economics Division Working Papers

South Asia

Indian fiscal federalism: major issues

M. Govinda Rao

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Research School of Pacific and Asian Studies ANU

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Abstract

With the reassessment of the role of the State in resource allocation, a review of federal fiscal arrangements in India has become necessary. In this paper, the major problem areas in federal fiscal arrangements in India are analysed and identified, keeping in view the principles of fiscal federalism and the practices and experiences of different federations. The paper begins with an analysis of tax and expenditure assignments and identifies anomalies. One consequence of the existing assignments is significant levels of centre–state and interstate tax disharmony and inequitable transfer of resources arising from interstate tax exportation. The paper also analyses the vertical and horizontal imbalances in the Indian federation and brings out the shortcomings of intergovernmental transfers as a mechanism of satisfactorily resolving these imbalances. In the light of the analysis, the paper makes recommendations for the reform of federal fiscal arrangements in India.

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Indian fiscal federalism: major issues

India represents a 'classic' case of a federation with constitutional demarcation of functions and finances between the centre and the states.[1] The 920 million people in the federation are spread over 25 states and 7 centrally administered territories (two with their own elected governments). At both central and state levels separate legislative, executive and judicial arms of government are constituted. The upper house or the *Rajya Sabha* in the central parliament is the House of the states. Members of legislature in each state elect and send representatives to it. The seventh schedule to the constitution specifies the legislative domains of the central and state governments in terms of union, state and concurrent lists. The constitution also requires the President of India to appoint the Finance Commission every five years (or earlier) to review the finances of the centre and the states and recommend intergovernmental transfers for the ensuing five years.

As in other federations, historical factors in India have played an important part in the adoption of a federal constitution with strong unitary features. During British rule, centralisation of economic and political powers was not merely an Anglo-Saxon tradition, but a colonial necessity. At the same time, the difficulty of administering a large country with a number of principalities having divergent languages, cultures and traditions called for some degree of decentralisation. For a period of about two decades prior to the enactment of Government of India Act, 1935, the system required the provinces to make a contribution to the centre. Although there were strong arguments for decentralisation (the UK Cabinet Mission Plan envisaged limited powers to the centre in a three-tiered federal structure), the constitution adopted by the Indian Republic in 1950 closely followed the Government of India Act, 1935, with pronounced centralising features to be called 'quasi-federal'. There were two probable causes for this: first, once the Muslim majority areas opted out of India to form Pakistan, the major reason for a loose federal structure had vanished; second, a strong centre was thought desirable to safeguard against fissiparous tendencies within some of the constituent units (Chelliah 1991).

The centralisation inherent in the constitutional assignments was accentuated by the adoption of a planned development strategy. The centralised decision-making in relation to production and distribution activities and disposal of resources in the 'national interest' implicit in central planning is the negation of the very principle of federalism. In the Indian context, even though economic planning has been implemented in a mixed economy framework, the strategy of public sector dominated, heavy industry based import substituting industrialisation necessarily called for concentration of economic as well as administrative powers (Chelliah 1991). Although the immediate cause of the unprecedented economic crisis of 1991 was the persisting fiscal imbalance through the 1980s, it revealed the unsustainability of the development strategy. Market oriented economic reforms were initiated after 1991 with a view to imparting competitiveness to the Indian economy and integrating it with the world market.

The reassessment of the role of the state in resource allocation requires a review of federal fiscal arrangements in India. When a greater role is assigned to the market in resource allocation, governmental units have to be reoriented to provide public services responsively, and to regulate and monitor the functioning of the market. A prerequisite of evolving such a system is to analyse the existing federal fiscal arrangements from an economic perspective, identify their weaknesses and indicate the directions of reform.

In all federations, governmental units inherently have a competitive relationship. The competition can be both intergovernmental (between different levels of government) or interjurisdictional (among different units, within a level). An efficient competitive federalism, however, requires

- clear demarcation of functions and the resources to carry them out
- adherence to a set rules to foster mutual trust and understanding
- an independent and just mechanism to conduct and monitor the interactions between different governmental units (Breton 1987).

Thus, the natural starting point for the review of federal fiscal arrangements in India—the assignment of fiscal responsibilities—is undertaken here in the second section. The assignment of taxes and expenditures between the centre and individual states should not only be in accordance with the principle of comparative advantage but also should ensure a clear linkage between revenue raising and expenditure decisions at the margin. However, even the most efficient system of assignments cannot clearly match the revenue and expenditure powers of individual governmental units. When the fiscal powers of different governmental units overlap, free-riding behaviour among them causes centre–state and interstate fiscal disharmonies. This problem is examined in the third section. The discussion of assignments and fiscal overlapping in the Indian federation leads to the analysis, in section four, of vertical and horizontal mismatch between revenue and expenditure powers or what is known as fiscal imbalances. These imbalances as shown in section five, can be a source of inequity and inefficiency that intergovernmental transfer mechanisms must be designed to resolve. Recommendations presented in the last section identify critical areas of reform in Indian federal fiscal arrangements.

Revenue and expenditure assignments in the Indian federation

Tax and expenditure assignments: principles and practices

The assignment of functions and sources of finances among different layers of government is an important step in the efficient organisation of a federal fiscal system. For analytical convenience, the layer-cake perspective on federalism in the Musgravian tripartite division of governmental functions, assigns stabilisation and redistribution mainly to the central government while the allocation function is shared among the hierarchical layers depending upon their comparative advantage. The Musgravian principle implies that the progressive and mobile tax bases should be assigned primarily to the central government and the subcentral units should raise revenues mainly through user charges, benefit taxes and taxes on relatively less mobile bases (Musgrave 1983). At the same time, to reap welfare gains, the lower level jurisdictions have to provide all non-national public services and this creates a serious asymmetry between revenue sources and expenditure functions or what is termed 'vertical fiscal imbalance' (Hunter 1977).

The decentralisation theorem suggests that, so long as there are no scale economies, the subcentral provision of public services results in welfare gains. The gains will be greater, the larger the diversities in the preferences for public services (Oates 1972, 1977). There are, however, some disagreements with such a functional allocation. Gramlich (1987) and more recently Inman and Rubinfeld (1992) have argued that the subcentral units can make effective contributions to counter-cyclical policy. Similarly, Pauly (1973) has argued that redistribution should be considered a local public good and subnational units do have an important role to play in poverty alleviation (see also, Rao and Das-Gupta 1995).

This problem can be alternatively stated in terms of the literature on 'competitive federalism'. Competitive federalism views governmental systems as competing entities analogous to firms. It combines the results of electoral competition in a democratic polity with the federal form of government. The competition analysed in this context is not restricted price competition, but Schumpeterian entrepreneurial competition (see Breton 1987).

Successful interjurisdictional competition requires that functions should be assigned according to comparative advantage. Given that many tax bases are mobile across jurisdictions, the more senior governments have a comparative advantage in levying taxes, since they can more effectively control free-riding. Free-riding is the sharing benefits of public services without making commensurate payments and can take the form of tax avoidance and evasion, interstate tax exportation or benefit spillovers.

The more junior governments, on the other hand, have a comparative advantage in reducing the welfare costs of providing public services, because at lower levels the mismatch between goods supplied and demanded would be lower. Also the bundling of public services more flexible, since bundling of public services on a 'take it leave it' basis increases welfare costs (see Breton 1987). Welfare costs can therefore be reduced by either moving to the jurisdictions providing the preferred bundle of public services (exit) or consumers influencing policies to provide the preferred pattern of public services (voice). Thus, assignments made according to comparative advantage would result in revenue concentration and expenditure decentralisation. Intergovernmental transfers are necessary to resolve this problem of vertical imbalance (Breton and Fraschini 1992).

Analysing the actual fiscal assignments in different federations, however, brings out three important features. First, the existence of vertical fiscal imbalance is a feature seen in all federations. This occurrs because the actual assignments of tax and expenditure powers are done broadly according to the principle of comparative advantage. This does not imply, however, that higher vertical fiscal imbalance necessarily denotes greater efficiency in assignments. Second, the assignment of powers minimising concurrence or overlap can only be done in a *de jure* sense. *De facto*, the overlapping of tax and expenditure powers between different jurisdictions is unavoidable. Third, concurrency in tax and expenditure powers is not necessarily undesirable if there is a mechanism to coordinate the policy actions of different governmental units, and the benefit of coordination exceeds its cost.

Tax and expenditure assignments in India

In India the tax and expenditure powers of the central and the state governments are specified in the seventh schedule to the constitution. The functions required to maintain macroeconomic stability, international relations and activities having significant scale economies are assigned exclusively to the centre or are to be undertaken concurrently with the states. The functions which have a statewide jurisdiction are assigned to the states.

The assignment of tax powers, however, is based on the principle of separation. The tax bases are assigned exclusively either to the centre or to the states. Most broad-based and progressive tax handles have been assigned to the centre. The centre also has residuary tax powers. A number of tax handles have been assigned to the states as well, but from the point of view of revenue productivity, only the tax on the sale and purchase of goods is important.

The constitution recognises that the tax powers assigned to the states will be inadequate to meet their expenditure needs and therefore provides for the sharing of revenues from personal income tax (Article 270) and union excise duty (Article 272). The states in need of additional assistance can be given grants-in-aid (Article 275). Tax devolution and grant allocation are to be determined by the Finance Commission, an independent quasi-judicial body appointed by the president every five years (Article 280).

Looking at the shares of the central and state governments in revenues and expenditures, the states on an average, raise about 38 per cent of current revenues and incur 54 per cent of expenditures (Tables 1 and 2). The revenues derived from exclusive central taxes constitute about 32 per cent of the total; those from exclusive state taxes 35 per cent and the remaining 33 per cent of revenues are from shareable sources. The major taxes levied exclusively by the centre are customs duty (22 per cent of total tax revenue) and corporation tax (8 per cent). Among the state taxes, the revenue from sales tax constitutes almost 20 per cent of tax revenues. Other state taxes individually contribute less than 6 per cent of total tax revenue. Although, on average, the states incur 54 per cent of total expenditures, their control over spending authority is much lower because a significant proportion is incurred on central sector and centrally sponsored schemes—essentially shared-cost programs.

The pattern of expenditures indicates that the central government plays a major role in defence and industrial promotion (Table 2). The states, on the other hand, have a predominant share of expenditures on internal security, law and order, social services like education, health, family welfare, housing and social security and on economic services like agriculture, animal husbandry, forestry, fisheries, irrigation and power and public works. The states' share of administrative services expenditure is about two-thirds; of social services it is over 86 per cent; and on economic services

Table 1 Revenue receipts of the central and state governments, 1991–92

Items of revenue	Revenue (billion rupees)[a]			Revenue share (per cent)		
	Centre	States	Total	Centre	States	Total
Tax revenue (a+b)	501.6	526.9	1028.5	48.8	51.2	80.4
(a) Exclusive central taxes	325.2	-	325.2	100.0	-	25.4
Corporation tax	78.5	-	78.5	100.0	-	6.1
Custom duties	222.6	-	222.6	100.0	-	17.4
Other	24.1	-	24.1	100.0	-	1.9
(b) Exclusive state taxes	-	354.9	354.9	-	100.0	27.8
State excise duties	-	54.7	54.7	-	100.0	4.3
Sales taxes	-	198.2	198.2	-	100.0	15.5
Taxes on transport	-	29.8	29.8	-	100.0	2.3
Other	-	72.3	72.3	-	100.0	5.7
(c) Shared taxes	176.5	172.0	348.4	50.6	49.4	27.2
Personal income tax	16.3	51.0	67.3	24.2	75.8	5.3
Union excise duty	160.2	120.9	281.1	57.0	43.0	22.0
Non-tax revenue	158.7	91.5	250.2	63.4	36.6	19.6
Net contribution from public enterprises	24.1	-11.1	13.0	184.9	84.9	1.0
Interest receipts	109.3	53.2	162.5	67.3	32.7	12.7
External grants	9.5	-	9.5	100.0	-	0.7
Grants to states	-161.5	161.5	-	-	-	-
Other	15.8	49.3	65.1	24.2	75.8	5.1
Total revenue accrual	498.8	779.9	1278.7	69.9	30.1	100.0
Total revenue collections	732.3	446.4	1278.7	62.4	37.6	100.0

[a] US$1.00 = 34.50 rupees.
Source: India, Minstry of Finance, 1993. *Public Finance Statistics*, New Delhi.

their share is almost 60 per cent. The analysis of constitutional assignment in India brings out the following features.

- The constitution exhibits a clear centripetal bias in the distribution of tax and regulatory powers. In addition to its expenditure functions, the centre can also influence the expenditure decisions of the states. The assignment of most of the broad-based taxes and residual tax powers to the centre, its overriding powers in regard to the functions in the concurrent list and its domination through economic planning and control over virtually the entire financial sector are only some instances of the centre's dominance in the economic sphere.
- The constitutional assignment of tax powers in India follows the principle of separation in contrast to that of concurrence, followed in federations like the USA and Canada. However, tax separation in a system where the tax bases

Table 2 **Expenditure (current+capital) of the central and state governments, 1991–92**

	Expenditure (billion rupees)[a]			Share of expenditure (per cent)		
	Centre	States	Total	Centre	States	Share in total
Interest payments	200.3	109.6	309.9	64.6	35.4	17.5
Defence	164.5	-	164.5	100.0		9.3
General administrative services, of which	100.2	167.4	267.6	37.4	62.6	15.1
Administrative services	31.2	75.5	106.7	29.2	70.8	6.0
Compensation and assignment to local bodies	0.9	9.9	10.8	8.7	91.3	0.6
Other	3.9	17.4	21.2	18.2	81.8	1.2
Natural calamity relief	-	10.6	10.6	-	100.0	0.6
Social and community services	49.3	312.8	362.1	13.6	86.4	20.4
Education, art, culture and scientific services of which	22.2	169.9	192.0	11.5	88.5	10.8
Education	6.2	67.2	73.4	8.5	91.5	4.1
Medical and public health	0.8	9.9	10.7	7.4	92.6	0.6
Family welfare	3.6	15.3	18.9	19.3	80.7	1.1
Housing and urban development	3.4	41.7	45.2	7.6	92.4	2.5
Social security and welfare	2.4	4.5	7.0	35.1	64.9	0.4
Economic services	219.8	318.5	538.3	40.8	59.2	30.4
Agriculture and allied services	54.4	100.6	154.9	35.1	64.9	8.7
Industry and minerals	67.3	18.1	85.4	78.8	21.2	4.8
Power, irrigation and flood control	24.9	128.6	153.4	16.2	83.8	8.7
Transport and communication	34.3	38.8	73.0	46.9	53.1	4.1
Public works	3.8	10.0	13.8	27.8	72.2	0.8
Other	35.1	22.6	57.7	60.9	39.1	3.3
Loans and advances	88.2	31.6	119.7	73.6	26.4	6.8
Total	822.3	950.6	1772.8	46.4	53.6	100.0

[a] US$1.00 = 34.50 rupees.

Source: India, Ministry of Finance,1993. *Public Finance Statistics*, New Delhi.

overlap can only be done in a *de jure* sense; *de facto*, overlapping cannot be avoided. The problem is particularly severe in the case of indirect taxes. The levy of manufacturing excises by the central government, sales taxes by the states and the tax on the entry of goods into a local area for consumption, use or sale (*octroi*) by urban local bodies has had serious adverse consequences on the economy.

- Conceptually, a major advantage of a federation over the Balkanised system is the existence of a unified market unencumbered by any form of impediments to the free movement of and trading in factors of production as well as products. However, the constitution empowers the levy of tax on interstate sale of goods by the centre, and the latter has allowed the states to levy the tax subject to a specified ceiling rate. The proceeds of the tax are collected by the exporting state and this has rendered the sales tax an origin-based consumption tax. Besides creating resource distortions, this tax has caused a perverse transfer of resources from the poor consuming states to rich producing states. Similarly, the states can levy a tax on the entry of goods into a local area for consumption, use or sale (*octroi*) and the levy of this tax by the urban local bodies has caused severe distortions because it is in the nature of an import duty into a local area. These taxes have tended to create several tariff zones within the country (Rao 1993).
- The existence of vertical fiscal imbalances is a logical outcome of the assignment of powers and responsibilities. The access of the centre to most of the broad-based taxes and assignment of borrowing powers has placed it in a relatively stronger financial position. At the same time, the states have the responsibility of providing most of the social and physical infrastructure, besides ensuring internal security and law and order. The persistence of vertical fiscal imbalance renders the role of intergovernmental transfers in federal fiscal arrangements critical.

Tax and expenditure overlapping

Intergovernmental competition and fiscal disharmony

The pursuit of common objectives by different levels of government and the spillover effect of policies of one level of government on another can create conflicts in their jurisdictions. An expansionary fiscal policy by the central government can increase the unit cost of providing public services and thus constrain the states' abilities to deliver these services. Increases in salary levels by the central government may itself have a demonstration effect on the states. Similarly, the central government may compress its expenditures simply by reducing transfers to the states. Increases in the administered prices of central public enterprises increases the cost of providing services at the state level and vice-versa. A reduction in subsidies by the centre, particularly on wage goods, may force the states to introduce them for electoral reasons. These are just a few examples of the vertical interdependence of policies.

A major source of expenditure disharmony between the central and the state governments, however, has arisen from central intrusion into state spheres of activity through centrally sponsored schemes. These shared-cost programs for specified schemes have not only altered states' allocative decisions, but also created committed liabilities for state governments in the future.

There are also notable adverse allocative implications of vertical tax overlapping. First, in addition to violating the principle of horizontal equity, the splitting of the power to levy taxes on income and capital between the central and the state governments on the basis of whether they are derived from agricultural or non-agricultural sources has led to distortions, tax evasion and avoidance (Chelliah 1993). Second, although in a legal sense the central excises and state sales taxes and *octroi* are separate levies, these taxes fall virtually on the same base. Consequently, the problem of vertical tax overlapping has continued to plague the Indian tax system. A levy of taxes on taxes and margins on taxes in a mark-up pricing situation creates a divergence between producer and consumer prices which is wider than the tax element.

The Indian experience brings out three important lessons. First, tax assignment should not be done merely on legal considerations—the economic consequences of such assignments must be taken into account. Second, avoidance of concurrency in a *de jure* sense does not prevent *de facto* overlapping. Third, overlapping by itself cannot be considered undesirable. What is important is that the tax policies of different levels should be properly coordinated and harmonised to minimise distortions. In the USA and Canada, even when the federal and state (provincial) governments enjoy concurrent tax powers, they have been able to achieve a greater degree of coordination and harmonisation than the India (Rao and Vaillancourt 1994).

Interjurisdictional competition and fiscal disharmony

From the viewpoint of production efficiency, fiscal federalism has the potential to realise a resource allocation superior to the best possible allocation achievable under the centralised arrangement and all else equal, economic growth under the former should be higher. Efficient and stable intergovernmental competition is possible only when, *inter alia*, there is competitive equality and cost-benefit appropriability (Breton 1987). Competitive equality ensures that the larger/stronger units do not dominate, coerce or prevent smaller/weaker units. This can be brought about through regional policies of the central government or by giving intergovernmental grants to offset the fiscal disadvantages of the weaker states. Cost-benefit appropriability ensures that residents of one state are not able to consume public services without making commensurate payments.

Thus, in ensuring fair and efficient competition among the states, the central government has an important monitoring role. First, it should activate the process of competition by ensuring the free flow of factors and products across the country.

Second, it should ensure competitive equality among the states through regional policies and by giving intergovernmental transfers to offset the fiscal disabilities of the poorer states. Third, it should initiate the process of harmonisation in tax policies among the states to minimise interstate tax exportation and tax competition. Finally, it should, through cost-sharing programs, ensure optimum standards of services having a high degree of interstate spillovers.

A number of studies have examined the welfare implications of interjurisdictional tax competition, but consensus on the desirability of such spillovers is yet to emerge. The conventional view is that interjurisdictional competition is a source of distortion. According to this view, cut-throat competition by the states to attract trade and industry into their respective jurisdictions at the cost of other states can distort the allocation of resources (Netzer 1991) and the race to the bottom in reducing tax rates results in the less than optimal provision of public services. The alternative view is that interjurisdictional competition is a beneficent force. This view has found particular favour among Leviathan theorists who argue that such competition can work as an effective constraint on the government's monopoly power to maximise revenue (Brennan and Buchanan 1980). Oates and Schwab (1988) show that when communities are homogenous, where the costs and benefits are clearly perceived and where public decisions reflect the preferences of the residents of respective jurisdictions, interjurisdictional competition is efficiency enhancing. However, even in this model, if the jurisdictions are constrained to tax capital for want of more efficient tax instruments and if public decisions deviate from the will of the electorate, tax competition will not lead to efficient outcomes.

It is difficult to find a situation where the assumptions of the model of benign competition set out by Oates and Schwab will be satisfied in a developing country federation. Acute interstate inequalities in the levels of development bestow varying degrees of competitive strength on different jurisdictions. The delinking of tax and expenditure decisions results in the costs and benefits of public decisions being not clearly perceived. Free-riding behaviour of the states can result in significant interstate tax exportation. Under such conditions tax competition could cause serious distortions and inequity.

When sales taxes predominate in the states' tax systems and when the states levy origin-based taxes, additional problems are created. First, the strategy of imposing different tax rates on items consumed by the residents as opposed to those exported to non-residents, increases rate differentiation within each of the states. Second, tax competition can cause wide differences between the states' tax systems, depending on the structure of production and consumption and on the strategy followed to maximise revenue and attract capital. Third, origin-based consumption taxes (with taxes levied on inputs and capital goods) can result in cascading, and in heterogenous state economies with varying powers. This can cause significant interstate tax exportation having adverse effects on both equity and efficiency. In particular, the levy of tax on interstate sales enables interstate tax exportation. Besides creating impediments to the free movement of goods across the country, central sales tax has caused inequitable resource transfers from the poorer to richer states (Rao and Vaillancourt 1994).

The gains from state autonomy in choosing their preferred public service–tax rate can conflict with the welfare loss arising from interstate tax competition. It is necessary to know the exact nature of resource distortions and inequity due to interstate tax conflicts emerging from the states' free-riding strategy to achieve the required degree of tax harmonisation. The optimal degree of tax harmonisation is achieved when the marginal welfare gains from states' fiscal autonomy are equivalent to marginal welfare loss from resource distortion and inequity arising from interstate tax competition and tax exportation.

Interstate tax competition results from the state attempts to free-ride. The competition may take the form of

- reducing nominal tax rates to maximise revenue by attracting cross-border purchases
- levying selectively lower nominal tax rates and giving incentives to new industries to attract capital into their jurisdictions
- adopting strategies to export the tax burden to non-residents by instituting tax systems and tax rates on both factors and products.

The strategy adopted by the states to divert trade into their jurisdictions and to export the tax burden to non-residents has contributed to excessive differentiation in tax rates. The prevailing sales tax systems have a mix of first-point, last-point and multi-point taxes. In addition, to raise more revenues the states have resorted to levying surcharges, turnover taxes and additional sales taxes. The result is accute differentiation in effective tax rates and a tax system that is both complex and irrational. The attempt to attract capital through liberal tax concessions on new industries has further added to the complexity. In addition, the taxation of inputs and capital goods has resulted in cascading.

Fiscal imbalances: trends and issues

Fiscal imbalances refer to the mismatch between revenue raising capacity and expenditure needs of different governmental units. Such imbalances can arise vertically between different levels of government or horizontally between different jurisdictions. In most federations, given that the central government has a comparative advantage in raising revenues and the states are relatively better placed to deliver public services, vertical imbalance is implicit in the assignment of functions itself. Interjurisdictional differences in income due to various historical and institutional factors, as well as variations in resource endowments, create horizontal imbalances.

Vertical fiscal imbalance in India

The consequence of constitutional assignment as well as fiscal developments over the years has been to create a high degree of fiscal centralisation and vertical fiscal imbalance. The state governments in 1992–93 collected about 35 per cent of total revenues, whereas their share in total current expenditure was 57 per cent (Table 3). From the revenue sources assigned to them, they could finance only about 42 per cent of their expenditures and had to depend upon central funds or borrowing to meet the remainder. In comparison to five other federations, the Indian states' dependence on the centre for financing their expenditures (the coefficient of vertical fiscal imbalance) was the highest (Table 4). The states could raise only 42 per cent of the revenues from the revenue soureces assigned to them.

The trend in fiscal centralisation over the period 1955 to 1993 in India shows that while the states' share in total expenditures broadly remained constant (or showed a marginal decline), their shares in both aggregate current revenues and total expenditures declined (Table 3). In other words, the fiscal dependence of the states or the degree of vertical fiscal imbalance has increased since the mid-1950s. Furthermore, although the states' share of total expenditures remained almost constant throughout the period, their control over expenditure decisions has not remained unaltered. The share of specific purpose grants for central sector and centrally sponsored schemes in total transfers increased from 12 per cent during the fifth plan (1969–74) to over 18 per cent during the seventh plan (1985–90). As most specific purpose transfers also have matching provisions, the intrusion of the central authority in states' expenditure priorities is larger than the amount of these transfers.

Horizontal fiscal imbalance

An important feature of Indian fiscal federalism is the wide interstate differences in the ability to raise revenues and per capita expenditures. There are 14 relatively more homogenous general category states, but even these have wide differences in revenue raising capacities, efforts, expenditure levels and fiscal dependence on the centre. In addition, in terms of economic characteristics and endowments, the 10 mountainous states of the north and the northeast differ markedly from the rest and are considered 'special category' states.

Table 3 Trends in vertical fiscal imbalance, 1955–93 (per cent)

	Share of current revenues to total current revenues	Share of current expenditure to total current expenditue	Share of current revenue to states' current expenditure	Share of total receipts to total receipts of centre and states[a]	Share of expenditure to total expenditure	Share of revenues to states' expenditure[a]	Share of states' own revenue to states' total expenditure
1955–56	41.2	59.0	68.9	50.6	61.7	57	48.5
1960–61	36.6	59.9	63.9	49.0	56.8	57	45.4
1965–66	32.6	55.6	63.5	43.9	53.3	54	42.7
1970–71	35.5	60.2	60.6	43.5	53.9	58	50.3
1975–76	33.5	55.1	70.4	39.2	47.6	60	54.2
1980–81	35.6	59.6	60.1	44.0	56.0	51	43.7
1985–86	35.5	56.0	57.7	42.0	52.0	54	45.5
1990–91	36.6	55.2	53.5	45.1	52.2	55	44.8
1991–92	37.6	58.3	54.8	45.3	54.5	56	47.3
1992–93 (RE)	35.3	57.3	53.7	42.3	53.3	54	45.6

[a] Current + capital receipts

Note: RE = revised estimates.

Source: India, Ministry of Finance, (relevant years). *Indian Economic Statistics/Public Finance Statistics*, New Delhi.

Table 4 Vertical imbalance in selected countries

	Year ending	Coefficient of vertical imbalance 1988	1989	1990
Australia	June 30	0.51	0.46	0.47
Brazil	December 31	0.24	0.20	0.31
Canada	March 31	0.24	0.23	0.21
Germany	December 31	0.20	0.17	0.20
India	March 31	0.54	0.55	0.55
United States	September 30	0.14	0.14	0.15

Note: The degree of vertical imbalance refers to only state/provincial/regional governments. The coefficients have been computed as (1 - R/E)*100 where, R = total revenues including capital receipts of the states but excluding intergovernmental grants and E = total expenditures (current + capital) of the states.

Source: International Monetary Fund, 1993. *Government Finance and Statistics Year Book*, International Monetary Fund, Washington, DC.

The differences in the per capita revenues and fiscal expenditures of different states bring out a number of important features of the Indian federation (Table 5). First, there are wide variations in revenues among different states in both per capita terms and as a revenue–income ratio (state domestic product). Second, these variations indicate both interstate differences in revenue capacity, and the differences in their revenue efforts. Third, the special category states are characterised by low revenue bases even though their per capita incomes are not very low. This is because much of the income generated in these states is in the service sector—particularly, government administration. Fourth, although the revenue bases in the special category states are low, partly due to the higher unit cost of providing public services, their per capita expenditures are significantly higher than the all-state average. The higher than average per capita expenditures in these states cannot be entirely attributed to their inherent cost disability—this may also be due to bad fiscal management. Finally, for the general category states, the fiscal dependence on the centre was not only high but varied inversely with per capita income. At the same time, even after equalising transfers were given, per capita expenditure in high income states was higher than the average by 35 per cent and that of low income states was lower by 25 per cent. This shows that the equalisation mechanism has not been able to adequately offset the fiscal disabilities of the poorer states.

The interstate disparities in India, even among the relatively more homogenous general category states, are not only high, but have shown an increasing trend. In 1980–81, the per capita income in the richest state, Punjab (2,674 rupees), was about 2.9 times that of the poorest, Bihar (919 rupees). In 1991–92 this difference increased to 3.1 times with per capita incomes at 8,428 rupees and 2,520 rupees respectively in the two states. Both the coefficients of variation and the Lorenz ratios of per capita state domestic product as well as per capita states' own revenues increased over the period 1975–76 to 1990–91 (Table 6). But, although the degree of equalisation showed a marginal increase, the variation in per capita expenditures remained broadly constant.

Intergovernmental transfers in India

Economic rationale for transfers

A critical component of fiscal decentralisation in many countries is a system of intergovernmental transfers. Intergovernmental transfers have been employed to fulfill a variety of objectives and the design of the transfer scheme depends on the

Table 5 Revenues and expenditures of the states, 1991–92

	Per capita SDP 1990–91 (rupees)	Per capita own revenue	Own revenue as % of SDP	Per capita current expenditure	% of own revenue to current expenditure
Major states					
High-income states					
Gujarat	5,850	969.3	15.2	1,260.4	76.9
Goa	7,890	1,691.5	19.3	2,811.9	60.2
Haryana	7,516	1,112.9	12.8	1,370.7	81.2
Maharashtra	7,598	974.4	12.4	1,264.8	77.0
Punjab	8,428	1,563.9	16.3	2,058.2	76.0
Sub-total	7,100	1,068.4	13.7	1,387.8	77.0
Middle income states					
Andhra Pradesh	4,731	603.1	11.1	964.2	62.6
Karnataka	4,631	778.7	13.8	1,095.6	71.1
Kerala	4,232	652.7	14.4	1,202.6	59.3
Tamil Nadu	4,619	865.8	16.8	1,518.5	55.9
West Bengal	4,794	393.2	7.5	777.5	50.6
Sub-total	4,625	639.8	12.2	1076.6	59.4
Low-income states					
Bihar	2,520	212.8	7.3	659.5	32.3
Madhya Pradesh	4,021	173.8	11.5	813.4	58.2
Orissa	3,596	293.0	7.2	827.1	35.4
Rajasthan	4,035	514.4	11.7	920.4	55.9
Uttar Pradesh	3,557	327.3	8.1	743.0	44.1
Sub-total	3,509	346.2	9.9	764.6	45.3
Special category states					
Arunachal Pradesh	5,046	612.6	11.0	3,204.5	18.5
Assam	3,932	343.1	8.1	951.3	36.1
Himachal Pradesh	4,790	514.2	9.6	1,889.6	27.2
Jammu and Kashmir	3,872	360.4	8.9	1,955.5	18.4
Manipur	3,893	194.6	4.7	2,040.5	9.5
Meghalaya	4,190	363.6	8.2	2,056.4	17.7
Mizoram	4,135	475.7	11.1	4,587.1	10.4
Nagaland	4,977	373.8	6.8	4,006.5	9.3
Sikkim	5,063	975.6	17.9	3,782.9	25.8
Tripura	3,569	167.6	4.8	1,970.1	8.5
Sub total	4,063	363.5	8.3	1,593.2	22.8
All states	4,567	576.9	11.5	1,026.0	56.2

Note: SDP = state domestic product

Source: Reserve Bank of India, 1994. *Bulletin*, February; Indian, Ministry of Finance, 1994–95. *Public Finance Statistics*, New Delhi.

Table 6 **Interstate variation in state government expenditures, 1975–91** (per capita SDP)

	Coefficient of variation				Lorenz ratio			
	1975 –76	1980 –81	1985 –86	1990 –91	1975 –76	1980 –81	1985 –86	1990 91
General administration	23.4	21.9	25.0	29.3	0.132	0.125	0.142	0.159
Education	32.9	31.7	26.4	20.3	0.164	0.168	0.146	0.115
Health	28.8	24.3	27.6	25.8	0.161	0.134	0.157	0.139
Total social services	35.2	29.6	31.1	26.0	0.196	0.164	0.177	0.145
Transport and communication	81.2	74.3	75.4	75.3	0.365	0.347	0.326	0.362
Irrigation	33.6	39.7	40.6	39.5	0.190	0.220	0.223	0.222
Industry and minerals	68.7	48.0	40.0	47.3	0.331	0.229	0.228	0.256
Total economic services	37.4	34.0	41.0	36.7	0.201	0.192	0.214	0.204
Total current expenditure	26.0	23.5	24.8	23.2	0.148	0.132	0.142	0.131
Total capital expenditure	38.7	28.1	54.3	40.2	0.205	0.156	0.247	0.210
Total expenditure	26.6	23.0	28.3	24.2	0.148	0.128	0.157	0.134
Total per capita net state domestic product	29.9	31.7	31.7	34.1	0.163	0.173	0.173	0.186

Source: Budget documents of state governments (1977–78, 1983–84, 1987–88 and 1992–93).

purpose for which it is given. It is important to be clear about the objectives of different types of transfers in order to evaluate their efficacy. In the literature, federal transfers are recommended for closing the fiscal gap, equalisation and spillovers or merit good reasons. Sometimes, the centre gives transfers to carry out the agency functions.

Closing the fiscal gap. An important reason for giving transfers is to enable the subcentral governments to satisfactorily undertake their functions when the revenues assigned to them are inadequate. Even when assignments are done solely on economic considerations, the comparative advantage of the central government in undertaking redistributive and stabilisation functions and the state's comparative advantage in the allocative function creates vertical fiscal imbalance that has to be resolved by a system of central transfers to states.

Equalisation. The imbalance between revenue capacity and expenditure need varies across different states depending upon the size of their tax base, the size and composition of their population and other factors affecting the cost of providing public services. The richer states, due to their higher revenue capacity, can provide better standards of public services than their poorer counterparts. To offset this fiscal disadvantage, equalising transfers are called for.

The argument for equalising transfers is based on the horizontal equity grounds advanced initially by Buchanan (1950) and later developed by Boadway and Flatters (1982). Taking comprehensive income as the index of well-being, it has been argued that federal income tax as presently structured cannot ensure horizontal equity, for its base does not take into account the redistributive effect of states' fiscal operations. The states' fiscal operations cannot be distributionally neutral except in the unlikely case of their levying benefit taxes. When the quasi-public services provided by them are financed by resource rents or source-based taxes as against residence-based taxes, the net fiscal benefits will systematically vary. The residents in the resource-rich (high income) regions will have higher net fiscal benefits and their higher public consumption will not be included in determining the tax base of the central government.

Boadway and Flatters define horizontal equity in two ways. According to the broad view, the fiscal system should be equitable nationwide vis-à-vis the actions of all governments. Two persons equally well off before central and state actions must also be so afterwards. To fulfill this concept of horizontal equity, it is necessary to give transfers so that each province is enabled to provide the same level of public services at a given tax rate (like in a unitary state). In contrast, the narrow view of horizontal equity takes the level of real incomes attained by the individuals after a state's budgetary operation as the starting point and the central fiscal action will be directed to ensure horizontal equity after the state's fiscal system has been established. In this model the central budget need not offset the inequalities introduced by the operation of state budgets *per se*, rather, the income distributional effects of the states' fiscal operations are taken as given.

Transfers to correct spillovers. When there is no perfect mapping, the provision of public services by subcentral governments may spill over the jurisdictions and such externalities result in the non-optimal provision of public services. A Pigovian subsidy is required to 'set the prices right'. To be cost-effective, the specific purpose transfers made to subcentral units to ensure optimal public services provision require matching contributions.

The design of intergovernmental transfers

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 subcentral 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. This is achieved by giving unconditional transfers equivalent to the need–revenue gap (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.

Specific purpose transfers, on the other hand, are intended to compensate the spillovers or are given for merit 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, open ended with matching requirements and 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 are also recommended (Feldstein 1975).

Thus, in an ideal system, there should be an optimal combination of general and specific purpose transfers. General purpose transfers would enable all the states to provide a given normative standard of public services at a given tax effort. The specific purpose transfers would ensure a given standard of outlay on the aided services.

Intergovernmental transfers in India

A notable feature of intergovernmental transfers in India is the existence of multiple channels of transfer from the central government to the states. The constitution provides for the appointment of a semi-judicial body, the Finance Commission, by the President of India every five years. The Commission makes an assessment of the fiscal resources and needs of the centre and individual states and recommends the shares of personal income tax, union excise duty and grants-in-aid allocated to the states in need of such assistance. With development planning gaining emphasis, however, the scope of the Finance Commission's recommendation has been restricted to the states' non-plan requirements in the current (revenue) account. The Planning Commission has become a major dispenser of funds to the states by way of grants and loans to meet their plan requirements. In addition to these two channels, various central ministries give specific purpose transfers with or without matching requirements.

There is a considerable amount of confusion in the term 'transfers'. In Indian federal finance literature, even central loans to states are characterised as transfers. Such transactions involve transfers only to the extent of nterest subsidies or loan write-offs. Here only tax devolution and grants are considered to be transfers; transfers arising from interest subsidy are not taken into account. The trends in the relative shares of the three channels of central transfers to states since the fourth five-year plan (1969–74), bring out several interesting features (Table 7). First, the share of statutory transfers in the total declined from 65 per cent during the fourth plan to a little over 60 per cent during the seventh plan (1985–90). Second, the proportion of formula based transfers given by the Finance Commission and the Planning

Table 7 Current transfers from the centre to the states (billion rupees)

	Finance Commission transfers			Plan grants			Other Grants	Total
	Tax Devo-lution	Grants	Total	State plan schemes	Central schemes	Total		
Fourth Plan	45.6	8.6	54.2	10.8	9.7	20.5	9.3	83.9
(1969–74)	(54.2)	(10.2)	(64.6)	(12.8)	(11.6)	(24.4)	(11.0)	(100.0)
Fifth Plan	82.7	28.2	110.9	29.1	19.3	48.4	5.4	164.7
(1974–79)	(50.2)	(17.1)	(67.3)	17.7)	11.7)	(29.4)	(3.3)	(100.0)
Sixth Plan	237.3	21.4	258.7	73.8	69.0	142.8	15.1	416.5
(1980–85)	(57.0)	(5.1)	(62.1)	(17.7)	(16.6)	(34.3)	(3.6)	(100.0)
Seventh Plan	494.6	62.7	557.4	155.2	165.1	320.3	35.2	913.1
(1985–90)	(54.2)	(6.9)	(61.0)	(17.1)	(18.0)	(35.1)	(3.9)	(100.0
1991–92	172.0	34.5	206.4	57.2	55.4	112.5	10.2	329.4
	(52.2)	(10.5)	(62.)	(14.2)	(16.8)	(34.4)	(3.1)	(100.0)
1992–93	205.2	20.8	226.1	80.3	66.8	147.1	10.5	383.7
	(53.4)	(5.5)	(58.9)	(20.9)	(17.4)	(38.3)	(2.7)	(100.0)

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

Commission has declined, while that of discretionary transfers has increased over the years. Third, within the Finance Commission, the proportion of tax devolution has increased.

Finance Commission transfers. The constitution specifies that the Finance Commission is required to distribute the shares of personal income tax and union excise duty between the centre and the states and among the states *inter-se;* recommend grants to the states in need of additional assistance; and address any other matter referred to them. Although the constitution does not place any restriction on the scope of the Commission, with development planning gaining emphasis and with the Planning Commission dispensing a significant share of transfers, the scope of the Finance Commission has been restricted to meeting only the non-plan current requirements of the states.[2] This is known as the 'gap-filling' approach. The relative shares of the centre and the individual states and the criteria adopted for their distribution among the states according to the recommendation of the ninth Finance Commission are summarised in Table 8.

An important feature of the tax devolutions recommended by the Finance Commissions is that, while the criteria adopted for distributing them are different

Table 8 Criteria for tax devolution under the ninth finance commission, 1989–92 (per cent)

	Income tax	Excise duty
States' share	85.0	45.0
Criteria for distribution		
Contribution	10.0	-
Population	22.5	25.0
Per capita SDP		
Inverse formula	11.25	45.0
Distance formula	12.5	33.5
Composite index of backwardness	11.25	12.5
Pre-devolution deficits	-	16.5

Note: Inverse formula = $(P_i/Y_i)/S_iP_i/Y_i$
Distance formula = $(Y_h-Y_i)P_i/S(Y_h-Y_i)P_i$
where, Y_i and Y_h represent per capita state domestic product of the i^{th} and the richest state, P_i - the population of the i_{th} state, (Y_h-Y_i) for the 'h' state is taken to be equivalent to the value of the state with the second highest per capita state domestic product.

from the principles of grants-in-aid, nowhere is it made clear that the economic objectives of the two instruments are different (Rao 1987). Tax devolution is recommended mainly on the basis of general economic indicators and grants are given to offset the residual fiscal disadvantages of the states as quantified by the Commissions. Even in the case of tax devolution, until recently, the criteria adopted for the distribution of personal income tax and excise duties have been different. Furthermore, assigning weights to contradictory factors like 'contribution' and 'backwardness' in the same formula for distribution has rendered the achievement of the overall objective of transfers difficult. Although over the years, attempts to improve the progressivity of the transfer scheme have been made by assigning larger weight to the per capita incomes of the states, in both the inverse or distance formulae, population has continued to receive the largest implicit and explicit weight.

Grants are determined on the basis of projected gaps between non-plan current expenditures and post-tax devolution revenues. In this sense, the Finance Commission's role has been to act as fiscal 'dentists' filling in budgetary 'cavities'. Some of the Commissions have also attempted to enhance outlays on specified state services by making ill-designed closed-ended specific purpose non-matching grants. The gap-filling approach has been criticised from several perspectives. First, none of the Finance Commissions has assessed, on any objective basis, the overall resource position of the centre and the amount of resources required to meet its commitments.

Second, the transfers made by the Finance Commissions were not designed specifically to offset fiscal disadvantages arising from the states' lower revenue raising capacity and higher unit cost of providing public services. While tax devolution is determined on the basis of general economic indicators, grants are given on the basis of projected post-devolution budgetary gaps. Third, the design of the grants has serious disincentive effects on tax effort and can lead to profligacy in spending. Nor, does the approach enable the states with lower tax bases to provide a given level of public service at a given tax-price.

More recent Commissions tried to reduce the post-devolution gaps by substantially enhancing the share of tax devolution in total transfers. The seventh Finance Commission, for example, increased the states' share of union excise duty from 20 to 40 per cent. At the same time, Finance Commissions have tried to target transfers by including different elements of backwardness, (the inverse and distance variants of per capita income), thereby complicating the the tax devolution formula. Also, the more recent Commissions introduced selective norms for the centre 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 actually estimated the revenue capacities and expenditure needs of the states. The practice of different approaches to tax devolution and grants, however, has reduced the relevance of such exercises.

Plan transfers. The Planning Commission gives both grants and loans to the states to finance their plan schemes. Although in earlier years plan assistance was given on a schematic basis, since 1969 it has been allocated on the basis of a consensus formula (Gadgil formula)[3]. 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 assistance is given as grants, 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 the special problems of these states. The grant portion of this assistance is 30 per cent and the remainder is given as a loan. Thus, transfers given to the states for plan purposes, and also their grant–loan components, are determined independently of required plan investments, their sectoral composition, the resources available to the states or their fiscal performances.

The tenuous relationship between the required plan investments and plan transfers becomes clear when we examine per capita plan outlays during the seventh plan (Table 9). In all the major states except Maharashtra, the resources available for plan investments from the states' resources, before any central transfers were given, were negative. The deficits were higher in the poorer states. As the richer states had access

Table 9 **Per capita federal fiscal transfers and plan outlay in the states during the Seventh Plan** (1981–82 rupees)

	Per capita annual SDP 1982–85 (current prices) (1)	Index of taxable capacity 1984–85 (2)	States' plan resources before statutory transfers (3) (6) - (5+4)	Finance Commission (4)	Non-plan loans Actual (5)	States' plan resources after statutory transfers Actual (6)	Plan assistance (including central schemes) Actual (7)	Total plan outlay Actual (8)
High income states	3340	146.30	-134.24	321.43	534.83	722.02	533.18	1,255.20
Punjab	4013	169.18	-459.28	280.45	318.05	139.23	1,131.83	1,271.06
Maharashtra	3,384	142.75	229.72	316.24	509.77	1,055.73	233.52	1,289.25
Haryana	3,043	151.11	-175.07	344.39	570.99	740.31	463.18	1,203.49
Gujarat	2,929	122.16	132.35	344.62	740.53	952.79	304.20	1,256.99
Middle income states	2,206	112.82	-271.46	439.65	255.78	423.96	227.88	651.84
Karnataka	2,461	117.68	-49.98	389.70	112.04	451.76	213.36	665.12
West Bengal	2,230	76.09	-421.11	483.04	278.40	340.34	140.56	480.90
Kerala	2,144	117.60	-521.60	440.26	380.98	299.65	308.19	607.84
Tamil Nadu	2,142	138.64	-186.56	439.21	316.60	569.25	229.51	798.76
Andhra Pradesh	2,053	114.04	-178.07	446.02	190.87	458.82	247.77	706.59
Low income states	1,689	50.06	-265.69	472.19	171.11	377.60	287.94	665.55
Madhya Pradesh	1,860	58.14	-139.69	422.13	227.32	509.75	200.00	700.76
Rajasthan	1,820	67.46	-380.23	389.99	291.74	301.50	421.77	723.27
Orissa	1,728	37.72	-250.75	582.07	126.74	458.07	310.56	768.63
Uttar Pradesh	1,713	54.14	-256.19	440.86	143.54	328.21	272.18	600.39
Bihar	1,323	32.85	-301.61	525.89	66.20	290.49	235.21	525.70
Average of 14 States	2,345	99.97	-211.92	428.94	261.35	478.36	276.90	755.27

Note: SDP = state domestic product

Sources: Columns 1 and 2: India, Ministry of Finance, 1990. *Second Report of the Ninth Finance Commission*, New Delhi; other columns: finance/planning departments of the state governments.

to larger non-plan loans and as they could get higher central plan assistance, per capita plan outlays in high income states were almost double those of middle and low income states. The mild equalising trend in statutory transfers was hardly adequate to offset the regressive bias imparted by the other forms of central assistance.

Assistance to the central sector and centrally sponsored schemes. The third component of transfer is given for specified purposes with or without matching provisions. These are called central sector and centrally sponsored schemes. Grants for central sector schemes are given to the states to undertake certain agency functions and therefore, are entirely financed by the central government. Centrally sponsored schemes, on the other hand, are initiated in respect of services falling within states' jurisdictions to ensure that adequate levels of these services are provided. These are shared-cost programs, and the matching ratios vary from project to project, but are uniform across states. As many as 262 such schemes were in existence in 1985, and others have been added in subsequent years. In fact, the transfers given to fund centrally sponsored schemes have attracted the sharpest criticism due to their discretionary nature and conditionality attached to them. The states have criticised the proliferation of such schemes as an unwarranted intrusion into their domain. Although in 1970, the National Development Council decided to roll back the volume of such assistance to one-sixth of the central assistance to state plans, these transfers have continued to grow in importance. They formed about 36 per cent of total plan assistance and 17 per cent of total current transfers in 1992–93.

Shortcomings of intergovernmental transfers. The design and implementation of intergovernmental transfer schemes in India suffers from a number of weaknesses. First, multiple agencies transferring resources with overlapping jurisdictions have blurred the overall objectives of the transfer system. Second, both general purpose and specific purpose transfers have not been designed to fulfill economic objectives and consequently have ceased to be efficient instruments of equalisation or of ensuring minimum service levels in the states. Instead, they tend to have disincentive effects on fiscal prudence and tax effort. Accommodating different interests in the transfer formulae has unduly complicated them. In addition, proliferation of shared-cost programs with detailed conditionalities attached to them has helped to multiply bureaucracy and distort allocations at the state level. It is necessary to impart greater a degree of objectivity and transparency into the transfer systems.

Equalising effect of intergovernmental transfers. The correlation coefficients of intergovernmental transfers with per capita SDP and their income elasticities clearly show that the transfers recommended by the Finance and Planning Commissions have had equalising effects (Table 10). The equalising effect is greater in more recent years, particularly during the first three years of the recommendation of the ninth

Table 10 **Equalising effect of transfers**

Finance Commission	Correlation coefficients with per capita SDP 6th (1974–79)	7th (1979–84)	8th (1984–89)	9th (1989–92)	Income elasticities 6th (1974–79)	7th (1979–84)	8th (1984–89)	9th (1989–92)
Shared taxes	-0.167	-0.706[b]	-0.849[b]	-0.717[b]	-0.024	-0.195[a]	-0.507[a]	-0.504[a]
Non-plan grants	-0.240	-0.289	-0.110	-0.404	-0.716	-0.070	0.302	-0.802
Total Finance Com. transfers	-0.272	-0.551[a]	-0.664[b]	-0.666[b]	-0.201	-0.280[a]	-0.403[a]	-0.540[a]
Plan grants: state plan schemes	-0.263	-0.524[a]	-0.010	-0.669[b]	-0.243	-0.426[b]	-0.029	-0.704[a]
Plan grant: central schemes	0.342	-0.101	-0.162	-0.207	0.460	-0.066	-0.095	-0.140
Total plan grants	0.091	-0.327	-0.092	-0.500[a]	0.072	-0.236	-0.060	-0.355
Gross current transfers	-0.194	-0.519[a]	-0.663[b]	-0.653[b]	-0.115	-0.268[b]	-0.277[a]	-0.482[a]
Net current transfers	-0.252	-0.573[a]	-0.794[b]	-0.768[b]	-0.159	-0.338[a]	-0.491[a]	-1.006[a]

[a] Significant at 1 per cent level.
[b] Significant at 5 per cent level.
Note: Elasticity coefficients relate to cross-section of 14 major states.
Source: Estimated from the data taken from the budget documents of the state governments for the relevant years.

Finance Commission (1989–92). This finding is confirmed by the analysis of interstate inequalities in per capita revenue collections and per capita revenue accruals. The estimated effects indicate that

- the transfers in the aggregate tend to equalise but the degree of equalisation as measured by the reduction in the Gini coefficient during the period, 1989–92 was about 0.1067
- the equalisation achieved by the Finance Commission transfers was about twice that of Plan transfers; the equalisation by both the Finance and Planning Commissions transfers has marginally increased over time
- within the Finance Commission transfers, tax devolution has shown the highest degree of equalisation (Table 11).

It is important to note, however, that the equalising effect of the transfers has not been sufficient to offset the fiscal disabilities of the poorer states. This is evident from

Table 11 Effect of federal transfers: Gini coefficients of fiscal variables

Variable (per capita)	6th Finance Commission (1974–79)	7th Finance Commission (1979–84)	8th Finance Commission (1984–89)	9th Finance Commission (1989–92)
Own revenue	0.2262	0.2355	0.2329	0.2575
Own revenue+shared taxes	0.1805	0.1718	0.1640	0.1842
Own revenue+Finance Commission transfers	0.1599	0.1615	0.1576	0.1742
Own revenue + state plan transfers	0.2092	0.2138	0.2167	0.2350
Own revenue+transfers for central schemes	0.2186	0.2184	0.2126	0.2350
Own revenue + plan transfers	0.2030	0.1994	0.1993	0.2154
Own revenue + total current transfers	0.1490	0.1417	0.1394	0.1508
Degree of equalisation: shared taxes (1-2)	-0.0457	-0.0637	-0.0689	-0.0732
Degree of equalisation: Finance Commission transfers (1-3)	-0.0662	-0.0740	-0.0753	-0.0832
Degree of equalisation: state plan grants (1-4)	-0.0170	-0.0217	-0.0162	-0.0224
Degree of equalisation: central schemes (1-5)	-0.0076	-0.0170	-0.0203	-0.0225
Degree of equalisation: total plan transfers (1-6)	-0.0232	-0.0361	-0.0336	-0.0421
Degree of equalisation:. total current transfers (1-7)	-0.0772	-0.0938	-0.0935	-0.1067

Note: Interstate Gini coefficients correspond to 14 major states only.
Source: Finance accounts of the state governments, various issues.

the positive and significant correlation between per capita revenue accruals and per capita states incomes. The income elasticity of per capita revenue accruals and per capita current expenditures is 0.15, which is only marginally lower than the income elasticity of the states' own revenues (0.18) (Table 12). There are two reasons for this: the equalising effects of transfers are strong, and interstate tax exportation has caused inequitable resource flows from relatively low income states to high income states.

Table 12 **Regression results**

Dependent Variable	Independent variable		$\bar{R}^2$	F. statistic
	Constant	Per capita SDP		
Per capita own revenue	-296.3650* (-2.4714)	0.1760* (8.720)	0.8524	76.059
Per capita total revenues	165.2228 (1.3369)	0.1500* (7.2019)	0.7965	51.8670
Per capita revenue expenditure	208.520 (1.10)	0.158* (5.0146)	0.6500	25.1464
Per capita total expenditure	341.4971 (1.5679)	0.1801* (4.9050)	0.6395	24.0591

Note: Number of observations: 14. * significant at 1 per cent level. Figures in parenthesis are 't' values of regression coefficients.

Federal fiscal arrangements in India: major issues

The preceding analysis is helpful in identifying the major shortcomings in federal fiscal relationships in India. The analysis shows that the weaknesses in fiscal arrangements are due not merely to the constitutional arrangements, but also to the conventions, methods and working of institutions as they have evolved over the years. To an extent, these arrangements have been shaped by the developmental strategy and any change in the strategy would require changes in federal fiscal arrangements.

Federal fiscal arrangements in a market economy should aim at the efficient delivery of public services corresponding to diverse preferences, ensure a nationwide market unfettered by impediments and activate welfare-improving intergovernmental and interjurisdictional competition. Unlike in a planned economy where the centralisation of economic power is a prerequisite, fiscal functions in a market economy call for decentralisation. Further, be it from a dynamic developmental perspective or from the viewpoint of merely exercising preferences for public services in a rational manner through exit and voice, human resource development plays a critical role in a developing economy. This function primarily belongs to subcentral governments—and as a result their relative role is likely to increase. Greater responsibilities for providing urban and rural infrastructure will also be thrust on the subcentral governments as a consequence of the 73rd and 74th constitutional amendments.

Giving a larger role to the market in determining resource allocation will have consequences for inter-regional equity. The planning process in the past has not succeeded in promoting balanced regional development; the intergovernmental transfer system has failed to offset the revenue disabilities of the poorer states. Consequently, the distribution of states' per capita plan investments and physical and social infrastructures have been skewed in favour of the richer states. In addition there has been the perverse transfer of resources due to interstate tax exportation and the regional policy followed by the central government did not have an equalising effect. By 1992–93, the four richest states with a population of 19 per cent of the total claimed 24 per cent of capital stock of central public enterprises, while the share of the five poorest states having 43 per cent of population was only 34 per cent. The distribution of private sector investments has been even more unequal. This is seen from the pattern of assistance given by banks and financial institutions. Given this scenario, it is likely that in a liberalised environment, the richer states with better physical and social infrastructures, proximity to the markets and more responsive bureaucracies would attract a larger share of investments than the poorer states. Unless corrective steps are taken, inequalities in income levels are likely to increase rather than decline.

The reform of the federal fiscal system should begin with the re-examination of assignments. It is necessary to review whether the distinction between income and wealth from agricultural and non-agricultural sources serves any useful purpose. Assigning power to levy sales tax only on goods and the exclusion of taxation of services altogether from the purview of the states is anomalous and has prevented them from having access to this growing tax base. Further, constitutional tax separation has not prevented *de facto* concurrency. Perhaps, giving concurrent consumption tax powers along with instituting a mechanism to ensure coordinated levies by the centre and the states may, in fact, give states access to more tax bases and reduce vertical fiscal imbalance. It should be noted, however, that access to larger tax bases by more advanced states can accentuate horizontal imbalance; but the solution to this lies in better targeting of transfers to offset the fiscal disabilities of poorer states.

Concurrent tax and expenditure policies, unless coordinated, can be a source of fiscal disharmony. Vertical disharmony can render the pursuit of macroeconomic objectives difficult. Horizontal fiscal disharmony can result in allocative distortions due to interjurisdictional tax exportation. Introducing a regular consultation mechanism for coordinating intergovernmental and interjurisdictional policies is extremely important for the success of competitive federalism. In a federation, the process of coordination is as important as the coordination itself—introduction of such a mechanism can help to foster mutual trust and confidence.

The preceding discussion has brought out the persistence of the unequal standard of public services and the failure of the federal transfer mechanism to offset the fiscal disabilities of the poorer states. In a more liberalised environment, interstate inequality in the standards of public services is likely to increase. This, in turn, may accentuate per capita income inequalities among the states. Giving concurrent tax powers to the states may also distribute revenue capacities unequally because the states with larger tax bases will exploit the tax powers better than those with smaller tax bases. In such a situation, ensuring competitive equality among the states will require a more purposeful federal transfer policy. The general purpose transfers should be clearly targeted to offset fiscal distribution. Similarly, the centrally sponsored schemes must be designed to ensure minimum outlay on broadly specified services throughout the federation. Consolidation of the large number of centrally sponsored schemes and the introduction of broad conditionalities with sufficient flexibility to enable the states to ensure effective implementation are some of the reforms needed in the area.

Reforms are needed to the institutional mechanism as well. First, overlapping functions of different institutions should be avoided. The Finance Commission can assess and recommend transfers to cover all current needs of the states, and the Planning Commission can assess physical infrastructure requirements and make the required loans. The working of the Finance Commission and the methodology adopted by it should be changed so that disincentives to fiscal management are avoided and transfers are designed to offset the fiscal disabilities of the disadvantaged states. This will require both institutions to function more professionally. Appointing professionals to the Finance Commission, strengthening its research capacity, establishing a permanent secretariat undertaking continuous research, enabling greater interaction between governmental units and imparting a greater degree of transparency to the functioning of the Commission are some of the reforms urgently called for.

Endnotes

1 As the national government is called by different names like union, federal or central government in different countries, these terms are used interchangeably.

2 The grants (Gi)receivable by the ith state is given by:

$$Gi = Ei-(Roi+Rai+Rsi)$$

$$Gi \quad 0.$$

Ei denotes projected non-plan current expenditures of the ith state

Roi denotes projected own revenues of the ith state. Rai denotes projected share of assigned revenues of the ith state, and Rsi denotes shared taxes of the ith state.

3 The formula (and its modifications) from time to time are evolved on the basis of consensus in the National Development Council (NDC). The NDC is constituted by the cabinet ministers at the centre, chief ministers of the states and the members of the Planning Commission. It is chaired by the Prime Minister.

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