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PRINCIPLES OF INTERGOVERNMENTAL TRANSFERS : HAVE THE FINANCE COMMISSIONS FOLLOWED THEM?

M. Govinda Rao

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Principles of Intergovernmental Transfers: Have the Finance Commissions Followed Them?

M. Govinda Rao*

I. Introduction:

The constitution of 11th Finance Commission in India comes at an important stage of economic and political environment. Economic liberalisation has enhanced the role of the market and economic decentralisation. The emergence of coalition politics at the Centre and regional parties coming to power in the States has caused political instability on the one hand and increase in the power of the States on the other. The 73rd and 74th Constitutional amendments have created the necessary condition for sub-State decentralisation and activate intergovernmental competition. If it is properly implemented, this has the potential to generate significant gains from decentralisation both in rural and urban areas not seen hitherto. The terms of reference given to the Finance Commission specifically requires it to address the question of financially empowering the local governments in urban and rural areas of the country. These developments have once again brought to the fore the questions of equity and efficiency in the provision of public services. In addition, increased vertical and horizontal intergovernmental competition arising from greater economic, administrative and political decentralisation and issues of governance and capacity building at both State and local levels call for a re-examination of the design of the intergovernmental transfer system.

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The emerging economic and political environment necessitates a fresh perspective on intergovernmental transfers for two specific reasons. First, it is important to ensure equity in the provision of public services across regions in an environment of increasing regional disparities. As market assumes greater role in resource allocation, it is necessary to target the transfers and make them incentive based to ensure that intergovernmental competition is beneficent. Second, the issue of targeting and incentives in the design of transfer system is of paramount importance particularly in the context of unhealthy and deteriorating fiscal position of both Central and State governments. This paper attempts to give some broad suggestions for designing the transfer system in the light of the principles of intergovernmental transfer system and some best practises available.

The plan of the paper is as follows. In Section 2, we make a brief recapitulation of the economic rationale for intergovernmental transfers. Section 3 evaluates the design of Finance Commission transfers from the viewpoint of equity and incentives based on the principles and some best practises. The final section presents concluding remarks.

II. Economic Rationale for Intergovernmental Transfers

Intergovernmental transfers have been employed to fulfil a variety of objectives and the design of the transfer scheme depends on the intended purpose. In the literature, federal transfers are recommended for a number of reasons. The most persuasive case for general-purpose transfers have been made on horizontal equity grounds and specific purpose transfers have been reasoned to offset spillovers or for merit good reasons. It would be useful to briefly recapitulate these arguments for intergovernmental transfers.

(a) Equalisation arguments for intergovernmental transfers:

The horizontal equity argument for federal transfers was advanced by Buchanan (1952) and restated later by Boadway and Flatters (1982). According to the horizontal equity argument two persons equally well off before the introduction of the fiscal system should also be so afterwards. Taking comprehensive income which includes current private consumption, net accretion to wealth and current benefits from the public services as the index of well-being, it has been shown that, even when the fiscal systems of the centre and individual States treat equals on an equal footing, nation-wide horizontal equity may be violated. This is because, fiscal activities of State governments result in differential Net Fiscal Benefits (NFBs) to individual equals and the central income tax as is presently structured cannot take account of the real income from such differential net fiscal benefits. Thus, even when the States levy proportional income tax at uniform rates, the revenue collections and therefore, per capita expenditures in richer States will be higher. If public services are assumed to be a perfect substitute for private goods, the residents in these States will then receive higher benefits from public services for the same tax rate payment.

The differences in NFBs arise because the States cannot levy benefit taxes. The most important reason for the variations in NFB is the non-rivalry and non-excludable characteristics of the services provided by the sub-national governments[1]. Larger revenue collections due to higher per capita incomes, even when

1 The level of public services (g) depends on 'congestion' technology: $g_p = G_p / L_p^{\alpha}$, where G_p is the public expenditure, L_p is the number of residents, and α is the congestion elasticity, bounded between 0 in the case of pure public goods and 1 in the case of pure private goods. *Ceteris paribus*, the lower the value of α, the higher is the value of g_p and therefore, NFB.

the effective tax rates are identical, result in higher per capita benefits from public expenditures and, higher NFBs. Another source of variation in NFBs is the levy of origin (resource) based rather than destination (residence) based taxes by sub-national governments. Often, free-riding behaviour among the States results in the levy of resource based taxes or origin based consumption taxes and which can cause significant inter-State tax exportation. The ability to export taxes differs among the States and this causes the NFBs to differ. In addition, the States may have their own redistributive policies and this can cause variations in NFBs as well. In all these cases, in order to equalise NFBs, it is necessary either to levy discriminating central tax rates, which may not be feasible, or to give equalisation grants.

The degree of desired equalisation depends on the view one takes on horizontal equity. According to the 'broad' view, two equally placed persons before the Central and State government activities ought to be equally well-off afterwards. This implies that the NFBs in two States should be completely equalised[2]. It has been shown that full equalisation of NFBs is also justifiable on efficiency grounds. The differences in NFBs due to inter-State tax exportation or redistributive policies of the State governments affect migration decisions and prevent the marginal productivity of labour from being equalised among different provinces. Thus, equalisation payments are called for on grounds of both equity and efficiency[3].

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2 According to the alternative 'narrow' view, the central government takes the actions of the State governments as a given datum and ensures that its fiscal actions treat two persons equally well off after State Government budgets are in place remain equally well-off after central government activity. This requires the central government to include the additional NFBs due to tax spillovers or State government redistribution as the taxable income of the central government. For details, see Boadways and Flatters (1982, p. 20)

3. For a detailed examination of efficiency implications of horizontal equity transfers, see Courchene (1989).

The central income tax, as presently structured, will tax only wage and property income and not the real income accruing to residents in the form of higher public expenditures due to source-based taxes collected by the states from non residents. For the same reason, such source-based taxes or state taxes on resource rents prevent the attainment of horizontal equity because central taxes are paid only on market income and not real income which includes state spending on public services financed from source-based taxes. Similarly, when we relax the assumption of identical individuals, the redistribution from the states' budgetary activity will cause the NFBs to differ across the states that cannot be captured in the prevailing structure of central income tax. The simplest example is to consider the case of individuals within a state with different incomes but receiving equal benefits from a state's public expenditure financed by a proportional income tax. The presently structured income tax cannot take into account the differential NFBs. Thus, when the income levels in the two states are different, a person who is otherwise equal, and residing in a higher income State would have a higher NFB than the one residing in a low-income State.

The preceding analysis assumes that the functioning of the states' fiscal system is the only source of inequity and inefficiency. In economies where many prices and outputs are determined or regulated by government policies rather than by the market mechanism, there can be other sources of inequity. Often, these invisible sources of inequity can be very significant, and as the intergovernmental transfer system fails to offset them, the inequities and inefficiencies in such federations continue to persist. An obvious source of inter-state variations in NFBs in developing countries is the subsidised loans given to the states by either the central government or the public sector financial and banking system. Of course, it is possible to design these implicit transfers to conform to the overall requirements of

equity. However, often the political economy consideration could result in their inequitable distribution.

Thus, the objective of equalising transfers is to enable the sub-national governmental units to provide a given quantity and quality level of public services at a given tax price. The choice of the actual level and mix of public services provided is left to the preferences of the people living in these jurisdictions as revealed through the political mechanism. This implies that equalising transfers cannot be purpose-specific. It is however, important to ensure that the design of the transfer system does not result in adverse incentives and 'free-riding' behaviour among the recipients.

(2) Intergovernmental transfers to correct spillovers:

Intergovernmental transfers are also seen as a device to resolve the problem of mismatch between a benefit span from various hierarchies of public goods and exogenously given spatial jurisdictional domains. When the benefits of public services provided by a state spills over its jurisdiction, it ignores the benefits accruing to the non-residents while equating the marginal benefits of public services with the marginal costs. Optimal provision of the public service, in principle, can be ensured through Coasian bribes or through voluntary action of the jurisdictions (Gramlich, 1994). However, in practise, this solution is infeasible and grants should be designed to internalise the externalities. Such transfers must necessarily be specific-purpose, and the efficient design would call for matching contributions from the recipients.

(3) Design of Intergovernmental Transfers

As mentioned above, general-purpose transfers from the Centre to the States have to be made to resolve fiscal imbalances

and to ensure horizontal equity. As the objective of these transfers is to enable the sub-central governments to provide a given level of public services at a given tax rate, the transfers should offset the fiscal disadvantages arising from lower revenue capacity and the higher unit cost of providing public services.

Designing of the transfer system to offset fiscal disabilities can be done in a number of ways. In Canada, for example, the Department of Finance estimates transfers as a shortfall in fiscal capacity of the province from the benchmark capacity. The 'five province standard' (excluding Atlantic Provinces and Alberta) or the average of the fiscal capacities of five provinces is taken as a benchmark. In this system, there is no provision for offsetting fiscal disabilities arising from differences in the unit cost or need. In Australia, on the other hand, both revenue and cost disabilities are taken into account in the estimation of 'relativities' which form the basis for the determination of inter-state distribution of equalising transfers. The simplest method is to give transfers on the basis of shortfall in fiscal capacity weighted with cost disability factors. A more comprehensive method, however is to design the transfers to equalise the 'need-revenue' gap (Ahmad, 1998, Bradbury, et al., 1984). The `need-revenue' gap measures the difference between what a state ought to spend to provide specified levels of public services and the revenue it can raise at a given standard level of tax effort.

Intergovernmental transfers designed to offset differences in fiscal capacities and needs of the states takes account of both vertical and horizontal fiscal imbalances. If assignment of tax powers results in a serious vertical fiscal imbalance like in India, the benchmark capacity and need stipulated for equalisation should take that into account. In other words, the benchmark selected should take into account

the requirement of redistribution of resources between the Centre and States as well as that of equalisation.

Specific-purpose transfers, on the other hand, are intended to compensate the spillovers or are given for good reasons to ensure the optimal provision of public services provided by the States. The design of the transfer system, therefore, should be specific-purpose, and open-ended with matching requirements. The matching ratios should vary with the size of spillovers. As the responsiveness of the States to a given matching rate could vary with their level of development, equalising matching ratios is also recommended (Feldstein, 1975).

4. Characteristics of an ideal transfer system:

The desirable transfer system should be equitable and have the right type of incentives. It is important to note that equity in general purpose transfers does not imply equalisation of per capita incomes across States, nor does it deal with making transfers to reduce poverty and illiteracy and thereby improve the condition of backward classes[4]. It only means that each State should be enabled to provide a given level of public services assuming that it would raise taxes at standard rates. If the residents of a State choose to levy the tax at below the standard rate, the cost of this action should be borne by them and not the national tax payer. In other words, an equitable transfer system has to be designed to offset revenue and cost disabilities of the States.

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4. Some of these are important objectives and should be addressed through specific-purpose transfers. Designing general-pupose transfers to deal with such objectives, however, could involve moral hazard problems. Also, administering such transfers requires a proper monitoring mechanism.

The transfer system if not properly designed could have adverse incentives both to the donor and recipient. The classic example of disincentive to the donor was seen in China under the 'fiscal contract' system adopted until 1994. The system resulted in the provinces adopting strategies to reduce their contribution to the Centre and this resulted in 'the decline in the two ratios'; the share of government revenues to GDP declined from 31 percent in 1979 to 12 percent in 1996; and the share of Central government expenditure in total expenditure declined from 51 percent to 27 percent during the same period. Similar arguments have been made in India where devolution of very high proportions of personal income tax and Union excise duties are alleged to have distorted the tax structure (Burgess and Stern, 1993, Joshi and Little, 1996). The disincentives to the recipients from an improper design of the transfer system are well known. The 'fiscal dentistry' practised by the Finance Commissions is alleged to be an important reason for increasing 'budgetary cavities' at the State level.

Incentives (and disincentives) in intergovernmental transfers depend upon not only the design of the transfers but also a number of institutional factors. A measure of stability and continuity in the transfer system is important to enable the recipients to adopt a medium term fiscal strategy and plan their expenditure implementation. A formula-based system of transfers as against negotiated system imparts a measure of fairness and objectivity and reduces lobbying and transaction costs to the recipients. Simplicity in the design of transfers makes it easy to understand and reduces information requirements. A simple and formula based system of transfers ensures transparency and helps to build trust and confidence among the States.

III. Finance Commission Transfers: Problems of Design

The above discussion on the principles of transfers provides a benchmark for designing tax devolution and grants by the Finance Commissions. Of course, the ideal design of the transfer system can hardly be seen in practise because the actual design of the transfer system has to consider a number of non-economic objectives and is often, the result of political bargaining and compromise among the contending parties. Nevertheless, it would be useful to keep the basic principles in mind in attempting to improve the system.

As mentioned earlier, the economic objective of general-purpose transfers is to enable every State to provide a given standard level of public service at a given tax-price. However, this has to be achieved without creating adverse effects on the incentives for fiscal management at Central and State levels. In this section, we examine the equity and efficiency implications of tax devolution and grants-in-aid given by Finance Commissions and examine their consequence on the states' fiscal management incentives.

An analysis of equity and efficiency consequences of Finance Commission transfer is important because it constitutes the largest component of explicit central transfers to States. During the Fourth Plan period, almost two-thirds of the total current transfers to the States were given on the recommendation of the Finance Commissions. However, sharp growth of discretionary transfer since early 1980s under the 'Garibi Hatao' slogan and the 20-point programme of Indira Gandhi has reduced the importance of statutory transfers. Thus, the share of statutory transfers declined steadily from 67.3 per cent during the Fourth Plan to 61 per cent during the seventh. The slide in statutory transfers has continued even after with its share having declined approximately from 63 per cent in 1991-92 to 58 per cent in 1994-95 (Table 1).

Table 1: Current Transfers from the Centre to the States

(Rs. Crore)

Plan Periods/Years	Finance Commission Transfers			Plan Grants			Other Grants	Total
	Tax Devolution	Grants	Total	State Plan Schemes	Central Schemes	Total		
Fourth Plan (1969-74)	4560 (54.2)	860 (10.2)	5420 (64.6)	1080 (12.8)	9700 (11.6)	2050 (24.4)	930 (11.0)	8390 (100.0)
Fifth Plan (1974-79)	8270 (50.2)	2820 (17.1)	11090 (67.3)	2910 (17.7)	1930 (11.7)	4840 (29.4)	540 (3.3)	16470 (100.0)
Sixth Plan (1980-85)	23730 (57.0)	2140 (5.1)	25870 (62.1)	7380 (17.7)	6900 (16.6)	14280 (34.3)	1510 (3.6)	41650 (100.0)
Seventh Plan (1985-90)	49460 (54.2)	6270 (6.9)	55740 (61.0)	15520 (17.1)	16510 (18.0)	32030 (35.1)	3520 (3.9)	91310 (100.0)
Eighth Plan								
1991-92	17200 (52.2)	3450 (10.5)	20640 (62.7)	5720 (14.2)	5540 (16.8)	11250 (34.4)	1020 (3.1)	32940 (100.0)
1992-93	20520 (53.5)	2640 (6.9)	23170 (60.4)	7840 (20.4)	6520 (17.0)	14390 (37.5)	720 (1.9)	38340 (100.0)
1993-94	22390 (51.4)	2070 (4.8)	24460 (56.1)	10770 (24.7)	7410 (17.0)	18180 (41.7)	930 (2.1)	43570 (100.0)
1994-95	24850 (52.6)	2430 (5.2)	27280 (57.8)	9900 (21.0)	9450 (20.0)	19350 (41.0)	530 (1.1)	47160 (100.0)

Note: Figures in parenthesis are percentages to total transfers **Source:** Indian Finance Statistics/Public Finance Statistics, Ministry of Finance, Government of India.

1. Equity in intergovernmental transfers.

Equity implications of general-purpose Central transfers to States in India are analysed here in terms of elasticities of individual item of transfers with respect to per capita SDP across States. Such an analysis is not entirely satisfactory since, the objective of the transfer system is to offset both revenue and cost disabilities of the States. Analysis in terms of income elasticities ignores cost disabilities across States altogether. Besides, per capita SDP at best, is only an imperfect indicator of revenue capacity. Nevertheless, income elasticity gives a broad indication of the equity in the distribution of transfers.

The analysis of central transfers to several states shows that

(i) distribution of transfers by the Finance Commissions have the most equalising effect;

(ii) the equalising effect of Finance Commission transfers have increased significantly over the years probably in response to increasing inter-State inequalities[5];

(iii) Much of the equity objective is achieved by tax devolution rather than grants-in-aid.

This is due to the fact that tax devolution is explicitly designed to target States with lower per capita SDP whereas grants are given to fill the residual gaps. Similar results are obtained when we examine the reduction in inequalities in per capita revenues among the States when different components of transfers are added to revenues of the states. (Table 2).

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5. The coefficient of variation in per capita SDP across States increased steadily from 0.224 in 1965-66 to 0.397 in 1994-95. See, Rao, Shand and Kalirajan (1998)

Table 2
Income Elasticity of Intergovernmental Transfers

	VI F.C. (1974-79)	VII F.C. (1979-84)	VIII F.C. (1984-89)	IX F.C. (1989-94)
Shared Taxes	0.024	-0.195*	-0.507*	-0.564*
Non-plan grants	-0.716	-0.070	0.302	-0.054
Total Finance Commission transfers	-0.201	-0.280*	-0.403*	-0.514*
Plan grants-State plan schemes	-0.243	-0.426**	-0.029	-0.457**
Plan grants-Central schemes	0.460	-0.066	-0.095	0.070
Total plan grants	0.072	-0.236	-0.060	-0.282
Gross current transfers	-0.115	-0.268**	-0.277*	-0.408**

Note: *Significant at 1 percent level. **Significant at 5 percent 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.

While the tax devolution by the Finance Commission had a progressive distribution, the grants-in-aid were not related to the level of incomes in the states. Grants were determined on the basis of the projected non-plan budgetary gaps of the states. The projections made by the Finance Commission involve firming up the base year estimates and applying the growth rates judged to be reasonable. Thus, base year estimates are by and large, calculated on actuals though, in the case of some revenue and expenditure items the estimates applied to make projections were invariably based on the past trends and in some cases judgements on how the expenditures and revenues should perform in the forecast period.

In any case, these projections were inherently inequitable because, entitlements depended not on the basis of requirements, but on the basis of past expenditures. Given the low revenue capacity in poorer States, their projected expenditure was low. Thus, it is not surprising that income elasticity of non-plan grants received by the States was positive and significant during the period of award covered by the Eighth Finance Commission and was not significant during the award of the Ninth Finance Commission (Table 2). On the other hand, as bulk of the transfers - the tax devolution - was distributed on the basis of general economic indicators, even the States with no fiscal disabilities received substantial amounts. However, 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.

Table 3 shows the non-plan surpluses of the major States after the Finance Commission recommendations as estimated by them. The tendency is that, the high income States consistently had significantly higher than the average non-plan

surpluses whereas the surpluses in the low income States have been below the average. In fact, per capita non-plan surpluses in high income States were about three times that of low income States according to the Sixth Finance Commission's recommendation but according to the Ninth Finance Commission's recommendation it was about four times. The average surplus of low income States according to the award of the Ninth Finance Commission was less than 50 percent 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.

Efficiency or incentives in intergovernmental transfers are influenced as much by the design of the transfer system as by institutional arrangements. The literature in this area is rich. Interestingly, while there is a general agreement that the design of Finance Commissions' transfers is not conducive to prudent fiscal management at both central and State levels, there has been very little action to remedy the situation. What follows is an attempt to identify the major sources of disincentives.

2. Incentives and Disincentives in Finance Commission Transfers:

The first major source of disincentive in the statutory transfer scheme is the nature and functioning of the institution itself. As a temporary body, the Finance Commission can not fulfil their legitimate role of setting a stable and sustained incentive mechanism. With successive Commissions giving different signals to the Centre and States on issues relating to fiscal management, it is difficult to envisage an environment that provides appropriate incentives. Lack of continuity in the deliberations of the Finance Commissions and non-existence

of the system of monitoring the implementation of fiscal norms recommended by the Finance Commissions, howsoever unrealistic and frivolous, has not helped to provide a clear signal on fiscal prudence in either the Central or State governments. Often, the succeeding Commission gives conflicting signals from those of the previous. As for the state governments, the interest in the report of the Commission is only to see how much their entitlements are; they are not obliged to implement any of the recommendations relating to the norms and improvement in the fiscal management. The Central government, on its part, has not implemented many of the recommendations except those relating to the distribution of assigned taxes, shared taxes and grants. It has totally ignored the recommendations relating to its own fiscal discipline. It also has not implemented the recommendations relating to the strengthening of the Finance Commission Division in the Finance Ministry to improve its research capacity and the appointment of an Advisory Committee[6]. The casual approach to the Commission is seen by the fact that initially appointed Member-Secretaries of the last two Commissions were shifted before the Commissions could finalise their recommendations.

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6. The Ninth Finance Commission (Para 10.7, p. 41) for example recommended, "....between the life of one Finance Commission and the appointment of the next Finance Commission, in the interregnum, active and imaginative studies and projects on different topics relevant for the working of the Finance Commission be undertaken by the Finance Ministry to facilitate the work of the incoming Finance Commission. We strongly suggest that the present Division in the Finance Ministry which looks after the work of the Finance Commission,......, be entrusted with this task. The Division, however, needs to be substantially strengthened and should function under a separate Joint Secretary assisted by adequate number of officials and technical staff." (India, 1991). This recommendation has been totally ignored by the Central Government.

Table 3

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

(Rs. 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	263.40	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

Another source of inefficiency in the transfer system arises from the artificial distinction made between plan and non-plan requirements and confining the scope of the Finance Commission to determine only the latter. This, not only prevents proper assessment of revenue capacities and expenditure requirements of the Centre and States, but also constrains prioritisation of expenditures by the States and prevents them from adopting a medium term strategy for implementing their own expenditure plans. This has had adverse efficiency consequences like inadequate provision for maintenance and upkeep of assets. With two different agencies designing different components of general-purpose transfers, it is difficult to achieve the desired results in terms of focusing on the transfers to offset fiscal disabilities. The problem is compounded by the adverse selection implicit in the incentive structure of fiscal decision-making. Spending in new schemes has a lot of political mileage whereas, expenditures on maintenance is not preferred.

The above are institutional problems affecting intergovernmental transfer systems. The Finance Commission *per se*, cannot do much to remedy the situation. However, there are a number of issues pertaining to the design of the transfer system and the methodology of effecting transfers which the Commission is directly concerned with. The efficiency issues pertaining to the design of the transfer system are discussed below.

An important source of inefficiency in the design of the transfer system is the adoption of different criteria for the distribution of tax shares and grants. In federations like Australia, the tax sharing schemes over the years have been incorporated into grants and this has helped to design the transfer system to achieve the intended objectives. In India, although the Constitutional provisions for tax devolution and grants are

different, there is no stipulation that the Finance Commission should adopt different criteria for devolving them. Over the years, the use of uniform criteria for the distribution of income tax and excise duties has minimised contradictions. Nevertheless, distribution of tax shares is done on the basis of general economic indicators and grants are given on the basis of projected budgetary gaps.

The formulae used for distributing tax shares and grants by the Finance Commissions are not specifically designed to offset revenue and cost disabilities of the States. As mentioned earlier, tax devolution is made on the basis of general economic indicators with predominant weight assigned to per capita SDP in its 'inverse' or 'distance' variant and grants are given on the basis of projected non-plan budgetary gaps. There are many other factors besides per capita SDP which determine taxable capacity of the States. Also, if only one factor has to be taken, per capita consumption is a better proxy than per capita SDP. By and large, the Finance Commissions took into cost disabilities and expenditures only indirectly, in their choice of variables used in the formula for distributing tax shares. Population has received significant implicit and explicit weight in the tax devolution formula used by all the Finance Commissions. Even though the services provided by the States have 'public good' characteristics, the size of population cannot be an adequate measure of need. For services like education and health, it is not the total but the relevant age composition of population that is the indicator of need. There are a number of other factors besides population which determine need for public services.

Some of the Commissions have employed indicators like poverty ratio, literacy ratio and the proportion of scheduled caste and tribe population in the devolution formula. The policy

makers in both the Central and State governments should be concerned with these serious problems and use appropriate strategies and policy instruments to remedy the situation. It is however doubtful whether general-purpose transfer is an appropriate instrument to tackle with issues of dealing with poverty alleviation or removal of illiteracy. Using these factors in tax devolution could also have moral hazard problems. The objectives poverty alleviation or removing illiteracy are best dealt with through specific purpose transfers with States making matching contributions to ensure cost-effectiveness and accountability. Given the temporary nature of the Finance Commissions, they cannot effectively administer specific purpose transfers.

The Fourth and the Fifth Finance Commissions considered a list of social and economic variables and assigned equal weights to them in their devolution formula (Annexe 1 and 2). The Tenth Finance Commission employed a more sophisticated approach by estimating an infrastructure index and assigning weights to this in the devolution formula. This is clearly an advancement from the approach adopted by the Fourth and Fifth Commissions. However, it would be misleading to assume that the infrastructure index represents either the revenue capacity or the expenditure need. The infrastructure index is a stock variable whereas expenditure need is a 'flow' variable. Besides, the variables chosen to construct the index are not necessarily the ones the States provide and the weights assigned do not represent the relative importance assigned by the States (in terms of composition of their expenditures). It is difficult to justify the use of infrastructure index even on the grounds of simplicity and transparency because, besides the implicit judgements involved in the choice of variables and assignment of weights to them, most States may not be familiar with the statistical methodology employed to estimate the index. If cost

disabilities or expenditure needs of the States have to be used in the transfer scheme, there is no alternative but to estimate them for individual items of State expenditures. None of the Finance Commissions except the Ninth made any attempt to estimate expenditure needs and cost disabilities. The Eleventh Commission has the opportunity to review the approach and make improvements in the approach and methodology employed by the Ninth Finance Commission to estimate cost disabilities and expenditure needs for various public services provided by the States.

The tenth Finance Commission assigned 10 percent weight to tax effort in its tax devolution formula. In its assessment of tax effort, however, the Commission made an explicit judgement that (i) per capita SDP is the sole indicator of taxable capacity; (ii) taxable capacity of the States increases with per capita SDP with an exponential value of 2; and (iii) taxes collected by the State is from its own citizens and there is no tax exportation[7]. In reality, none of these assumptions may be appropriate. It may be better to use per capita consumption instead of per capita SDP as the determinant of taxable capacity. This would avoid the bias arising from not including net factor income from outside the state. Besides, in principle, most state taxes are on consumption. In any case, the attempt is to give a clear signal on fiscal management. Even if it is imperfect, it is important to assign significant weight to this factor.

The method of determining the grants by the Finance Commissions has been a subject of considerable debate. Clearly,

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7. In fact, the tenth Finance Commission is not the first to employ this methodology to estimate tax effort. More than 30 years ago, Shastry (1966) in his incisive study, put forward estimates of taxable capacity and effort using identical methodology.

it is imperative for the 11th Commission to deviate from this practice if it intends to give a clear signal on fiscal management to the Central and State governments.

In determining the transfers, the Finance Commission has to first determine the total amount to be transferred to the States and then decide on the criteria to be adopted to effect inter-State distribution. Given the importance of giving a proper signal to both Central and State governments, the Commission has no option but to "...review the state of finances of the Union and States and suggest ways and means by which the governments, collectively and severally, may bring about a restructuring of the public finances so as to restore budgetary balance and maintain macro-economic stability" (Para 4, Terms of Reference). Thus, the Commission has to make a comprehensive assessment of the finances of the Central and State governments and then determine the total divisible pool. While the transfers based on assessment helps to determine the States' entitlements, there is no mechanism yet in place to enforce fiscal discipline on the Central government. The Commission will have to give serious consideration to this issue.

In regard to determining the entitlement of individual states in the transfers, the simplest way is to design transfers to consider both tax devolution and grants in totality. The total amount available can be distributed on the basis of a simple formula consisting of an indicator of taxable capacity weighted with cost disabilities. If necessary, additional incentive may be given to the tax effort factor. In this manner, both equity and efficiency can be factored in and this also has the virtue of simplicity and transparency. As mentioned earlier, a more comprehensive approach, however, is to determine the entitlements of the States as a difference between fiscal

capacities and needs of the States[8]. Similar results can be obtained by determining entitlements as a difference between fiscal capacities and needs of the States. In either case, estimating fiscal capacities and effort and expenditure needs or cost disabilities is inevitable.

The preceding discussion addresses the designing of the transfer system purely from the viewpoint of offsetting fiscal disabilities arising from differences in fiscal capacities and needs. As pointed out earlier, there are other sources of fiscal inequity like subsidised loans to the States and inter-State tax exportation. Analysis shows that such invisible transfers are a regressive distribution and significantly reduce the progressive bias of the explicit transfers (Rao, 1998). Ideally, this has to be taken into account in any properly worked out scheme of general purpose transfers. This would require the estimation of such invisible transfers, which may not be easy in the short term. Besides, while it is important to depart from the established methodology, in the short term it is necessary to make a smooth transition and ensure that the budgetary balances of the states are not seriously dislocated.

Designing transfers to offset the difference between fiscal capacities and needs of the States in the Indian context requires three important prerequisites:

(i) considerable progress has to be made in obtaining reliable estimates of capacity and need;

8. The essential difference between the two approaches is that the capacity-need difference approach takes into account not only the capacity differences but also differences in the savings positions of the states. For details of this approach, see Le Grand, 1975.

(ii) such an approach should do away with the distinction between plan and non-plan resources and expenditures;

(iii) transfers thus designed cannot maintain different approaches to tax devolution and grants. While the reforms in the transfer system should move in this direction, it would be unrealistic to expect the 11th Finance Commission to take this giant leap. Nevertheless, the transfer system, if it has to serve the desired objective, has to move in this direction.

IV. Concluding Remarks

In spite of many positive contributions by the Finance Commissions, it is necessary to admit that 50 years of experimentation have not been very successful in designing an equitable and efficient transfer system in India. Although the transfers given by the Finance Commissions have shown a progressive bias, it would be incorrect to conclude that they have helped to offset revenue and cost disabilities. Instead, the transfer system has failed to promote prudent fiscal management at both Central and State levels. To put the system of transfers on healthy lines, this provides both an opportunity and a challenge to the 11th Finance Commission. The constitution of the Commission comes at a momentous time in the history of the country when economic liberalisation has enhanced the role of fiscal, administrative and political decentralisation and the recommendations of the Commission should help to create the preconditions for a beneficent intergovernmental competition.

Efficiency and equity in intergovernmental transfers depends on design and implementation of the system as well as institutional arrangements. The Finance Commissions may not

be able to deal with institutional problems entirely. Even in the design of the transfer system, the Planning Commission and Central Ministries give about 42 percent of the transfers. But, it is important to design the transfers given by the Finance Commissions to fulfil economic objectives of intergovernmental transfers.

The paper has suggested broad guidelines in designing the transfer system:

(i) It is necessary to design transfers to meet the objectives of offsetting revenue and cost disabilities and providing incentives irrespective of whether the transfer stream is tax devolution or grants.
(ii) equalisation of incomes, eradication of poverty or illiteracy cannot be the objective of general purpose transfers.

These objectives have to be achieved through specific-purpose transfers. Given its temporary nature, the Finance Commission does not have the capacity to monitor such transfers. The ideal design is to estimate revenue and cost disabilities directly, and design the transfers to offset these fiscal disadvantages with some weights assigned to fiscal management factors like tax effort. Finally, clear signals for fiscal management can be provided only when there is some continuity and mechanism to monitor the recommendations of the previous Finance Commission.

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Annexure 7.1

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

Finance Commi-ssions	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 backwardness@
Tenth	77.5	-	20	60**	5 (Area) 5 (Infrastru-cture Index) 10 (Tax Effort)

* According to "distance" formula - see notes under Table 6.

** According to "inverse" formula - see notes under Table 6.

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

** According to inverse formula - see notes under Table 6.

Annexure 7.2: Distribution of States' Share in the Net Yield from Union Excise Duties

Criteria Used for Distribution among the States						
Finance Commi-ssions	Coverage	States' share (per cent)	Proportion of population of the state to the total population of all other states	Per capita income	Economic or social backwardness	Other criteria
1	2	3	4	5	6	7
First	Three commodities: tobacco, matches & vegetable products	40	100	-	-	-
Second	Eight commodities:	25	90	-	-	10 percent for adjustment
Third	All commodities yielding more than Rs 5.9 million in 1960-61 (about 35)	20	Mainly population basis along with relative financial weakness & economic backwardness as other factors	-	-	-
Fourth	All commodities excluding regulatory duties, special excises and earmarked cesses	20	80	-	20 Backwardness as indicated by 7 factors; i) per capita agricultural production; ii) per capita manufacturing value added; iii) percentage of workers to total population, iv) percentage of enrolment 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) enrolment 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	-	-
Seventh	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 equalising 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

1	2	3	4	5	6	7
Eighth	Net proceeds: excluding cesses levied under Special Acts & 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 & earmarked cesses	45 (40 percent to all States & 5 percent 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 & tribes & number of agricultural labourers	
Tenth (1995-2000)	Net proceeds excluding cesses levied under special Acts and earmarked cesses	47.5 (40 per cent to all the states & 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* = $(P_i / Y_i) / \Sigma P_i / Y_i$; ** *Distance formula* = $(Y_h - Y_i) P_i / \Sigma (Y_h - Y_i) P_i$ *where* Y_i *and* Y_h *represent per capita SDP of the* i^{th} *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.

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