Towards a Rational System of Centre-State Revenue Transfers in India: An Exploration

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Introduction

This is a rather ambitious title for a somewhat hurriedly written seminar paper for the simple reason that with a transfer system evolving and operating over more than fifty years, one does not have a clean slate to start from. Getting things right in such a system, however messy, is far from simple, perhaps impossible. Besides, federal fiscal relations in which the transfer system plays a vital role form only one element, though perhaps the most vital, in the complex web of centre-state relations in a federation, reflecting *inter alia* the history and geography of the country and the heterogeneity of its people. Given the political compulsions, what may seem 'ideal' from the economic angle may not be acceptable. Nevertheless, it is necessary to keep a federation's transfer system constantly under review in order to identify its strengths and weaknesses and correct at least the glaring deficiencies that come to

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The authors wish to thank Dr. Govinda Rao for very useful comments. The authors alone are, however, responsible for the errors and omissions that remain.

notice as otherwise social and economic development and even the stability of the country as a nation may be in peril. This provides the motivation for the exercise undertaken in the present paper.

Although the system of centre-state transfers in India with the institution of Finance Commission (FC) forming its keystone, has often been lauded for its virtues, it has come under criticism on several counts and of late the criticisms have been particularly sharp. The faults, according to critics, are many and need urgently to be attended to.[1]

The most serious deficiency of the transfer system, it is widely felt, is the perverse incentives it creates for efficiency and fiscal discipline among the states. The dispensation of the Eleventh Finance Commission (EFC) came in for particularly sharp criticism for their perceived neglect of efficiency in fiscal management and focussing only on equity. "The consideration of equity between the States", it was alleged, "has now been carried to such absurd levels by the Report of the EFC that there was a veritable revolt by the so-called advanced States against the award of the Commission" (Godbole, 2001).

On the other hand there are those who put a premium on equity and think like Musgrave (1999) that a major function of a federation is to redistribute resources among the constituent units to bring about a measure of equality in the provision of public services to all citizens of the country no matter where they reside. In their view India's transfer system has gone only some way in achieving this objective. Careful analysts are of the view that "although the transfer system on the whole has an equalising effect, it is not designed to offset shortfall in fiscal capacity and cost disabilities fully" (Rao and Singh, 2002). Using pooled data for 15 major States for the years 1990-91 to 1999-00 in a 'fixed effects' model, Chakraborty (2003) finds that aggregate transfers are a positive (and not negative) function of per capita income, suggesting that the mechanism of centre-state transfers in operation in India has been very regressive. Progressivity if any, is also undone to a considerable extent by transfers that take place in many invisible ways (Rao, 1997) .

Another point of criticism voiced particularly by the states has been that the transfers have not been adequate to bridge the vertical gap. A larger proportion of central revenues, it is contended, should have devolved than has taken place in view of the inherent limitations of their tax power relative to their expenditure responsibilities under the constitution.[2] Thus, the vertical and horizontal imbalances that all federal systems have to face remain large and the transfer system has not been able to redress them adequately or satisfactorily. On the contrary, it has been a major factor in the acute fiscal stress felt all round. In other words, the transfer system is gravely flawed and calls for some radical reform.

The reform if they are to be effective have to be wide ranging embracing the entire gamut of federal fiscal relations starting from the existing scheme of assignment of power and functions of the different level of government envisaged in the constitution. Such a task is beyond the scope of this paper. The paper seeks to suggest a conceptual framework for designing a rational system of centre-state transfers in India and explore how such a system can be developed and used as a guide for the Finance Commission in its task of adjudicating the flow of central revenue to the states. In section II we briefly go over the rationale for intergovernmental transfers with particular reference to the equity vs. efficiency debate. Section III provides a brief review of how the transfer system that is currently in operation in India measures up against what may be considered the ideal. In section IV an attempt is made to illustrate how a conceptually desirable system could be evolved, note the obstacles that are likely to be encountered in implementing such a system and how the transition can be made to the recommended regime. Section V concludes.

II. Integovernmental Transfers in Federations and their Rationale:The Equity Vs. Efficiency Debate

The intergovernmental transfers that are in vogue in federations, their rationale, relative merits and drawbacks have been the subject matter of extensive discussion in the federalism literature and are well known.[3] We do not intend to go into them in detail. However, to set the perspective a brief overview may be in order.

The reasons commonly advanced in justification of revenue transfer from the centre to subnational governments in a federation fall broadly under three categories. One, transfers are needed to redress the vertical imbalance or the fiscal gap that stems from the asymmetric devolution of functions and tax powers among different governmental levels which is common in federations. Two, given that subnational activities can generate externalities that are not taken into account by the jurisdictions where they originate, public goods may be under or over-produced. Specific purpose, open ended and matching grants are required to be provided by the central government so that the goods in question are produced to the socially optimal level. The third and the most controversial ground is that transfers from the centre designed to secure fiscal equalization among the states are necessary, indeed, imperative, in the interest of both equity and efficiency.

Unconditional tax reimbursement transfers from the centre to the states or revenue sharing derive their rationale from the advantage of centralising tax power and decentralising expenditure functions. In principle, the surplus of the revenue collected by the centre over what is required by it to meet its own expenditures, described as "the optimal fiscal gap" should be distributed among the states in the form of lumpsum unconditional grants (Petchy, Shapiro, and Walsh 1997, hereafter P-S-W). The "optimal" fiscal gap is not easy to quantify but in many federations transfers are made to meet the vertical gap. In India too, the case for sharing income tax and union excise duties stipulated in the constitution was based primarily on this reasoning. The practice of providing tax reimbursement transfers explicitly via revenue sharing or through weights for "collection" or "contribution" in the FC's tax devolution formula has been given up. But, the need to redress the vertical imbalance is clearly recognised in the Indian Constitution and hence the mandate for compulsory sharing of union tax revenue with the states. The crucial question is, given the sharp differences in the fiscal capacities among the states how does one determine what is the right amount of transfer that can close the vertical gap?

As noted already, the optimal fiscal gap is not simple to figure out. It requires an assessment of what the centre can be reasonably expected to collect by exercising its revenue raising powers and what would be its legitimate expenditure needs. This is a formidable task, and no FC has made any serious attempt to assess the vertical fiscal gap that could be regarded as "optimal" although this has been a recurring theme in the criticisms of the FCs (*vide* Godbole 2001, Rao and Sen, 1996). Although an assessment is made of the centre's resources to arrive at what would be devolved to the states after meeting the union government's expenditures, based on certain norms of tax buoyancy and reasonable assumptions regarding growth of current expenditures, the projections of the FCs are rooted largely in history, and only some adjustments are made to the actual budget figures of the base year from which the projections are made relying on plausible assumptions regarding the likely macro scenario (GDP growth, inflation and so on). The "devolvable" share of centre's revenue can scarcely be called an approximation of the optimal (vertical) fiscal gap. After all, what should be legitimate expenditure needs of the union is a matter for Parliament to decide.

Nevertheless, the EFC, for the first time, had attempted to put a figure for closing the vertical gap (*viz.*, 37.5 percent of centre's revenues) based on a reasonable assessment of the centre's resources and expenditure needs in a macro framework, and proceeded to allocate the transfers to the states within this overall limit (though confining attention while making its recommendations to the non-plan side of the budget). However, as it turned out, in the first three years of the reference period of the EFC the transfers have fallen short of the stipulated target level. As a percentage of GDP, the transfers have been markedly below what the EFC had anticipated in its projections, largely because of sluggish growth of the centre's tax revenue.[4] Thus, while with the 80th amendment to the constitution, bringing all union taxes into the divisible pool a major source of complaint regarding inadequate sharing of central taxes (and their buoyancies) has been removed, the stability that was hoped for in tax devolution has not been achieved. This has affected particularly badly the states that depend heavily on central tax devolution. Perhaps some floor based on a reasonable assumption of buoyancy in central taxes needs to be fixed in the interest of stability. A measure of flexibility – another desirable attribute of the transfer system – can also be built into the transfers by providing for a variation in the central revenue sharing within a specified margin in order that both 'pain' and 'gain' of cyclical fluctuations (though not of the centre's inadequacy in revenue effort) are shared fairly between the two levels of government.

A more practicable approach, useful for many purposes, is, as suggested by Bird and Smart (2002), to take the vertical fiscal balance as being achieved when expenditures and revenues (including transfers) are balanced for the richest state in the federalism measured on the basis of its capacity to raise resources on its own. Under such a scheme, poorer states will still face a fiscal gap but it would be more appropriate to consider such gaps as part of the problem of achieving horizontal fiscal balance among the states rather than vertical balance between the centre and the states.

The second category of transfers that are made by central governments in federations are meant to take care of the externalities that are generated by the activities of subnational governments. "Inefficient, non-cooperative equlibria" are cited in justification for central transfers to ensure that public goods supplied by lower level governments are optimally produced. These are generally specific purpose, open-ended matching grants. If optimally designed, these transfers help to induce increased provision of public goods at state/local levels to an extent that just neutralises the tendencies of states to under-provide through strategic behaviour where the externalities are positive (and conversely when these are negative) (P-S-W, 1997). However, quantifying externalities is far from simple.

Transfers to meet horizontal imbalances — "the equalisation grants" — which constitute the bulk of the transfers in many federations are even more intractable and controversial, particularly because of the perceived conflict between equity and efficiency that such transfers are believed to involve. Since, as noted, the tilt towards equity in the transfers recommended by the FCs and particularly the EFC has come in for severe criticism, based on a misperception of the rationale for equalization and its costs and benefits some discussion of the equity and efficiency issues involved in equalisation transfer may not be out of place.

Grants are made in most federations to equalise fiscal capacities or to reduce interjurisdictional inequalities in the standards of public services. These grants may be given in the form of equalising need-adjusted revenue obtained at a specified common level of tax rate. Countries in which such grants have been used extensively include Germany, Switzerland, Australia, and Canada. In selective form, these are used also in the USA (Musgrave, 1999, p. 167). Contrary to what is commonly thought, the case for equalisation grants rests on both efficiency as well as equity grounds.

The efficiency arguments for equalisation proceed mainly on the reasoning that in the presence of inter-state disparities in fiscal capacities fiscally induced migration may take place as the richer states can offer higher net fiscal benefits (NFB) than the poorer ones and such migration may not be related to labour productivity differential in the respective states. That is to say, while migration may serve to maximise the country's output by equalising the marginal products of labour across regions, in the presence of differential NFBs, the differentials in productivity may not get equalised and so it is necessary to ensure that the NFBs are equalised through interjurisdictional transfers. Strictly, one may argue, equalisation of NFBs should be secured through inter-personal and not inter-state transfers. However, inter-institutional equality of NFB, being infeasible, inter-jurisdictional transfers are considered the only alternative (Musgrave, 1999).

The case for equalisation for efficiency reasons is questioned by some by pointing to the possibility that taxes and government expenditures get capitalised in the costs of goods and services. Where these are fully capitalised, equalisation transfers of a general, non-matching variety cannot be justified on either equity or efficiency grounds (Shah, 1996). In the real world, however, full capitalisation is rare and so equalisation transfers are justifiable on efficiency considerations alone.

"Equity" lends even stronger support for equalisation. In the federal context, its operational implication is that differences in NFBs arising from decentralization where fiscal capacity of the constituent units differ sharply ought to be undone. Thus, the reasons that call for equalisation for efficiency call for them also on horizontal equity grounds. However, equalisation is not an instrument for redistributing income. It is an instrument for "facilitating equal treatment of equals by the overall public sector" (Boadway, 1998). Equalisation also serves to secure a level playing field for intergovernmental competition which it is strongly believed, makes for efficiency in the public sector (Breton, 1995).

Mandated by Article 36(2) of the country's constitution, equalisation grants now constitute the dominant component of federal transfers to provinces in Canada, constituting a central pillar of Canada's fiscal federalism[5] (Boadway, 1998). These are unconditional transfers, the rationale for which is derived from two 'overarching' principles viz., 'a federal rationale' and 'a citizenship rationale': paralleling in a way, the concern for vertical and horizontal equity in the federal setting. For the federal principle to be meaningful, each level of government in the federation should have the requisite financial means and financial security to carry out its constitutional responsibilities. The citizenship rationale predicates that all citizens of a federation wherever they may live should have access to certain key economic and social rights - 'rights that ought to attend citizenship as it were' (Courchene, 1998). Equalisation transfers also serve as an aid to the stability of the nation - "a glue so to say", to keep a heterogeneous population together (Boadway, 1998).

From another angle (which lends support to the efficiency case for equalisation), it is argued, federalism may entail certain costs in terms of uniformity of public services to the constituents in that certain functions are centralised and so they may not be as varied as preferences would like them to be, although they have to bear the cost through central taxes. At the same time, they also confer many benefits which are well known and so, yield a surplus or excess of benefits over the uniformity and other costs. This provides the rationale for lump-sum transfers between member states.[6] The creation of the system of equalisation in Australia can be explained partly by the "stability and compensatory motive" (P-S-W, 1997). Substantial interregional transfers are in vogue even in federations that do not attach much weight to distributive transfers for explicit equalisation of fiscal capacity among regions.

It is noteworthy that the MacDougall Report (1977) on public finance in the EU indicated that explicit interregional transfers are desirable in the interests of stability and cohesion of the emerging federal type arrangement in Europe in the face of loss of exchange rate mechanism and independent monetary policy instrument for adjustment and the need to ensure some degree of convergence in the economic performance of member-states to ensure a sustainable degree of economic integration. The recommendations of the Report led to the creation of the mechanism of "structural funds" which make transfers to lagging regions in the EU amounting to 2 to 3 percent of national GDP in several countries. The Maastricht Treaty proposed a new cohesion fund for providing additional integration transfers to secure greater political and social stability as well as economic convergence in the backdrop of economic reforms that will underpin a single market and common currency (P-S-W, 1997, p. 116).

The scheme of transfers envisaged in the Indian Constitution bears ample evidence of the awareness of the basic rationale for which intergovernmental transfers are provided for in a federation. Sharing of tax revenues raised by the centre is explicitly mandated in the constitution (Article 280) in recognition of the vertical imbalance implicit in the assignment of the powers and functions to the two levels of government (the 'federal rationale'). The constitution also authorises the centre (and the states) to make grants for any public purpose which presumably embraces the case for spillovers (Article 282). Although redistribution or equalisation does not figure in the way, it is explicated in the Canadian Constitution, the fact that the grants-in-aid to be provided by the FC are required to be determined on an assessment of the budgetary needs of individual states is taken to signify, quite rightly, a mandate for equalisaton at least to a reasonable extent (the 'citizenship' rationale).

However, as noted at the outset, there is a widespread feeling that the transfers that are actually in operation do not possess the attributes of what is regarded as a good transfer system. The transfers have not been able to address either vertical or horizontal balances adequately. On the other hand, they have bred fiscal laxity all round.

III. Weaknesses of Existing Transfer System in India: The Underlying Factors

The deficiencies stem mainly from:

- Multiplicity of transfer channels each following its own criteria/formula.
- Faulty design of the FC transfers.
- Institutional weaknesses of the system.

While the constitution envisaged the FC to be the prime channel for routing the flow of central revenue to states, right from the beginning, nearly 40 percent of the transfers have taken place through other channels, mainly Planning Commission (PC) and the Ministry of Finance and other central agencies. With a multiplicity of agencies dispensing federal funds — the FC, the Planning Commission and the Union ministries, and the emergence of foreign aid agencies also as sources of conditional funds routed under "additional central assistance" for state plans, it has not been possible to take an integrated view of the central transfers. In the absence of relevant data even their distribution among the states cannot be found out.

The transfers arbitrated by FC (called statutory transfers) which still dominate the transfer scene accounting for over 60 percent of the total revenue transfers, suffer from many deficiencies arising mainly from the following:

- Limitations on the scope of FC's transfer, with the exclusion of plan revenue expenditure and so plan grants from their purview.

- Methodological weaknesses and reliance on "gap-filling" approach.

- Lack of clear focus or purposiveness in the transfers - with a multiplicity of objectives sought to be pursued simultaneously, cancelling out their effects in some instances.

The cumulative effect of all these has been that the transfers end up with a bias against poorer states, despite the weight given to relative poverty (as measured by the 'distance' of their per capita income etc. from the advanced states) in the tax devolution formulae. Disparities in the per capita revenue expenditure on basic social services and post devolution non-plan revenue implies have remained large and so have been the per capita post-devolution non-plan revenue surpluses. Consequently, already advanced states could undertake larger development programmes accentuating the inter-State disparities further. For all its tilt towards equity even under the dispensation of the EFC, per capita revenue capacity of the states after devolution and statutory grants, remained sharply unequal. Bihar's revenue capacity for instance remained below 50 percent of Punjab's throughout the award period 2000-2005 (Table 1). On the other hand, there is reasons to believe that the transfers have generated perverse incentives for fiscal discipline because of the gap filling approach of the FCs. In several instances especially in the case of special category states, the transfers seem to have created a dependency syndrome.

The risks inherent in intergovernmental transfers because of perverse incentives for fiscal discipline among recipient governments — with the snapping of the Wicksellion connection - has been the subject of considerable discussion in the recent literature on intergovernmental transfers.

The prescriptions to guard against the undesirable incentive outcome of transfers focus invariably on the need to anchor the transfers on a normative determination of the revenue capacity and expenditure needs of the recipient governments. Clearly, if the transfers are not to act as a dampener on the revenue raising efforts of subnational governments, equalisation transfers should be designed to provide each level of government with sufficient funds, — own-source revenue raised by exercising at least average diligence plus transfers — to deliver a pre-determined (normative) level of services. (Whether differentials in the cost of providing services should be taken into account is open to debate, one view being that they should not, in consideration of the efficiency of labour migration). Transfers based on objective norms of capacity create no disincentive effect as the amount received is neither larger when the recipient government's fiscal effort is lower or expenditures are 'extravagant' judged by normal prudence and practices, nor smaller when the effort is higher (Bird and Smart, 2002).

Not that the FCs have been unaware of this logic of 'norms'. In fact no FC so far has gone entirely by the deficits projected by the state governments in their memoranda. Right from the First, all of them invariably carried out their own assessment for each state based on certain norms. But 'history' or the 'actuals' have still dominated the outcomes because no FC so far has found it possible to adopt a fully normative approach all along the line; the norms have pertained mainly to the growth rates of revenues and expenditures for the quenquennial projections. The Ninth FC, for the first time made a valiant effort to incorporate norms of both capacity and need and did go some way in that direction although they had to moderate their norm-based transfer scheme to avoid severe disruption. The Tenth FC more or less followed the earlier practices with again some limited adjustments and projections based on 'reasonable' assumptions. The EFC again made some effort to introduce norms and commissioned studies by experts to set up norms objectively but their effort did not bear fruit and so the 'tyranny of the base year' (that is, the practice of making projections from the actuals of the base year, however adjusted) persisted.

The reasons advanced by the EFC for its inability to go by norms suggested by the studies commissioned by them are set out in Chapter V of their Report of June 2000 (*vide* paragraphs 5.8 to 5.20). Briefly, in estimating taxable capacity, the basic problem was that the regression equations used for determining the capacities of the state relied upon a number of variables identified in this regard along with some selected dummy variables, that raised the question as to which of the variables could be considered to be within the control of the states and which were not. Then there were acute data problem regarding the explanatory variables. The results were also found to be sensitive to the assumptions regarding the combination of variables used. Hence the EFC decided to proceed on the basis of some "broad judgements" regarding the taxable capacity of the state" (para 5.11).

The task of setting up norms for expenditure 'needs' is much more intractable than for revenue. The reasons are several; the 'needs' vary depending upon many factors apart from the level of income, consumption and structure of the state's economy and also factors such as the demographic composition of the population (the age profile, the number of school going children etc.), terrain, special problems (like insurgency). What is more, in a truly decentralised system, the decisions regarding what should be the size and composition of the public sector at the state/local level must be left to the choice of the citizens of the jurisdiction concerned. Any attempt to impose a norm of expenditure in a country as diverse as India cannot but be regarded as an intrusion on the federal structure of the polity. Nevertheless, since the states are all dependent on the centre for meeting their vertical gap, in fairness, it cannot be left entirely to the states to decide what should be the level, though not the composition, of their expenditure as otherwise the demand for funds from the centre would reach impossible proportions. Hence, some norms for expenditures too have to be followed in the deciding what should be the legitimate share of a state in central transfers and all FCs have tried to project the expenditures of the states on the basis of some reasonable criteria instead of going entirely by what the states project. However, these efforts have not gone very far and as in the case of revenue, or perhaps to a greater extent, 'history' (in the form of committed expenditures) has dominated the scene.

The NFC made a serious attempt to set up expenditure norms for assessing the revenue needs of the states but they were not adopted fully when it came to the question of assessment of the needs of individual states.[7] The EFC made another attempt to set up norms of expenditure needs based on objective criteria and as already mentioned had commissioned a study for the purpose. Based on regression equations with selected variables the study came out with estimates of revenue expenditure of the states, individually for the main items excluding interest payments, pension and a few other items. Although they met the standard statistical tests, the EFC did not find the estimates usable mainly because "in several cases the estimates were way out of alignment with the actual expenditure" and "imposition of norms derived statistically would be too disruptive". Another reason advanced was that "the expenditure needs of a state for purposes of equalisation should be viewed in juxtaposition with or as supplement to revenue capacity equalisation transfers and not in isolation". Then there were acute data problems. The EFC therefore felt that there was no alternative but to use only some of the normative principles in estimating the revenue expenditure needs of the states in the base year in a limited way which was explained in some detail in the Commission's report (para 5.19 and 5.20).

However, as is repeatedly emphasised in the literature, if equalisation transfers are not to generate wrong signals for fiscal prudence and at the same time serve the objective of equalisation, there is no escape from a 'normative approach', even if, some adjustments are felt necessary to help the transition to a rational system and avoid unacceptable disruption in the functioning of governments.

Exercises were carried out for this paper based on some plausible and in our view acceptable assumptions to see how the transfers would look like, if determined normatively. The methodology adopted in brief and the results are set out in the section that follows. The exercises cover only the non-special category states excluding Goa. Goa is left out as it is an outlier in most respects.

IV. Normative Revenue Transfers in the Indian Context: Likely Dimensions

Briefly, the methodology consists of the following. First, we work out what would be the revenue, tax and non-tax, that each state can raise by making average effort. For estimating the average on the tax side we divide the states into two groups: high income (HI) in one group, and middle and low income (MI/LI) in the other. For HI group the mean is taken to be the average while for MI/LI group the median is chosen as a fair basis of estimating revenue potential. We do not make any attempt to follow the representative tax system approach because of data as well as conceptual difficulties arising from the diversity of tax practices among the states. Applying the normative tax ratio defined as $(\bar{T})$ to the GSDP, the tax potential of state *i* is taken as $\hat{T}_i = GSDP_i * \bar{T}$, where $\hat{T}_i$ is the normative tax revenue for the state in question.

For non-tax revenue, we assume that it represents largely the recovery of cost of services provided by the government (of course this head comprises diverse items like state lotteries, royalties from mines, interest/dividends on loans/investments.). Given the limitation of time we thought it expedient to apply a simple norm as defined below for non-tax revenue by taking the ratio of revenue raised from non-tax sources as a proportion of their revenue expenditure excluding interest payments and pension. The ratio of the best performing states in the two groups of states *viz*. HI & MI/LI was taken as the norm for the respective groups. The assumptions underlying the norms adopted by us for estimating revenue potential and expenditure needs are spelled out in some more detail in the appendix.

Having set up the norms of revenue and revenue expenditures in this way, we next computed the revenue (tax and non-tax) that a state can reasonably be expected to raise and the level of expenditure which can be regarded as legitimate and unavoidable, and thereby the normative deficit. This, in our view, is the amount of union revenue which if transferred to the states would help to bridge both vertical and horizontal imbalances in the system to a reasonable extent — "reasonable" in the sense that this would equalise the revenue and revenue expenditure of all states at a comparable level if every state made the average effort to exploit its revenue potential. The "normative gap" in our scheme refers to the aggregate gap in the revenue account (that is, comprising revenue expenditure on both 'plan' and 'non-plan' account). We call these as "normative transfers".

The amounts that would work out as normative transfers for the years 1995-96 to 2001-2002 and also 1987-88 taken as a benchmark, if the norms proposed here were followed, are set out in Table 2. To have an idea of how the normative transfers compare with the revenue transfers that have actually taken place, the ratios of the actual to normative transfers averaged over the years in view grouped under the reference periods of the Tenth and the Eleventh Finance Commission for each of the 14 states are given in Table 3. Table 4 presents the normative transfers as a ratio of actual deficit (before transfer). Table 5 shows the ratios of actual transfers to the actual pre-transfer deficits of each state.

It must be added, the exercises have many limitations. They are too aggregative and take no account of the heterogeneity of either the revenue sources or the components of expenditures or the non-linearity in the cost estimates of providing public services made in per capita terms. Even so, the exercises may serve to indicate the broad dimensions of the changes in the inter-state revenue transfers that may be required if normative principles are followed. The tables reveal some striking facts that deserve close attention in the exploration of a rational system of transfer. These are highlighted below.

- If the transfers were to achieve equalisation of the level of public services proxied by per capita revenue expenditure across all states at a level now obtaining among middle income states, assuming reasonably comparable revenue effort on the part of every state, then the transfers will need to go up substantially for the majority of the middle and low income states. The transfers now taking place fall far short of the normative transfers in all the low and middle income states. This is brought out clearly in Table 3. Taking the average of the three years of the EFC's reference period, the proportion of actual to normative transfers varies from 43 percent in the case of Bihar to 79 percent for West Bengal. In contrast, the proportion exceeds 100 percent for all the high-income states except Haryana; in the case of Punjab it is as high as 190 percent; and for Maharasthra it is 135 percent. Evidently the impression that has gone round that the advanced, "better performing" states are not getting their due from the centre does not seem to be well founded. Going by the normative approach, Bihar should be getting more than twice the amount of central transfers than they are receiving now, while Punjab should be getting no more than 50 percent or so. This has been broadly the pattern in the five preceding years 1995-2000 which spans the award period of the Tenth Finance Commission.

- Another notable feature of the normative transfers is that for the 14 states taken together, the transfers if made on a normative basis would not only serve to bring about a reasonable parity in revenue capacity to meet revenue expenditures at a moderate level, these would help also to balance their budgets as a whole (vide Table 4). Although they may not be large enough to wipe out the deficits fully, with normative transfers the revenue budget gap of the 14 major states taken together would narrow down to less than 3 percent of their present level, while the actual transfers now meet only about 59 percent of the actual revenue deficit of these states (Table 5). There would of course be wide variation among states in budgetary outcomes in terms of balance in the revenue budget; low income states would have substantial surpluses while the high income states would still have large deficits. This is because the level of expenditures in the high income states is comparatively very high. Even at present, with the transfers far exceeding what they would be entitled to on a normative basis, the high income states are left with large deficits in their budget with central transfers meeting less than 50 percent of their gap except in the case of Harayana, requiring them to have recourse to borrowing on a large-scale. For Punjab, actual central transfers meet only about 36 percent of the state's revenue deficit (even though as Table 3 shows the actual transfers exceed the normatively warranted transfers by over 90 percent. In Bihar on the other hand actual transfers cover only about 78 percent of their revenue deficit (Table 5); with normative transfers, the state would have a sizable revenue account surplus (Table 4).

- Normative transfers meant to bring up the level of revenue expenditure of all states to at least that of the average of the middle-income states would require the devolution of a much larger share of the centre's revenue than is taking place now. Table 2 shows that the proportion of revenue transfer to the 14 major states to the centre's revenue which currently stands at about 27 percent will need to go up to about 44 percent if normative equalisation is to come about.

To have an idea of what would be the increase needed in the aggregate revenue transfers that is, taking all other states also into account (including the special category states) a rough estimate was made by adding the actual transfers to the other states that is special category states and Goa to the normatively determined transfers for the 14 states. (Because of limitations of time it was not possible to investigate what would be the implication of the normative approach in the case of special category states). It seems that normative equalisation would require raising the share of the states in the centre's revenue to more than 50 percent as against the present level of 34 percent (Table 2). The EFC had suggested a ceiling of 37.5 percent as the states' share in central revenues to enable them to bridge their overall revenue gap (taking plan and non-plan budgets together). Given the tight fiscal situation facing the centre, enhancing the states' share to over 50 percent would seem to be a rather tall order. However, it needs to be pointed out that the finances of the states had to take a severe beating in recent years partly because of the sluggish growth of central revenues and a decline in the volume of tax devolution as compared to what was envisaged by the EFC.

Our exercises suggest that the states' share in central revenue even if determined normatively would not be more than 43 percent provided the buoyancy of the tax revenue of the centre with respect to GDP increased to 1.15 as against 0.91 registered during the nineties (EFC Report para 2.24). The EFC had posited a target of 10.28 percent as the ratio for the centre's gross tax revenue to GDP at the end of the period 2000-2005 as against 8.8 percent that obtained in 1999-2000. If this target cannot be achieved, there are three possible alternatives.

One is to require the centre to devolve a minimum amount of revenue to the states in terms of the proportion of GDP which would ensure equalisation at a reasonable level subject to a floor in absolute terms. (The transfers may be made on the basis of projected growth of GDP in a given year to be adjusted later) The other alternative is to stagger the equalisation by scaling down the norm of per capita revenue expenditure of states which are below the average of the middle level to no more than 90 percent or so in the initial years. Another alternative is to cut down the revenue expenditure of the states on the Plan side. A large part of the Plan expenditure of both the centre and the states now fall under the category of "revenue" that is current expenditure (around 60 percent in the case of the states, vide Annexure Table II.8 of EFC Report). In the absence of any surplus on non-plan revenue account this is financed entirely by borrowing and this has been held as a prime destablishing factor for the state budgets by both the Tenth and the Eleventh FC. If the states' share in centre's revenue cannot be raised very substantially because of poor growth of union revenues, the states' budgets cannot be brought into balance unless their revenue expenditures under the Plan are trimmed substantially (of course such trimming must occur on the non-plan side too) . As shown below this should not be too difficult to achieve.

Of the total share of the states in the centre's revenue which was sought to be capped by the EFC (at 37.5 percent) around 22 percentage points were on account of tax devolution, and about 2 percentage points are made up of statutory (Article 275) grants while Plan grants constitute around 10-11 percentage points. The rest is made up of discretionary grants. Of the Plan grants an increasingly large proportion is now made up of assistance for central plan and centrally-sponsored schemes. There are some 200 and odd schemes at present and these are universally regarded as distortionary and disruptive of the states' expenditure priorities. While there can be a good case for some of the centrally sponsored schemes on grounds of externalities, the operation of so many schemes is scarcely justifiable on any ground. These could easily be scaled down and the amounts spent by the centre on this account transferred to the states. That apart, the transfers by way of central assistance for the state plans which are given under the Gadgil formula also have come to be regarded in reality as nothing but support for the non-Plan revenue expenditures. These could be done away with and replaced with scheme-based support as was the practice before 1969. The case for designing the transfers on externality consideration on schematically and with matching component rather than following a formula is argued forcefully in Akerlof (1969).

In other words rationalisation of the transfer system and restoration of fiscal balance in the states will not be possible without a radical review of the practice of planning, plan financing and central assistance for the state plans. In any case, while determining the revenue needs of the states normatively it is necessary to take a holistic view and do away with the plan and non-plan distinction in revenue expenditures, which is a source of other distortions in the expenditure priorities of both the centre and the states. Until that happens, rationalisation of the transfer system will not be possible. However, given the way fiscal reforms are proceeding in the country, such a radical departure from the past practices would seem to be a distant goal and so one has to explore how rationalisation can be brought about within the existing framework of revenue transfers for plan and non-plan budgets separately. As will be seen from the discussion that follows even that would be a challenging task.

Using some aggregative norms of revenue expenditure as indicated in the appendix, the actual statutory transfers as a proportion of the transfers to meet non-plan revenue gap estimated normatively (hereafter called normative statutory transfer) are shown in Table 6. The picture that emerges is almost similar to that for aggregate (plan and non-plan) transfers depicted in Table 3. Overall, during the last three years on the average the actual transfers form about 62 percent of the normative statutory transfers (Table 6). For all middle and low income states the proportion is no more than 70 percent or so whereas for some of the high income states the proportion is well above 100 percent.

As in the case of aggregate transfers (plan plus non-plan), normatively determined statutory transfers would help to bridge the non-plan revenue deficit for the 14 states combined to the extent of about 93 percent (Table 7) although there would be sharp variations in the non-plan budgetary outcome of individual states. Low and middle income states (barring Kerala and W.Bengal) would be left with a surplus while high income states would have deficits, since they would not be entitled to any transfer as their own revenue should suffice to meet their revenue expenditure at the level of middle income states. Again, as in the case of aggregate normative transfers, even statutory transfers determined on the normative basis would require substantial increase in the share of the states in central revenues, from around 19-20 percent at present to over 29 percent (*vide* Table 8). This would seem to be an impossible task given the centre's revenue situation and expenditure commitments.

However, if the centre's revenue growth improves and the buoyancy of centre's tax revenue goes up, the task may not be impossible. Also, one could consider some phasing in equalisation such as going in for equalisation at a lower level to start with.

The main problem however would be reducing the quantum of transfers to the high income states who do not qualify for any transfer on a normative basis. This is because, the system of statutory transfer as it has evolved since independence has tended to rely increasingly on tax devolution rather than Article 275 grants. So much so that nearly 90 percent of the statutory transfer now flow as 'tax devolution' and only the rest (10 percent) goes as grants-in-aid to states in need of assistance to meet their budget gaps. This leaves little room for equalisation because, however progressive the devolution formula may be, it is not possible to tailor tax devolution to meet only the normatively determined revenue gaps. Besides, under the constitution, union tax revenues are required to be shared compulsorily with the states although the exact share is left to be determined by the FC. One reason for such tax sharing is to compensate the states for the limitation of their revenue base with the assignment of major tax powers to the centre. Tax devolution thus partakes of the character of revenue reimbursement grant. That provided the rationale for attaching some weight to "collection" or "contribution" in the devolution formula. As mentioned earlier, that practice has now been given up. All states should be entitled to a share in central revenue by way of tax devolution even if they are found not to qualify for any transfer on a normative basis. It would not be possible to deny any state of a share in Union taxes and so equalisation cannot be carried beyond a point. However, this only underlines the need to roll back the share of tax devolution in the statutory transfers. Clearly, the transfer system cannot be rationalised unless the tax devolution component of the statutory trnasfers is drastically reduced. It should be realised that the whole exercise of assessing the revenue gap of the states which is done by the FCs, even though done in a limited way, loses its significance when several states are left with substantial surpluses on their non-plan revenue account, after their share in union taxes is added to their own revenue base.

If however, a radical reform as proposed above does not seem feasible, it would be desirable to supplement the non-plan revenue transfers with some basic services equalisation grants to enable the states with below average revenue capacity (even with statutory transfer) to be in a position to bring up only the level of some basic services, like primary education, health, water supply and sanitation, to the average level of expenditure under these heads. As mentioned earlier, even with the inclusion of the share in central taxes recommended by the EFC in its revenues, Bihar's per capita revenue capacity would be no more than 60 percent of the average. Non-plan per capita revenue expenditure as projected by the EFC also revealed wide disparity among the states. (in Bihar Rs. 724 as against Rs. 1547 of Gujarat, Rs. 1769 in Punjab). Even if the average ratio of the states' spending on basic services to their revenue capacity was used as the norm for determining how much Bihar should spend on the services in question if its revenue capacity was raised to the average level, it was found that there would still remain a large per capita deficiency in Bihar as compared to the average and this was true of all the low income states (M.P., U.P., and Orissa). Clearly there was a case for transfer specifically to equalise these services.

It may not be out of place to mention that equalisation of the standards of basic services was postulated by the First FC as one of the principles to guide the grants-in-aid to states contemplated under Article 275 of the Constitution. However, the First FC made recommendations for such grants to provide funds for expanding only primary eduction. This lead was not followed by the subsequent FCs until the Sixth FC. The case for focussing on equalisation of basic services instead of merely filling the budget gap of the states was put forward cogently by Gulati (1987) while he was a member of that Commission.

The ToR of the Sixth FC had for the first time asked the Commission to consider providing grants for upgrading administrative services in the backward states. This, it was argued by Gulati, opened up the room for giving grants for improving the level of social services as well. There were several ways in which the statutory transfer scheme could be designed to promote this objective but it was not possible to proceed far in the direction of equalisation unless the proportion of tax devolution in the statutory transfers was brought down. One way could be, it was suggested by Gulati to restrict tax devolution only at what would be required to maintain social services at the minimum level observed among the states. The suggestion apparently did not find favour with the other members of Sixth FC. However, the Sixth FC did extend the ambit of grants-in-aid to upgrade not only administrative services of backward states or the level of asset maintenance but also selected social services like education, medical services and public health. One notable outcome of this endeavour was that the proportion of tax devolution in the statutory transfers recommended by the Sixth FC came down to 62 percent as against 85 percent earlier as that of grants-in-aid went up to 38 percent as against 15 percent. But this was shortlived. The weight of tax devolution in the statutory transfers went up again and has received above 80 percent thereafter (Bagchi, 2002). It is time a fresh look was taken at the relative weights of tax devolution and grants-in-aid in the FC's package if the system of revenue transfer is to be rationalised.

V. Conclusions

Even if the revenue transfers are based strictly on objectively derived norms, and not on 'history' the question that needs to be addressed squarely is, will that suffice to take care of the problem of incentives? What is the guarantee that the states receiving much larger transfers than before will adhere to the norms and not go soft on their revenue effort or in the matter of spending? Will the states that will be receiving much larger amounts from the centre under the proposed scheme fulfil the expectation of providing higher level of public services or will they develop the dependency syndrome noticed among the Atlantic provinces of Canada and also Special Category States in India? After all, it is asked, time and again, how seriously have the states taken the FC's projections in the past?[8] It is also argued that equalisation will put a premium on 'remaining poor' and discriminatory against states showing better performance in development.

In our view, doubts about the value or even credibility of FC's projections of revenue and expenditures of the states (and the centre) are based on a misperception of the role of the FC. The FCs, it needs to be appreciated, are not supposed to anticipate how the states will frame their budget; their task clearly is to adjudicate the sharing of revenue between the centre and the states and their allocation among the States in a judicious manner. So their projections cannot be faulted if they turn out to be wide of the actuals. The real weakness of the FC's approach has been, as correctly pointed out by critics, the absence of a truly normative approach and their inability to get free of the 'tyranny of the base year'. It is not surprising that the states pay little attention to the FC's projections when they know that these would go into the "dustbin of history", once a new commission is appointed. This would not happen if the base year figures are also set up normatively. The incentives for fiscal discipline implicit in the norms will however not work, even if calibrated carefully, unless the implementation of the FC's dispensation is backed by a hard budget constraint.

It is now generally agreed that the most effective remedy for imprudent subnational borrowing is market-based control that requires the states to adhere to norms of fiscal prudence unavoidably. Until an efficient capital market comes into being, there would be a role for some hierarchical control over the states' borrowing (Anand, Bagchi, and Sen, 2001). But such controls should be exercised in a transparent, rules based way and not through a secretive bilateral agreements with the centre.

This is not to deny that there can be a case for attaching conditionality to equalisation transfers in one respect *viz*., the requirement to maintain proper accounts. India's Constitution contains elaborate provision for requiring governments at all levels to observe the rules regarding maintenance of accounts and fiscal prudence and adhere to the expenditure limits laid down by the legislature. The C&AG has been given a constitutional status with authority to oversee the maintenance of accounts and observance of rules of financial behaviour by all governments. However, the checks on improvident spending do not appear to be working as effectively as they should have. There is considerable room for tightening the requirements for maintaining accounts in government.

Conditionalities can be attached only to specific purpose grants for which there is a case because of externalities. A good deal of caution is however needed in using specific purpose grants because of, the fact that quantifying externalities is a formidable task. It is salutary to note that both in USA and Canada there is a move in recent years to replace specifically targeted grants with block grants and equalisation transfers because of the problems inherent in designing such grants efficiently (Inman and Rubinfeld, 1997). Specific purpose grants are no doubt used in a big way in Australia but this practice has come under severe criticism from experts in federal finance primarily on the ground that these are centralising, and distort the expenditure priorities of the states.[9] The proliferation of the centrally sponsored schemes in India and persistent criticisms about their wasteful and distortionary impact on state finances bear eloquent testimony to the misgivings about the wisdom of relying too heavily on such grants.

There can however be a case for conditionalities for loans extended by the centre. Again, caution is needed to see that such conditionalities are not used to impose centre's expenditure preferences and priorities when there are no obvious externalities or to favour states politically aligned to the government at the centre. This is particularly important in the era of coalition governments and the findings of research that suggest that political alignment can be a significant factor influencing the flow of funds from the centre (Khemani, 2003).

The question still remains, if the share of the poorer states in central revenues is enlarged as much as the normative approach would require, and that of the richer states reduced, will that not be discriminatory against the better performing states and thus be detrimental to the growth of the economy? While the reasoning underlying this poser looks persuasive, it overlooks the possibility that improvement in the level of public services like health and education may unleash the growth potential of the regions that are lagging behind. Keeping them poor also may not be in the larger interests of the nation or even the best interest of the states that are already advanced. It would of course not be reasonable to expect all regions to attain the same level of development irrespective of their endowment. However, equalising the level of public services is necessary to prevent migration lured by better living conditions in the richer regions and also as a matter of "categorical equity" as Musgrave (1999) insists. The better off states should not grudge the flow of larger central funds to the poorer states as the bulk of the resources from other sources like private investment and FDI are flowing to areas that are already doing well, as the Deputy Chairman, Planning Commission had pointed out in his address at the Golden Jubilee function of the FC in April 2003.

It should be recognised that providing the backward states with transfers justifiable in a normative framework is a necessary, though not sufficient condition for raising their living conditions, and thereby the environment for activities that spur growth; for the transfers to work there has to be an improvement in governance as well. Ultimately it is the democratic process and inter-state competition that can bring it about. In the last analysis, the task of fiscal transfers is to provide a level playing field. What is required is not giving the poor less because they are poor but to see that they use the transfers properly. There should be other ways to punish financial mismanagement (such as financial emergency in specified situations) than keeping them at a low level of help.

To sum up, the scheme of centre-state revenue transfer in India needs to be reformed if the goals of efficiency and equity are to be served. The changes that seem imperative are:

- Integration of transfers, combining transfers for meeting expenditure needs on both plan and non-plan accounts, bringing both under the purview of FC.

- Determination of the revenue gap of the states on a normative assessment of revenue capacity and expenditure needs, with a view to equalising revenue capacity and expenditures at a reasonably comparable level in all states.

- Providing special grants to equalise the level of basic social services like, primary health, education, water supply and sanitation at a reasonable level.

- Imposition of a hard budget constraint and market based control on the states in the matter of borrowing, combined with requirements to maintain proper accounts

Reform on these lines would call for a radical change in the approach of the FC and also the strategy of planning followed so far. Given our 'path dependence' these may look impracticable in the foreseeable future. However, some fundamental rethinking on how the transfer system should operate is long overdue. This paper is a modest attempt to explore the directions in which the reforms should proceed.

Table 1: Per Capita Revenue Capacity

(Rs.)

	2000-01	2001-02	2002-03	2003-04	2004-05
Non Special Category States (NSCS)					
1. Andhra Pradesh	2186	2552	2981	3481	4083
2. Bihar	1290	1469	1672	1902	2182
3. Goa	4588	5253	6000	6865	7886
4. Gujarat	2861	3333	3881	4515	5264
5. Haryana	2767	3233	3778	4407	5143
6. Karnataka	2523	2909	3353	3864	4476
7. Kerala	2686	3121	3621	4194	4869
8. Madhya Pradesh	1762	2003	2279	2596	2970
9. Maharashtra	2729	3210	3776	4435	5213
10. Orissa	1656	1791	2114	2330	2678
11. Punjab	2715	2981	3452	3996	4643
12. Rajasthan	2007	2158	2423	2790	3228
13. Tamil Nadu	2812	3259	3776	4374	5095
14. Uttar Pradesh	1419	1567	1803	2072	2388
15. West Bengal	1789	1960	2188	2456	2854
Total NSCS (Av.)	2042	2322	2676	3082	3576
Special Category States (SCS)					
16. Arunachal Pradesh	3973	4167	4360	4568	5025
17. Assam	1537	1702	1934	2193	2501
18. Himachal Pradesh	3624	3830	4060	4266	4536
19. Jammu & Kashmir	3950	4244	4420	4680	5025
20. Manipur	2557	2678	2797	2929	3120
21. Meghalaya	2907	3047	3217	3338	3535
22. Mizoram	5059	5306	5551	5948	6240
23. Nagaland	4950	5166	5467	5608	5945
24. Sikkim	6328	6645	6965	7311	7816
25. Tripura	2402	2517	2650	2755	2910
Total SCS	2643	2840	3056	3289	3587
90% of Total SCS	2379	2556	2750	2960	3228

* Based on projections made by EFC taking statutory transfers and own source revenues together.

Table 2: Estimated Normative Central Transfers to States

(Rs. Lakhs)

	1987-88	10th Finance Commission Period	11th Finance Commission Period*
Andhra Pradesh	146242	642669	1118520
Bihar	250372	1221903	1920068
Gujarat	48102	148114	354874
Haryana	18036	41011	121004
Karnataka	95483	435626	705617
Kerala	63633	284310	414718
Madhya Pradesh	141310	786132	1140961
Maharashtra	78677	94562	365326
Orissa	82829	380995	749069
Punjab	7994	60396	102936
Rajasthan	93468	468291	941053
Tamil Nadu	94237	492449	946938
Uttar Pradesh	341996	1746515	2963309
West Bengal	128481	644330	967241
All States	1590860	7447301	12811634
Normative Tr. As % of Centre' Rev.	33.14	38.73	44.36
Normative Tr. As % of Centre' Norm. Rev.	33.14	37.14	37.45
Norm Tr. As % of Centre's Rev. incl. SCS	41.96	47.23	51.86
Norm. Tr. As % of Centre's Norm. Rev. incl. SCS	41.96	45.34	43.78
Act. Trans.(14 St.) as % to Centre's Rev.	30.36	25.97	26.87
Act. Trans Incl SCS. As % to Centre's Rev.	39.18	34.47	34.37

Note: SCS= Special Category States

* Upto 2002-03 (the figures for the year 2002-03 are taken from BE).

Table 3: Actual Revenue Transfers as a as a Percentage of Normative Transfers

(percent)

	1987-88	10^{th} Finance Commission Period	11th Finance Commission Period
Andhra Pradesh	78.95	77.70	66.46
Bihar	64.95	47.06	42.77
Gujarat	171.72	165.70**	110.63
Haryana	144.96	107.83**	99.27
Karnataka	73.82	65.52	65.82
Kerala	74.23	69.46	65.20
Madhya Pradesh	86.39	56.61	61.35
Maharashtra	149.29	179.63**	135.75
Orissa	95.41	69.89	65.15
Punjab	343.97	207.35**	190.11
Rajasthan	111.38	73.06	57.97
Tamil Nadu	109.68	74.47	48.21
Uttar Pradesh	79.30	51.74	47.62
West Bengal	99.78	60.62	79.34
All States	91.62	68.64	60.56

** Extreme values are excluded in the calculation of average.

Table 4: Normative Transfers as a Percentage to Actual Pre-Transfer Deficit

(percent)

	1987-88	10th Finance Commission Period	11th Finance Commission Period
Andhra Pradesh	130.87	100.52	106.52
Bihar	202.29	182.54	188.09
Gujarat	43.23	34.56	34.38
Haryana	73.59	19.27	64.31
Karnataka	117.02	123.08	99.61
Kerala	95.41	86.61	81.59
Madhya Pradesh	113.83	132.60	141.30
Maharashtra	71.47	8.93	32.28
Orissa	95.78	92.86	108.96
Punjab	15.87	18.85	22.10
Rajasthan	66.90	94.48	107.18
Tamil Nadu	71.58	89.84	107.94
Uttar Pradesh	139.03	125.20	143.51
West Bengal	91.95	90.18	62.15
All States	102.79	96.44	97.65

Table 5: Actual Transfers as a Percentage to Actual Pre-Transfer Deficit

(percent)

	1987-88	10th Finance Commission Period	11th Finance Commission Period
Andhra Pradesh	103.32	75.10	70.88
Bihar	131.39	85.32	77.82
Gujarat	74.24	64.76	37.02
Haryana	106.68	50.73	54.87
Karnataka	86.39	81.22	65.39
Kerala	70.82	60.81	53.15
Madhya Pradesh	98.35	75.02	81.29
Maharashtra	106.70	61.05	42.08
Orissa	91.38	64.43	70.91
Punjab	54.58	39.70	36.10
Rajasthan	74.51	69.03	62.15
Tamil Nadu	78.51	66.94	52.05
Uttar Pradesh	110.24	64.24	68.29
West Bengal	91.75	55.13	49.22
All States	94.17	66.06	59.13

Table 6: Actual Statutory Transfers as a Percentage of Normative Statutory Transfers*

(percent)

	1987-88	10th Finance Commission Period	11th Finance Commission Period
Andhra Pradesh	98.94	88.26	59.40
Bihar	71.08	48.70	47.76
Gujarat	760.05	242.25	150.90
Haryana	812.13	21.62	92.28
Karnataka	92.88	72.48	62.26
Kerala	91.35	75.55	72.87
Madhya Pradesh	111.91	57.39	61.45
Maharashtra	**	93.31	162.71
Orissa	105.82	66.64	56.20
Punjab	**	177.71	65.13
Rajasthan	91.65	70.60	54.42
Tamil Nadu	185.85	91.44	46.10
Uttar Pradesh	93.99	55.83	50.96
West Bengal	165.51	67.55	104.41
All States	117.87	73.65	62.29

* Comprising tax devolution and grants-in-aid under Article 275 of the Constitution

** The normative transfers for these states work out to a negative figure.

Table 7: Normative Non-Plan Transfer as a Percentage of Actual Deficits

(percent)

	1987-88	10th Finance Commission Period	11th Finance Commission Period
Andhra Pradesh	227.09	112.72	147.14
Bihar	330.36	176.67	166.12
Gujarat	21.08	10.36	16.11
Haryana	71.48	7.72	51.63
Karnataka	263.09	202.05	137.99
Kerala	81.06	115.83	89.63
Madhya Pradesh	176.61	167.37	160.00
Maharashtra	0.00	2.06	2.06
Orissa	113.36	112.55	114.75
Punjab	0.00	5.27	4.04
Rajasthan	84.75	93.77	103.42
Tamil Nadu	95.40	106.98	118.91
Uttar Pradesh	159.85	121.41	132.90
West Bengal	68.81	80.03	47.89
All States	136.51	104.96	93.01

Table 8: Estimated Normative Non-Plan Revenue Transfers

(Rs. Lakhs)

	1987-88	10^{th} Finance Commission Period	11th Finance Commission Period
Andhra Pradesh	78322	434232	751945
Bihar	162069	949831	1451678
Gujarat	5529	38210	115860
Haryana	1373	9837	27013
Karnataka	49115	292388	451446
Kerala	33054	194879	259827
Madhya Pradesh	74329	569029	775593
Maharashtra	0	11405	19010
Orissa	50137	281636	574979
Punjab	0	16164	12385
Rajasthan	49018	322615	673373
Tamil Nadu	35761	321564	648984
Uttar Pradesh	200783	1286720	2121361
West Bengal	59115	427408	581060
All States	798606	5155921	8464513
Normative Tr. As % of Centre's Rev.	16.64	26.67	29.34
Normative Tr. As % of Centre's Norm. Rev.	16.64	25.57	24.77
Actual St. Tr. As % of Centre's Revenue	20.33	19.71	19.25

Note: St. Tr. = Statutory Transfers

Appendix

The Normative Deficit Estimation Assumptions

In estimating the budget gap of the states on a normative basis, 'norms' have to be set up for both revenues and expenditures.

In assessing the revenue capacity of the states normatively for the exercises undertaken for this paper, separate norms were applied for tax and non-tax revenues. An examination of the tax-revenue profile of the fourteen states under consideration revealed wide divergence in their tax effort as reflected in the tax/GSDP ratios among them, with low-income states as a group at the bottom and middle income states on top. Proceeding on the premise that all states including those in the LI group should be able to raise their tax ratio to the level at which most of them are doing, the median ratio of the 14 states was adopted as the norm for both MI and LI states. For HI states, this might look a little too soft as taxable capacity can be expected to increase more than proportionally with per capita GSDP. So we chose the group average of HI states as the norm in their case.

The median tax to GSDP ratio for the period between 1995-96 and 2000-01 worked out to be 6.40 percent and the high-income group average worked out to be 6.97 percent. These were the norms used for the present exercise. The middle and low-income group average worked out to be 7.38 and 5.03 percent of GSDP respectively.

In the case of non-tax revenues, the principle of revenue recovery is taken to set up the norm. Accordingly, the ratio of own non-tax revenue as a percentage of primary revenue expenditure (that is excluding pension) of the fourteen states was calculated. Like in the case of tax effort, estimated recovery profile shows wide divergence across states. It was also noticed that there has been a steady decline in the recovery ratio across states irrespective of their income groups over the years. In order to set up norms for non-tax revenues, we assumed that both middle and low-income states should mobilize revenue to the level of the best performing states in their respective groups. As the best performing high-income states has a recovery ratio much above that of other states in the group, the application of best performance norm of high-income group appeared to be too harsh. Thus, we reasoned that these states should achieve the average performance at a level of 20 percent, which is the average of the recovery performance ratio of high and middle income states.

On the revenue expenditure side, separate norms were applied for primary general service expenditure excluding pension, expenditure on social services and economic services. In the case of pensions, the normative principle was not applied and actual pension expenditure was added to the normative general service expenditure. Interest payment has been measured in terms of the intensity of debt burden, *viz*., interest payment as a percentage of revenue receipts and normative interest payment is estimated at the minimum of the ratio (among the fourteen states) in each year. In the case of primary general services, social services and economic services, the per capita expenditure of the middle income states was applied as the norm.

References

Ahmad, Ehtisham 1997. *Financing Decentralized Expenditures: An International Comparison of Grants,* UK: Edward Elgar.

Akerlof, George 1969. “Centre State Fiscal Relations in India”, *Indian Economic Review*, IV (2):99-121.

Anand, Mukesh, Amaresh Bagchi, & Tapas Sen, 2001. "Fiscal Discipline at the State Level: Perverse Incentives and Paths to Reform", Paper presented at NIPFP-World Bank Conference, New Delhi (May).

Bagchi, Amaresh 2002. "Equalisation as Goal of Centre-State Transfers", *Economic and Political Weekly*, July 6.

Bird, Richard M. and Michael Smart, 2002. "Intergovernmental Fiscal Transfers: International Lessons for Developing Countries", *World Development,* 30(6).

Boadway, Robin 1997. "The Economics of Equalization: An Overview" in Robin Boadway and Paul Hobson (*eds*.) *Equalization: Its Contribution to Canada's Economic and Fiscal Progress.* John Deutsch Institute, Queen's University. Canada: Kingston, Ontario.

Breton, Albert 1995. *Competitive Governments*. UK and USA:Cambridge University Press.

Burbridge, J.B. and G.M. Myers, 1994. "Redistribution within and across the Regions of a Federation", *Canadian Journal of Economics*, 27(3): 620-36 (August).

Chakraborty, Pinaki 2003. "Unequal Fiscal Capacities Across Indian States: How Corrective the Fiscal Transfer Mechanism", Paper presented at the World Institute for Development Economic Research/United Nations University Conference on Spatial Inequality in Asia, Tokyo.

Courchene, T. 1988. "Renegotiating Equalization: National Polity, Federal State, International Economy", *C D Howe Institute, Toronto*.

Godbole, Madhav (2001), "Finance Commissions in a *cul-de-sac*", *Economic and Political Weekly*, 6-12, 36(1): 29-34.

Gulati, I. S. 1987. *Centre- State Budgetary Transfers*, Sameeksha Trust.

Khemani, Stuti 2003. Partisan Politics and Intergovernmental Transfers India, Policy Research Working Paper 3016, The World Bank.

Musgrave, Richard A. 1999. "Fiscal Federalism" in John M. Buchanan and Richard A. Musgrave, 155-175. *Public Finance and Public Choice*: *Two Contrasting Visions of the States*, Mass. USA: MIT Press.

Oates, Wallace 1999. "An Essay on Fiscal Federalism", *Journal of Economic Literature*, Vol. XXXVII.

Petchi, Jeffrey, Perry Shapiro, and Cliff Walsh, 1997. "Transfers in Federal System: A Critical Survey" in Ronad C. Fisher (*ed.*) *Intergovernmental Fiscal Relations* Mass. USA: Kluwer.

Rao, M. Govinda and Nirvikar Singh, 2002. "Fiscal Transfers in a Developing Country: The Case of India", Paper presented at a seminar in Birmingham.

Rao M. Govinda, 1997. "Invisible Transfers in Indian Federalism", *Public Finance/Finances Publiques*, 3-4 (52):429-448.

Rao, M. Govinda and Tapas K. Sen, 1996. *Fiscal Federalism in India: Theory and Practice.* New Delhi: Macmillan, India.

Shaw, Anwar 1996. A Fiscal Needs Approach to Equalization, Canadian Public Policy, XXII.

End Notes

[1] A concise and incisive critique of India's transfer system is presented in Rao and Sen (1996, Ch. 6).
[2] For instance in his presentation to the Twelfth Finance Commission, the Chief Minister of Andhra Pradesh is reported to have urged that the states' share in union taxes be raised to 50 percent (The Hindu, 23 August, 2003).
[3] *See* for instance the articles in Ahmad (*ed.*) (1997); Bird and Smart (2002); Oates (1999); and Musgrave (1999).
[4] As a proportion of centre's revenue, aggregate transfers to the states work out to 34.9 percent in 2000-01, 33.14 percent in 2001-02 and 34.00 percent in 2002-03 [according to revised estimates (RE) figures].
[5] The Article runs as follows: "Parliament and the Government of Canada are committed to the principle of making equalization payments to ensure that provincial governments have sufficient revenues to provide reasonably comparable levels of public services at reasonably comparable levels of taxation".
[6] Burbridge and Myers (1994) provide an analysis along these lines.
[7] Equalisation transfers in Canada are confined to revenue capacity equalisation only while Australia's transfer scheme takes expenditure needs also into consideration. The formulae used in Australia are however, quite complex (Shah, 1996).
[8] *Vide* for example, Godbole (2001).
[9] To quote Petchy, Shabiro and Walsh (1997): "…….. while there may be theoretical justifications, based on the presence of externalities, for centrally mandated specific purpose transfers from the Centre to the states, in practice there are other reasons why such transfers are made. They have also been used to achieve backdoor centralisation of expenditure powers and hence get around constitutional and other limitations on the reach of central powers". (P-S-W, 1997, p. 106).