ineffective. There are over 100 schemes, and attempts to consolidate them into broad sectoral programs have been unsuccessful. These programs have provided the central government with an instrument to actively influence states' spending, replacing pre-1969 plan transfers in this role. The proliferation of schemes may also have increased the size

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[4] The special category states (so called because they were placed in a special category for the purpose of planning – they are all hill states on the geographical periphery of India) receive a much higher proportion of Plan funds as grants.

[5] The NDC is chaired by the Prime Minister, and its members include all central cabinet ministers, Chief Ministers of the states, and members of the Planning Commission. Like the ISC, it serves as a bargaining and log-rolling body, though with a much narrower scope.

and control of the bureaucracy. While the NDC recently appointed an investigative committee that recommended scaling down and consolidating centrally sponsored schemes, implementation of this proposal was weak.

Loans and Guarantees

In addition to explicit transfers, intergovernmental loans, to the extent that they are subsidized[6] or completely written off, also constitute implicit transfers to subnational governments. Ideally, borrowing should be to finance investment, but state governments have increasingly used borrowing to meet current expenditure needs (now as much as 50 percent). State governments need central government approval to borrow from the market if they are indebted to the center, and this constraint binds for all the states. Central loans (including Planning Commission and ministry-based project loans) now constitute about 60 percent of the states' indebtedness, with another 22 percent being market borrowing, and the remainder made up of pension funds, shares of rural small savings, and required holdings of state government bonds by commercial banks (Rao and Singh, 2002; Srinivasan, 2002). While these captive sources of finance are limited, the states have been able to soften their budget constraints further by off-budget borrowing or nonpayment by their public sector enterprises (PSEs). For example, the State Electricity Boards (SEBs) have been tardy in paying the National Thermal Power Corporation, a central PSE (Srinivasan, 2002). Other sources of softness in state government budget constraints include central government guarantees of loans made to state government PSEs by external agencies, and write-offs of past loans made to state governments. These write-offs have regularly been a part of recent Finance Commissions' recommendations, as debt relief for the states.

3. Current Issues

The current problems of state finances must be seen in the context of India's history and institutions. Precedent, informal institutional norms and procedures, and formal legislative frameworks all play a role in determining fiscal behavior and outcomes at the state level. In particular, the system of intergovernmental relations, as it developed, combined poor explicit incentives for subnational fiscal discipline with political and administrative controls to compensate. The current problems of state finances can be seen as the consequence of a relaxation of the latter controls, without complementary reforms in explicit incentives.

Fiscal Situation of the States

Aggregate state finances have deteriorated significantly since the late 1980s. Overall revenue deficits (i.e., differences between current revenues and expenditures) were nonexistent or negligible before that time. From 1987-88 onwards, the states taken

[6] In some cases, central loans have been at higher than notional market rates, but it is not completely clear that those market rates would have been operative for subnational debt subject to risk without central guarantees.

as a whole have always been in revenue deficit, and the level increased from an average of 0.62% of GDP across the three years 1993-96 to 2.53% in 2000-03.[7] This deterioration was greater than the worsening in overall fiscal deficits for the same period (2.55% to 4.07%), reflecting the crowding out of capital expenditures by current expenditures such as subsides and salary payments. Perhaps the biggest single factor in explaining this trend was the Fifth Pay Commission's award, which, spilling over to the states, led to a very large jump in the states' wage bills. A third measure, the states' total primary deficit (the fiscal deficit less interest payments) also worsened significantly from an average of 0.69% of GDP over the 1993-96 period to 1.41% over 2000-03. A consequence of these continued and worsening deficits was a substantial increase in the debt-GDP ratio of the states, from 21 % in 1996-97 to 31% in 2002-03. The latest estimates for the revenue deficit (1.4% in 2004-05 and budgeted at 0.7% in 2005-06) reflect an improvement, but it is too early to confidently identify a trend.[8]

Disaggregating the states' deficits reveals that the source of deterioration has been increases in expenditures such as interest payments, rather than declines in own revenues or transfers from the central government (particularly tax sharing and grants determined by the Finance Commission). Of course, this view is predicated on the assumption that the "natural" income elasticity of tax revenues (sometimes called "buoyancy") is equal to one. One could as well argue that the buoyancy of states' tax revenues ought to be greater than one, which would imply that tax revenues have failed to grow at a pace consistent with that norm. The problem, though, is that no exact normative benchmark exists. We will return to the consideration of taxes in more detail later in the paper.[9] For now, we present the aggregate data, which are summarized in Table 3.

[Table 3 about here]

The first four data columns of Table 3 summarize trends in the four components of states' revenues. Deterioration across the two three-year periods came in non-tax revenues and non-Finance Commission transfers, but even so, the total decrease amounted to only a little over half a percentage point of GDP. The increase in revenue expenditures in this same period amounted to 1.34% of GDP (Table 3, data column 5), and interest payments and pensions were major contributors to this jump. Further aspects of changes in expenditure (not shown in Table 3) have been increases in subsidies – with the power sector a major culprit – and a squeeze on Plan expenditure, which ought to be earmarked for capital projects. Note that some of the negative impact of the power sector also shows up in the decline in net non-tax revenues (Rao, 2003).

[Table 4 about here]

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[7] These and other figures in this section are taken from the report of the Twelfth Finance Commission (Finance Commission, 2005).

[8] These figures are from the Economic Survey of India, 2005-06, available at http://indiabudget.nic.in/es2005-06/chapt2006/chap29.pdf. The improvement in the fiscal deficit, 4.0% in 2004-05 and 3.4% in 2005-06 has been smaller, and the debt-GDP ratio has reached about 33%, though it may stabilize.

[9] See also Rao (2003) for a detailed discussion of tax revenues of the states.

Next, we turn to the performance of individual states. In many cases, the fiscal deterioration for the special category states was worse than that of the major states, but we focus on the latter here, as they contain the bulk of India's population. Data for these 15 states is shown in Table 4.[10] Ranks are shown in parentheses, with a higher rank indicating a 'worse' number in terms of deficit, change in deficit, or debt stock. While there is considerable variation across the states, in terms of their fiscal positions and the level of deterioration, there is no clear pattern. High and low income states, reforming states as well as those that have moved slowly on reform, larger and smaller states, all have shown significant fiscal deterioration.

[Table 5 about here]

Some studies (e.g., Khemani, 2002; Purfield, 2003) have attempted to provide causal explanations of state deficits through cross-section or panel (pooled cross-section and time-series) regressions for the states. Explanatory variables include structural variables such as the share of agriculture in Gross State Domestic Product (GSDP), behavioral variables such as expenditure levels, and political variables such as affiliation between the ruling parties at the state and central levels. The results are suggestive, but not conclusive, with one unexplained issue being the variation in states' fiscal performance from year to year. In other words, these regressions may not capture the essential mechanisms of state fiscal policy making, and hence do not uncover the underlying structural explanation of fiscal performance. However, Table 5 does indicate some of the underlying sources of states' differing performance, without attempting a causal explanation through regression analysis. In Table 5, we again follow the convention of ranking from 'worst' to 'best', with 'worst' being low tax revenue or revenue increases, but high expenditure or expenditure increases. Of course, this characterization neglects the potential benefits of government expenditure,[11] focusing only on the narrow fiscal consequences. Bearing out the earlier aggregate figures, we see from Table 5 that, while a couple of states have allowed own-tax revenues to slip substantially, the major source of fiscal deterioration has been increases in expenditures running well beyond tax revenues. Again, there is no obvious or simple link between the economic characteristics of the states and their relative revenue and expenditure performance. However, we proceed to consider various institutional contributors to the states' current situation.

Economic Reform

The current fiscal challenges facing the states are closely tied to the process of economic reform that began (or accelerated, depending on the particular analysis) in 1991, when India faced a severe balance of payments crisis, as well as a need for national

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[10] Following the analysis in the Twelfth Finance Commission Report, the new states of Chhatisgarh, Jharkand and Uttaranchal are combined with their respective 'parents' for the purposes of the comparison across the years.

[11] In fact, as pointed out in the Twelfth Finance Commission Report, revenue expenditure has tended to crowd out capital expenditure.

fiscal adjustment.[12] Fiscal adjustment remains a major issue. However, reform has proceeded in fits and starts. Major steps have been taken in trade liberalization, removal of restrictions on domestic industrial investment, and in some aspects of financial sector regulation. To some extent, however, central government attempts at fiscal consolidation transferred some of the fiscal adjustment challenges to the state level. At the same time, the reforms gave state governments more freedom to make policies independently,[13] and this has extended the impacts of openness to the subnational level. State governments now can affect the incentives of foreign capital to enter their jurisdictions. From the perspective of an Indian state, capital from another country or from another state can be treated equally in typical policy environments. The final impacts of the entry of capital on a subnational government will therefore depend also on the internal mobility of capital and labor. A further consideration is that the fiscal health of the states that results from their policies is likely to impinge on the entire nation's credit rating in world capital markets.[14] Reforms have also given the states the option of taking developmental and structural adjustment loans from multilateral agencies such as the World Bank and Asian Development Bank. In principle, these are meant to improve the states' short-run (through fiscal reforms) or long-run (through growth) fiscal positions, but in practice the systemic problem of soft budget constraints, operating through central government guarantees and bailout histories, makes these loans potential future contributors to the states' fiscal stress (Rao, 2003).

The central and state governments have also considered privatization as a tool for fiscal adjustment, in addition to any efficiency-enhancing role it may play. The large implicit subsidies for those employed in PSEs are an important aspect of resistance to privatization. The biggest problems have been in the power sector. In the case of state-level PSEs such as the SEBs, there are additional twin problems of large deficits and the need for coordinated reform of the power sector. Electric power is a concurrent responsibility of the center and the states. Each state has had an SEB that is vertically integrated with respect to generation, transmission and distribution, and is part of the state government. Political compulsions and inefficiencies have led to large losses by the SEBs, and they have been a major contributor to the states' fiscal deficits. The problem is even worse than budget figures indicate. For example, in 2000-01, the losses of the SEBs were over Rs. 260 billion of which only Rs. 60 billion were accounted for in the state budgets by way of explicit subsidies to the SEBs. While the power sector received early attention in the economic reform process, one of biggest hurdles to sectoral reform and new investment was the effective bankruptcy of the SEBs, leading foreign investors in generation to demand guarantees from the state governments for payments for electricity sales to the SEBs. Since the state governments themselves were in financial stress, they further asked for counter guarantees from the central government. Various attempts at

[12] See Singh and Srinivasan (2005b) for a detailed discussion of the national fiscal situation.

[13] The responses of the states were varied, as were the results. Bajpai and Sachs (1999) provide a detailed survey and scorecard of the efforts and outcomes for 15 major states, arguing that the enthusiastic reformers have done better in terms of human development as well as narrower measures of economic well being.

[14] The mechanism by which this occurs can be direct, through larger combined deficits for the center and states, or indirect, through contingent liabilities arising from explicit central counter guarantees for state guarantees to foreign corporations.

reforming the power sector failed to make much headway, leaving this aspect of the states' fiscal problem to fester, although reform finally seems to be coming through the latest Electricity Act.

Intergovernmental Transfer System

Despite the Finance Commissions' success in establishing guidelines and stability for center-state tax sharing, their methodology and processes have been criticized. The main earlier criticisms were (i) the scope of the Finance Commissions through the Presidential terms of reference was too restricted; and (ii) the design of their transfer schemes reduced state government incentives for fiscal discipline (through 'gap-filling' transfers), while doing relatively little to reduce inter-state inequities.[15] The first of these criticisms has been partly met in the case of the last two Finance Commissions, which were given broad terms of reference with respect to assessing the overall fiscal position of the central and state governments. However, this has not translated into greater control over overall transfers: Planning Commission transfers and central ministry transfers are outside the Finance Commission's control, though it can comment on their efficacy and associated decision processes.

The fiscal discipline effects of Finance Commission transfers are particularly relevant to the states' current fiscal stress, but there has been little effective change in recent years. The Eleventh Finance Commission added a weight for fiscal discipline, but this was not in itself a substantial enough incentive for the states, especially given the existence of alternative transfer channels, and off-budget operations. The Twelfth Finance Commission preserved this change, but reversed earlier declines in the relative weight given to population (Table 6), the latter change coming at the expense of the weights given to infrastructure, and to measures negatively related to income. The latter weights were meant to promote horizontal equity, and the Twelfth Finance Commission's alternative to emphasizing this equalizing channel was to increase various kinds of grants, which were also sometimes made categorical (such as for health and education). Unfortunately, this approach increases the ad hoc nature of transfers, and weakens any link between fiscal discipline and transfers. The overall conclusion could be that the formulas for determining Finance Commission require a more comprehensive reappraisal than has been attempted in recent years.

[Table 6 about here]

While there is no obvious fiscal disincentive effect in the Planning Commission approach to its transfers, neither is there a clear process of evaluating investment needs and priorities. A lack of coordination between the Finance and Planning Commissions, together with fungibility of transfers, further complicates the impact of these intergovernmental transfers. Table 1 reports the amount of plan transfers (grants only): the transfers discussed in Section 2 are in the category of 'state plan grants'. Hence, one

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[15] Thus, both larger government deficits at the subnational level and, to some extent, increases in inter-state inequalities in the last decade, can be seen partly as outcomes of the functioning of India's intergovernmental transfer system.

can see that these plan transfers are only about one-third to one-quarter of Finance Commission transfers in magnitude. Nevertheless, they represent an important source of revenue for the states. Most recently, reflecting their deteriorating fiscal positions, some states have been using plan transfers for meeting current salary obligations, illustrating the problems of the system. Of course, even if plan transfers were more effectively categorical, there is a significant degree of fungibility at the level of state budgets.

While the specific purposes and matching requirements of central and centrally sponsored schemes make them potentially an important channel for dealing with spillovers, as noted, the implementation of these schemes has been problematic, with concerns about lack of transparency, poor selection of projects, and ineffective monitoring. Nevertheless, the discretionary aspect of these intergovernmental transfers has made them attractive to central ministries. The Planning Commission is charged with a role in designing and coordinating the various ministry schemes, but if one judges by outcomes, its effectiveness in this role is not too great. These issues are often referred to under the category of "expenditure quality" (e.g., World Bank, 2005), and the states' fiscal stress has only exposed these long-standing problems.

The Twelfth Finance Commission directly addresses the problem of multiple channels of transfer, as well as the design of the Planning Commission transfers:

> Plan grants should be given as genuine grants and states may be encouraged to borrow from the market directly. Such a change would require delinking of grants from loans in plan assistance. This would facilitate determination of grants according to needs and loans according to capacities. The plan size of each state needs to take into account the sustainable level of debt and the capacity to borrow from the market. A restructuring plan must include reforms relating to the planning process. Part of the distortion in the structure of expenditure derives from the distinction between plan and non-plan expenditures. It is inefficient to show preference for creating new assets or undertaking new schemes being part of the plan, while sacrificing maintenance of already created assets. (Finance Commission, 2004, p. 82)

As we have noted, however, the Finance Commission does not have the power to act on the above recommendations. Considerable prominence in the Twelfth Finance Commission's report is given to the lack of infrastructure that faces each newly constituted commission. This contrasts with the permanent resources available to the Planning Commission and the ministries.

Tax Reform

One reason that the intergovernmental transfer system comes under the strain of dealing with large transfers and multiple objectives is the nature of tax assignments in India, as outlined in Section 2. More explicitly, the states' heavy reliance on transfers increases political bargaining and the softness of budget constraints, resulting in a possible efficiency loss (Rao and Singh, 2005, Chapter 11) and exacerbation of the states' fiscal stress. A complement to reforming the intergovernmental transfer system is reform of tax assignments. Tax reform can also improve the efficiency of inter-state tax competition, with positive implications for growth as well as the states' long run fiscal situations. At the same time, it must be recognized that promoting efficiency and growth may require removing some of the states' current sources of tax revenue. This is difficult at the best of times, and more so when the states have high fiscal deficits. Hence, a coordinated tax reform is required.

Evolving a coordinated consumption-tax system remains a major challenge. Rao (2000) provided detailed recommendations with respect to issues such as rates, interstate sales taxes, and tax administration for a dual VAT coordinated between the Center and the states, and noted the problem created by the failure of the Constitution to explicitly include services within the scope of states' sales tax authority. Rao had suggested moving taxation of services from the Union list, where it implicitly lay (through the Center's residual powers over taxes not explicitly specified in the Constitution), to the Concurrent list via a constitutional amendment. However, the central government chose instead to explicitly add service taxes to the Union List, via the 88th amendment to the Constitution, passed in January 2004, but still to be enacted. Service taxes are to be shared with the states, in a manner yet to be determined, and outside the common pool that is allocated by the Finance Commission. It is indeed possible that the sharing of service taxes will be completely outside the Commission's scope in the future, representing a reversal of previous measures to simplify the tax-sharing system and make it more efficient.

On the other hand, the center has been largely successful in persuading the states to replace taxation of interstate sales with a destination-based VAT, and this is well on the way to implementation (as of March 2006). This would remove some of the internal barriers that have plagued the development of a true national market within India,[16] and could also reduce tax exporting by the richer states, complementing the role of transfers in keeping interstate income divergence from becoming politically unacceptable. Studies commissioned by the Twelfth Finance Commission support the view that a properly designed state-level VAT would prove to be revenue augmenting over the medium to long term, with any transitory losses possibly compensated for by the center. The latest budgetary figures are consistent with this conclusion.

Taxation of services illustrates a broader issue addressed by the Eleventh Finance Commission, which made a general recommendation to give the states more power to tax, to reduce the vertical fiscal imbalance. This approach takes some pressure off the fiscal transfer system, allowing states that can obtain internal political support to more flexibly tax their own constituents for delivering benefits to them. Another possible example of such a tax reassignment would be to allow states to piggyback on central income taxes.[17] With tax sharing no longer applied to specific tax "handles", but to tax

[16] Theories of Market Preserving Federalism (e.g., Weingast, 1993) emphasize the positive role of a common internal market. In the United States, this idea was incorporated in the Interstate Commerce Clause. The framers of the Indian Constitution, although aware of the need to ensure a common market, were not averse to the idea of placing restrictions if the situation so demanded. While they intended that the sales tax system in India should be destination based, the recommendations of the Taxation Enquiry Commission of 1953, led to the Sixth amendment adding clauses which enable the central government to levy taxes on inter-state transactions. State-level entry taxes are also inefficient, but once again, replacing them will require alternative revenue sources for the states. See Rao and Singh (2005) for further discussion.

[17] This change would, of course, require a constitutional amendment.

revenues in total, this change would give states more flexibility at the margin, where they properly should have it. While states are already assigned the right to tax agricultural income, their use of this tax is minimal: the separation of agricultural income merely promotes tax evasion. Piggybacking, combined with a removal of the distinction between nonagricultural and agricultural income,[18] would represent a change in tax assignments that could increase efficiency as well as reduce the states' fiscal problems.

Local Government Reform

The states' fiscal deterioration has taken place in a complex policy environment, with the creation of constitutionally recognized local governments coinciding with the process of national economic reform. After decades of debate, major local government reform began to be implemented in 1991, when two separate constitutional amendment bills were introduced, covering rural and urban local governments respectively. In 1993, these became the 73rd and 74th amendments to the Constitution of India. The amendments reduced state governments' discretionary control over elections to rural local government bodies. Direct elections to local bodies must now be held every five years. Hence "voice" replaced "hierarchy" as the primary accountability mechanism (Hirschman, 1970; Rao and Singh, 2001). Local government reform also changed the nature of tax and expenditure assignments to local governments,[19] and instituted a system of formal state-local transfers modeled on the Finance Commission component of the existing center-state system. Aside from political considerations of promoting greater citizen involvement through decentralization, there is the potential for improving the quality of spending by pushing decision-making on local public goods down to the local level. While there are some serious issues with the new assignments, including problems of local capacity and efficiency of raising and spending money, we focus on the new transfer system and competition between state and local governments.

One view (e.g., World Bank, 1995) has been that formal transfers from the center and states to local governments could accentuate the states' fiscal deficit problems. Alternatively, one can argue that a formal, rule-governed system will make existing problems more transparent, and therefore more easily identifiable and soluble. In fact, local government finances, particularly for urban bodies, had worsened before local government reform, under a system of hierarchical control with supposedly strict monitoring by state governments. The new State Finance Commissions (SFCs) have struggled to formulate the principles for sharing or assigning state taxes, tolls, and fees and for making grants-in-aid. There remains considerable variation in the quality of analysis, methodologies used, and implementation of transfers across the different states. Lack of political will at the state level and, perhaps most significantly, the states' own fiscal problems have restricted progress in this dimension. While the current situation with respect to local governments seems no worse than the previous one of *ad hoc* and

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[18] This suggestion does not preclude provisions such as tax smoothing for farm income to mitigate the effects of greater risks associated with agriculture.

[19] For example, the 73rd amendment created a list of 29 different areas of rural local government functional responsibility, considerably broader in scope than the previous situation, though the majority of these remain concurrent responsibilities with the state government.

discretionary transfers and control of local bodies by state governments, there now seems to be explicit competition between state and local governments for transfers.

After the last general election, in May 2004, the new government at the center proposed transferring money directly to local governments. In the past, the states received unconditional Finance Commission transfers earmarked for local governments, but have retained control of these monies. They also controlled Planning Commission and central ministry conditional transfers that were ostensibly targeted at district or block level rural government authorities. With local governments now enjoying constitutional status, the states are reluctant to permit new transfers direct to rural local governments, and they have opposed the center's proposals, fearing that they will lead to reductions in their own transfer receipts. Meanwhile, the Finance Commissions have continued to make transfers to the states, earmarked for local bodies. The Tenth Commission allocated interim transfers, before the SFCs had been constituted. The Eleventh Commission had many of the SFC reports available, but found them inadequate as a basis for determination, and again made some ad hoc[20] earmarked grants for local bodies, and the Twelfth Commission has followed this approach. Both the last two commissions have made copious recommendations with respect to how the states can improve local government functioning, including expenditure allocations, monitoring, and tax assignment. Clearly, similar recommendations also have value at the state level (e.g., World Bank, 2005, Chapters 2 and 3). Overall, local government reform adds another dimension of complexity – one that is often neglected – to the challenge of improving the states' fiscal situation.

4. Assessment and Policy Options

Given the evolution and current complexity of India's system of fiscal federalism, and the range of issues that face the states as they struggle to control their finances, it is useful to offer a basic analytical framework within which policy options can be discussed. The objectives of policy reform can be encapsulated as (1) improving governmental efficiency with respect to taxes and expenditures, (2) maintaining some degree of equity through and within the operations of the government, and (3) providing some sustainability and stability. Fiscal correction is properly seen as a mechanism for furthering these goals, rather than as an end in itself. Nevertheless, the poor fiscal situation of the states represents an immediate threat to all three policy objectives.

From the perspective of the government of any single state within India's democratic system, the main performance motivator is re-election, which provides ongoing rewards to ruling politicians. This performance incentive is attenuated when short-term rewards associated with rent-seeking (including interest-group lobbying as well as corruption) outweigh the gains from pleasing the wider electorate. Further complicating factors are myopic rent-seeking by the electorate which leads to populism (manifested in widespread subsidies), and the differing incentives of bureaucrats who must implement policies. For a national government, revenue is raised and spent entirely

[20] The Commission used a formula, but this was not arrived at according to any obvious analytical criterion. The Twelfth Commission has followed this precedent.

within the jurisdiction, and performance can be judged by how efficiently these tasks are accomplished. For subnational governments, however, tax-sharing creates yet another complication. A state's total resources depend on the decisions of the center with respect to revenue-raising, and potentially on the spending of the other states as well.

The problem is referred to as a common pool problem (e.g. Purfield, 2003; Hausmann and Purfield, 2004). The latter paper picturesquely compares it to what happens when an individual goes to a restaurant in a group and orders lobster, whereas if he were alone, he would have ordered a cheaper item, chicken. However, this analogy oversimplifies, masking the problem and, therefore, the solution. In Hausmann and Purfield's story, the implicit assumption is that the bill will be equally divided. Hence the marginal cost of an individual order of lobster is split among the entire group. Suppose instead that the marginal cost versus chicken of all the lobster orders is separated out and divided among only those who order lobster. Then the common pool problem goes away. The key idea is that marginal incentives must be right, so that, in the case of India's states, they must bear the full marginal cost of their spending.

With this "Marginal Principle" in mind, scattered and uneven discussions (e.g., Purfield, 2003) of the common pool problem, transfer dependence, soft budget constraints, and moral hazard can all be examined within a unified conceptual framework. For example, problems of soft budget constraints and moral hazard are just a dynamic version of the Marginal Principle, with the external source of marginal funds coming with a lag, through bailouts by the central government. One caveat should be noted: transfer dependence can still lead to income effects on states' behavior, even when transfers are inframarginal. However, if one objective of transfers is to improve horizontal equity, these income effects may be desirable. Furthermore, they do not, by themselves, create an incentive for fiscal laxity. Having said this, it is possible that the political economy of transfer dependence may make it harder to follow the Marginal Principle, and this is borne in mind in the following discussion, which begins with an overall analysis of the causes of the current fiscal situation of the states, before turning to specific policy options.

Explaining the Current Situation

It must be realized that India's intergovernmental transfer system, and its mechanisms for state government borrowing, were remarkably stable until the late 1980s. Thus, one can ask why the common pool problem or soft budget constraints did not manifest themselves earlier. A partial answer must lie in the changing nature of federal politics. As we have noted earlier, India began its independent existence with a relatively centralized system. Political, administrative and economic control was exercised effectively by the central government, in a variety of ways. Thus, for several decades, the shortcomings of India's fiscal federal arrangements were masked. They did not show up as fiscal deficits, but instead as failures at the state government level to achieve national goals of providing basic education, health and nutrition, and of reducing poverty.

Ultimately, the macroeconomic crisis of 1991, which itself was triggered by attempts to break out of a low growth trajectory through partial reforms, uncovered growing problems at the state government level. Attempts to squeeze central expenditure in turn put similar squeezes on the states, through some of the intergovernmental transfer channels. The states were allowed to individually pursue private investment, leading to some degree of tax competition that further worsened their resource position (Rao, 2003). Some regional parties also used their new political power in central coalition governments to extract additional resources from the common pool. The single worst factor in the worsening fiscal position of the states, however, was their mimicking at the state government level of the Fifth Pay Commission award for the central government. One can understand this as follows. Economic liberalization allowed private sector salaries to rise substantially, creating an envy effect for central government bureaucrats. Their large pay increases had a similar effect on state governments. While these phenomena have more to do with motivations of status and envy, economic liberalization was a factor. It removed some elements of an implicit social contract, without changing other elements of the system. Thus, institutional structures that were somewhat adequate in the past are no longer functional.

This perspective on the causes of the states' looming fiscal crisis focuses attention on the need for significant institutional reform with respect to the functioning of government and intergovernmental relations. Indeed, this also applies to the role of local government. While local government reform had a history and motivation far removed from the economic liberalization of the 1990s, the criteria for making it effective have much in common with changes needed at the state government level. Similarly, state-local fiscal relations need to be developed and molded along lines following those for center-state fiscal institutions. However, in the following, we focus on the state government level, leaving it to readers to extrapolate to the local level.

Reforming Institutions of Fiscal Federalism

We have already outlined much of the case for reforming the system of transfers and taxes, from the perspective of improving the states' long run fiscal situation, as well as the efficiency of their fiscal actions. We elaborate on some of these aspects in this section. One can make a case for the Finance Commission and Planning Commission overhauling their transfer formulae completely, to achieve greater simplicity and transparency with respect to meeting their objectives. Removing a significant portion of center-state transfers outside the political economy arena, clearly targeting them toward horizontal equity objectives, and doing so in a manner that does not create perverse incentives for recipient governments, is feasible and desirable. This approach is contrary to the recently popular idea of using the intergovernmental transfer system to provide very refined or targeted incentives to meet general fiscal balance goals, but we would argue that it is most appropriate for the bulk of intergovernmental transfers.[21] The key

[21] In fact, one problem with the current system is that transfers attempt to combine multiple objectives into overall formulae (Tables 2 and 6). Adding complex ways of rewarding fiscal discipline, as in tying some portion of intergovernmental transfers to state-level fiscal reforms, only compounds the problem. The Eleventh Finance Commission worked out such a scheme, pooling 15 per cent of revenue deficit grants and adding an equal amount to create a "Fiscal Reform Facility," to be allocated among the states based on fulfillment of fiscal restructuring targets of tax and non-tax revenue growth, expenditures on salaries, interest payments and subsidies. Problems with this scheme included the small size of the incentive fund, biases in the monitorable measure against smaller and poorer states, conflicts with other fiscal incentive programs, and

idea is that transfers should not be linked to spending plans or projected resource gaps. This is the only way to respect the Marginal Principle described at the beginning of this section.

To meet horizontal equity objectives, it would be preferable to establish exogenous levels of per capita spending for the states, determine their fiscal capacity, and make transfers based on the difference. Thus the formula would be based on normative levels of government spending, rather than an arbitrary weighting scheme. M. Govinda Rao has been a strong advocate of this approach, including in his role as economic advisor to the Ninth Finance Commission, but subsequent Commissions, despite broadening their scope in other ways, have not tackled the task of rethinking the transfer system. Once minimum levels of spending (predicated on the states' norms of fiscal effort) are met through these equalizing transfers, the remaining amount of transfers can be determined by pure tax-sharing considerations, based on the states' income shares. Grants based on marginal needs, and any form of categorical grants (which are subject to fungibility anyway) would be done away with in the above restructuring.

With respect to the Planning Commission, there is also a case for overhaul. Planning Commission grants are meant to be for developmental purposes, which might be interpreted as capital spending, although investments in human capital are typically counted as current spending according to budgeting conventions. One can make a case for the Planning Commission restricting itself to certain types of categorical grants, and making allocations based on transparent normative criteria, paralleling those proposed for the Finance Commission. The states could be left to choose projects within broad categories. Loan components could be done away with, as recommended by the Twelfth Finance Commission. The Planning Commission could also play a stronger role in designing and coordinating individual ministry schemes, which have otherwise proliferated into a chaotic jumble. The Finance Minister, in the 2005 budget, noted the need for better monitoring of the outcomes of all these transfer schemes, but it is unclear what progress has been made. The outcome of these reforms would at least be less time wasted on center-state bargaining, less uncertainty, and greater transparency.

Several issues remain to be addressed. The first is political feasibility and desirability. Here, India's polity has shown itself capable of absorbing considerable change, provided that the losers can be compensated adequately. In the case of the previous change in the tax-sharing system, implemented after the Tenth Finance Commission's recommendation, and in the innovations in VAT and services taxation, the political actors have worked out the requisite compensation principles, or are cognizant of the need to do so. Second, growing regional inequality might threaten political stability. The evidence from several studies suggests growing inequality among the Indian states in the past three decades, with the rate increasing in the 1990s.[22] Differences in infrastructure and institutions that seem to explain interstate differences have been persistent, and intergovernmental transfers have not made a substantial difference. Reforms in the transfer system would not solve problems of increasing inter-state inequalities, since the variation in SDP per capita is far greater than the level of per

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opportunities for moving deficits off budget to manipulate the program outcomes. The Twelfth Finance Commission rejected this approach, but retained fiscal discipline weights for tax devolution (Table 6).

[22] See Rao and Singh (2005) for a summary of these studies.

capita transfers, but would make horizontal equity in public services more transparently achievable. The center must recognize the special problems of poorer states in achieving fiscal adjustment, and the transfer system is where this recognition can be implemented.

A third issue is that of the effectiveness and efficiency of state governments. The dominant policy instinct is to try to control the state governments through incentive mechanisms administered by the central government. The perspective offered in this paper is that the center should focus on avoiding disincentives, and make it as easy as possible for electorates to assess the performance of the state government. Thus, rather than rely on categorical grants so heavily, as the Twelfth Finance Commission has done, non-categorical grants, supplemented by league tables of spending on key sectors such as health and education might be preferable. Ultimately, of course, even spending figures can be meaningless, as illustrated by the problem of absentee rural schoolteachers, who draw salaries but do not teach. However, monitoring by citizens and their agents (NGOs, the media), and better electoral accountability are more likely to succeed than central government controls.

Changes in tax assignments are an important complement to reform of the intergovernmental transfer system. In the discussion of the Marginal Principle, we noted that the key idea is that marginal funds for expenditure by the recipient of transfers should come from its own resources. However, we also noted that large transfers may make it politically more difficult to maintain the Marginal Principle. This is because the overall link between own taxes and spending, as perceived by constituents and politicians, is weakened. Thus, transfer dependence, even if it does not directly violate the Marginal Principle, may still be a source of problems.[23] This logic suggests that the states' ability to raise their own revenues should be strengthened. This, in turn, can be done by strengthening tax assignment to the states. Section 3 has discussed several possibilities for achieving this goal.

Deficits and Debt

The severe deterioration in state finances (Table 4) has taken place despite ostensible controls on state government borrowing. Technically, the states cannot keep borrowing to finance deficits without the acquiescence of the central government, but the latter has been unable to enforce hard budget constraints on the states. We have indicated that this is at least partly related to the increased power of regional parties in national coalition governments. In initial attempts to impose conditions on state borrowing that would encourage fiscal reforms, the center was not able to harden budget constraints. For example, in 1999-2000, eleven states signed Memoranda of Understanding (MOUs) with the center, promising fiscal reforms in exchange for ways and means advances (essentially, overdrafts) on tax devolution and grants due to them. In some cases, however, the center had to convert these advances into three-year loans. The Reserve Bank of India (RBI) reported stopping payments to three states (Reserve Bank of India,

23 Hausmann and Purfield (2004) discuss the possibility that noncooperative sub-national behavior is more likely in federal systems with large vertical imbalances, which encourage political bargaining. One can frame this as an indirect violation of the Marginal Principle, since lobbying behavior affects marginal transfers.

2001), but the political difficulty of not bailing out states that are both poor and populous is obvious.[24]

A more recent development was the enactment of the central FRBM Act in 2003. The law was initially recommended by the Eleventh Finance Commission, and required considerable political bargaining before it was passed. A detailed roadmap for achieving deficit reduction targets mandated by the act was prepared the following year (Ministry of Finance, 2004).[25] Initially, five states (Karnataka, Kerala, Punjab, Tamil Nadu and Uttar Pradesh) followed the center and passed their own FRBM laws. More recently, six other states have followed.[26] Coordinated and uniform implementation of the state laws (Kopits, 2001) would help control externalities or free-riding behavior, given that enforcement provisions are weak in the Indian case (Hausmann and Purfield, 2004; Howes, 2005), but the approach of individual states choosing their own provisions may be the most practicable. The Twelfth Finance Commission does provide some coordination by recommending minimum provisions for state level FRBM laws.[27]

In addition to reforms in tax and transfer systems as ways of reducing subnational fiscal deficits, an important area of reform relates to the process of borrowing by the states, which has hitherto been *ad hoc* and opaque. Improvements in financial information, budgeting and accounting practices, regulatory norms and monitoring are all required here, as well as changes in the institutional rules (IMF, 2003; Hausmann and Purfield, 2004). These reforms parallel many of those required for India's financial sector as a whole: state governments just happen to be among the most powerful of those entities taking advantage of poorly functioning credit markets to run up unpaid debts. Some reform is already taking place, including statutory or administrative borrowing ceilings, guarantee redemption funds, explicit restructuring and write-offs,[28] and market-based borrowing mechanisms such as auctions conducted by the RBI.

Given the high stock of debt of the states (Table 4, last column), some restructuring is also important. In 2002-03, the central government introduced a debt-swap scheme to enable state governments to swap their high cost debt, owed to the center, for additional market borrowings and a part of current small saving transfers. The Twelfth Finance Commission report provides further recommendations along these lines. Following its terms of reference and the precedent of previous commissions, the latest

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[24] Political considerations also constrain the center to make plan loans at the same interest rate to all states, removing even that device for providing appropriate marginal incentives.

[25] This report placed a heavy emphasis on tax reform to increase government revenues as a way of reducing deficits. We have discussed tax reform more broadly, from an efficiency as well as a deficit reduction perspective, earlier in this section, and in Section 3.

[26] These states, which have acted after the Twelfth Finance Commission's report, are Maharashtra, Orissa, Rajasthan, Assam, Haryana and Andhra Pradesh. It is too soon to judge the nature of implementation of their acts. The Twelfth Finance Commission recommended tying debt relief to passing FRBM laws.

[27] William McCarten (personal communication) notes that the Maharashtra FR law calls for an independent review panel to provide fiscal monitoring and fiscal rule infraction identification, and suggests that the states could coordinate to support a single body, independent of the Center, as a way of achieving more effective benchmarking of fiscal performance. Hausmann and Purfield (2004) also suggest an independent scorekeeper. Rather than a new agency, Finance Commissions could play this role, as the Twelfth Finance Commission has already done to some extent.

[28] Many of these reforms are discussed in detail in the Twelfth Finance Commission Report.

report also provides for some debt relief, but rightly shies away from linking it to measures of performance such as the human development index or investment climate. In doing so, the Twelfth Commission has avoided an approach which had been pushed by its predecessor. Instead, the latest report ties debt relief to states' explicitly setting fiscal responsibility goals, and meeting deficit reduction targets. The Commission's specific recommendations are complex, and potentially inconsistent in places (Rajaraman, 2005). There are also related questions about enforceability. In particular, the poorest highly indebted states may face deficit and debt situations that can only be realistically dealt with by specifically targeted debt relief, beyond what is currently recommended. Nevertheless, the latest plan has the virtue of giving the majority of states a way to climb out of their current fiscal holes in the medium term, thereby isolating those states that may require long term special assistance.[29]

The latest Finance Commission report also details an approach to reducing the central government's role as a lender to the states, replacing it with market borrowing. This would apply to several channels of central loans, including those through the Planning Commission and central ministries. The RBI is exploring the development of institutions to support this shift to market borrowing, including offering mechanisms, secondary markets for government debt, credit ratings, and methods of regulation and monitoring. Ultimately, as we have argued, this is the only way to at least partially respect the Marginal Principle, since borrowing from the central government is subject to a dynamic common pool problem. It is still possible that state governments will require bailouts in extraordinary circumstances, but *a priori* market discipline can restrict the frequency of such occurrences.[30] The political economy of such bailouts is also made more transparent, as compared to the current system of regular debt rescheduling, write-offs and implicit subsidies. The Twelfth Finance Commission Report also proposes annual ceilings on state borrowing, which would further harden budget constraints. Again, some of the poorest states may require special treatment in terms of central loans, since they may not be able to utilize market borrowing, but they can be identified ex post for this treatment, rather than the presumption being that all states need to rely on the center for capital funds.

Governance

Several aspects of reform in governance deserve consideration in order to support improvements in state finances. Possible reforms include internal state government restructuring as well as strengthening institutions for intergovernmental relations. Perhaps

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[29] An anonymous referee has noted that the debt relief plan does not take account of the additional fiscal pressures placed by trade liberalization and enhanced global competition. While it is true that both these factors add to the states' fiscal challenges, it is arguable whether their impacts are definite enough to quantify appropriate relief measures. In fact, invoking such factors can become yet another avenue for softening states' budget constraints,

[30] Note that true market discipline will require other sources of borrowing and central government guarantees to be limited, and lenders to also face the test of the market. In particular, the states must not have easy access to captive sources of finance, including nationalized financial institutions. In other words, fiscal reform is ultimately closely tied to, and dependent on, financial sector reform (Singh and Srinivasan, 2005a, 2005b).

the major question that must be addressed is how to manage fiscal adjustment in a manner that minimizes the pain for poorer citizens. The states, as noted in Section 2, have primary expenditure responsibilities in areas pertaining to basic health and education.

In fact, fiscal adjustment may provide the impetus for tackling long-standing problems of inefficiency in expenditures. Improvements in efficiency can allow fewer rupees to achieve the same or even greater benefits than is currently the case. Examples of existing "X-inefficiency" include the functioning of core administrations, many plan and ministry projects, and PSEs such as the SEBs. The evidence indicates that for many of the states, subsidies and salaries are taking a larger and larger share of expenditure, though the states' performance in this respect is not uniform (e.g., Howes and Murgai, 2005).[31] In many of these cases, expenditure reform will result in losers, since public sector employees currently enjoy monetary rents or leisure that will be lost. However, at least some of the leisure in inefficient organizations is involuntary, and results in frustration rather than any utility gain. As for the impacts on the poor, the World Bank (2003) is quite clear in its conclusions: "The burden of weak administration falls particularly on the poor, who suffer from skewed government spending, limited access to services, and employee indifference." Thus, it seems that there is room for fiscal adjustment that benefits rather than hurts the poor.[32] The areas for improved administration include budgeting procedures, accounting and auditing methods, personnel policies and tax collection, among others (Finance Commission, 2004; World Bank, 2005). One cannot overemphasize the importance of these basic improvements in government financial management and functioning.[33]

The efficiency of delivery of health and education in rural areas can also be improved substantially, either through restructuring government efforts, or bringing in private participants such as nongovernmental organizations or community groups. There is substantial evidence that institutional innovations can improve efficiency (e.g., Drèze and Gazdar, 1996; PROBE, 1999; World Bank, 2003, Chapter 3; Howes and Murgai, 2005). In either case, the gains come from improved incentives and reduced transaction costs. In addition to reforming at the state level itself, if local government reform is carried out in a manner that enhances transparency and accountability, both these channels of improvement can be realized.[34]

In addition to internal restructuring of government, the nature of intergovernmental institutions also matters for state finances. The previous paternalistic

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[31] An in-depth analysis of the social rationale for subsidies, and their cost effectiveness in fulfilling that rationale is overdue. See Mundle and Rao (1991) and Rao and Mundle (1992) for a classic analysis.

[32] In this context, it has also been noted that a system of explicit user charges often allows for more efficient as well as more equitable delivery of services (e.g., drinking water, health and education: see World Bank, 2003, Chapter 3, as well as World Bank, 2005). This would clearly be part of a necessary program of reducing inefficient and poorly targeted subsidies.

[33] It is noteworthy that the quality of government institutions in India lags so far behind best practice, even after a decade and a half of reform.

[34] See Rao and Singh (2005), Chapter 13 for further details. Of course there are many areas where the state governments must continue to play a dominant role, and where more cannot be squeezed out of the existing expenditures by improving incentives for those responsible for the service delivery. In such cases, shifts in expenditure and/or new resources for increased expenditure are required, but the latter option should be a last resort, given the states' fiscal situation.

model of central control has been changed by economic reform and by political fragmentation at the center. Since issues of tax and expenditure reform and controlling fiscal deficits require some coordination between the center and the states, institutions such as the ISC may actually have a greater role to play than in the past. While states that are pivotal, and hence politically powerful in a coalition government at the center may be able to directly extract concessions from the central government (as Andhra Pradesh[35] appears to have done in some cases in the previous national government), this does not make the ISC redundant. The potential role of the ISC is precisely to provide an alternative to such *ad hoc* bargaining. Bargaining over durable changes in rules governing the federation is also quite different from bargaining over specific instances. For example, the ISC was an important forum for gaining acceptance of the change in tax sharing recommended by the Tenth Finance Commission.[36] Tax reform, changes in the way that states borrow, and regulation of sectors such as power are all areas where the ISC can provide a less public, more focused forum for bargaining over such issues than is possible in Parliament. The role of the ISC may also be expanded if the current process of planning is reformed. The NDC now serves as the bargaining forum for plan transfers and loans: if these were replaced by a dual system of block grants and market-based loans, it would make the NDC redundant. Instead, the ISC may be the place for evolving a new institutional framework; bargaining over general rules, not specific instances.[37]

5. Conclusions

Clearly, state finances in India have deteriorated substantially in the past decade, and require urgent attention. In some respects, the problem is worse than that indicated by budget deficits, since the states also have large off-budget liabilities. We have suggested in this paper that the source of the problem lies partially, or even substantially, in governmental institutions that have not kept pace with changes in the functioning of India's market economy. Thus, tackling the problems of state finances requires broad systemic reforms. For example, we have identified a simple principle for redesigning India's system of intergovernmental transfers, including implicit transfers made through debt relief and restructuring. This principle emphasizes the importance of state governments bearing the costs of their expenditures at the margin.

Recent attention has focused on creating institutions for market borrowing by the states, and tax reform to improve the efficiency of taxes assigned to the states. The former change, in particular, is in the spirit of the Marginal Principle, applied in a dynamic context. In this paper, we have also emphasized changes in tax assignments and

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[35] The Telegu Desam Party of Andhra Pradesh also controlled the state government at that time. In other cases the regional party in the ruling central coalition may not have been in a position to represent its state's interests as forcefully.

[36] More recently, it has also been a place where an important change in the rules governing inter-state water disputes has been approved by the states (Richards and Singh, 2002). See also Kapur (2001) for additional examples.

[37] This is an extension of Riker's instrumentalist view of federalism (Riker, 1975, pp. 113-114), to include bargaining not just in constitution making, but also in evolution of subsequent governance, and not just for territorial protection or gain, but also over splitting the economic pie.

in the intergovernmental transfer system that would support the Marginal Principle. Analyses by recent Finance Commissions have argued along similar lines with respect to tax assignments, and indicated the general principles that might govern center-state transfers, but have either shied away from specific changes, or not been able to affect practical policy.

The broad approach adopted in this paper is not inconsistent with the recent comprehensive survey of state fiscal reforms undertaken by the World Bank (World Bank, 2005). The differences in what is presented here are mostly ones of degree of emphasis, although we have attempted a more coherent theoretical treatment. The World Bank report offers reform scenarios that, in terms of quantitative impact, emphasize increasing revenue-GSDP ratios, controlling wage bills and increasing capital spending while maintaining overall expenditure-GSDP ratios, and increasing central transfers, mostly for the poorer states (World Bank, 2005, Tables 5.3 and 5.4). As is typically the case with these scenarios, they are based on educated guesses of impacts, rather than behavioral modeling.[38] Hence, it is beyond the scope of this paper to provide alternative quantitative projections of how state finances might evolve under different scenarios, though revenue augmentation, expenditure control, and improving expenditure quality are all obvious and significant components of desirable reform. Underpinning all possible reforms, however, must be a clearer recognition of the Marginal Principle and its incentive consequences.

Can reforms be achieved in practice? India's political system is "leaving money on the table." It is therefore up to India's state governments, in cooperation with the central government (which now more clearly incorporates and reflects regional and subnational interests) to recognize this, and to devise politically feasible reforms that will allow potential gains to be realized and to be shared in a mutually acceptable manner. At a conference at Cornell University three years, ago, one of India's foremost fiscal experts, M. Govinda Rao, offered a cautionary conclusion to his own detailed, quantitative survey of state finances in India:

> Thus, the States have to traverse far in restructuring their finances. These require a series of reform measures on the expenditure and tax systems, power sector reform and restructuring state enterprises, administrative reengineering, building up a proper information system and computerization of tax administration. What has been achieved so far has been negligible. The fiscal reform journey towards achieving fiscal balance and consolidation and generation of quality infrastructure and a competitive environment will be long and arduous and opposition to reforms from vested interests will be strong. Political will and administrative competence, creating an awareness for the need for reform in the general public are the most important ingredients that will be needed in abundance to achieve the desired goals. (Rao, 2003)

This perspective is still valid. Though many small steps have been taken in the past three years, much still remains to be one. For example, the critical issue of power sector reform has barely been tackled, and this has held back the whole economy, as well as compounding the states' fiscal problems. On a more optimistic note, the explicit

[38] See Singh and Srinivasan (2005b) for more on this issue.

incorporation of fiscal responsibility goals into state-level legislation represents a significant step forward in defining a concrete agenda for fiscal reform. Tax reform, too, has moved forward in the last year.

We end with one final point on the role of policymakers and policy advisors. It is clear that all the states have been subject to common economic and political forces, which have led to deterioration in their finances. Nevertheless, there has been substantial variation in the performance of different states, not just fiscally, but also in growth and in broader measures of human development. Thus, the quality of leadership and policymaking matters. To expand on Rao's conclusion, in addition to the raising public awareness of the need for reform, making the link between policy and outcomes more transparent at the state level is needed in order to ensure that state government policymaking moves in the right direction.

References

Bajpai, Nirupam and Jeffrey D. Sachs (1999), "The Progress of Policy Reform and Variations in Performance at the Sub-National Level in India," Harvard Institute for International Development Discussion Paper, 730

Drèze, Jean, and Harris Gazdar (1996), "Uttar Pradesh: The Burden of Inertia," in *Indian Development: Selected Regional Perspectives*, ed. by Jean Drèze and Amartya Sen (Oxford and Delhi: Oxford University Press).

Finance Commission (2004), Report of the Twelfth Finance Commission (2005-10), November, http://fincomindia.nic.in/Report of 12th Finance Commission/index.html

Hirschman, Albert O. (1970), *Exit, Voice, and Loyalty; Responses to Decline in Firms, Organizations, and States*, Cambridge, MA: Harvard University Press.

Hausmann, Ricardo, and Catriona M. Purfield (2004), "The Challenge of Fiscal Adjustment in a Democracy: The Case of India," NIPFP-IMF Conference Paper, January.

Howes, Stephen (2005), Fiscal Responsibility Legislation at the State-level in India: What Has Been Achieved to Date, What Are the Challenges?, presentation at Conference on 'Fiscal Responsibility and Intergovernmental Finance' - June 22-24, Hyderabad, http://siteresources.worldbank.org/INTINDIA/Resources/stephen2ndppt.pdf

Howes, Stephen, and Rinku Murgai, (2005), "Subsidies And Salaries: Issues in the Restructuring of Government Expenditure in India," in *Fiscal Policy in India*, Peter Heller, ed., forthcoming, New Delhi: Oxford University Press.

International Monetary Fund (2003), *India: Country Report 03/261*, August.

Kapur, Devesh (2001), "India's Institutions and Economic Performance," paper presented at conference on Public Institutions in India: Performance and Design, Harvard University, February.

Khemani, Stuti (2002), Federal Politics and Budget Deficits: Evidence from the States of India, World Bank Policy Research Working Paper 2915, October.

Kopits, George R. (2001), "Fiscal Policy Rules for India?" *Economic and Political Weekly,* Vol. 36: 9, pp. 749-56.

Ministry of Finance (2004), *Report of the Task Force on Implementation of the Fiscal Responsibility and Budget Management Act, 2003*, Government of India, July.

Mundle, Sudipto and M. Govinda Rao (1991), "Volume and Composition of Government Subsidies in India," *Economic and Political Weekly*, Vol. XXVI, No. 18, May 4, pp. 1157-72.

PROBE Team (1999), in association with Center for Development Economics, *Public Report on Basic Education in India*, New Delhi: Oxford University Press.

Purfield, Catriona (2003), "The Decentralization Dilemma in India," IMF Working Paper, Washington: International Monetary Fund.

Rajaraman, Indira (2005), "Intergovernmental Finance and Policy Coordination: Implications of the Report of the Twelfth Finance Commission", presentation at Conference on 'Fiscal Responsibility and Intergovernmental Finance' - June 22-24, Hyderabad, http://siteresources.worldbank.org/INTINDIA/Resources/IndiraRajaraman-ppt.pdf.

Rao, M. Govinda (2000), "Tax Reform in India: Achievements and Challenges", *Asia-Pacific Development Journal*, 7, 2, 59-74.

Rao, M. Govinda (2003), "State Level Fiscal Reforms in India", paper presented at Cornell University, conference on Indian Economic Reform, April 19-20.

M. Govinda Rao and Sudipto Mundle (1992), "Analysis of Changes in State Government Subsidies 1977-1987," in Bagchi, Amaresh, J. L. Bajaj and W. A. Byrd (eds), *State Finances in India*, Vikas Publishing House, New Delhi. pp. 103-143.

Rao, M. Govinda, and Nirvikar Singh (2001), "Federalism in India: Political Economy and Reform", paper presented at the conference, "India: Ten Years of Economic Reform", at the William Davidson Institute, University of Michigan, September.

Rao, M. Govinda, and Nirvikar Singh (2002), "Fiscal Transfers in a Developing Country: The Case of India", paper presented at University of Birmingham conference on comparative federalism, January.

Rao, M. Govinda, and Nirvikar Singh (2005), *Political Economy of Federalism in India*, Oxford University Press, New Delhi.

Reserve Bank of India (2001), *Annual Report 2000–01,* Mumbai.

Richards, Alan and Nirvikar Singh (2002), "Inter State Water Disputes in India: Institutions and Policies," in *International Journal of Water Resources Development*, 18, 4, 611-625.

Riker, William (1975), "Federalism," in *Handbook of Political Science*, Vol. 5, Fred I. Greenstein and Nelson W. Polsby, (eds.), Reading, MA: Addison-Wesley.

Singh, Nirvikar, and T.N. Srinivasan (2005a), "Indian Federalism, Globalization and Economic Reform," in T.N. Srinivasan and Jessica Wallack, eds., *Federalism and*

Economic Reform in a Global Environment, forthcoming, Cambridge, UK: Cambridge University Press.

Singh, Nirvikar, and T.N. Srinivasan (2005b), Fiscal Policy in India: Lessons and Priorities, in *Fiscal Policy in India*, Peter Heller, ed., forthcoming, New Delhi: Oxford University Press.

Srinivasan, T.N. (2002), "India's Fiscal Situation: Is a Crisis Ahead?", in A. Krueger, ed., *Economic Policy Reforms and the Indian Economy*, Chicago: University of Chicago Press.

Weingast, Barry, (1993), Constitutions as Governance Structures: The Political Foundations of Secure Markets, *Journal of Institutional and Theoretical Economics*, 149, 233-61.

World Bank (1995), *India: Recent Economic Developments and Prospects*, Washington, D.C.: The World Bank.

World Bank (2003), *India: Sustaining Reform, Reducing Poverty*, New Delhi: World Bank and Oxford University Press.

World Bank (2005), *State Fiscal Reforms in India: Progress and Prospects* (*A World Bank Report*), New Delhi: Macmillan India.

Table 1: Composition of Central Transfers to States (Rs. Billion, Percentages)

Plan Periods / Years	Finance Commission Transfers			Plan Grants			Other Grants	Total
	Tax Devolution	Grants	Total	State Plan Schemes	Central Schemes	Total		
Fourth Plan (1969-74)	45.60 (54.35)	8.60 (10.25)	54.20 (64.60)	10.80 (12.87)	9.70 (11.56)	20.50 (24.43)	9.30 (11.08)	83.90 (100.00)
Fifth Plan (1974-79)	82.70 (50.21)	28.20 (17.12)	110.90 (67.33)	29.10 (17.67)	19.30 (11.72)	48.40 (29.39)	5.40 (3.28)	164.70 (100.00)
Sixth Plan (1980-85)	237.30 (56.97)	21.40 (5.14)	258.70 (62.11)	73.80 (17.72)	69.00 (16.57)	142.80 (34.29)	15.10 (3.63)	416.50 (100.00)
Seventh Plan (1985-90)	494.60 (54.17)	62.70 (6.87)	557.40 (61.04)	155.20 (17.00)	165.10 (18.08)	320.30 (35.08)	35.20 (3.85)	913.10 (100.00)
Annual Plan 1991-92	172.00 (52.22)	34.50 (10.47)	206.40 (62.66)	57.20 (17.36)	55.40 (16.82)	112.50 (34.15)	10.20 (3.10)	329.40 (100.00)
Eighth Plan (1992-97)	1318.50 (55.56)	147.20 (6.20)	1465.70 (61.76)	483.40 (20.37)	364.70 (15.37)	848.40 (35.75)	58.40 (2.46)	2373.10 (100.00)
1997-98	404.11 (62.52)	16.80 (2.60)	420.91 (65.12)	120.08 (18.58)	67.56 (10.45)	187.64 (29.03)	37.80 (5.85)	646.35 (100.00)
1998-99	394.20 (62.29)	14.20 (2.24)	408.40 (64.54)	132.70 (20.97)	71.10 (11.24)	203.80 (32.21)	20.60 (3.26)	632.80 (100.00)
1999-00	441.21 (59.03)	19.88 (2.66)	461.09 (61.69)	163.16 (21.83)	82.03 (10.98)	245.19 (32.80)	41.14 (5.50)	747.42 (100.00)
2000-01 RE	518.27 (52.28)	121.69 (12.28)	639.96 (64.56)	157.59 (15.90)	136.76 (13.80)	294.35 (29.69)	56.99 (5.75)	991.30 (100.00)
2001-02 BE	603.5 (55.41)	95.34 (8.75)	698.84 (64.17)	190.67 (17.51)	152.52 (14.00)	343.19 (31.51)	47.04 (4.32)	1089.07 (100.00)

Notes: RE: Revised Estimates, BE: Budget Estimates
Source: Rao and Singh (2005)

Table 2: Formula for Distributing State Plan Assistance

Criteria	Share in central plan assistance (per cent)	Share of grants and loans	Distribution criteria non-special category states
A. Special category States	30	90:10	
B. Non-special category States	70	30:70	
(i) Population (1971)			60.0
(ii) Per capita income, of which			25.0
(a) According to the ‘deviation’ method covering only the States with per capita income below the national average			20.0
(b) According to the `distance' method covering all the non-special category states			5.0
(iii) Fiscal performance, of which			7.5
(a) Tax effort			2.5
(b) Fiscal management			2.5
(c) National objectives			2.5
(iv) Special problems			7.5
Total			100.0

Notes: 1. The formula is as revised in December, 1991; 2. Fiscal management is assessed as the difference between States' own total plan resources estimated at the time of finalizing annual plan and their actual performance, considering latest five years; 3. Under the criterion of the performance in respect of certain programs of national priorities the approved formula covers four objectives, viz. (i) population control, (ii) elimination of illiteracy, (iii) on-time completion of externally aided projects, and (iv) success in land reforms.

Source: Rao and Singh (2005)

Table 3: Trends in Revenue and Expenditure Components, All States (% of GDP)

Period	Own Tax Revenues	Own Non-Tax Revenues	Finance Commission Transfers	Non-Finance Commission Transfers	Revenue Expenditures	Interest Payments	Pensions
1993-96	5.27	1.55	2.94	1.62	12.00	1.86	0.63
2000-03	5.44	1.26	2.88	1.23	13.34	2.65	1.25
Change	0.17	-0.29	-0.05	-0.39	1.34	0.79	0.62

Source: Twelfth Finance Commission Report (Finance Commission, 2004)

Table 4: Comparative Fiscal Performance, Major States (% of GSDP)

	Revenue Deficit, 2000-03 (Rank)	Change in Revenue Deficit, 1993-96 to 2000-03 (Rank)	Fiscal Deficit, 2000-03 (Rank)	Change in Fiscal Deficit, 1993-96 to 2000-03 (Rank)	Debt, 2000-03
Andhra Pradesh	-2.03 (13)	-1.51 (11)	-4.57 (9)	-1.41 (13)	29.93 (11)
Bihar	-1.87 (14)	-0.04 (15)	-4.52 (10)	-1.67 (10)	44.35 (5)
Goa	-2.44 (10)	-3.89 (3)	-4.68 (6)	-2.38 (4)	33.54 (9)
Gujarat	-4.66 (3)	-4.75 (1)	-5.74 (5)	-3.93 (2)	37.92 (7)
Haryana	-1.32 (15)	-0.56 (14)	-3.69 (15)	-1.19 (14)	28.02 (12)
Karnataka	-2.21 (11)	-2.15 (9)	-4.37 (11)	-1.65 (11)	27.27 (13)
Kerala	-4.17 (5)	-2.99 (5)	-5.13 (6)	-1.81 (6)	37.58 (8)
Madhya Pradesh	-2.05 (12)	-1.44 (12)	-3.94 (13)	-1.78 (7)	30.42 (10)
Maharashtra	-3.09 (7)	-3.00 (4)	-4.12 (12)	-1.96 (5)	27.11 (14)
Orissa	-4.91 (2)	-2.91 (6)	-7.84 (1)	-3.21 (3)	63.68 (1)
Punjab	-4.53 (4)	-2.66 (8)	-6.14 (3)	-1.77 (8)	46.66 (3)
Rajasthan	-3.87 (6)	-2.78 (7)	-6.05 (4)	-1.54 (12)	44.88 (4)
Tamil Nadu	-2.50 (9)	-1.78 (10)	-3.75 (14)	-1.77 (8)	26.16 (15)
Uttar Pradesh	-2.98 (8)	-1.21 (13)	-5.07 (7)	-1.03 (15)	46.94 (2)
West Bengal	-5.47 (1)	-3.95 (2)	-7.31 (2)	-4.13 (1)	42.73 (6)

Source: Twelfth Finance Commission Report (Finance Commission, 2004)

Table 5: Comparative Revenues and Expenditures, Major States (% of GSDP)

	Own Tax Revenue, 2000-03 (Rank)	Change in Own Tax Revenue, 1993-96 to 2000-03 (Rank)	Revenue Expenditure, 2000-03 (Rank)	Change in Revenue Expenditure, 1993-96 to 2000-03 (Rank)
Andhra Pradesh	7.30 (9)	1.40 (12)	15.56 (10)	2.08 (9)
Bihar	4.46 (2)	0.75 (7)	18.11 (3)	1.60 (11)
Goa	6.46 (6)	-1.45 (1)	17.25 (5)	0.13 (15)
Gujarat	7.71 (10)	0.20 (5)	18.37 (2)	5.85 (1)
Haryana	8.30 (13)	1.09 (9)	13.45 (15)	0.39 (14)
Karnataka	8.33 (14)	-0.19 (4)	15.33 (11)	1.36 (12)
Kerala	8.11 (12)	-0.34 (3)	16.11 (8)	1.18 (13)
Madhya Pradesh	6.45 (5)	1.53 (13)	16.74 (7)	3.45 (3)
Maharashtra	7.76 (11)	1.12 (10)	14.10 (14)	3.42 (4)
Orissa	5.81 (3)	1.87 (14)	22.22 (1)	5.74 (2)
Punjab	7.13 (8)	1.87 (14)	15.33 (11)	2.59 (7)
Rajasthan	6.48 (7)	0.25 (6)	18.06 (4)	2.63 (6)
Tamil Nadu	9.00 (15)	0.98 (8)	15.60 (9)	1.66 (10)
Uttar Pradesh	5.88 (4)	1.12 (10)	16.78 (6)	2.50 (8)
West Bengal	4.26 (1)	-1.20 (2)	15.02 (13)	3.23 (5)

Source: Twelfth Finance Commission Report (Finance Commission, 2004)

Table 6: Criteria and Relative Weights for Tax Devolution

Criterion	Weight (%) 11th FC	Weight (%) 12th FC
1. Population (1971 Census)	10	25
2. Income (Distance Method)*	62.5	50
3. Area	7.5	10
4. Index of Infrastructure	7.5	0
5. Tax Effort**	5.0	7.5
6. Fiscal Discipline***	7.5	7.5

Notes: *The distance method is given by: $(Y_h-Y_i)P_i/\Sigma(Y_h-Y_i)P_i$ where**,** where Y_i and Y_h represent per capita SDP of the i^{th} and the highest income State respectively and P_i is the population of the i^{th} State .
** Tax Effort (η) is estimated as (η) = $(T_i / Y_i) / (0.5\ 1/Y_i)$ where, T_i is the per capita tax revenue collected by the i^{th} State and Y_i is the per capita State domestic product of the i^{th} State.
*** Estimated as the improvement in the ratio of own revenue of a state to its revenue expenditures divided by a similar ratio for all States averaged for the period 1966-99 over 1991-1993.

Source: Rao and Singh (2005), Twelfth Finance Commission Report (Finance Commission, 2004)