AN ANALYSIS OF EXPLICIT AND IMPLICIT INTERGOVERNMENTAL TRANSFERS IN INDIA*

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Abstract

In this paper, we provide a critical overview of central-state transfers in India. In addition to examining explicit transfers through the Finance Commission, Planning Commission and central ministries, we also analyze implicit transfers that operate through inter-state tax exportation and subsidized lending to the states. We quantify equity impacts of these transfers, finding that formula-based transfers have been equalizing, helping to overcome lack of fiscal capacity in poorer states, but that implicit transfers tend to go disproportionately to richer states, canceling out much of the equity impact of explicit transfers. We also highlight some of the institutional weaknesses of the current methods of intergovernmental transfers in India. We therefore make a case for reforms that would include: channeling transfers through a single, permanent, professional agency; a rule-based system of transfers rather than expanding central discretion; a transfer system with appropriate fiscal incentives for the center and the states, and minimizing implicit transfers arising from undesirable policies such as inter-state sales taxes, or badly targeted policies such as subsidized credit.

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I Introduction

India is a large, heterogeneous developing country. For countries such as India, intergovernmental transfers can play an important role in nation-building, by delivering public services corresponding to varied preferences of the people, enabling efficient and equitable allocation of resources, and promoting balanced regional development. At the same time, an ill-designed system can create severe regional tensions and accentuate fissiparous tendencies. Political economy considerations such as regional demands may, in turn, pose serious constraints in achieving economic objectives in the attempt to design and implement the intergovernmental transfer system.

Theoretical discussions bring out the desirable features that should be taken into account in designing and implementing an effective intergovernmental transfer system. First, an ideally designed transfer system should have a mix of general purpose and specific purpose transfers. While the objective of general purpose unconditional transfers is to *enable* every state to provide a given level of public services at a given tax price, specific purpose transfers can ensure a specified minimum levels of services which have spillovers across states, or which are considered "merit goods". Of course, judgments have to be exercised in determining the volume of transfers, the mix of the two types of transfers, and the degree of equalization (the benchmark chosen). Second, the transfer system should be formula-based rather than discretionary. Formula-based transfers have an advantage of being transparent and objective and the transfer system will not only be fair but also is appear to be so. Third, formula-based transfers should be simple and transparent, and should avoid adverse incentives on fiscal management of the donor as well as the recipients. Finally, the mechanism for designing and implementing the transfer system should be transparent and objective, and should be capable of adjusting to changing economic situations.

Usually, the analysis of intergovernmental transfers is confined to explicit transfers, and implicit inter-regional transfers are ignored. In the ultimate analysis, the extent to which the objective of the transfer system is fulfilled depends upon the redistribution done by both explicit and implicit transfers. The problem is particularly important in an economy like India, where many prices and outputs are regulated. This paper analyses intergovernmental transfers in India - both explicit and implicit. The rest of the paper is organized as follows. In section II, we consider explicit transfers. After providing an overview of the different forms of explicit transfers in section IIa, we analyze Finance Commission transfers in considerable detail. We then examine Planning Commission transfers and different types of transfers by central ministries in sections IIc and IId. In section IIe, we examine the equity impact of the components of the transfer system, as well as its overall effects. Section IIf considers weaknesses in the institutional

arrangements governing transfers. Section III turns to a consideration of implicit transfers. We consider three sources of implicit transfers: (i) inter-state tax exportation, (ii) subsidized lending by banking and financial institutions to the private sector; and (iii) subsidized borrowing by the states from the central government and the banking system. We find that the higher income states are the beneficiaries of such implicit transfers. Section IV concludes by summarizing the need for a more transparent, integrated system of intergovernmental transfers in India.

II. Explicit Central Transfers to States

IIa. Volume and Composition

Transfers from the central government contribute a significant part of state finances (see Table 1). In per capita terms at constant (1981-82) prices, central transfers to the states increased by over 2.5 times from Rs.77 in 1975-76 to Rs. 194 in 1993-94 and declined marginally thereafter owing to greater fiscal compression (Table 1). It is also seen from the table that, until 1993-94, the growth of transfers was faster than both the center's and the states' own revenues. In fact, during the period since the mid-seventies, while the annual average rate of growth of states' own revenues was only about 15.3 per cent and that of central revenues was even lower at 14.8 per cent, central transfers to the states increased at 16.4 per cent. Thus, the share of transfers in central revenues increased from 32 per cent in 1970-71 to 44 per cent in 1993-94 and declined thereafter to 39 per cent in 1995-96. Similarly, the share of transfers in state revenues increased from 39 per cent to 44 per cent and declined to 38 per cent in 1995-96. Of course, state expenditures increased at a much faster rate during this period and, therefore, the share of transfers in state expenditures declined steadily. However, they still finance almost a third of state expenditures.

Table 1

Central Transfers to States

Years	Per Capita Transfers 1981-82 Rupees	Transfers as Percentage of GDP	Transfers as Percentage of Central Revenues	Transfers as Percentage of State Current Revenues	Transfers as Percentage of Total State Expenditures
1975-76	77.36	3.67	31.8	38.64	44.80
1980-81	105.37	4.84	34.8	43.81	47.50
1985-86	151.54	5.55	40.98	45.62	46.42
1990-91	179.98	5.20	40.02	44.34	34.22
1991-92	184.03	5.35	39.65	42.33	34.06
1992-93	191.04	5.45	40.64	44.16	35.61
1993-94	194.12	5.33	44.07	42.36	35.38
1994-95	180.31	4.76	39.09	37.73	30.37
1995-96	185.39	4.66	39.06	38.37	30.85

Source: Indian Economic Statistics/ Public Finance Statistics.

Ministry of Finance, Government of India.

A notable feature of the federal fiscal arrangements in India is the existence of multiple channels of transfers from the center to the states. First, there is a constitutional mechanism to devolve tax shares and give grants. Second, the Planning Commission gives grants and loans for implementing development plans. Finally, 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 a proportion of the cost (centrally sponsored schemes).

The constitutional mechanism for central transfers consists of devolving the shares of individual income tax (Article 270) and union excise duties (Article 272), and giving grants-in-aid to the states in need of assistance (Article 275)[1]. To ensure an impartial and objective arrangement, the tax devolution and grants are required to be made based on the recommendations of a semi-judicial body, the Finance Commission, to be set up by the President of India every five years (or earlier), under Article 280. However, with development planning gaining emphasis, the Planning Commission became a major dispenser of funds to the states by way of both grants and loans. As there is no specific provision in the constitution for plan transfers, the central government channeled these transfers under the miscellaneous and ostensibly

Table 2
Current Transfers from the Center to the States

(Rs. Billion)

	Finance Commission Transfers			Plan Grants			Other Grants	Total
Plan Periods/ Years	Tax Devolu-tion	Grants	Total	State Plan Schemes	Central Schemes	Total		
Fourth Plan (1969-74)	45.6 (54.2)	8.6 (10.2)	54.2 (64.6)	10.8 (12.8)	9.7 (11.6)	20.5 (24.4)	9.3 (11.0)	83.9 (100.0)
Fifth Plan (1974-79)	82.7 (50.2)	28.2 (17.1)	110.9 (67.3)	29.1 (17.7)	19.3 (11.7)	48.4 (29.4)	5.4 (3.3)	164.7 (100.0)
Sixth Plan (1980-85)	237.3 (57.0)	21.4 (5.1)	258.7 (62.1)	73.8 (17.7)	69.0 (16.6)	142.8 (34.3)	15.1 (3.6)	416.5 (100.0)
Seventh Plan (1985-90)	494.6 (54.2)	62.7 (6.9)	557.4 (61.0)	155.2 (17.1)	165.1 (18.0)	320.3 (35.1)	35.2 (3.9)	913.1 (100.0)
Eighth Plan:								
1991-92	172.0 (52.2)	34.5 (10.5)	206.4 (62.7)	57.2 (14.2)	55.4 (16.8)	112.5 (34.4)	10.2 (3.1)	329.4 (100.0)
1992-93	205.2 (53.5)	26.4 (6.9)	231.7 (60.4)	78.4 (20.4)	65.2 (17.0)	143.9 (37.5)	7.2 (1.9)	383.4 (100.0)
1993-94	223.9 (51.4)	20.7 (4.8)	244.6 (56.1)	107.7 (24.7)	74.1 (17.0)	181.8 (41.7)	9.3 (2.1)	435.7 (100.0)
1994-95	248.5 (52.6)	24.3 (5.2)	272.8 (57.8)	99.0 (21.0)	94.5 (20.0)	193.5 (41.0)	5.3 (1.1)	471.6 (100.0)

Note: Figures in parenthesis are percentages to total transfers

1 The Constitution, under 275 (1) also provides for giving central grants to the States for promoting the welfare of Scheduled tribes in a state or for raising the level of administration of Scheduled areas.

Source: Indian Finance Statistics/Public Finance Statistics, Ministry of Finance, Government of India.

limited provisions of Article 282[2] Prior to 1969, plan transfers were schematic but since then, the distribution has been done on the basis of a consensus formula decided by the National Development Council (NDC)[3]. Thereafter, however, various central ministries felt the need to influence states' outlays on selected items of expenditure through specific purpose transfers with or without varying matching requirements. Thus, at present, there are three major channels of central transfers to states, namely, (i) tax devolution and grants given by the Finance Commission, (ii) grants and loans given by the Planning Commission, and (iii) transfers for various central sector and centrally sponsored schemes devolved by various central ministries, but monitored by the Planning Commission.

The relative shares of the three channels of central transfers to states since the Fourth Plan, presented in Table 2, bring out some important features. First, there has been a steady increase in the *discretionary element* of transfers. The proportion of transfers recommended by the Finance Commission or statutory transfers in total current transfers declined from 65 per cent during the Fourth Plan (1969-74) to less than 60 per cent during the Eighth Plan (1991-95). On the whole, the formula based transfers from Finance and Planning Commissions have not only shown large fluctuations from one plan period to another but also have tended to increase the discretion by the central government. These transfers claimed about 85 per cent of total transfers in the Fifth Plan period and during the Seventh Plan period, the share was lower at 78 per cent.

Of the discretionary transfers, specific purpose transfers for central sector and centrally sponsored schemes, constitute the bulk. The share of these transfers increased steadily, from less than 12 per cent in the Fourth and Fifth Plan periods, to about 20 per cent in 1994-95. Most of these schemes require matching contributions from the states. Thus, there is clear evidence of an increase in the discretionary element in transfers to the states, which is one of the most significant political economy features of the intergovernmental transfer system in India.

Second, within statutory transfers, the proportion of tax devolution, which had already been high, has shown a steady increase while that of grants has declined. Thus, even as the share of statutory transfers declined from about 67 per cent during the fifth plan to about 57 per cent in 1993-94, the share of tax devolution increased from 50 per cent to 53 per cent. Tax devolution constituted 84 per cent of statutory transfers during the Fourth Plan, but increased to almost 90 per cent during the Eighth Plan. In fact much of the increase in per capita transfers (at constant prices) over the years shown in Table 1 was from the increase in tax devolution. This may be explained by the fact that, while the Finance Commissions since the Seventh attempted to impart greater progressivity in tax devolution, this was done subject to the constraint of protecting the transfers of the better off states in absolute terms (at constant prices). In the event, both tax devolution and overall per capita transfers showed a significant increase. We will return to these issues later in the paper.

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[2] The legitimacy of these transfers has been seriously questioned. Some constitutional experts argue that transferring funds to the states under Article 282 is unconstitutional. Others consider that though this is permissible, channelling large amounts under this article is not in keeping with the spirit of the Constitution (See, NIPFP, 1993).

[3] The NDC is chaired by the Prime Minister and its members include all cabinet ministers at the center, Chief Ministers of the States and members of the Planning Commission.

IIb. The Finance Commission Transfers

The terms of reference. Under Article 280 of the Constitution, the President of India appoints the Finance Commission every five years or earlier to make recommendations on:

(i) the distribution between the Union and the States of the net proceeds of taxes which are to be or may be divided between them and the allocation between the States of the respective shares of such proceeds;

(ii) the principles which should govern the grants-in-aid of the revenues of the States, out of the consolidated fund of India and the sums to be paid to the States which are in need of assistance by way of grants-in-aid of their revenues under Article 275 of the constitution; and

(iii) any other matter referred to the Commission by the President in the interest of sound finance.

Under the third category, the Finance Commissions have been asked to examine and make recommendations on matters such as the distribution of certain assigned taxes specified under Article 269 of the Constitution such as estate duty on non-agricultural land, grants in lieu of tax on railway passenger taxes, and additional excise duties in lieu of sales tax on sugar, textiles and tobacco. Some of the Finance Commissions have also been asked to assess the states' indebtedness and suggest corrective measures to be taken, and to review the policies with regard to the financing of relief expenditures by states affected by natural calamities and recommend appropriate remedial measures.

So far, ten Finance Commissions have made recommendations and, barring a few exceptions, these have been accepted by the central government[4]. Yet, the working of these Commissions, their design of the transfer system, and the approach and methodology adopted by them have come in for severe criticism. The main criticisms are (i) those relating to attempts to restrict the scope of the Finance Commissions through the Presidential terms of reference; and (ii) those on the approach and methodology employed by the Commissions and the consequences for the design of the transfer scheme evolved by them in terms of equity and incentives.

(i) Restrictions on the scope of the Commission. The adoption of a planned developmental strategy with a pronounced socialist bias concentrated economic power in the hands of the center and, even within the central government, the Planning Commission. The increased dominance of the Planning Commission in allocative decisions, and its empowerment to dispense assistance to the states to finance their developmental activities substantially curtailed the Finance Commission's role in making intergovernmental transfers. Although the Constitution makes no distinction between Plan and non-Plan sides of the budget, and puts transfers under Articles 270 (income tax), 272 (excise duty) and 275 (grants) entirely within the

4 Notable exceptions were the rejection of the majority recommendation of the Third Finance Commission on the inclusion of 75 per cent of Plan revenue expenditures in the assessment (see main text), and the rejection of the unanimous recommendation of the Seventh Finance Commission to treat the small saving loans given to the states as "loans in perpetuity".

jurisdiction of the Finance Commissions, Presidential terms of reference have confined the Finance Commissions to making transfers only to meet the non-plan requirements of the states. The conflict in the jurisdictions of the two Commissions surfaced for the first time when the Third Finance Commission made its recommendations. Although its majority recommended inclusion of 75 per cent of the plan requirements of the states, the central government rejected this recommendation and accepted the recommendation of the Member-Secretary to avoid the plan side of the states' fiscal requirements altogether.

For the subsequent Commissions (until the Ninth) the terms of reference themselves excluded the plan side from their scope. This provoked the Chairman of the Fourth Commission to state, ".... there is nothing to exclude from its purview, grants for meeting revenue expenditures on the plan schemes nor is there any explicit bar against grants for capital purposes" (India, 1965. p.12.), but he nevertheless excluded it "... as it would blur the entire division of functions between the (Finance) Commission and the Planning Commission" (p.12.). In fact, even when the terms of reference did not impose any restrictions, as in the case of Ninth Finance Commission, the convention of assessing the non-plan side separately from the plan side was continued as the Commission could not break the shackles imposed by precedent.

The restriction of the Finance Commissions to the non-plan side of the budget has led to a number of problems. First, larger transfers through the Planning Commission have significantly curtailed the ability of the Finance Commission to make transfers and effect intended redistributions. Second, it has prevented a comprehensive periodic review of state finances. Third, conceptually, the plan and non-plan distinction is unsound. This artificial classification has led to inadequate provision for maintenance of existing assets in some states that were keen to have large plans, while in other states it led to pushing a number of development projects under the non-plan classification if these projects could not be included under the plan. Finally, it is even unclear whether the practice of giving transfers under Article 282 of the Constitution for plan purposes is constitutionally valid (see footnote 2).

(ii) Methodology - the gap-filling approach. The Finance Commissions' approach to federal transfers consists of (i) assessing overall budgetary requirements of the center and states to determine the volume of resources available for transfer with the center and required individual states and during the period of recommendation, (ii) projecting states' own revenues and non-plan current expenditures, (iii) distributing assigned taxes,[5] broadly on the basis of origin, (iv) distributing sharable taxes - the personal income tax and union excise duties between the center and the states and among the states *inter se*; and (v) making up the deficit between projected expenditures and revenues after tax devolution with grants.[6] This is popularly known as the "gap-filling" approach.

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[5] These are additional excise duties in lieu of sales tax, estate duty on non-agricultural land (abolished in 1985), wealth tax on agricultural property (abolished in 1982), and grants in lieu of a repealed tax on railway passenger fares.

[6] The grants (G_i) receivable by the ith state are given by, $G_i = E_i - (R_{oi} + R_{ai} + R_{si})$, if the right hand side is positive, where E_i denotes projected non-plan current expenditures of the ith state; R_{oi} = Projected own revenues of the ith state, R_{ai} = Projected share of assigned revenues of the ith state; and R_{si} = Projected shared taxes of the ith state.

Assigned taxes are distributed according to the principle of origin and there are no serious problems associated with them. Of course, the states contend that the center has not exhausted the potential of Article 269 taxes, which are to be levied by the center, but the proceeds to be assigned to the states. As regards shared taxes, the basic issue is that as the center gives away large shares to states, it concentrates on non-sharable revenue sources which not only creates horizontal inequities and relative price distortions, but also distorts the tax structure.

In the evolution of the system of tax devolution over the years, some important features are notable. First, states have always preferred tax devolution over grants due to its inherent responsiveness to price and income increases. Second, the Finance Commissions, stung by the criticism that the transfers given by them tended to promote laxity in fiscal management in the states, have preferred to increase tax devolution rather than "gap-filling" grants. For these reasons, tax devolution has shown a significant increase both in absolute terms and in relation to grants, with states' share of income tax increasing to 87.5 per cent and that of Union excise duties increasing to 47.5 per cent under the recommendation of the Tenth Finance Commission.

After estimating the gap between projected revenues (including assigned taxes) and non-plan expenditures within the revenue accounts of the states, the Finance Commissions determine the shareable portion of income tax and union excise duty so as to cover the bulk of the gap, and the remainder is filled through grants under Article 275. These are then distributed to the states mainly on the basis of general economic indicators like population, per capita SDP in its inverse or "distance" form[7], other indicators of backwardness, collection and tax effort.

The shareable portion of the two taxes and the criteria for their distribution among the states adopted by the last ten Finance Commissions reporting thus far have been summarized in Appendices 1 and 2. An examination of the criteria used to distribute the tax shares brings out some notable features. First, as already mentioned, tax devolution was made on the basis of general economic indicators like population and backwardness and not on the basis of fiscal disadvantages *per se*. Until 1989-90, tax devolution was not linked to the fiscal needs of the states as measured by the Finance Commissions at all. The Ninth Finance Commission, however, felt the need to link tax devolution to the estimated deficits but assigned this factor only 5 per cent weight. This was followed by a 7.5 per cent weight assigned by the Tenth Finance Commission. Of course all the Commissions assigned weights to population, which broadly represents expenditure need, but even in doing this, the Finance Commissions were mandated to use the 1971 population figures, ostensibly to provide an incentive to those states succeeding in controlling population growth. In the process, even the states which had higher population growth due to immigration of people and not just higher birth rates were penalized.

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7 The inverse formula is given by $= \dfrac{P_i/Y_i}{\sum P_i/Y_i}$

and the distance formula is given by $= (Y_h - Y_i)P_i / \sum (Y_h - Y_i)P_i$

where Y_i and Y_h represent per capita SDP of the ith and the highest per capita SDP state, P_i - the population of the ith State, $(Y_h - Y_i)$ for the 'h' state is taken to be the distance between the highest and the next highest per capita SDP.

Second, assigning weights to contradictory factors like 'collection' and 'backwardness' in the same formula for distribution has rendered the achievement of the overall objective of transfers difficult. Third, while the objective of basing transfers on general economic indicators was to keep the devolution package simple and transparent, the purpose was lost when the Finance Commissions used a number of factors which included multiple variables and the same variable was used with different exponential powers as was done in the case of inverse and distance forms of per capita SDP. Again, the "backwardness" criterion sometimes included a number of variables: the Fifth Finance Commission considered a list of 5 variables, the Ninth Commission in its second report took into account three overlapping variables namely, scheduled caste and scheduled tribe population, agricultural laborers and people below the poverty line, and in the First Report of the Ninth Finance Commission, only the poverty ratio was used, to the benefit of high income states with high poverty ratios, like Maharashtra, and to the disadvantage of middle and low income states with relatively low poverty ratios, such as Kerala.

Grants recommended by the Finance Commissions (Article 275), on the other hand, are determined on the basis of projected gaps between non-plan current expenditures and post-tax devolution revenues. Some of the Commissions moderated the "gaps" by taking account of normative growth rates of revenues and expenditures in projections, and taking the returns from public undertakings on a normative basis. Some of the Commissions (particularly after the Sixth) also attempted to enhance outlays on specified services in the states by making closed-ended, specific purpose non-matching grants. However, these attempts were selective and, by and large, it would not be incorrect to characterize their approach as "gap-filling". The Ninth Finance Commission was the first to attempt and comprehensively adopt the normative approach and determine the gap between revenue capacities and expenditure needs of the states, but when the bulk of the transfers was given by way of tax devolution based on general economic indicators, and not the fiscal need as assessed, the effectiveness of this approach was dissipated. The Tenth Finance Commission reverted to the old methodology, on the plea that it was not mandated to follow the "normative" approach in its terms of reference.

(iii) Evaluation of Finance Commission transfers. The "gap-filling" approach outlined above suffers from a number of shortcomings. First, none of the Finance Commissions assessed the overall resource position of the center and the proportion of the resources required to meet its commitments on any objective basis, although the terms of reference explicitly required them to do so. They merely made judgments about the shareable proportions of non-corporate income tax and union excise duty. In fact, the Commissions have found it difficult to evolve any objective criteria for evaluating the center's needs. On the other hand, continuously raising the states' share in sharable taxes implicitly meant that the center had more resources than its own needs or that it was the center which should or could raise more resources. With the deterioration in the center's own fiscal position in the 1980s, larger devolution meant a higher fiscal imbalance at the center and the exercise of distributing transfers became largely one of distributing deficits.

Second, the prevailing practice of dealing with plan and non-plan requirements of the states separately by the Planning and Finance Commissions has not only prevented an integrated view of the fiscal needs of the states, but also has compartmentalized the assessment of interdependent components of states' fiscal needs. The expenditures on completed plan schemes

are classified as non-plan. The interest payable on plan loans is a non-plan item. On the other hand, there are several instances when new expenditures of a developmental nature are undertaken on the non-plan side. In fact, whether or not a particular developmental scheme should be included under plan is left to the discretion of the state concerned. A number of irrigation projects in Karnataka, for example, have not been included under plan schemes because of a river water dispute with other states. In Kerala, the Mahatma Gandhi University in Cochin was entirely started under a non-plan classification. Besides poor co-ordination, the compartmentalized treatment of plan and non-plan expenditure needs, and the emphasis on having large plans have led to inadequate provision for, and maintenance of, assets created under previous plans. From the states' point of view, separate plan and non-plan assessments gave them the opportunity to submit different projections to the two Commissions - an overestimated non-plan budgetary gap to the Finance Commission and overestimated saving in the non-plan account to the Planning Commission.

The third important weakness of the Finance Commission transfer schemes is their lack of clear purpose. They have not been designed to meet the major conceptual objective of unconditional transfers, namely, offsetting fiscal disadvantages of the states. Tax devolution was decided on different considerations from those of grants-in-aid, and, even in the case of the former, the criteria for distributing the income tax were different from those for excise duties. The earlier Commissions recommended tax devolution mainly on the basis of population but, as later Commissions substantially increased devolution, better targeting meant assigning greater weight to the backwardness factor to contain the cost of transfers to the center. Even so, a predominant proportion of transfers continued to be through tax devolution distributed on the basis of general economic indicators.

Fourth, although it is true that successive Commissions assigned higher weights to backwardness in the tax devolution formula, their methodology has had an inherent bias against poorer states. As projections were made by taking existing revenues and non-plan expenditures (with some minor modifications) as bases, the standards of services in the states with lower tax bases could not be enhanced because the budgetary gaps projected on the basis of existing low levels of services in these states would be small. At the same time, as the bulk of the transfers - tax devolution - was distributed on the basis of general economic indicators, even states with no fiscal disabilities in the Commissions' own reckoning received substantial amounts. Thus, while the states with greater means ended up with high levels of estimated per capita non-plan surpluses after the award of the Finance Commissions , those with low tax bases were barely able to balance their non-plan accounts and often, as the Finance Commissions' assumptions were unrealistic, had to use plan funds to finance non-plan current deficits.

Table 3 shows the non-plan surpluses of the major states after the Finance Commission recommendations, as estimated by them. It is seen that the high income states consistently had significantly higher than average non-plan surpluses, whereas the surpluses in the low income states were below the average. In fact, per capita non-plan surpluses in high income states were about three times those of low income states according to the Sixth Finance Commission's recommendation, while according to the Ninth Finance Commission's recommendation this ratio was about four. The average surplus of low income states according to the award of the Ninth Finance Commission was less than 50 per cent of the average surpluses of all the states. Given

this unequal starting position, the richer states could make larger plan investments, resulting in imbalances in the pattern of development itself.

Fifth, the gap-filling approach adopted by the Finance Commissions has had adverse effects on incentives. The center has tended to concentrate on non-shareable sources of revenue like import duties, thereby distorting the pattern of resource allocation. Transferring 85 per cent of the net proceeds from the personal income tax is said to have created a lack of interest in it for the center[8]. Similarly, it is pointed out that the center has tended to mobilize resources by increasing administered prices on public monopolies rather than increasing excise duties on them. Again, this can alter relative prices in unintended ways. At the state level, the gap-filling approach is said to have led not only to a disincentive on tax effort, but also profligacy in spending. At the same time, since tax devolution is not related to any assessments made by the Finance Commissions, while grants are given as a residual form of assistance, scrutiny of state budgets has only applied to states with post-devolution gaps in their non-plan revenue accounts.[9]

The disincentives of the existing scheme of devolution on the center's tax effort can be summarized thus. In the main, it has been argued that sharing of only non-corporate income tax and union excise duty has reduced the incentive for the central government to raise revenue from these sources, which has violated horizontal equity (as the center has put inadequate effort in recovering the tax from non-salaried incomes) and distorted the tax structure. The Tenth Finance Commission, therefore, recommended an alternative scheme of devolution wherein the center would transfer 29 per cent (26 per cent to cover the sharing of income tax and excise duty and 3 per cent against additional excise duties in lieu of sales tax) of all tax revenues collected by it. This percentage will remain at the same level for the next 15 years and the Finance Commissions will only determine inter-state distribution. The central government, after ascertaining the views of the states and that of the Standing Committee of the Inter-State Council, has accepted the recommendation. The implementation of this recommendation will require the amendment of the Constitution, and, given the unanimity of views on the need for such a reform from all the parties concerned, it should not be very long before the recommendation is implemented.

Recent Commissions have modified the criticized approach in two other ways. First, they substantially enhanced tax devolution so that very few states were left with post-devolution gaps to be filled by grants. The Seventh Commission, for example, increased the excise duty share of the states from 20 per cent to 40 per cent, and assigned higher weights to the backwardness factor in order to devolve larger tax shares to the poorer states. Every succeeding Commission has tried to target tax devolution to poorer states. However, as noted earlier, an overwhelming proportion of transfers is given on the basis of general economic indicators, and the detailed exercises on assessments had relevance only to a small proportion of transfers. In spite of attempts by the Ninth and the Tenth Commissions to earmark a portion tax devolution to post-devolution gaps, the assessment exercise continues to have only a marginal relevance to the transfer system.

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[8] For arguments on these lines see, Burgess and Stern (1993). Dasgupta and Mookherjee (1994), however, provide evidence against this the hypothesis.

[9] For details, see Rao and Chelliah (1991).

Table 3

Per Capita Non-plan Revenue Surpluses After the Recommendations of Finance Commissions

(Rupees per annum)

States	Sixth Finance Commission (1974-79)	Seventh Finance Commission (1979-84)	Eighth Finance Commission (1984-89)	Ninth Finance Commission (1990-95)
High Income States	**153.12**	**435.11**	**826.52**	**1176.67**
Gujarat	120.32	331.66	629.89	915.47
Haryana	217.84	509.69	920.12	1445.40
Maharashtra	135.74	465.53	885.37	1380.40
Punjab	234.71	473.58	927.41	686.78
Middle Income States	**43.06**	**220.97**	**438.23**	**600.96**
Andhra Pradesh	15.21	178.03	333.82	660.24
Karnataka	80.47	263.4	478.84	993.08
Kerala	3.41	94.41	228.48	138.11
Tamil Nadu	42.67	140.43	601.53	752.46
West Bengal	21.17	143.13	29.66	358.64
Low Income States	**49.74**	**253.68**	**366.81**	**273.49**
Bihar	29.89	159.96	132.48	433.17
Madhya Pradesh	37.61	218.85	356.05	323.67
Orissa	30.89	27.91	47.18	168.96
Rajasthan	26.01	77.57	97.33	205.31
Uttar Pradesh	30.02	183.50	309.88	195.82
Average	**55.48**	**215.58**	**380.80**	**562.26**
Proportion of Maximum/Minimum	68.76	18.26	31.27	10.47

Source: Reports of the Finance Commissions

Second, recent Commissions introduced selective norms for the center and the states by targeting the rates of growth of revenues and expenditures, and by assuming certain rates of return on their loans and investments. The Ninth Finance Commission went as far as estimating revenue capacities and expenditure needs of the States. This is a marked improvement over past

practices but different approaches for making tax devolution and grants reduced the relevance of such exercises. As far as the norms prescribed for the center are concerned, in the absence of a mechanism to enforce them, these have been merely of academic interest.

IIc Plan transfers

Plan transfers from the center to the states consist of grants and loans. Prior to 1969 these were distributed largely on a schematic basis in which both the quantum of transfers and their loan-grant components were discretionary. However, since 1969, plan assistance has been distributed on the basis of the "Gadgil formula" approved by the National Development Council modified from time to time. The latest modification in the formula was done in December, 1991. According to this latest formula, at present 30 per cent of the funds available for distribution is kept apart for the special category states. Assistance to them is given on the basis of plan projects formulated by them and 90 per cent of the transfer is given by way of grants, with the remainder as loans. The 70 per cent of the funds available to the major states is distributed with 60 per cent weight assigned to population, 25 per cent to per capita SDP, 7.5 per cent to fiscal management and the remaining 7.5 per cent to special problems of states. Of the 25 per cent weight assigned to per capita SDP, the major portion of the funds, 20 per cent is allocated only to the states with less than average per capita SDP on the basis of the "inverse" formula; the remaining 5 per cent of the funds is assigned to all the states according to the "distance" formula. For the major states, assistance is given by way of grants and loans in the ratio of 30:70. The transfers given to the states for plan purposes are not related to the required size or composition of plan investments (see Appendix 3).

The Planning Commission works out five-year-plan investments for each sector of the economy and each state. Keeping this in the background, and based on the estimated resource availability, which includes the balance from current revenue, contributions of public enterprises, additional resource mobilization, plan grants and loans, market borrowings and other miscellaneous capital receipts, the states work out their respective annual plans for each year, which are then approved by the Planning Commission. Thus, in the final analysis, given the quantum of central transfers to the states as determined by the Gadgil formula, at the margin it is mainly the own resource position of the states that determines their plan sizes.

Nor does plan assistance have any relationship with the investment requirements of the states. Transfers are not directly related to the shortfall in states' resources, given the required amount of plan investments and own resources reckoned at a standard level of effort. Assistance given to the states for plan purposes, as well as their grant-loan components, are determined independently of the required plan investments, their sectoral composition, resources available with the states or their fiscal performances. In fact, the grant component of central plan assistance has been kept at 30 per cent because, at the time the Gadgil formula was introduced, the current component of plan outlay was approximately 30 per cent.

Hence, while there were considerable variations in the ratio of current plan expenditures among individual states, the grant-loan mix for plan assistance for the major states has been kept constant. The constancy in the grant portion to all the major states does not take account of the differing repayment abilities of the states; besides, it involves a bias against the states with a

strategy for development through human capital formation (e.g., education), as against those with an emphasis on material capital formation. In the former, the current expenditure component, according to prevailing budgeting practices, would be higher. Since, in the medium term, the return on expenditure would accrue to the individual rather than the government, states with a larger current component of plan expenditures would have as much of an interest liability as states with a larger share of capital expenditures, but with much lower levels of revenue-yielding assets. There may, therefore, be a case for varying the grant component of central plan assistance, depending on the repayment capacity of individual states.

IId Assistance for Central Sector and Centrally Sponsored Schemes

Assistance given to states through central sector and centrally sponsored schemes, constituting about 20 per cent of total transfers, is in some respects the most controversial form of transfers. These transfers are neither based on the recommendations of the Finance Commission, nor determined by the Gadgil formula, but are discretionary. Central government ministries initiate a number of "National Programs", either by themselves or at the request of the relevant ministries at the state level. Central sector schemes are assisted entirely by way of central grants and the states merely have the agency function of executing these programs. Centrally sponsored schemes are essentially cost sharing programs, and the share of central assistance is given by way of grants or loans decided for each of the programs. The rationale for introducing these programs is ostensibly to finance those activities which have a high degree of inter-state spillovers, or are in the nature of merit goods (e.g., poverty alleviation and family planning).

These transfers have attracted the sharpest criticism mainly because of the arbitrariness and discretion implicit in them. Although the major programs on family planning and rural development are well designed, and the transfers are given according the formulas devised by the administering ministries, there are a number of instances where bureaucratic and political discretion plays an important role in determining the amount of transfers and the pattern of their distribution. There have also been instances where the Prime Minister has announced the programs in public meetings, leaving the Planning Commission and the relevant ministries to work out details subsequently. When even a few of the programs are determined in an arbitrary and non-transparent manner, well formulated programs under central sector and centrally sponsored schemes also become the subject of doubts about their objectivity and transparency.

These programs have provided the central government with an instrument to actively influence states' spending. Until 1969, the volume and pattern of assistance to state plan schemes were decided for each project, and the central government did not find a need for such transfers. But once plan assistance was given according to the Gadgil formula, the center took recourse to these specific purpose transfers and expanded them significantly. These schemes have grown in both volume and number over the years, in spite of states' objections to their proliferation and the decision of the National Development Council (NDC) in 1970 to roll into assistance to such schemes 1/6th of central assistance for state plans. At present, there are over 250 centrally sponsored schemes with detailed conditionalities. Besides the discretionary element implicit in these transfers, detailed conditionalities imposed by the center, such as requirements on staffing patterns, tend to distort the states' own priorities and programs. Also,

the proliferation of multiple schemes seemingly has increased the bureaucracy considerably, with no visible gains to the people. Therefore, the NDC appointed an investigative committee, which recommended scaling down centrally sponsored schemes. This recommendation, however, has not been acted upon in a serious manner. There is perhaps a strong case for consolidating a number of schemes into specific purpose transfers under broad headings, with greater flexibility given to the states in the use of funds.

IIe Central Transfers to States and Inter-State Equity

While theoretical considerations require that intergovernmental transfers should be designed to offset revenue and cost disabilities fully, actual transfer systems fall far short of this ideal. This is partly because, in practice, historical and political factors are at least as important as economic considerations in determining the transfer system. Thus, the volume of transfers made, the form and composition of the transfers, and the degree of progressivity in their distribution are all determined as a compromise between economic considerations and the constraints imposed by non-economic factors. However, the extent to which the economic objectives -- such as equity -- of intergovernmental transfers policy are met still needs to be analyzed, and we next focus on the equity objective.

Table 4

Equalizing Effect of Transfers

Transfers	Correlation coefficients with per capita SDP				Income elasticities			
	VI F.C. (1974-79)	VII F.C. (1979-84)	VIII F.C. (1984-89)	IX F.C. (1989-94)	VI F.C. (1974-79)	VII F.C. (1979-84)	VIII F.C. (1984-89)	IX F.C. (1989-94)
Shared Taxes	-0.167	-0.706**	-0.849**	-0.809**	-0.024	-0.195*	-0.507*	-0.564*
Non-plan grants	-0.240	-0.289	-0.110	-0.286	-0.716	-0.070	0.302	-0.054
Total Finance Commission transfers	-0.272	-0.551*	-0.664**	-0.765*	-0.201	-0.280*	-0.403*	-0.514*
Plan grants-State plan schemes	-0.263	-0.524*	-0.010	-0.425**	-0.243	-0.426**	-0.029	-0.557**
Plan grants-Central schemes	0.342	-0.101	-0.162	-0.278	0.460	-0.066	-0.095	0.070
Total plan grants	0.091	-0.327	-0.092	-0.417	0.072	-0.236	-0.060	-0.282
Gross current transfers	-0.194	-0.519*	-0.663**	-0.716**	-0.115	-0.268**	-0.277*	-0.408**

Note: *Significant at 1 per cent level. **Significant at 5 per cent level
Elasticity coefficients relate to cross-section of 14 major States. F.C.= Finance Commission.
Source: Estimated from the data taken from the Budget Documents of the State Governments.

The correlation coefficients and the cross-section income elasticity of different types of transfers with per capita SDP under different Finance Commission awards since the Sixth are presented in Table 4. Several insights emerge. First, per capita transfers are inversely related to per capita SDP from 1979-80. The absolute value of the (negative) correlation coefficients as also their significance levels, however, are higher in more recent years. Second, Finance Commission transfers had the highest progressivity. In fact, it is only since the recommendations

of the Seventh Commission in 1979-80, that Finance Commission transfers and, consequently, total transfers, have had a significant negative correlation with per capita SDP. This can be explained by the increased weight given to the backwardness factor in tax devolution by Commissions since the Seventh -- evidenced by the fact that the correlation of per capita shared taxes with per capita SDP is consistently negative after 1979-80.

Table 5

Effect of Federal Transfers: Gini Coefficients of Fiscal Variables

Variable (Per capita)	Sixth Finance Commission (1974-79)	Seventh Finance Commission (1979-84)	Eighth Finance Commission (1984-89)	Ninth Finance Commission (1989-92)
1. Own revenue	0.2262	0.2355	0.2329	0.2575
2. Own revenue+shared taxes	0.1805	0.1718	0.1640	0.1842
3. Own revenue+Finance Commission transfers	0.1599	0.1615	0.1576	0.1742
4. Own revenue + State plan transfers	0.2092	0.2138	0.2167	0.2350
5. Own revenue+transfers for Central schemes	0.2186	0.2184	0.2126	0.2350
6. Own revenue + plan transfers	0.2030	0.1994	0.1993	0.2154
7. Own revenue + total current transfers	0.1490	0.1417	0.1394	0.1508
8. Degree of equalization - Shared taxes (1-2)	-0.0457	-0.0637	-0.0689	-0.0732
9. Degree of equalization - Finance Commission transfers (1-3)	-0.0662	-0.0740	-0.0753	-0.0832
10.Degree of equalization - State plan grants (1-4)	-0.0170	-0.0217	-0.0162	-0.0224
11.Degree of equalization - Cent. Spons. Schemes (1-5)	-0.0076	-0.0170	-0.0203	-0.0225
12.Degree of equalization - total plan transfers (1-6)	-0.0232	-0.0361	-0.0336	-0.0421
13.Degree of equalization - Total current transfers (1-7)	-0.0772	-0.0938	-0.0935	-0.1067

Note: Inter-State Gini Coefficients correspond to 14 major States only
Source: Finance Accounts of the State governments, various issues

We may also see that the grants given by the Finance Commissions (non-plan) had no relationship whatsoever with per capita SDP. The grants given to state plan schemes show no significant negative correlation in most of the years. This is a little surprising in view of the weight given to the backwardness factor in distribution of grants for state plan schemes. It appears that the progressive bias imparted by the weight assigned to the backwardness factor (25 per cent at present) in the Gadgil formula is inadequate, or is largely offset by the discretionary

element in the Gadgil formula in the name of "special problems" and the regressive bias imparted by the "tax effort" factor.

There is clear evidence in Table 5 that the transfer system in more recent years has shown greater progressivity. The question, however, is to what extent has the system succeeded in offsetting the fiscal disadvantages of poorer states. This can be seen by the changes in the inter-state inequalities in per capita own revenues and per capita total revenues (including transfers) as measured by the difference between the Gini coefficients of the two sets of variables. The estimates show that (i) in the aggregate, the transfers tend to be equalizing and the equalizing effect has shown a consistent increase over the awards of successive Commissions; (ii) the reduction in the Gini coefficient caused by Finance Commission transfers is about twice as much as that of Plan transfers; and (iii) the bulk of the reduction in inequalities is attributable to shared taxes.

Despite progressive distribution of intergovernmental transfers, per capita revenue accruals and, therefore, per capita expenditures across states continue to be significantly higher in states with higher per capita SDP, as may be inferred from Figures 1 and 2. Thus, the distribution of per capita revenue accruals (Figure 1) as well as per capita expenditures (Figure 2) across the states has a positive slope when they are plotted against per capita SDP. It is also seen that the slope of revenue accruals which includes central transfers is only marginally different from that of the states' own revenues (Figure 1).

Figure 1

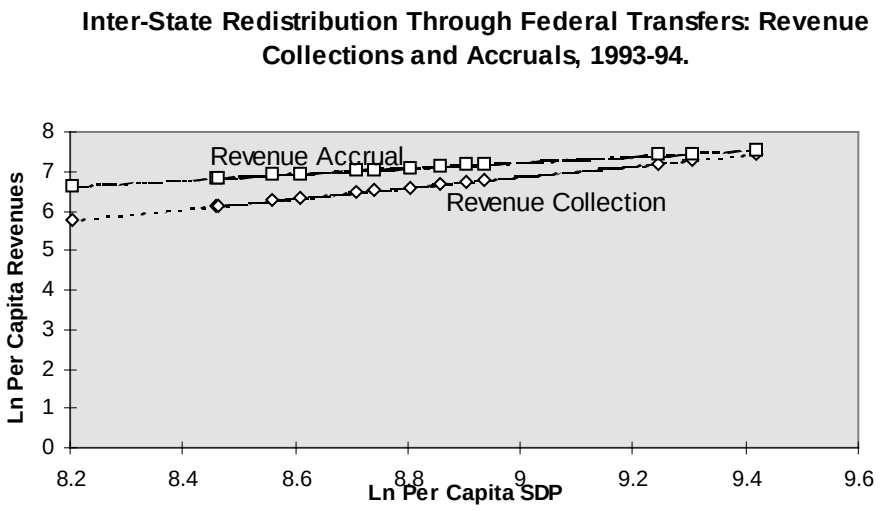
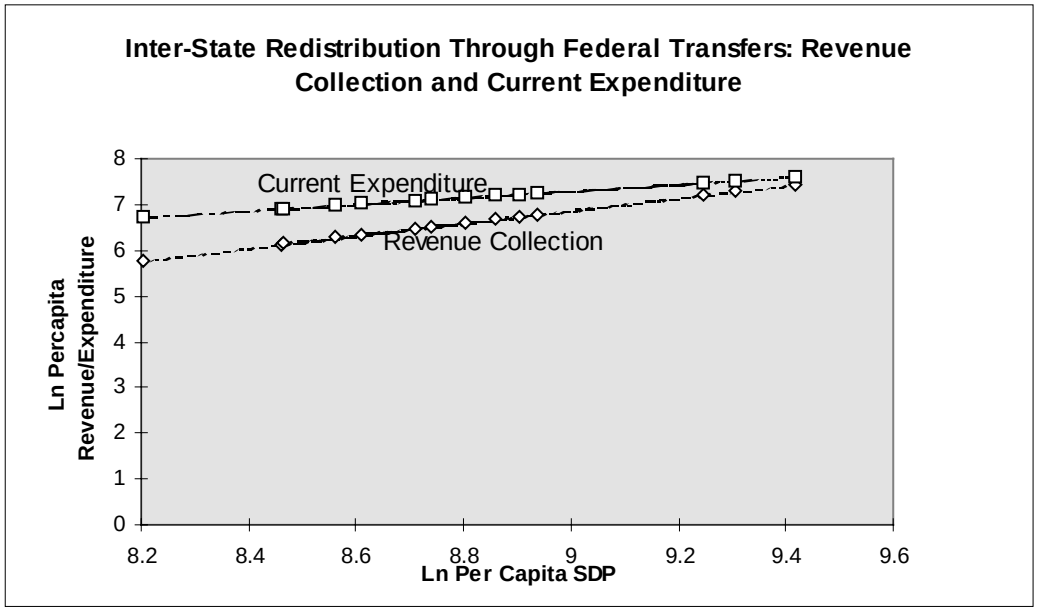


Figure 2



IIf The Institutional Mechanism for Intergovernmental Transfers

An important precondition for a successful intergovernmental transfer system is that, besides being equitable and incentive compatible, it should be simple, objective, transparent, and flexible. A proper institutional mechanism, therefore, is an important prerequisite for an effective transfer system. The mechanism should not only help in designing and implementing the transfer system in accordance with policy objectives, but also should foster mutual trust and confidence between the center and states and among the states *inter se*.

In India, the Constitution attempted to create an appropriate institutional mechanism through the Finance Commission. The Commission was to be appointed every five years, to take account of the changing needs of the center and the states. The Finance Commission (Miscellaneous) Act also lays down qualifications of the Chairman and Members of the Commission and the presence of a judicial member/chairman in the Commission is supposed to give it a semi-judicial status.

However, despite the provision of a specialized, independent and semi-judicial agency, the system of transfers evolved over the years in India has not fulfilled its intended objectives. The design of general and specific purpose transfers falls short of the intention of offsetting the fiscal disabilities of poorer states, and of ensuring minimum standards of services in aided activities. Further, transfers in practice do not adequately meet the canons of simplicity and transparency; the incentives generated by the system do not promote good fiscal management; and transfers are not well targeted to meet the objective of fiscal equalization.

There are a number of reasons why the intergovernmental transfer mechanism has not served its purpose as effectively as might have been hoped. First, as already mentioned, although the Constitution envisaged rule-based transfers on the recommendation of the Finance Commissions, other developments reduced the constitutional body to a minor role, with a major proportion of transfers lying outside its purview. Multiple agencies giving transfers in an uncoordinated manner cannot be expected to singularly pursue economic objectives of intergovernmental transfers. Besides, while the Finance Commission is expected to be a non-political body, the Planning Commission is not. The Gadgil formula used for distributing Plan assistance is determined by consensus in the NDC, where all the states are members, and it would be unrealistic to expect targeted transfers to offset fiscal disadvantages in such a system. Further, the centrally sponsored schemes are discretionary, and designed by the central ministries, where many non-economic considerations enter into the distribution mechanism.

Even the Finance Commissions have not advanced a professional role in evolving the transfer system. Lack of permanency in their tenure has impeded the evolution of a satisfactory methodology for dispensing transfers. Although a small cell has been created in the Finance Ministry, it is ill-equipped to undertake continuous studies in state finances and to improve the methodology of making projections, estimating fiscal capacities and needs of the states, and undertaking analysis of their indebtedness. This cell does not even maintain and update the data required for the analysis by the subsequent Commission. Each Commission has to start afresh and, given its time constraints, is hardly able to make the scientific analysis necessary for making well-founded recommendations. Thus, there has been very little improvement in methodology or data bases.

The fact that the central government (more particularly, the Union Ministry of Finance) plays a leading role in determining the Chairman and Members of the Commission and specifying its terms of reference, raises questions about objectivity and fairness in the minds of state-level decision-makers. This is particularly true when political personalities are appointed to the Commission. In addition, the Member-Secretary is always a senior bureaucrat belonging to the Indian Administrative Service, who will be appointed not because of his expertise or interest in the subject, but merely because he qualifies to be appointed as a Secretary[10]. Often, mid-way through the Commission's tenure, the Member-Secretary secures a transfer to a regular posting as a Secretary in an important administrative department to be replaced by another such bureaucrat[11]. The staff of the Commission, by and large, also come on deputation from various central ministries and most of them are unfamiliar with the technical details of state finances and intergovernmental transfers. They often lack the requisite research background to evolve an appropriate approach. In short, the whole institutional approach to the appointment of the Finance Commission and its functioning has not been very professional. Thus, the Commissions' contribution to the development of an objective and scientific approach and methodology for satisfactorily resolving fiscal imbalances and supporting more effective intergovernmental relationships has left much to be desired. The basic objective of establishing an independent, semi-judicial body to recommend intergovernmental transfers is left unfulfilled.

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10 This designation is the highest rung of the civil service.

11 The Member-Secretaries of both Ninth and Tenth Finance Commissions were changed mid-way through the Commissions' deliberations as they were transferred to administrative departments.

Lack of co-ordination between the Planning and Finance Commissions adds to the shortcomings of the current institutional arrangement. Their working is implicitly based on the incorrect assumption that the plan and non-plan sides are independent and exclusive. Parallel assessments of state finances by the two agencies does not merely result in duplicating the work; there are instances where the Planning Commission has gone about filling the non-plan gaps of the states in their current accounts resulting from their non-compliance with the norms set by the Finance Commissions. The states, as noted earlier, submit different projections of revenues and expenditures to the two commissions -- attempting to magnify the gap in the revenue account in submissions to the Finance Commission, while exaggerating the availability of resources to the Planning Commission to ensure larger plan sizes. The presence of a common member in Planning and Finance Commissions has partly resolved this issue, but the problem of independent treatment of interdependent plan and non-plan sides remains.

III Intergovernmental Transfers in India: Implicit Transfers

The foregoing analysis demonstrates that, even when a constitutional mechanism to effect formula-based transfers by an independent body is established, the political system may hinder the evolution of a simple, equitable, objective and rule-based system of transfers. Even if such a system is developed, there can be a number of implicit and invisible ways in which more powerful (either politically or economically) states can effect resource transfers in their favor to offset the effect of explicit transfers. Besides the pattern of distributing the central government's own expenditures and its regional policies in terms of locating central public enterprises, we can identify at least three important sources of resource transfers: (i) inter-state tax exportation; (ii) subsidized lending by banking and financial institutions to the private sector -- this includes lending by All India Financial Institutions[12] (AIFI) at below market interest rates, subsidized by the refinancing facility extended by the Reserve Bank of India, and priority sector lending by commercial banks for specified activities like agriculture and rural development, industrial promotion, small scale industry and exports; and (iii) subsidized borrowing by the states from the central government and the banking system. The main source of inter-regional transfers from lending to the governments comes from the stipulation to the banking system on the extent of their lendable resources to be held in government bonds at regulated interest rates (Statutory Liquidity Ratio), the stipulation on the amount of assistance to be given to the "priority sector", and the distribution of seignorage or the profits of Reserve Bank of India through the refinancing facilities given to AIFI. We discuss these three sources of invisible transfers in some detail.

IIIa Inter-State Tax Exportation

In Indian fiscal federalism, states raise almost 35 per cent of the total tax revenue or about 8.5 per cent of Net State Domestic Product (SDP) and, therefore, the structure and operation of their tax systems have a significant impact on economic efficiency and equity. An overwhelming

12 All India Financial Institutions refer to All-India Development Banks (Industrial Development Bank of India, Industrial Finance Corporation of India, Industrial Credit and Investment Corporation of India, Small Industries Development Bank of India, Industrial Reconstruction Bank of India, SCICI) and specialized financial institutions (RCTC, TDICI), TFCI) and investment institutions (LIC, UTI, GIC).

proportion (over 90 per cent) of state tax revenue accrues from indirect taxes, and the sales tax alone contributes about 53 per cent.

Given that revenue from sales taxes predominates in the states' fiscal operations, the structure and operation of sales taxes and inter-state tax competition have important implications on allocative efficiency and equity in the economy. Whether inter-state competition in taxation leads to inefficient resource allocation or is a beneficent force is a controversial issue. Break (1967, pp.23-24) argued three decades ago, "....Active tax competition.....tends to produce either a generally low level of state-local tax effort or a state-local tax structure with strong regressive features." More recently, Rivlin (1992) has argued for the replacement of state taxes with tax sharing arrangements to avoid disruptive inter-state competition. In contrast, Oates and Schwab (1988) show in a formal model of inter-jurisdictional competition in which states provide two public goods -- one a local consumption good and another a public input which enhances the productivity of capital -- and finance the public goods through benefit taxes, there is a Pareto efficient outcome. However, the levy of non-benefit state taxes, particularly taxes on capital, can be a source of distortion and, as Musgrave (1997) has argued, tax competition may divert capital into less efficient uses.

The analysis of Indian experience shows that inter-state tax competition can be a source of serious allocative distortions and regressive inter-state transfers[13]. Distortions are caused by excessive and irrational forms of rate differentiation as well as the erection of trade barriers across different jurisdictions (Rao and Vaillancourt, 1994). Regressive inter-state resource transfers are caused by the states attempting to "free-ride" by exporting the tax burden to non-residents

Inter-state tax exportation arises from the levy of origin-based cascading type sales taxation along with the taxation of inter-state sale of goods. The sales taxes levied by the states are predominantly on the basis of origin, at the stage of manufacture or import. They also levy taxes on raw materials, intermediate inputs, and capital goods. In addition, inter-state sale is taxed subject to a ceiling rate of four per cent[14]. In an economy where there is only limited internal and external competition, the tax is fully shifted forward, so input taxes cascade on to the inter-state sales tax. Consequently, the effective tax rate on inter-state sales would be much higher than the four per cent nominally levied. This results in the exportation of the tax burden from more affluent producing states to consumers in poorer consuming states. When the exports of more developed states are larger than their imports, and the proportion of final goods in their exports, too, is higher, as in the Indian case (Rao and Sen, 1996), the residents of poorer states end up paying taxes on larger volumes of imports and at higher effective tax rates.

Non-availability of data on inter-state trade makes it difficult to estimate inter-state tax exportation accurately. However, our analysis presented in Table 6 shows that, in above average

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13 For detailed analysis of the sales tax systems in different States and its adverse efficiency and equity consequences, see, NIPFP (1994).

14The ceiling rate is applicable only when the transaction takes place between the registered dealers. If the sale is from a registered dealer, in the exporting state to a non-registered dealer in the importing state the ceiling rate applicable is 10 per cent.

per capita income states, tax shares are systematically higher than corresponding consumption shares (household consumption plus state government purchase of goods). Of course, the entire difference cannot be attributed to inter-state tax exportation. The difference could also be due to better tax effort in more advanced states, though there is no *a priori* reason to believe this. By making alternative assumptions about the reasons for the difference in effective rates (share of sales tax collections in total consumption) as partly due to legitimate variations in effective rate and partly due to inter-state tax exportation, we have estimated the amount of inter-state tax exportation. Thus, when it is assumed that 50 per cent of the difference is attributed to tax exportation, the more affluent states collected more than Rs. 21 billion from consumers in states with less than average per capita incomes. Thus, the richer states collected almost 13 per cent of their sales taxes from the residents of poorer states and the residents in poorer states paid 19 per cent of the sales tax payment to their states to the richer states.

IIIb Inter-Regional Transfers from Subsidized Lending by Financial Institutions

A major by-product of India's planned developmental strategy has been controls on prices and quantities intended to benefit targeted sections of the population. Important among these is the distribution of credit at below market interest rates to specified activities in the private sector by the banking and financial system. This includes credit given by the banking system to such "priority sector" activities as agriculture, small-scale enterprises and exports and refinancing facilities provided by the AIFI at subsidized rates. This priority sector lending constituted about a third of total bank credit in 1995-96, and the subsidy element in these advances is significant. For example, the interest rate on priority sector borrowing in 1993-94 was 5.5 to 6.5 per cent as compared to the State Bank of India long term lending rate of 19 per cent. The amount of subsidy implicit in the assistance given by All India Financial Institutions was significant in earlier years as much of the profits of the Reserve Bank of India (seignorage) were used to provide a refinancing facility to these institutions, but this has declined since 1992-93 as the center has been appropriating the profits of the RBI entirely.

Table 7 and Figure 3 present the distribution of priority sector credit and the financial assistance given by the AIFI. It is seen that the distribution of both sources of lending has been disproportionately in favor of high income states. In the aggregate, these states, with just about 19 per cent of population, received 35 per cent of priority sector lending given to agriculture, small enterprises and exports, and their share of assistance from AIFI was 43 per cent. In contrast, the low income states with almost 44 per cent of population received just about 15 per cent of priority credit and 22 per cent of assistance from AIFI. Thus the distribution of subsidized credit by the banking system and AIFI has conferred disproportionate benefits to more advanced states.

Table 6

Inter-State Tax Exportation - 1993-94

	Household Consump-tion	State Govt Consump-tion of Goods	Total Consumption	Per Cent of Total Consump-tion	Sales Tax Collections	Per cent of Total Sales Tax	Effective Tax Rate	Difference Between Consump-tion Shares and tax Shares	Per Capita Tax Exported at 25% of difference Rs.	Per Capita Tax Exported at 50% of Difference	Per Capita Tax Exported at 100% of Difference
Gujarat	18470.1	475.2	18945.4	5.8	2771.0	9.9	14.6	4.2	6.8	13.7	27.3
Haryana	8562.4	208.6	8770.9	2.7	768.5	2.8	8.8	0.1	0.4	0.7	1.4
Maharashtra	37775.3	770.7	38546.0	11.7	4740.8	17.0	12.3	5.3	4.4	8.9	17.7
Punjab	11617.6	295.7	11913.3	3.6	961.2	3.4	8.1	-0.2	-0.6	-1.2	-2.4
High Income States	**76425.4**	**1750.2**	**78175.6**	**23.8**	**9241.5**	**33.2**	**11.8**	**9.4**	**4.0**	**8.0**	**15.9**
Andhra Pradesh	27198.2	687.1	27885.3	8.5	2323.9	8.3	8.3	-0.1	-0.1	-0.3	-0.6
Karnataka	17876.8	175.7	18052.5	5.5	2277.9	8.2	12.6	2.7	4.0	8.1	16.1
Kerala	15161.4	310.3	15471.7	4.7	1533.2	5.5	9.9	0.8	1.9	3.7	7.4
Tamil Nadu	18380.8	706.2	19087.0	5.8	3210.0	11.5	16.8	5.7	8.6	17.2	34.4
West Bengal	29138.0	837.3	29975.3	9.1	1813.1	6.5	6.0	-2.6	-2.5	-5.1	-10.1
Middle Income States	**107755.2**	**2716.6**	**110471.8**	**33.6**	**11158.1**	**40.0**	**10.1**	**6.4**	**1.7**	**3.4**	**6.8**
Bihar	26044.3	322.1	26366.4	8.0	1137.5	4.1	4.3	-3.9	-3.0	-6.1	-12.1
Madhya Pradesh	24634.9	587.6	25222.5	7.7	1214.1	4.4	4.8	-3.3	-3.3	-6.6	-13.2
Orissa	9754.6	309.6	10064.2	3.1	514.3	1.8	5.1	-1.2	-2.6	-5.2	-10.4
Rajasthan	24630.2	330.0	24960.2	7.6	1058.1	3.8	4.2	-3.8	-4.7	-9.3	-18.7
Uttar Pradesh	52705.7	645.2	53350.8	16.2	3552.6	12.7	6.7	-3.5	-1.7	-3.3	-6.7
Low Income States	**137769.7**	**2194.5**	**139964.2**	**42.6**	**7476.6**	**26.8**	**5.3**	**-15.8**	**-2.8**	**-5.5**	**-11.1**
All Major States	**321950.3**	**6661.2**	**328611.6**	**100.0**	**27876.2**	**100.0**	**8.5**	**0.0**	**0.0**	**0.0**	**0.0**

Table 7

Inter-State Redistribution Through Credit Policies

(Per cent)				
	Population Share (1995)	Share in Bank Credit march 31, 1994		Share in AIFI Assistance 1994-95
		Priority Sector	Total	
A. High Income States	**18.7**	**35.4**	**29.4**	**42.8**
1 Goa	0.1	0.3	0.3	0.7
2. Gujarat	4.9	4.9	5.4	13.2
3. Haryana	2.0	1.5	2.8	2.6
4. Maharashtra	9.4	25.3	15.8	23.5
5. Punjab	2.4	3.3	5.1	2.8
B. Middle Income States	**30.9**	**33.4**	**37.3**	**29.7**
1. Andhra Pradesh	7.8	6.8	8.9	7.5
2. Karnataka	5.3	6.0	6.8	6.1
3. Kerala	3.4	3.4	4.3	2.0
4. Tamil Nadu	6.4	10.3	11.1	9.3
5. West Bengal	8.0	6.9	6.2	4.8
C. Low Income States	**43.6**	**14.4**	**24.2**	**21.9**
1. Bihar	10.3	2.3	4.1	2.1
2. Madhya Pradesh	7.9	3.2	4.9	5.2
3. Orissa	3.7	1.3	2.2	2.3
4. Rajasthan	5.3	2.1	3.3	4.4
5. Uttar Pradesh	16.4	5.5	9.7	7.9
D. Special Category States	**5.4**	**1.9**	**2.8**	**2.2**
E. Union Territories	**1.4**	**14.9**	**6.4**	**3.4**
All States	**100.0**	**100.0**	**100.0**	**100.0**

**Unallocated 4.9%. n- negligible.

Source: 1. Report on Currency and Finance, 1994-95, Reserve Bank of India.

2. Public Enterprise Survey, Ministry of Industry, Government of India.

IIIc Invisible Transfers from Subsidized Lending to States

The most important source of implicit transfers, however, is subsidized lending to the states. Loans from the central government alone constitute almost 68 per cent of states' liabilities, the bulk of which was given for plan purposes under the Gadgil formula. Market borrowings constitute another 22 per cent, which is subscribed mainly by the banking system to

fulfill Statutory Liquidity Ratio (SLR) requirements[15]. The extent and nature of intergovernmental transfers from this source depends upon the pattern of inter-state allocation of these loans, and on the difference between the interest rate charged and the market rate of interest. Although in recent years there has been a significant increase in the rates of interest on states' borrowings, as may be seen from Figure 4, it still remains significantly below the market rate. In addition to the low average rates of interest charged on states' borrowings (which is partly due to the periodic rescheduling of loans on the recommendation of the Finance Commissions), the central government also writes off loans from time to time.

Figure 3
Relationship Between Per Capita SDP and Per Capita Assistance By All India Financial Institutions Across States - 1994-95

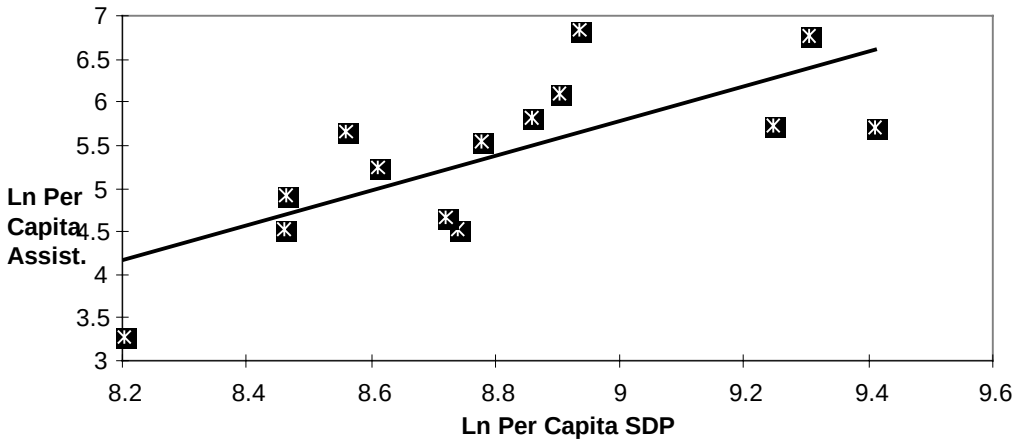

Table 8 and Figure 5 present the distribution of per capita intergovernmental transfers due to subsidized lending to the states from 1980-81 to 1994-95. Clearly, per capita transfers in high income states were higher than in both middle and low income states. In 1993-94, the average per capita transfer received by the low income states was lower than that of the high income states by almost 18 per cent. The difference was the highest in 1990-91, when the per capita transfers received by the low income states was lower than that of the high income states by 43 per cent.

The regressive nature of the implicit transfers due to states' subsidized borrowing from the center and the banking system has significantly reduced the overall progressivity of the intergovernmental transfer system. The cross-section income elasticity coefficients of explicit transfers presented in Table 9 and Figure 6 are negative and significant throughout the period from 1981-82 to 1993-94. The highest negative elasticity was in 1991-92, when the states for every percentage point lower SDP per capita received 0.8 per cent higher transfers. In contrast, elasticity coefficients of implicit transfers were positive and significant throughout the period, indicating the regressive nature of these transfers. In 1991-92, for example, although explicit

15 At present, the SLR stipulation requires the commercial banks to keep 25 per cent of their demand and time liabilities in eligible assets like central and state government bonds. In fact, the financial sector reforms brought down the SLR from 38.5 per cent in 1991-92 to 25 per cent in 1996-97.

transfers showed the highest progressivity, implicit transfers due to subsidized lending to states showed the highest regressivity, with the income elasticity at 1.13. Consequently, the elasticity of aggregate transfers was estimated at -0.34, significantly reducing the overall progressivity of the transfer system. The reduction in the overall progressivity of the transfer system due to the regressive nature of transfers implicit in subsidized lending to the states by the central government, as well as by the banking system, is observed in all years from 1981-82 as may be seen from Table 9 (and also Figure 6).

Figure 4

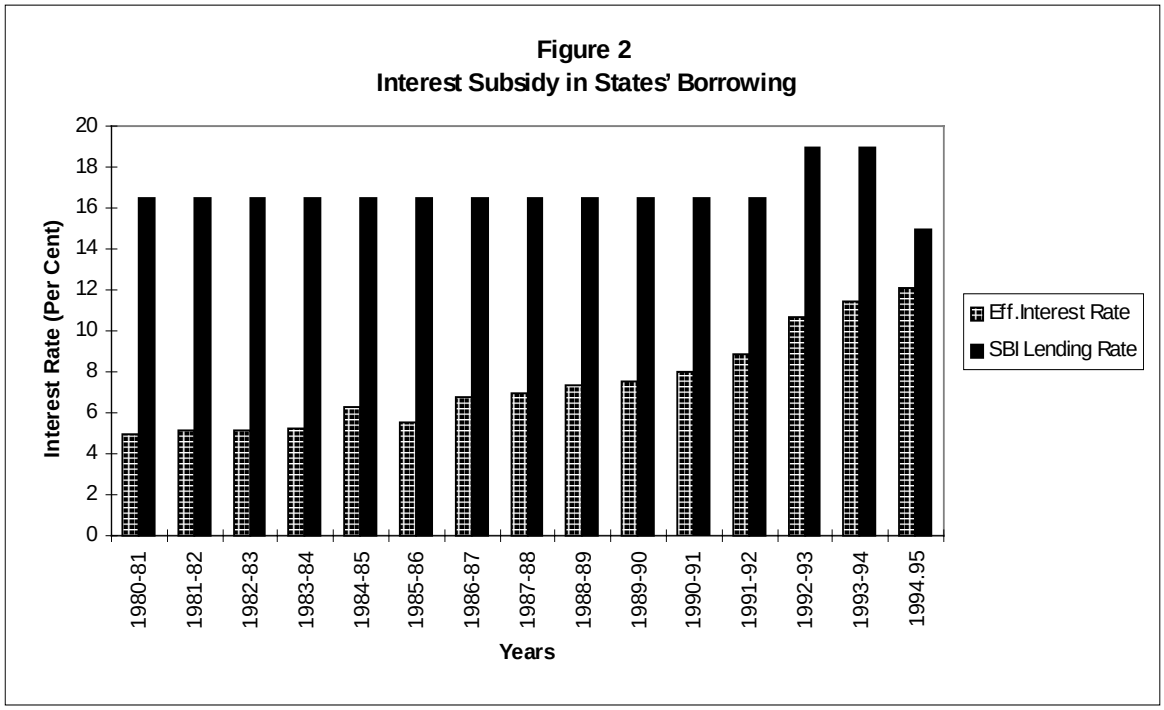

Figure 5

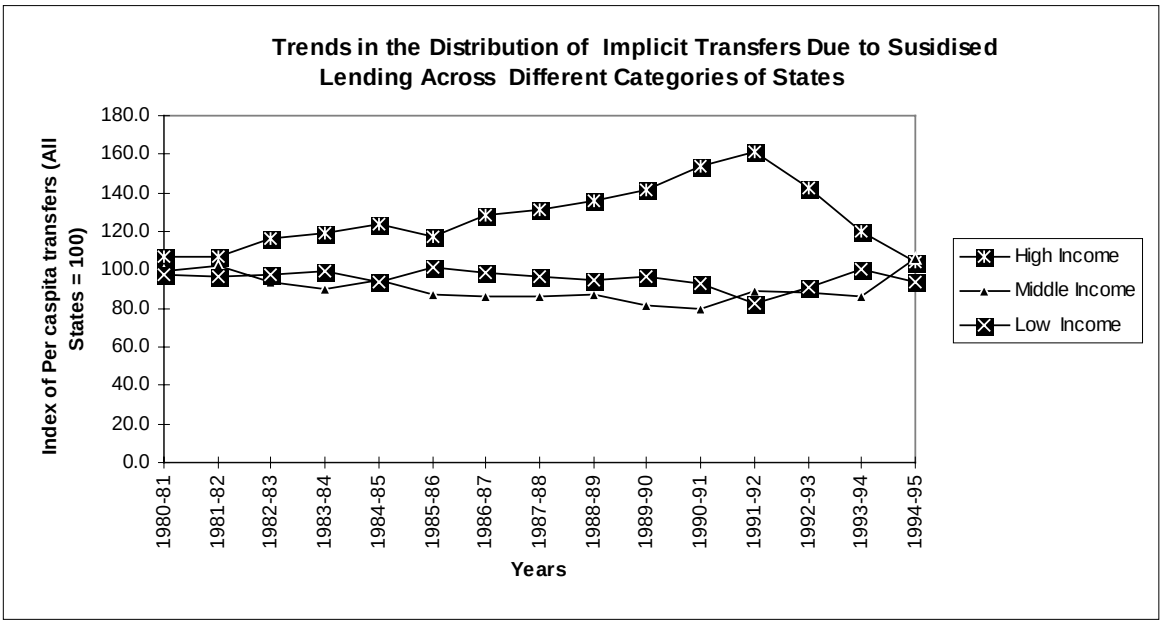

Figure 6

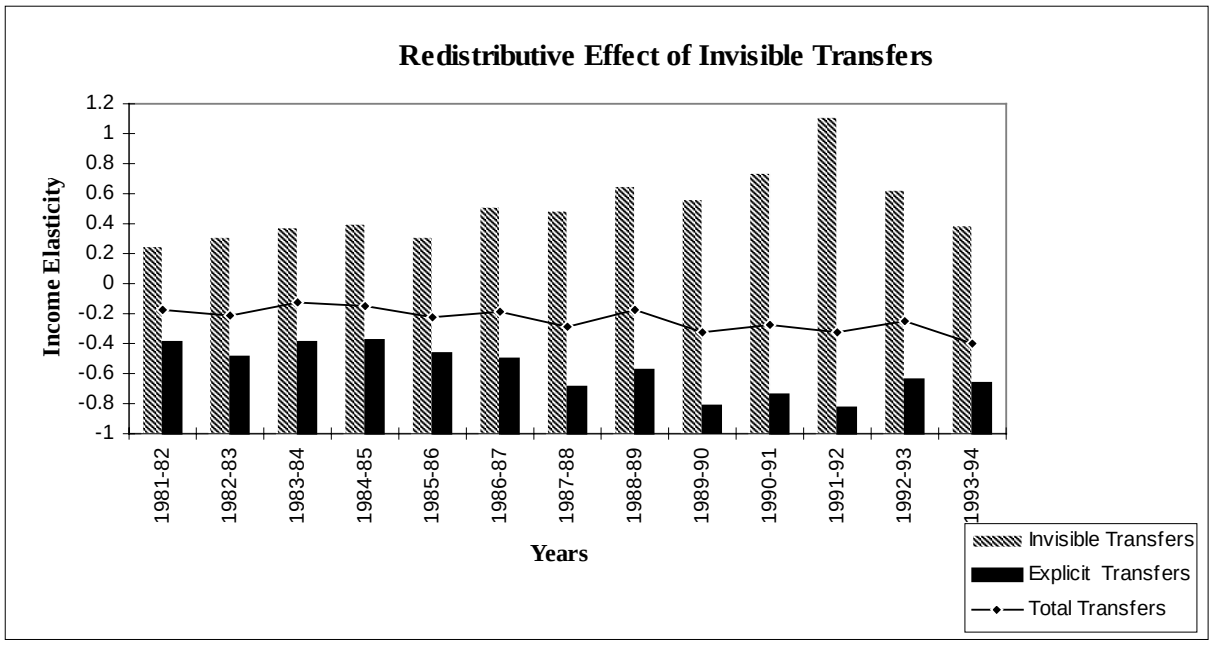

Table 8

Inter-State Distribution of Per Capita Implicit Transfers Due to States' Borrowing

State	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Gujarat	41.38	41.23	47.20	49.54	54.02	57.13	56.19	58.40	63.96	64.74	67.12	54.21	35.11	31.57	5.55
Haryana	55.84	57.30	60.74	67.37	66.49	73.79	66.78	62.65	71.62	65.04	66.83	51.61	57.10	50.62	19.19
Maharashtra	44.58	44.02	50.03	53.13	53.52	56.44	55.33	54.66	52.40	54.84	58.90	53.31	38.15	37.89	13.10
Punjab	46.10	50.91	59.95	64.97	53.17	72.16	97.64	106.24	117.30	141.02	140.56	156.82	191.41	103.82	46.33
High Income States	**45.07**	**45.57**	**51.78**	**55.21**	**54.99**	**60.53**	**62.35**	**63.53**	**66.04**	**70.43**	**72.94**	**66.96**	**59.33**	**46.54**	**16.08**
Andhra Pradesh	42.87	42.41	42.33	40.63	41.97	44.58	39.04	43.50	42.41	39.35	32.61	30.29	29.37	27.93	14.04
Karnataka	40.00	44.42	41.17	40.80	39.88	41.96	44.23	40.38	41.68	40.65	36.41	35.82	32.46	33.61	13.26
Kerala	49.77	47.79	44.55	36.86	41.28	49.12	44.81	44.26	49.14	47.75	51.34	47.80	59.75	51.04	29.91
Tamil Nadu	35.07	38.26	39.26	38.09	42.67	43.73	39.85	38.63	42.15	40.22	40.86	42.67	36.88	29.02	15.63
West Bengal	45.03	47.08	42.85	49.09	44.18	46.15	44.03	42.34	39.04	37.34	35.98	35.65	36.82	35.80	15.52
Middle Income States	**42.00**	**43.61**	**41.87**	**41.82**	**42.36**	**44.93**	**42.12**	**41.86**	**42.22**	**40.27**	**37.87**	**36.95**	**36.47**	**33.68**	**16.42**
Assam	64.81	44.41	52.88	58.18	52.68	62.19	62.24	64.17	65.96	61.39	76.99	117.35	73.75	60.71	13.04
Bihar	31.32	35.43	40.22	44.37	29.73	43.79	43.29	47.74	42.58	48.02	30.89	12.32	30.29	31.93	14.57
Madhya Pradesh	29.32	33.42	36.37	38.04	37.33	60.11	39.93	38.74	37.33	38.40	38.51	35.90	34.40	32.17	13.27
Orissa	52.71	47.22	46.24	48.10	55.29	54.53	52.18	50.13	40.11	53.97	49.60	44.17	51.46	46.92	23.79
Rajasthan	52.34	47.49	54.06	59.01	54.55	53.15	55.33	48.70	57.19	59.94	55.76	41.22	41.65	40.79	16.17
Uttar Pradesh	42.70	44.56	43.20	44.33	42.79	51.84	48.73	45.18	46.27	44.72	45.48	30.22	34.31	41.28	12.14
Low Income States	**41.03**	**41.23**	**43.63**	**46.07**	**41.88**	**52.40**	**47.81**	**46.66**	**45.76**	**47.75**	**44.22**	**34.37**	**37.89**	**39.11**	**14.43**
All Major States	**42.13**	**42.76**	**44.64**	**46.34**	**44.59**	**51.62**	**48.71**	**48.29**	**48.47**	**49.59**	**47.50**	**41.43**	**41.58**	**38.84**	**15.45**

Table 9

Income Elasticity of Intergovernmental Transfers in India

year	Income Elasticity of Explicit Transfers	Income Elasticity of Implicit transfers From States' Borrowing	Income elasticity of Total Transfers
1981-82	-0.3855*	0.2506**	-0.1704**
1982-83	-0.4877*	0.3149**	-0.2085
1983-84	-0.3817*	0.3711**	-0.1238
1984-85	-0.3754**	0.3951**	-1.4494
1985-86	-0.4617**	0.3073**	-0.2241
1986-87	-0.5056*	0.5165	-0.1863
1987088	-0.6910*	0.4845**	-0.2901@
1988-89	-0.5692*	0.6481	-0.1752
1989-90	-0.8171*	0.5641**	-0.3242
1990-91	-0.7410*	0.7348**	-0.2726@
1991-92	-0.8248*	1.1138	-0.3201
1992-93	-0.6640*	0.6188@	-0.2490
1993-94	-0.6669*	0.3837	-0.3975**

Income elasticities are estimated by regressing per capita transfers across states on their per capita SDP. * Significant at 1 per cent level. ** Significant at 5 per cent level. @ Significant at 10 per cent level.

Figure 7

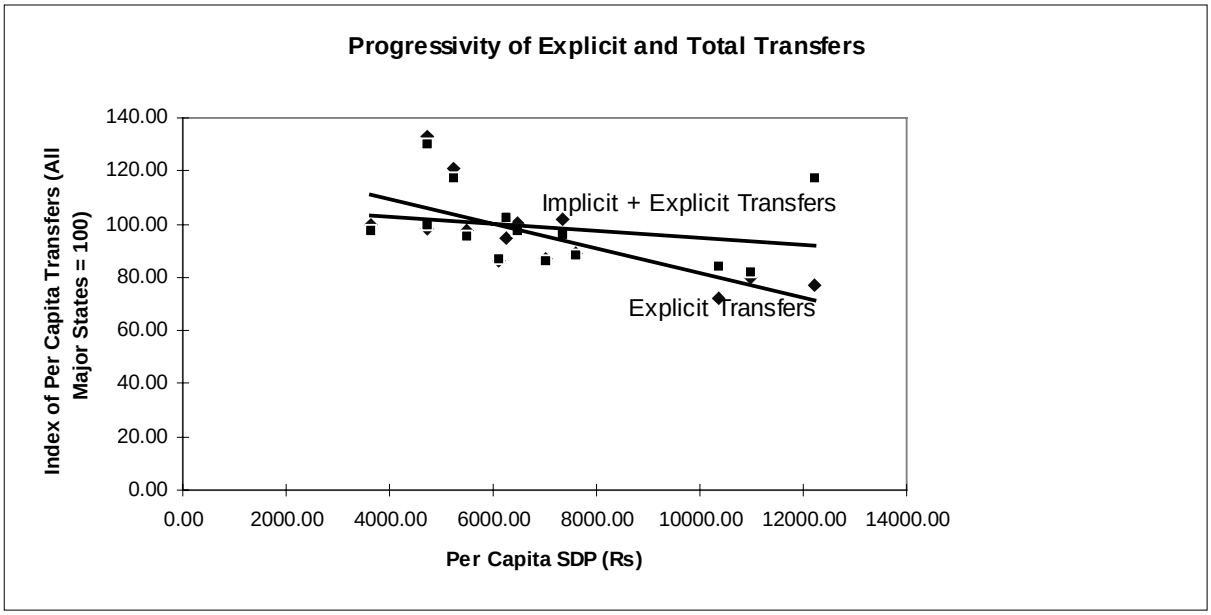

Figure 7 clearly brings out the effect of implicit transfers due to subsidized lending to the states on overall per capita transfers. While the index of per capita explicit transfers by way of

tax devolution and grants given by the central government shows a steep decline as the per capita income levels of the states increase, the decline is much less pronounced when per capita implicit transfers due to states' borrowing are added to per capita explicit transfers. Thus, these implicit transfers have significantly contributed to higher per capita state government expenditures and, possibly, better infrastructure facilities in richer states. Whether such an outcome has been driven by the political constraints on redistribution remains a hypothesis16 to be tested.

IV Concluding Remarks

The foregoing analysis brings out our main concerns with the transfer system developed in India. It is not that the system has failed to offset the fiscal disadvantages of poorer states entirely; rather, the design and the methodology of transfers raise serious doubts about objectivity, simplicity and fairness. Probably there is no system in the world that achieves perfect equalization, even if such a system were to be desired by economists. The degree of equalization achieved in a federation will be determined according to a compromise among contending parties. But, certainly, it should be possible to channel the transfers through a single, permanent, professional agency; it should be possible to have a rule-based system of transfers instead of expanding central discretion; it should be possible to design the transfer system with appropriate incentives for the center and the states; and it should be possible to minimize regional transfers arising from undesirable policies (such as inter-state sales taxes) or at least identify the effect of these implicit transfers.

Criticism of the system of intergovernmental transfers in India should not detract from its achievements. The very fact that the system has survived for over 50 years in a country so diverse in economic, political, linguistic and cultural factors implies the broad acceptability of the basic structure and functioning of the federation. The method of resolving the problems of special category states, the introduction of formula-based transfers in place of discretionary transfers, achieving a measure of equalization through formula-based transfers, and the attempt to reach consensus solutions to many contentious issues are some of the positive features. Our analysis highlights that reform is needed. That reform is possible suggests a degree of optimism on the future of Indian fiscal federalism.

16 We are grateful to Nick Hope for raising this important question.

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Appendix 1

Distribution of the States' Share in the Net Proceeds of Non-corporate Income-tax

Finance Commissions	Net Proceeds distributed to the States	Criteria for Distribution			Others
		Contri-bution	Popula-tion	Per capita SDP	
First	50	20	80	-	-
Second	60	10	90	-	-
Third	60.67	20	80	-	-
Fourth	75	20	80	-	-
Fifth	75	10	90	-	-
Sixth	80	10	90	-	-
Seventh	85	10	90	-	-
Eighth	85	10	22.5	45* 22.5*	-
Ninth (First Report)	85	10	22.5	45* 11.25 **	11.25 (Proportion of the poor in the States to total poor population)
Ninth (Second Report)	85	10	22.5	45* 11.25 **	11.25 Composite index of backward-ness@
Tenth	77.5	-	20	60**	5 (Area) 5 (Infrastructur Index) 10 (Tax Effort)

* According to "distance" formula - see footnote 7.

** According to "inverse" formula - see footnote 7.

@ The variables included are (i) the population of scheduled castes and tribes; and (ii) number of agricultural laborers. Equal weights are assigned to the two factors

** According to "inverse" formula - see footnote 7.

Appendix 2

Distribution of States' Share in the Net Yield from Union Excise Duties						
Criteria Used for Distribution among the States						
Finance Commis sions	Coverage	States' share (per cent)	Proportion of population of the State to the total population of all States	Per capita incom e	Economic or social backwardness	Other criteria
1	2	3	4	5	6	7
First	Three commodities: tobacco, matches and vegetable products	40	100	-	-	-
Second	Eight commodities:	25	90	-	-	10 per cent for adjust-ment
Third	All commodities yielding more than Rs 5.9 million in 1960-61 (about 35)	20	Mainly population basis along with relative financial weakness and economic backwardness as other factors.	-	-	-
Fourth	All commodities excluding regulatory duties, special excises and earmarked cesses	20	80	-	20 Backwardness as indicated by seven factors: i) per capita agricultural production; ii) per capita manufacturing value added; iii) percentage of workers to total population, iv) percentage of enrollment in class 1 to 5 to the population in the age group 6-11, v) population per hospital bed, vi) percentage of rural population, vii) percentage of scheduled caste population	-

1	2	3	4	5	6	7
Fifth	All types of union excise duties (for the first 3 years (1969-72), Regulatory duties and earmarked cesses are excluded	20	60	13.3 Distributed among only those States whose per capita SDP was below all States average: in proportion to the shortfall of the State's per capita SDP from all State average multiplied by the population of the State	6.7 According to an integrated index of backwardness measured by are: i) scheduled caste population, ii) number of factory workers per lakh of population iii) net irrigated area per cultivator iv) length of railways and surfaced roads per square kilometre area v) enrollment ratio of school going age children; and number of hospitals beds per thousand person	
Sixth	For 1974-75 and 1975-76 all items except auxiliary duties of excise and cesses levied under special acts and earmarked for special purposes	20	75	25 According to the "distance" formula	-	-
Seve nth	All items excluding duty on the generation of electricity	45	25	25 Inverse* of per capita SDP formula	25 Percentage of poor	25 According to a formula equalizing revenue capacity computed by regressing States' per capita revenue on per capita SDP and substituting the actual values of per capita SDP in the equation.
Eigh th	Net proceeds: excluding cesses levied under special Acts and earmarked for special purposes	45	25	25	50	(5 per cent to deficit States) in proportion to the deficit of a State to the total deficit of the State in that year

Ninth First Report (1989-90)	Net proceeds excluding cesses levied under special acts and earmarked cesses	45 (40 per cent to all States and 5 per cent to the States having post-devolution deficits)	25	50	12.5 Percentage of people below poverty line	-
Ninth Second Report (1990-95)	Net proceeds excluding cesses levied under Special Acts and earmarked cesses	45 (40 per cent for all States. 5 per cent for the States with post-devolution deficits.)	25	12.5 Inverse* formula 33.5 Distance formula**	12.5 Index of backwardness computed with equal weights assigned to population of scheduled castes and tribes and number of agricultural laborers	
Tenth (1995-2000)	Net proceeds excluding cesses levied under special Acts and earmarked cesses	47.5 (40 per cent to all the States and 7.5 per cent to the States having post-devolution deficits)	20	60 Distance formula	5 (index of Infrastructure) 5 Area; the relative shares of the States are worked out based on the area of the state with no State getting more than 10 per cent at the upper end less than 2 per cent at the lower end.	10 Tax effort as measured by the ratio of per capita tax revenue to the square of per capita SDP in the state scaled by population.

*Inverse formula = (P_i / Y_i)-/ -$\sum P_{ii}/Y_{ii}$ ---

**Distance formula = $(Y_h - Y_i)P_i / \sum (Y_h - Y_i)P_i$

where Y_i and Y_h represent per capita SDP of the ith and the highest per capita SDP State,

P_i - the population of the ith State, $(Y_h - Y_i)$ for the 'h' State is taken to be the distance between the highest and the next highest per capita SDP.

Appendix 3
Formula for Distributing State Plan Assistance*

Criteria	Share in central plan assistance (per cent)	Share of grants and loans	Criteria for distribution in non-special category States
A. Special category States (10)	30	90:10	
B. Non-special category States (15)	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 fifteen 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

Note: 1. The formula 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.