

## Notes

1. For a general discussion on federalism and economic growth, see Hicks, J.R. (1969) and also, Scott, A.D. (1964).
2. See Livingstone (1952), quoted in Oates (1977).
3. The general opinion among the economists is that there should be a nationwide redistributive policy and that should be formulated and implemented by the Central government (Oates, 1972, Musgrave and Musgrave, 1976, King, 1984). However, Pauly (1973) does not share this view. Taking redistribution as a local public good, he argues that programmes for assistance to the poor have often relied heavily on decentralised finance and administration. For a detailed analysis and criticism of this point of view, see Ladd and Dolittle (1982), and Brown and Oates (1987).
4. In an ideal case, in the absence of spillovers, when geographical distribution of population is fixed, optimal structure of government is obtained when there exists a level of government for each sub-set of population over which the public good is defined. This perfect mapping (Breton) or perfect correspondence (Oates, 1977) would provide Pareto-efficient levels of output. See also, Olson (1969).
5. On the attempt to measure welfare gains, see Bradford and Oates (1974). An estimate of price elasticity of demand for local public services is made by Bergstrom and Goodman (1973).
6. Besides welfare gains arising from catering to different preferences, four other advantages of decentralisation are adduced in the literature (King, 1984). First, decentralised provision enables more responsive signaling system. Second, it secures better

democratic control and accountability; Third, it can lead to better coordination among different layers and if one layer ignores the consumer's wishes other layers can either directly or by applying pressure on the first layer, cater to the wishes of the consumers. Finally, greater awareness of costs at sub-central levels may result in cost efficient methods of providing these services. Decentralisation also can lead to more experimentation and innovation. Brennan and Buchanan (1977) have argued for decentralisation on the reasoning that the increased competition at sub-central levels would tend to control the 'leviathan' governments. On the other hand, the main disadvantages from decentralisation pointed out are, inter-jurisdictional tax exportation (Mc Lure, 1967), non-optimal provision of public output arising from attempts to attract capital through tax competition or due to the existence of spillovers. Olson (1983) has recently put forth another disadvantage, namely, that since decentralisation probably makes it easier to articulate special interests, it could slow down economic growth.

7. The large volume of literature that followed Tiebout's seminal paper has analysed the implications on efficiency in resource allocation by relaxing some of the heroic assumptions of the mobility model. The important among them are, Buchanan and Goetz (1972), and Flatters, Henderson and Mieszkowski (1974).
8. For a discussion on the problems of measuring fiscal imbalances and fiscal centralisation, see Bird (1986 - 1).
9. For a detailed survey of these arguments see Scott (1964) and Wiseman (1987).
10. For a comparative analysis of the developed federation of Australia, Austria, Canada, Germany, Switzerland and the United States of America, see, Bird (1986 - 2).

11. Empirical support to the hypothesis that fiscal differentials affect property values. See, Oates (1969).
12. Some of the State governments, even within the existing Constitutional framework have tried to strengthen the local body institutions. Mention must be made of decentralisation attempts by the States of Karnataka and West Bengal, in this context.
13. For some discussion on the issue, see, Venkataraman (1965) and Datta (1984).
14. Thimmaiah argues that the Constitutional division of functions makes the States in India subordinate to the Centre, whereas, in Australia they ( States ) are coordinate. For a detailed analysis of Constitutional division of functions in India and its comparison with Australia, see, Thimmaiah, 1976.
15. The overdraft regulation scheme introduced in January, 1985 totally took away the States' powers to have overdraft with the Reserve Bank of India beyond seven continuous working days, see, note 28 below.
16. A number of States have complaints about erosion of their authority in various spheres. In fact, the appointment of Sarkaria Commission (1988) which analyses these issues in detail is in response to States' demand.
17. Olson states, "the efficiency of an economy may be increased either by making narrow special interest groups weaker or by making government stronger in relation to them; that is, by increasing the degree of government centralisation".
18. The empirical study by Ahmed and Stern (1982) shows that the effective sales tax rates across various consumer expenditure groups of households is more or less proportional.

19. Some analysis of this vertical tax overlapping is seen in the report of the Indirect Taxation Enquiry Committee (India, 1977). See also, Chelliah (1980) and Ahmed and Stern (1982).
20. A study by Shyam Nath (1987) estimates cumulative burden of Central and State taxes on the households belonging to various consumer expenditure groups in Rajasthan.
21. Even in the United States of America where tax on inter-State trade does not exist, Mc Lure (1967) estimated that almost 20-25 per cent of States' taxes are exported to the residents of other States in the average.
22. Chelliah, et.al (1981, p. 9) argues, "A large degree of centralisation of revenue resources is needed not only for economic and administrative consideration but also to fulfil the objective of regional equalisation".
23. However, in actual practice, at least since the mid-seventies, State tax revenues have exhibited higher buoyancy than that of the Centre; although firm estimates of elasticity of taxes at the two levels are not available due to inadequacies in the data on additional resource mobilisation, the available estimates of tax elasticities of individual taxes also point towards a similar trend. Therefore, the cause of increasing horizontal imbalances identified in the earlier years as the relative inelasticity of State taxes is not factually correct. On the estimates of elasticity of Central and State taxes, see Rao, V.G. (1979) and more recently, Sarma and Rao (1988).
24. There is some controversy on the reasons for fiscal imbalances at the Centre. While the Report of the Ninth Finance Commission (India, 1989) cites increased transfers to the States subsequent to the recommendation of the Seventh Finance Commission as the reason, low rate of growth of Central revenues and expansion of

Central activities in several concurrent and State areas are cited as main reasons by others (C.H.H. Rao, 1988).

25. Many of the issues are discussed in detail in the official literature, particularly in the Reports of the Finance Commissions as well as the Report of the Commission of Centre- State Relations (Chairman: R.S. Sarkaria, 1987), and therefore, the merits of these arguments have not been gone into here. On measuring the degree of centralisation in the Indian context, see, Pillai, V and Gopalakrishnan (1979), Chelliah (1983) and Rao (1987).
26. Consequent to the agreement between the States and the Centre in 1957, the former surrendered the right to levy tax on the three groups of commodities, namely, sugar, textiles and tobacco in lieu of which, the latter agreed to levy additional excise duty and distribute it among the States. This matter has been referred to every Commission subsequent to the second..
27. Abolished in 1982.
28. This was referred to the Seventh Finance Commission. The overdraft regulation scheme introduced in January, 1985 disallowed the practice altogether. According to the scheme, the RBI would not be obliged to honour the cheques of the States indulging in overdrafts beyond seven continuous working days. A medium term loan was given by the Centre to the States amounting to 90 per cent of the outstanding overdrafts as on January 28, 1985. The loans thus given amounted to Rs 1628 crore.
29. This matter was referred to the Fifth and the Eighth Commissions.
30. A notable exception to this is the rejection of the majority recommendation of the third Finance Commission on the inclusion of 75 per cent of Plan revenue expenditures in the assessment. Another exception is the rejection of a unanimous recommendation of the

Seventh Finance Commission of treating small saving loans as loans in perpetuity.

31. Minute of dissent by P.V. Rajamannar, Chairman, the Fourth Finance Commission, (India, 1965).
32. See, the Report of the Fourth Finance Commission (India, 1965, p. 12).
33. The term states, "In making its recommendations, the Commission shall ..... adopt a normative approach .....". The language of the terms of reference for the earlier Commission gave greater leeway as it had "inter alia after, "shall".
34. This is mainly because according to the terms of reference, while in the case of the Centre, the committed expenditures were to be taken account of, no such requirement was laid down in the case of the States; the terms also required the Commission to examine the feasibility of establishing a national insurance fund to which only the State governments were to contribute; and the Commission was asked to examine the feasibility of the merger of additional duties of excise in lieu of sales tax with basic duties, the arrangement of which is in the nature of a tax rental arrangement.
35. In fact, the Fifth Finance Commission itself stated, ".....taken together, as a whole they can and must observe the overall purpose of providing necessary assistance to the States on an equitable bases". (India, 1969. pp 72-73).
36. The first Commission itself stated, "in our view, there is no question of considering distribution of the tax on the basis of returning to a particular State, the whole or part of the collection in its area .....". There is no question of any compensation or reimbursement in India where the former provinces,..... at any rate, never possessed any right to tax incomes .... the integration did not

countenance the theory of compensation either in respect of federal assets or federal revenue passing to the Centre" (India, 1952 p. 18).

37. The relative shares of the States according to per capita income in its 'inverse' form is,

$$\frac{P_i/Y_i}{\sum_i (P_i/Y_i)} \quad (1)$$

and in the distance form is,

$$\frac{(Y_h - Y_i)P_i}{\sum (Y_h - Y_i)P_i} \quad (2)$$

where  $Y_i$  is the per capita State domestic product (SDP) of the  $i$ th State.  $Y_h$  - Per capita SDP of the highest income State, and  $P_i$ , its population. The share of the highest per capita SDP State in the formula (2) is computed by substituting the  $(Y_h - Y_i)$  of the next highest per capita SDP State.

38. On this, see also, Bagchi and Roy Choudhury (1989) Guhan, S (1989) and Arun (1989).
39. The effort is defined as the ratio of actual tax collection to taxable capacity.
40. See Reddy (1977), Ommen (1987).
41. Rao (1979) estimates tax effort by applying such a methodology for four States. More recently, this method has been employed by the Ninth Finance Commission to estimate taxable capacity of States for 1989-90. See, First Report of the Ninth Finance Commission, 1988. For a critique of this, see, Krishnaji (1988) and Coondoo and Mukherjee (1989). A reply to the issues raised in Krishnaji is given in Rao and Sarma (1989). For a detailed

discussion on alternative types of panel data models to estimate tax effort, see Sarma (1990).

42. One of the widely mentioned sources at the State level is the undertaxation of agricultural incomes. The Raj Committee after considering the difficulties of taxing agricultural incomes recommended a progressive tax on agricultural holdings (India, 1972). For an estimation of revenue potential from a modified agricultural holdings tax, see, Bagchi (1978).
43. For some recent attempts to measure, expenditure needs of the States, see, Rao and Aggarwal (1990), India (1989).
44. Hanson (1968 p.321) therefore states, "...the principles on which Central assistance to State plans is allocated have never been made clear. At present, no one knows, and even if the Commission has all this worked out, no one is likely to be told, at least just yet".
45. See footnote 37 for the computation of 'inverse' and 'distance' formulae.
46. According to the Ninth Finance Commission report, borrowings from the Centre constituted 63 per cent of States' outstanding loan at the end of March, 1989.
47. See also, George (1988).