

CENTER-STATE REVENUE TRANSFERS IN INDIA:
FINANCE COMMISSION POLICY (1951-1984)

by

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B. A., Economics
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Submitted to the
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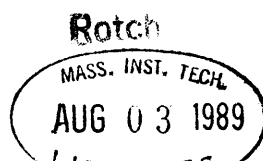
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ABSTRACT

A distinguishing feature of the Indian federal fiscal system is the "vertical imbalance" between the aggregate revenues and expenditures of State governments. As a result of the imbalance, State governments have to rely on the Central government's financial assistance for a large part of their budgetary expenditures. Thus, Center-State revenue transfers assume major significance in Indian Center-State relations.

There are three Central institutions which make revenue transfers to the States. This paper analyzes the policies of one of these institutions, the Finance Commission, for the 1951-1984 period. It focuses on the magnitudes and nature of its transfers to the States.

Finance Commission transfers are found to have increased in magnitude relative to the other two types of Central transfers, and as proportions of State government revenues. They have largely been unconditional in nature, and their inter-state distribution has been based on transparent criteria which tend to favor poorer States. On the whole, the Finance Commission's contributions to reducing the vertical fiscal imbalance have been positive, and it is suggested that the Central government should expand its role in the Center-State revenue transfer-scheme.

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INTRODUCTION

India became a Federal Democratic Republic in 1950. The Indian Constitution is the keystone of Indian federalism--it lays down the framework for the interaction between the Central and State governments. It seeks to balance the powers and duties of the two governmental levels and establish cooperation between them. However, Center-State relations in India are far from perfect. In the last 30 or 40 years, the frictions between the Center and the States seem to have increased, particularly with the increase in the number of States governed by non-Congress (the ruling party at the Center) parties.¹ Center-State relations have become the subject of tremendous concern and debate among politicians, administrators, academics, and the voting public in India. Numerous States have submitted memoranda on the subject to the Center. In fact, the Central government appointed a Commission to study Center-State relations which produced no less than a 4,900 page report in 1988.

It is the aim of this paper to study an important financial aspect of Center-State relations, specifically, the revenues being transferred from Central coffers for the

¹ See: Anirudh Prasad. (1985. Centre-State Relations in India. New Delhi: Deep & Deep Publications.) for a description of the major areas of contention among the Center and the States.

budgetary needs of the States. The States depend on these revenue transfers to a significant extent to meet their current and capital expenditures. The paper analyzes the contributions of the Finance Commission, an important Central body which makes policy for specific types of Central transfers.

The central argument of the paper is that the Finance Commission has played a worthwhile role in providing finances for State governments, both in terms of the magnitudes and the nature of its transfers. The magnitudes of Finance Commission transfers are large relative to other types of Central financial transfers. In general, its transfers are more acceptable to State governments because they are unconditional and give the States autonomy in the use of funds. Moreover, the Commission has used transparent criteria to redistribute Central monies in an equitable manner and promote the goal of regional equalization.

The role of the Finance Commission will be studied for the 1951-84 period. First, the Indian federal fiscal system will be described briefly and the rationale for Central transfers will be provided. Second, background information on State budgeting will be given because Central transfers differ in their uses and budgetary classifications. Third, Finance Commission transfers will be compared and contrasted with

other types of Central transfers. Finally, the evolution of Commission policy will be studied from two angles: the overall magnitudes of the funds it devolved to the States, and the nature of these devolutions.

The study draws from a fairly extensive body of literature on Indian fiscal federalism and the Finance Commission. The Finance Commission's five-yearly reports were found to contain much useful information on Center-State transfers. Conversations with Indian professionals familiar with the federal financial system also helped clarify the main issues in Center-State revenue sharing.

CHAPTER 1

INDIAN FISCAL FEDERALISM

This chapter provides a brief summary of the federal financial system in India. It shows how the Constitutional division of resources and expenditures between the Center and States results in a "fiscal imbalance" which is remedied by Central financial transfers to the States.

The Federal Structure

The Indian Constitution is one of the more detailed and lengthy Constitutions in the world. Instead of providing separate constitutions for the Union and the States, its makers established an elaborate division of powers and duties between the Central and State governments within a single Constitution. They intended to guarantee each level of government a sphere of functional responsibility and the resources to fulfil its obligations. The foundations of Indian federalism are thus found in three Constitutional lists:

(A) The Union List. This is a list of subjects over which the Central government or the Center has exclusive control, i.e., areas of national concern--defense, external affairs, external trade and aid, inter-state trade, industries, railways, currency and banking, post and telegraphs, heavy

industry, and infrastructure. Thus, the Central legislature (Parliament) and executive can frame laws, make policies, or create institutions to promote development in these areas without interference from the State governments. The States only have recourse to the Indian judiciary if they need to challenge Central decisions on subjects in this list.

The Union List also gives the Center the power to levy and collect many broad-based and elastic taxes such as those with an inter-state or industrial base. According to the Constitutional tax-scheme, there is no overlapping between these Central taxes and the State taxes (in theory, at least). Central taxes are as follows: personal (non-agricultural) income tax, corporation income tax, customs and import duties, excise duties (excluding those on narcotics and agricultural products), wealth (non-agricultural) tax, estate (non-agricultural) duties, and inter-state trade taxes.

In addition to taxes, the Center derives non-tax income of various types: administrative receipts, interest and principal recovered on loans made to States and others, borrowings from the public, external assistance, and profits from public enterprises (such as the Central Railways).

(B) The State List. This list enumerates subjects under the exclusive control of State governments including State revenue sources and expenditure responsibilities. According to this list, each State has the legislative and executive power to regulate or promote the development of agriculture and irrigation, power, education, health, family planning, and rural areas; the improvement of slums; and the preservation of forests. States also are supposed to establish local authorities (such as municipal governments) and devolve power to them.¹ They must discharge routine responsibilities in areas such as internal law and order (police services, etc.) and public justice. Theoretically, the Center cannot interfere with State policies in all of the above fields and individual States have the power to adjust their functions to the preferences of their inhabitants.

The States are given their own taxing powers in the State List. First, they can tax the agricultural sector through income taxes, property taxes, land revenues, and estate duties. In addition, they also levy the following taxes: sales tax, registration tax, stamp duties, excise duties on narcotics and alcoholic products, professions taxes, and motor

¹ Although local governments are creatures of State governments, they have their own budgets, may levy taxes, and make their own rules and regulations. See: Ministry of Information and Broadcasting, Government of India. 1984. India: A Reference Annual. New Delhi.

vehicle taxes. Non-tax revenues accrue to the States in the following forms: Central grants, loans from various sources such as the Central government, Central bank, public sector financial institutions, public money and capital markets,² and fees and user charges.

(C) The Concurrent List. As its name suggests, this list specifies subjects under the shared control of the Center and States. One example is economic and social planning, which has to be conducted and implemented by both levels of government in cooperation with each other. This is because planning has to take into account Centrally-articulated national priorities as well as differences in inter-state preferences for development strategies. Other joint governmental responsibilities are in areas where government regulation is required such as criminal law, marriage and divorce, trade unions, and drug production. There is only one type of concurrent taxation--stamp duties on specific items. In case of conflict, Central decisions are supposed to override those of the States.

The Constitution specifies that the Center has "residuary" power over subjects not mentioned in these three lists. Also, since the federation includes a few Union

² All State borrowings are controlled and regulated by the Central government.

territories (such as New Delhi) in addition to the States, the Center has all the powers and duties of regulation of the Union territories mentioned in the three lists.

The Vertical Fiscal Imbalance

The Constitutional division of expenditures and revenues between the Center and States results in a "vertical fiscal imbalance" which is one of the distinguishing features of the Indian federal fiscal system. A member of the current Finance Commission (1989), Raja Chelliah, explains the situation as follows:

If these major taxes³ are assigned to, or taken over by, the Central government, the tax base left to the States will become very narrow. At the same time, the responsibilities assigned to the State governments are considerable and with the rapid pace of urbanization and the growing demand for public services of the kind provided locally, the expenditures of the State governments have been growing rapidly. These conflicting tendencies of the revenue and expenditure sides have led to the familiar problem of vertical fiscal imbalance, also called the correspondence problem. This calls for a transfer of substantial resources from the Center to the

³ The major taxes are the excise tax, customs duty, corporation income tax, and personal income tax.

States....on a continuing basis.⁴

A more formal definition of the vertical fiscal imbalance describes it as a mismatch between the aggregate current expenditure needs of the States and their aggregate tax-raising plus charge-raising (i.e., revenue raising) capacity.⁵

The Constitution provides for Centralized collections of major taxes because they reap economies of scale in collection. Also, Centralized collections allow the Center to redistribute collections in favor of States with narrower tax bases in order to achieve balanced economic and social development (see: Chapter 3, page 1). This assignment of major taxes to the Center decreases the tax base available to State governments. In addition, the high rates of Central taxes effectively limit the ability of States to raise the rates of their own taxes. For instance, the rates of Central income tax are higher in India than in most countries, and the States do not have much scope for increasing their own profession tax rates.

⁴ Raja Chelliah. 1981. Trends and Issues in Indian Federal Finance. New Delhi: Allied Publishers Private Limited, p. 7.

⁵ David King. 1984. Fiscal Tiers: The Economics of Multi-Level Government. London: George Allen & Unwin.

The data in Table 1.1 show the magnitude of the vertical fiscal imbalance from the share of the States' taxes in total Indian tax collection, the percentage of total Indian current public expenditure made by the States, and the percentage of the States' revenues provided by their own revenues.

TABLE 1.1
THE MAGNITUDE OF THE VERTICAL FISCAL IMBALANCE
(percent)

YEAR	STATES' SHARE IN TAX COLLECTIONS	STATES' SHARE IN CURRENT EXPENDITURES	STATES' OWN REVENUE TO TOTAL STATE REVENUE
1960-61	33.7	57.1	69.9
1970-71	32.5	55.0	62.7
1975-76	31.9	51.2	64.7
1980-81	33.6	56.4	59.1

Sources: (i) Raja Chelliah. Trends and Issues in Indian Federal Finance, (ii) Report of the Ninth Finance Commission (1988), (iii) Bajaj, et al. Finance Commission and Backward States. (iv) Tata Services Ltd. Statistical Outline of India, (various issues).

The table shows that the share of the States in total tax collections is generally less than 35%, whereas its share in current account expenditures is over 50%. In fact, the States' own revenues account for only about 60% of their total revenues.

The Constitution's authors were aware of the gap created between the States' own revenues and expenditures and they made provisions to correct this imbalance. They designed a system for resource transfers from the financially-strong Center to the fiscally-weak States, and created an independent institution, the Finance Commission, to share certain Central taxes and give grants for meeting the budgetary needs of the States. In addition, they outlined four principles for the transfer of resources: (i) compensation, (ii) derivation, (iii) need, and (iv) national welfare. The compensation criterion was used in the early 1950s to financially compensate States for any hardships experienced as a result of joining the federation. The derivation principle relates the distribution of shared taxes to the contribution of individual States to the divisible tax pool. The need factor is used to determine the special budgetary needs of States, particularly the poorer ones. Finally, the national welfare principle requires that transfers promote the "efficient allocation of resources" and establish uniform national minimum standards for public services.⁶

⁶ As cited in: Anirudh Prasad. 1985. Centre-State Relations in India. New Delhi: Deep & Deep Publications.

CHAPTER 2

THE NATURE OF A STATE BUDGET IN INDIA

Center-State transfers in India are classified in different ways according to the types of State expenditures towards which they are applied. Therefore, a basic understanding of the State budget framework is essential for analyzing these financial flows. State budgets are divided into current and capital accounts. The classification of expenditures in each account is fairly complicated and merits discussion. This chapter describes the budgetary classifications and provides the consolidated budget for all States for four recent years.

Budgetary Classifications

A State budget has two parts: a current account and a capital account. As the current account is formally named the Revenue account in India, this term will be used throughout the paper.

Receipts on the Revenue account are those that do not incur any repayment liability such as the State's own revenues, Central grants financing the State Five-Year Plan, and Central grants financing Non-Plan expenditures. Receipts on the Capital account include domestic debt, loans from the Center, and the State's recovery of its own loans and advances

to various entities. In this way, State accounting separates receipts into government "revenues" (on Revenue account) and loans (on Capital account). The idea is that, by appropriately matching expenditures to the receipts financing them, fiscal imbalances and irresponsibility are minimized.

Expenditures are formally entered under either Revenue or Capital account depending on whether they need to be financed by revenue or capital receipts. This distinction is somewhat artificial, since there is fungibility between State income from the various sources.¹ Expenditures have to be voted upon and approved by the State legislature before they are formally entered into the budget.

An "object" classification² of expenditures on Revenue account reveals that they usually cover routine administrative matters such as government salaries and administrative costs. On the other hand, expenditures on Capital account usually create assets. They are made for:

- (i) the State's own investment outlay, and
- (ii) State debt repayment and loans to other entities (local governments, public sector companies, etc.).

¹ Christine Wallich. 1982. State Finances in India: Studies in State Finances. World Bank Staff Working Paper 523. Washington, D.C.: The World Bank, p. 9.

² For types of budgetary classifications: Richard Goode. 1984. Government Finance in Developing Countries. Studies of Government Finance. Washington, D.C.: The Brookings Instn.

A "functional" classification of expenditures reveals that both Revenue and Capital accounts have two categories: Developmental and Non-Developmental expenditures. The former are for developmental purposes in areas such as health, education, irrigation, etc. The latter include spending on civil administration, tax collection, jails, debt service, etc. The distinction between the two categories is sometimes arbitrary. For example, famine relief comes under the Non-Development category, when it could also be classified as a Development category.³ Figure 2.1 given below provides examples of Developmental and Non-Developmental expenditures for each account:

Figure 2.1: **EXPENDITURE EXAMPLES**

	<u>Revenue Account</u>	<u>Capital Account</u>
<u>Developmental:</u>	Education: teacher salaries	Education: school buildings
<u>Non-Developmental:</u>	Civil Service: clerical salaries	Civil Service: municipal buildings

Finally, States have Five-Year Plan expenditures. These are always Developmental, but can be found in either the Revenue account or the Capital account. This is because they are of both "capital" and "current" types and can enter different parts of the State budget. For example, a Plan

³ Christine Wallich. 1982. State Finances in India: Revenue Sharing. World Bank Staff Working Paper 523. Washington, D.C.: The World Bank.

irrigation project may be subdivided into dam construction expenditures on Capital account, and engineer/administrative salaries on Revenue account. Any Revenue account Plan expenditure gets converted into a Revenue account Non-Plan expenditure (or a "committed" expenditure) when a Plan project is completed. The State government (without Central assistance) bears the financing burden for such "committed" expenditure.

Figure 2.2 summarizes the classification of receipts on Revenue and Capital accounts.

Figure 2.2
CLASSIFICATION OF STATE RECEIPTS

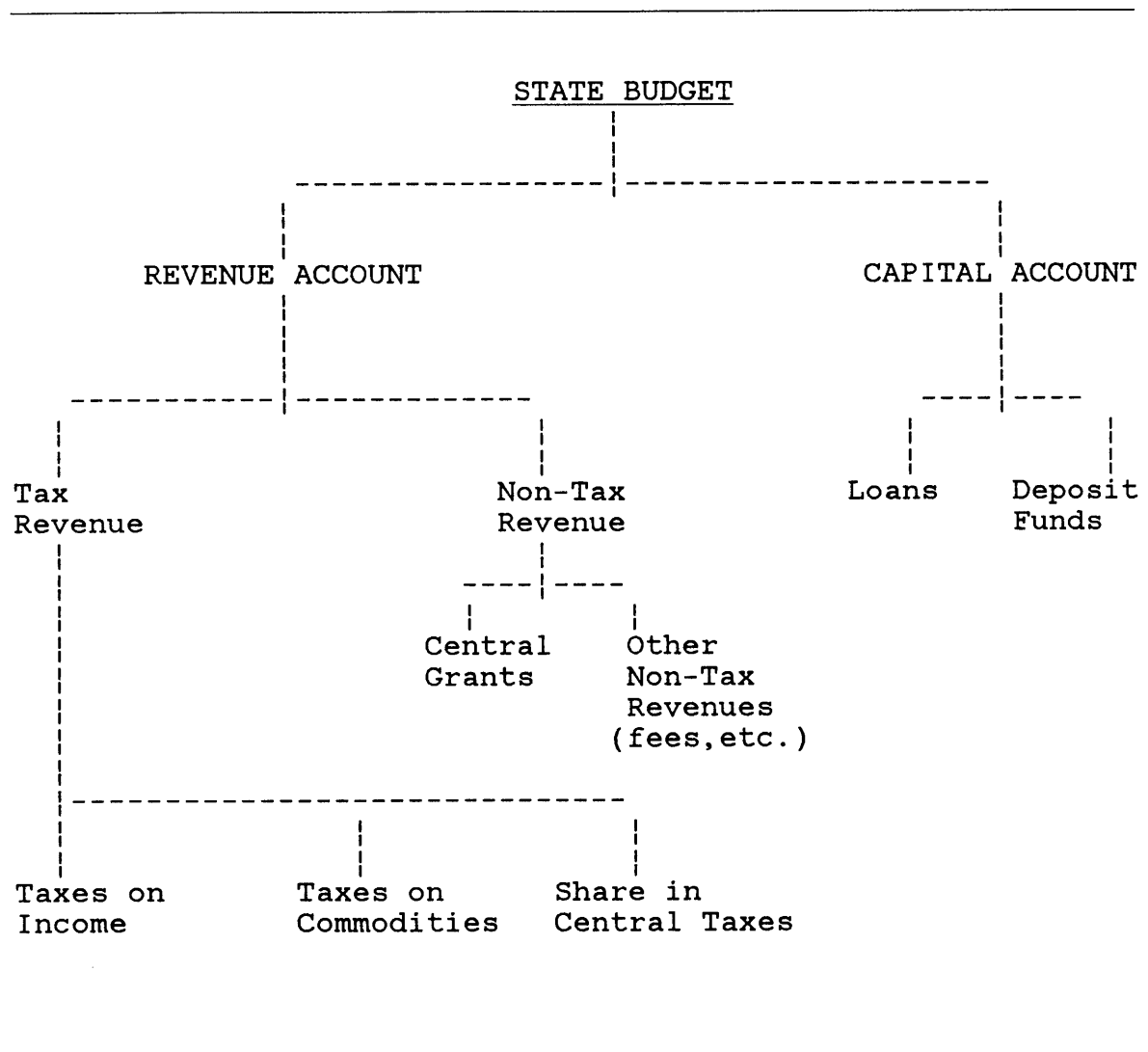
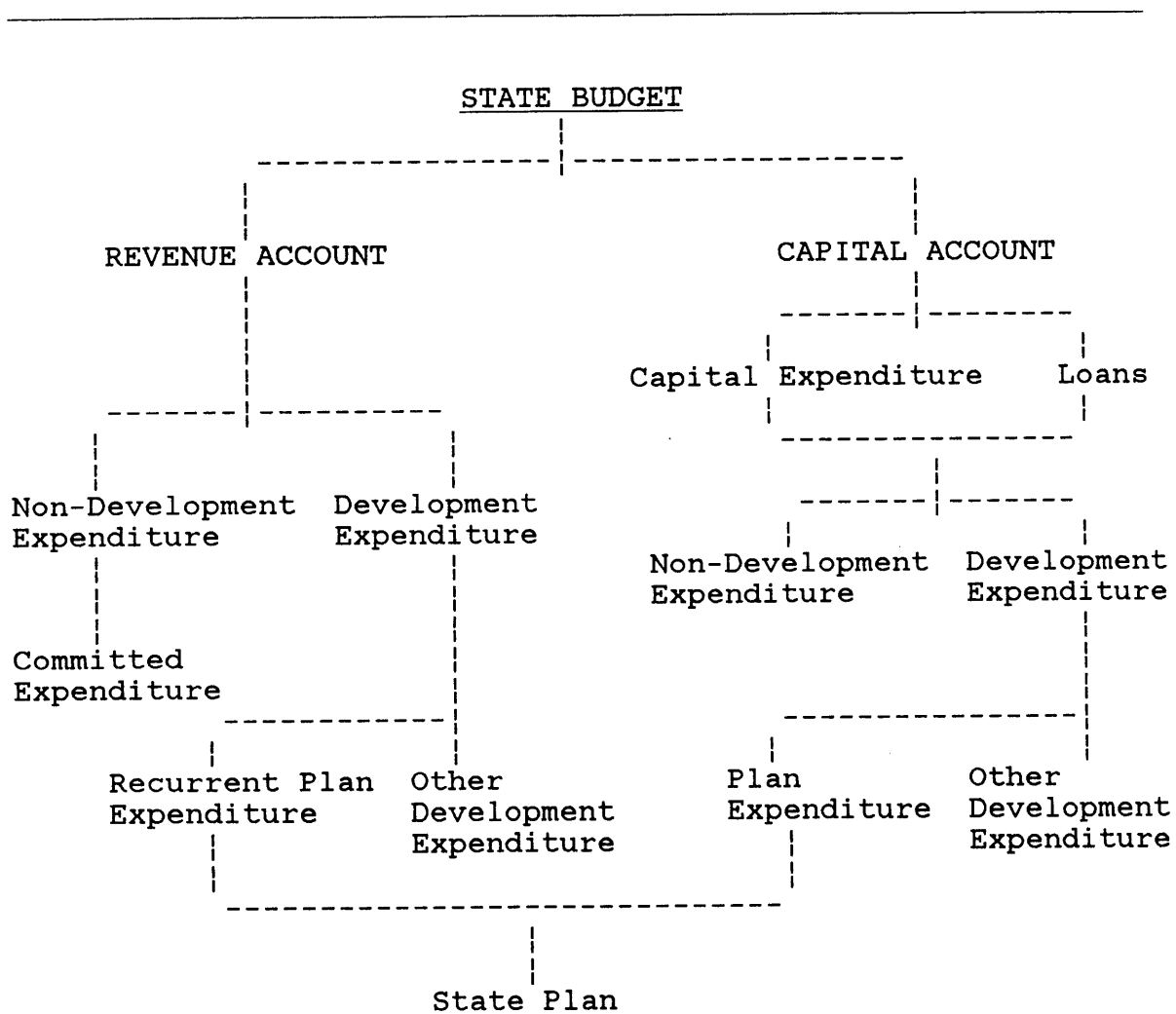


Figure 2.3 summarizes the expenditure classifications (functional, and Plan vs. Non-Plan) mentioned earlier.

Figure 2.3

CLASSIFICATION OF STATE EXPENDITURES



Source: Christine Wallich. State Finances in India: Revenue Sharing.

Consolidated Budgetary Position of the States

Table 2.1 gives the consolidated Revenue account for all Indian states for the four latest years.

TABLE 2.1

CONSOLIDATED BUDGETARY POSITION OF THE STATES (Revenue Budget)

	1987-88	1986-87	1985-86	1984-85
	(Budget)	(Revised)		
	(Rupees, in tens of millions)			
Revenue	42,777	38,536	33,424	27,425
Tax revenue.....	28,747	25,261	21,811	18,114
Taxes on income, property... etc	1,866	1,649	1,484	1,197
Of which:				
Agricultural income tax..	91	79	127	84
Profession Tax.....	180	162	145	119
Stamps/registration fees.	1,104	980	853	703
Land revenue.....	482	420	353	282
Taxes on commodities, etc...	17,600	15,103	13,067	11,063
Of which:				
Sales Tax.....	11,557	9,693	8,429	7,060
State excise duties.....	2,563	2,438	2,052	1,839
Taxes on vehicles.....	1,280	998	826	700
Share in Central taxes.....	9,281	8,509	7,260	5,855
Non-tax revenue.....	14,030	13,274	11,613	9,311
Of which:				
Grants from Center.....	7,507	7,359	6,323	4,762
Expenditure	41,884	38,250	32,770	28,349
Developmental.....	27,960	26,750	23,076	19,983
Social services.....	16,103	15,417	13,275	11,372
Economic services.....	11,857	11,333	9,801	8,610
Non-developmental.....	13,502	11,104	9,291	8,009
Others.....	422	396	402	357
Revenue account (net)	+893	+286	+654	-924

Source: Tata Services Limited, Department of Economics and Statistics. Statistical Outline of India: 1988-89.

The receipts section of the Revenue account in Table 2.1 shows that tax revenues are generally twice the size of non-tax revenues. Among tax receipts, the State sales tax is the largest revenue generator, followed by Centrally-transferred taxes (shared taxes). Among non-tax receipts, Central grants are over half of the total. On the expenditure side, developmental expenditures are more than half of the total expenditures; in particular, social service expenditures are high relative to total developmental expenditures.

Table 2.2 gives the consolidated Capital account for all Indian states for the same four years.

TABLE 2.2
CONSOLIDATED BUDGETARY POSITION OF THE STATES
(Capital Budget and Overall Position)

	1987-88 (Budget)	1986-87 (Revised)	1985-86	1984-85
	(Rupees, in tens of millions)			
Receipts	13,533	12,910	13,133	10,882
Of which:				
Market loans (gross).....	1,625	1,443	1,428	1,164
Loans from Center.....	8,225	7,813	8,368	5,910
Recovery of loans and advances.....	886	1,142	809	1,030
Small savings, provident funds, etc. (net).....	1,213	1,132	971	933
Reserve funds (net).....	581	455	501	348
Deposits & advances(net).	491	685	700	616
Disbursements	14,946	14,141	12,099	11,397
Developmental.....	7,023	6,294	5,355	4,788
Social services.....	1,089	1,022	744	642
Economic services.....	5,934	5,272	4,611	4,146
Non-developmental.....	246	241	98	124
Discharge of internal debt....	409	395	503	597
Loan repayments to Center.....	2,928	2,898	2,611	2,330
Loans & advances.....	4,362	4,287	3,530	3,395
Others.....	-21	26	2	164
Capital account (net)	-1,413	-1,231	+1,034	-514
Overall balance	-520	-945	+1,688	-1,438

Source: Tata Services Limited, Department of Economics and Statistics. Statistical Outline of India: 1988-89.

The receipts section of the Capital account in Table 2.2 shows that Central loans to the States (for Plan projects, etc.) are the largest source of funds. These loans are normally given at "preferential" or below-market rates of interest.* Market loans (State bond issues), and small savings loans (deposits from post-office savings schemes, etc.) are also important. On the disbursements side, amounts for developmental schemes are between half and one third of total disbursements. The next largest capital account disbursements are loans and advances which are made by the States to local bodies, public sector entities, etc. Finally, loan repayments to the Center for capital project loans also constitute significant levels of expenditure.

* Government of India. 1978. Report of the Seventh Finance Commission.

CHAPTER 3

CENTER-STATE REVENUE TRANSFERS

Central transfers to the States constitute a large part of the use of Central revenues. This chapter discusses the three main types of transfers that have been used during the 1951-84 period and their relative importance. It shows that the level of transfers effected by the Finance Commission have a significant impact on State finances.

Types of Revenue Transfers

The Central transfer system is supposed to serve a dual purpose:

(i) to reduce the vertical fiscal imbalance which arises because the Indian Constitution created a centralized collection system for major taxes (excise duties, customs duties, and income taxes). It did so for reasons of economic efficiency and social equity. For instance, Centralized collection is administratively effective and it finances Central implementation of national policies and economic plans. At the same time, the Constitution framers recognized the vertical imbalance problem and provided for its correction through Center-State transfers.

(ii) to achieve balanced economic development through the redistribution of resources in favor of backward and poor States.

The four Constitutional principles of compensation, derivation, need, and national welfare (Chapter 1) underlie the formulation of these two objectives. Central revenue sharing is commonly subdivided into three categories:

(i) transfers recommended by the Finance Commission, a statutory body appointed by the President of India,

(ii) transfers made by the Planning Commission, an extra-constitutional organization appointed by the Central government, and

(iii) Discretionary Transfers made by Central ministries and the Reserve Bank of India (the country's central bank).

Finance Commission Transfers

The Constitution of India states that a Finance Commission should be created once every five years by the President of India (the Constitutional Head of State) to review State finances. The President provides the Commission with the "terms of reference" for its work. The Commission makes recommendations on the amounts and inter-state distribution of two forms of Central transfers: devolved (or shared) taxes, which are five Central taxes that are shared with the States, and grants which are given for special budgetary needs of the States. Finance Commission recommendations become Central government policy on being approved by the President and Parliament.

The Finance Commission's role¹ has been interpreted by the President and the Central government in various ways. During the period of study (1951-84), the Center's views on the Commission's role changed quite drastically. It began by suggesting that the Commission transfer revenues which could be applied towards any expenditure on State current accounts (for both Plan and Non-Plan expenditures). Within a few years, it began confining the Finance Commission transfers to the Non-Plan portion of the Revenue account so that the Planning Commission became the sole coordinator of transfers for Plan purposes.

Finance Commission transfers were (and still are) extremely important in the scheme of Center-State revenue transfers, particularly since the Commission has a certain amount of discretion in increasing the volume of such transfers. Its financial awards usually constitute at least 30% of the total transfers during a Five-Year Plan period. In fact, Finance Commission transfers increased to over 40% of total transfers from 1974 onwards.

The amounts and inter-state distribution of Finance Commission transfers have important implications for State Plan finances. Its transfers result in Revenue budget surpluses for some States. As the Planning Commission

¹ See Appendix I for Constitutional provisions affecting the Commission's work.

looks at the size of the surplus in determining the allowable size of a State Plan size, a State with a large surplus, therefore, can design a larger Plan. Accordingly, an interesting political game is played by State governments. On the one hand, they try to impress the Finance Commission that they are "poor" and need more resources. On the other hand, they try to convince the Planning Commission that they have "adequate" funds for additional Plan projects.

The Finance Commission influences State finances in another important way. As mentioned above, it makes two types of transfers: devolved taxes and grants. Devolved taxes are unconditional transfers which can be used at the discretion of recipient States. Grants are either unconditional or conditional (conditional transfers have to be used for some activity specified by the Central government). If the Commission increases the amounts of devolved taxes and unconditional grants relative to conditional grants, States will tend to have greater control over the use of awarded funds.

Planning Commission Transfers

Planning is on the Concurrent List of the Constitution. While the National Planning Commission articulates overall priorities and formulates a Central Five-Year Plan, the State governments formulate their own State Five-Year Plans, after

consulting the Planning Commission. The State Planning process involves considerable Center-State bargaining which is arbitrated by the Planning Commission. The size of a State Plan is approved by the Planning Commission after it considers factors such as the magnitude of the State Revenue budget surplus, Center-State transfers, etc.

The Planning Commission channels six types of financial assistance for State Plans. The first is called "Normal Plan Assistance." It is linked to an automatic formula, and gives the States unconditional control over the use of these funds.² It was instituted in 1969, in place of an ad-hoc Plan assistance scheme.

The other five types of Planning Commission assistance give the Center far more discretion with respect to the amounts and inter-state distribution of resources. Advance Plan Assistance is used to fill ex-ante yearly plan "gaps" or deficits. The next three types are for specific regional development purposes and go to hill areas, tribal areas, and the Northeast States. The last form of Central Plan transfer is matching assistance (loan or grant) for States that implement externally-aided projects.

² For most states, 30% of this block assistance is in grant form and 70% is in loan form.

Discretionary Transfers

Central transfers which are of a non-statutory and non-State Plan³ nature are referred to as discretionary budgetary transfers.⁴ They are given in the form of either grants or loans. Generally, their amounts and inter-state distribution are not governed by any set formulae or norms,⁵ and they are initiated by Central government ministries or agencies.

The most important discretionary transfer is approved jointly by Central ministries and the Planning Commission.⁶ It funds Centrally-devised schemes to be implemented by State governments. These schemes are part of the National Five-Year Plan because they have special characteristics such as spillover effects. Implementing State governments are given both matching and non-matching grants for Central schemes, which have been steadily rising relative to other transfers. Existing restrictions limiting their financing to 1/6 or 1/7 of Normal Plan assistance are usually ignored.

³ Finance Commission transfers are "statutory" and Planning Commission transfers are State Plan transfers.

⁴ For their definition, see: K.K. George. 1986. "Discretionary Budgetary Transfers: A Review." Economic and Political Weekly. Vol. XXI, No. 46 (November 15), pp.1993-98.

⁵ Small savings schemes are distributed on a pre-set basis.

⁶ Some authors categorize it as a Planning Commission transfer (Thimmaiah, Bajaj et al.).

Two other discretionary transfers have a major impact on State finances. The first is drawn from the pool of small savings deposits of households such as post-office savings deposits. Generally, two-thirds of the net proceeds of the small savings pool is given to the States in the form of loans. The second is the category of miscellaneous Central loans which effectively give the States more financial discretion. For instance, the States are provided overdraft facilities by the Central bank which acts as their banker. An overdraft is supposed to be a temporary accommodation loan for the State to meet a financial contingency. However, many States have used the overdraft facility to access considerable sums of money, and effectively evade the assistance norms developed by the Finance and Planning Commissions. Unauthorized overdrafts have become a serious problem--they increased from minuscule levels in 1951 to Rs. 17,500 million in January 1984.⁷

⁷ G. Thimmaiah. 1985. Burning Issues in Centre-State Financial Relations. New Delhi: Ashish Publishing House, p. 83.

Transfers Compared

A comparison of the relative amounts of transfers effected by the three major types of sources shows that the Finance Commission's role expanded significantly between 1951 and 1984. Table 3.1 gives the percentage of transfers accounted for by each source.

TABLE 3.1

CENTER-STATE REVENUE TRANSFERS FROM THREE SOURCES, 1951-1984 (percent)

PLAN PERIOD	FINANCE COMMISSION	PLANNING COMMISSION	DISCRETIONARY SOURCES	REAL PER-CAPITA TOTAL (Rs.) ¹
I 1951-56	31.2	24.5	44.3	190.2
II 1956-61	32.0	36.9	31.1	402.2
III 1961-66	28.4	44.9	26.7	501.0
ANN-UAL 1966-69	33.3	33.0	33.6	357.3
IV 1969-74	35.9	23.4	40.7	584.3
V 1974-79	43.0	30.5	26.4	566.9
VI 1979-84	41.0	29.3	29.7	811.7

¹ Rs. 15.5 = US\$ 1, as of March 1989.

Note: 1980 was the base year used for estimating real per-capita amounts.

Sources: (i) IMF International Financial Statistics (1988), (ii) Report of the Seventh Finance Commission (1978), (iii) K.K. George. "Discretionary Budgetary Transfers: A Review." (for periods V and VI).

The table shows that Finance Commission transfers were above 35% of the total during the last three Plan periods. Planning Commission amounts varied from a high of almost 45% in period III to a low of 23% in period IV. Discretionary transfers showed similar variations to the Planning Commission ones. In the last period, the two latter types constituted about 30% each of total transfers.

This chapter has shown that Finance Commission transfers are important elements of State finances for a number of reasons. First, they already constitute a major portion of total Central revenue-sharing with the States. Second, the Finance Commission is a statutory body which is meant to be fairly independent of the Central government, even though it receives its terms of reference from the President. In contrast, the Planning Commission is an extra-Constitutional body that is less independent of the Central government, and Discretionary funding agencies are Central government departments. Third, Finance Commission transfers have an impact on the size of State Plans. Finally, the States usually prefer Finance Commission funds to other types because the States are free to use them for any purpose. For all these reasons, a study of the historical evolution of the Finance Commission's policies is justified and would shed some light on its contribution to federal finance.

CHAPTER 4

FINANCE COMMISSION POLICIES

This chapter analyzes the evolution of Finance Commission policy (1951 to 1984) from two perspectives :

(i) the magnitudes of the taxes and grants transferred to the 22 Indian States,¹ and

(ii) the nature of its tax and grant transfers, specifically, the manner in which they are distributed among States.

The data show that the real per-capita transfer amounts have increased significantly, with most of the increase occurring in tax devolutions. Moreover, the inter-state distribution of taxes has been based on transparent formulae developed by each Commission and has redistributed funds in favor of poorer States. Although most grants have been used to fill State Revenue budget gaps remaining after tax devolution, some have been used to equalize the standards of specific public services across States.

¹ Note: Since the period of study, the number of Indian States has increased to 25.

Constitutional and Legal Framework for Policy

Constitutionally and legally, the Finance Commission is independent of the Central government. (Appendix I contains the Constitutional articles that affect the Commission's working.) However, in practice, the Center prescribes guidelines for the Commission's work through its "terms of reference," which have had the following characteristics in the past:

- (i) they have restricted the Finance Commission's attention to the Non-Plan Revenue budgets of States,
- (ii) they have outlined various factors to be considered in distributing grants, such as the size of Revenue budget gaps, and inter-state inequalities in public services, and
- (iii) since the Seventh Commission, they have indicated that the factors considered in grant allocation should also be considered for tax devolution.

During the period of study, seven Finance Commissions were appointed by the President of India. Generally, since these Commissions worked within the scope of their terms of reference, their recommendations were accepted by the President and Parliament.

Commission Policy: Overall Magnitudes of Transfers

This section shows that, between 1951 and 1984, of the two types of Finance Commission transfers, shared taxes became the dominant form of transfer, while grants became a

"residual" form of assistance used mainly to cover budgetary deficits.

Devolved Taxes and Grants

Between 1951 and 1984, the level of devolved taxes increased significantly but the level of grants varied considerably. Graphs 4.1, 4.2, and 4.3 present yearly devolved taxes and grants as percentages of Central Revenues, State Revenues, and Gross Domestic Product (GDP) from 1955-1984. They are meant to indicate broad trends in transferring rather than to present detailed information on yearly flows.²

Graph 4.1 shows that devolved taxes as a percentage of Central Revenues (revenues in the Revenue account) increased from approximately 13% in 1955-56 to approximately 27% in 1983-84. Similarly, Graph 4.2 shows that devolved taxes as a percentage of State Revenues increased from roughly 13% in 1955-56 to roughly 22% in 1983-84. Graph 4.3 depicts the increasing trend in devolved taxes as a percentage of GDP-- from 0.7% in 1955-56 to 2.7% in 1983-84. All three graphs point out the dramatic increase in devolution caused by the Seventh Commission's recommendations (1979-84).

² Note: (i) The data used to generate them are contained in Appendix II, and (ii) Upto 1965-66, data were only available for two years: 1955-56, and 1960-61.

Figure 4.1

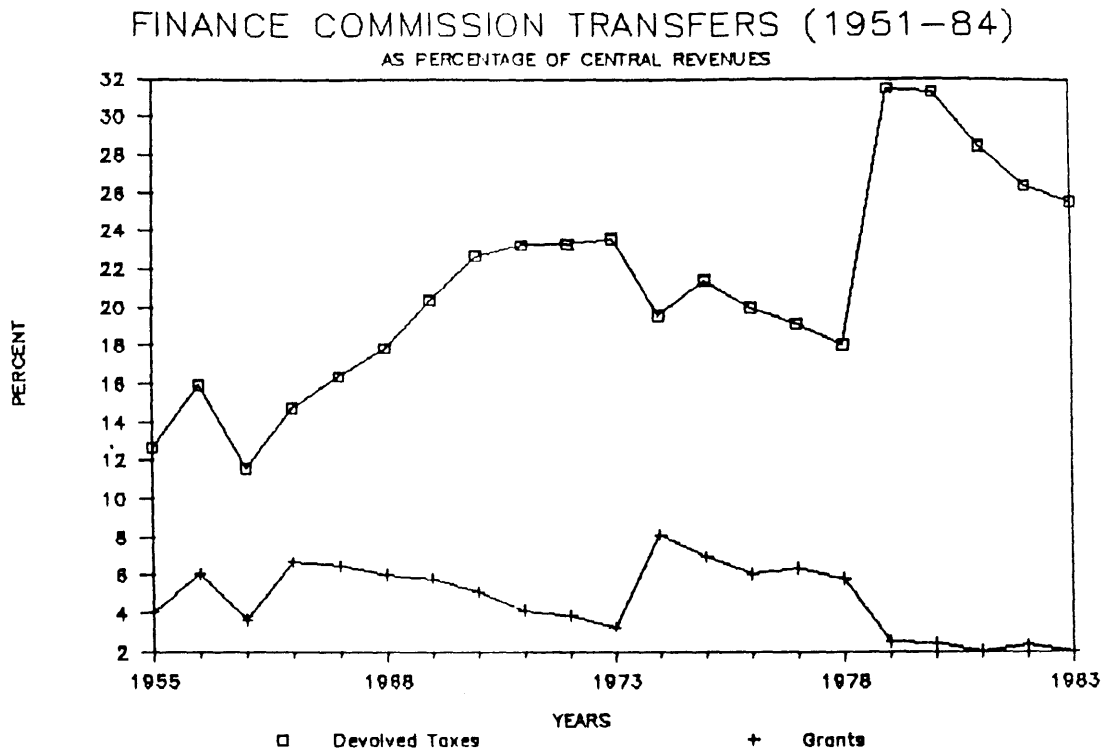


Figure 4.2

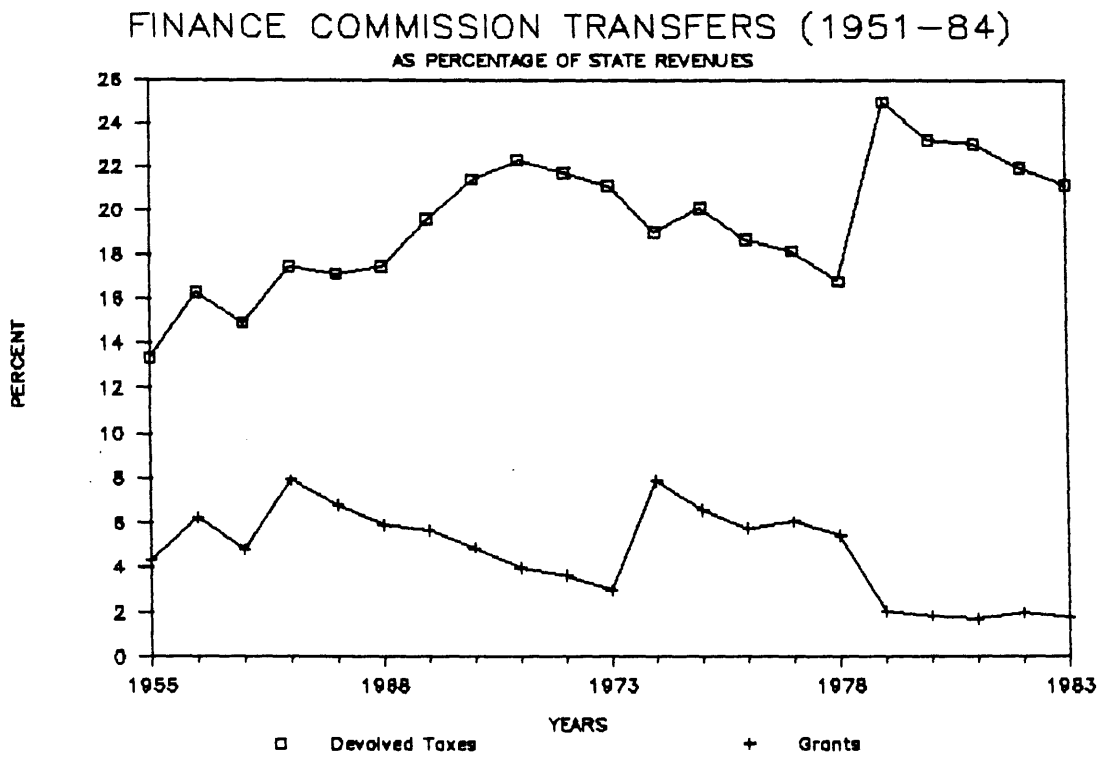
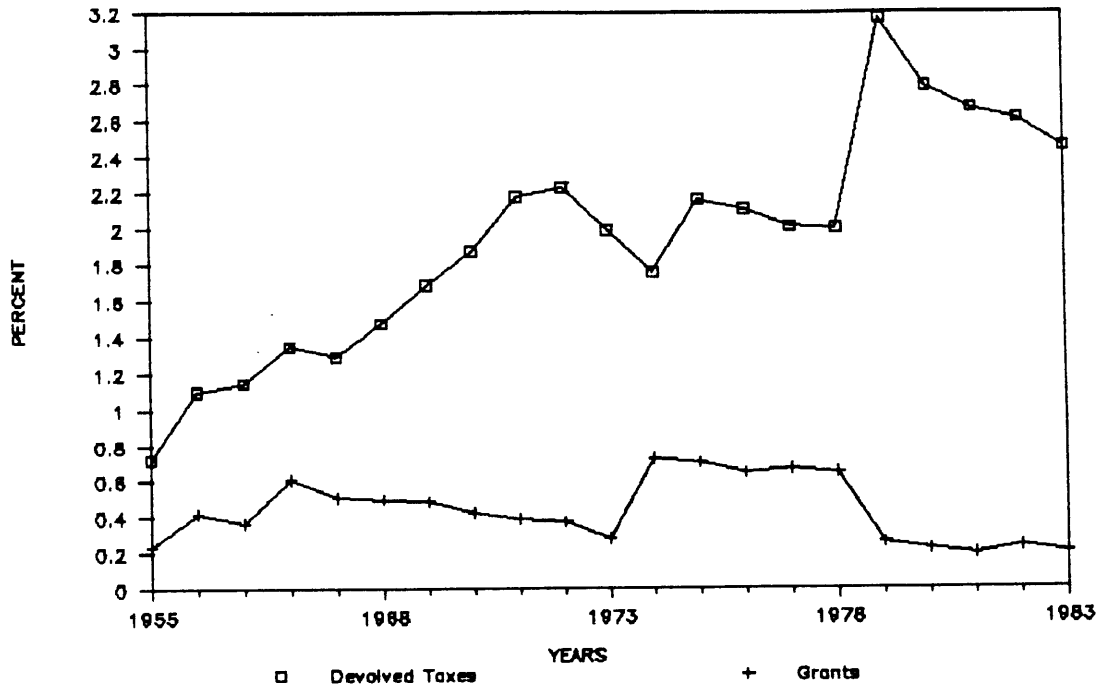


Figure 4.3

FINANCE COMMISSION TRANSFERS (1951-84)
AS PERCENTAGE OF GDP



In contrast to tax-devolution, grant-giving showed no consistent increase. First, grants as a percentage of Central Revenues hovered between 4% and 6% during the period. In fact, they declined to 2% of Central Revenues in the Seventh Commission period (1979-84). Second, grants as a percentage of State Revenues fluctuated considerably, from 4% to 7%, and declined to roughly 2% at the end of the period. Finally, grants as a percentage of GDP hardly displayed any consistent trend.

The increasing importance of tax devolution is highlighted by comparing the proportion of total transfers accounted for by taxes and grants. Table 4.1 (next page) shows that the percentage of devolved taxes to total transfers increased from 77% in Plan I to 92% in Plan VI. It also shows that the real per-capita amounts of transfers (taxes and grants) increased significantly, from Rs. 59.4 during Plan I to Rs. 338.9 during Plan VI.

TABLE 4.1

FINANCE COMMISSION TRANSFERS TO THE STATES, BY TYPE, 1951-1984

PLAN	PERIOD	DEVOLVED TAXES (%)	GRANTS (%)	TOTAL AMOUNT (Millions of Rs.)	REAL PER- CAPITA TOTAL (Rs.)
I	1951-56	77	23	4,470	59.4
II	1956-61	73	27	9,180	128.7
III	1961-66	75	25	15,900	142.2
ANNUAL	1966-69	72	28	17,820	119.1
IV	1969-74	84	16	54,210	209.8
V	1974-79	75	25	110,480	247.8
VI	1979-84	92	8	228,880	338.9

Note: 1980 was the base year used for estimating real per capita amounts.

Sources: (i) IMF International Financial Statistics (1988), p. 410, (ii) Report of the Eighth Finance Commission (1984): p. 156, (iii) Statistical Abstract of India (various issues).

The two most important devolved taxes are the income tax and excise duties.³ Table 4.2 (next page) shows that their combined share in transferred taxes was high during the 1951-84 period. While they accounted for almost all of the tax transfers during Plan I, they constituted between 80% and 89% of the tax transfers in subsequent periods. In real per-

³ Note: (i) only personal income tax is shared with the States. (ii) the excise tax is a producer-level tax, levied on over 100 commodities manufactured and produced within the country.

capita terms, the two taxes increased steadily from Rs. 45.5 in Plan I to Rs. 156.5 in Plan V. The table also shows that the real per-capita income tax and excise duty devolution jumped sharply to Rs. 278.7 in Plan VI. This also can be deduced from two earlier findings: (i) devolved taxes rose dramatically as a percentage of GDP in Plan VI, and (ii) income taxes and excise duties form the major part of devolved taxes.

TABLE 4.2

FINANCE COMMISSION TRANSFERS: INCOME TAX AND EXCISE DUTIES

PLAN PERIOD	INCOME & EXCISE DEVOLN.S (1) (Millions of Rs.)	TOTAL DEVOLVED TAXES (2)	(1) AS % OF (2) (%)	REAL (1) PER- CAPITA (Rs.)	RATIO OF INCOME TO EXCISE TAX DEVOLUTIONS.	
I	1951-56	3,420	3,440	99.4	45.5	4.34
II	1956-61	5,280	6,680	79.0	74.0	2.45
III	1961-66	9,530	11,960	79.7	85.3	1.39
ANN- UAL	1966-69	11,350	12,820	88.5	75.9	0.81
IV	1969-74	39,880	45,620	87.4	154.3	1.16
V	1974-79	69,790	82,750	84.3	156.5	0.88
VI	1979-84	188,210	211,770	88.9	278.7	0.38

Note: 1980 was the base year used for estimating real per-capita amounts.

Sources: (i) IMF International Financial Statistics (1988): p. 410, (ii) Report of the Eighth Finance Commission (1984): pp. 156-57.

It is interesting to note that the ratio of income tax to excise tax devolutions decreased from a high of 4.34 in 1951-56 to 0.38 in 1979-84. Two factors probably explain the variation:

(i) the scope of excise devolutions increased (details are in the next paragraph), and

(ii) Central excise collections rose spectacularly relative to income tax collections, due to reasons such as the higher buoyancy of excise duties and collection problems connected with the income tax.

Since 1951-56, the Commission increased the percentage of Central excise duties and income tax devolved to the States as a whole (see: Appendix III for historical recommendations). The percentage of income tax given to the States steadily increased from 55% in 1951-56 to 85% in 1979-84. Similarly, whereas 40% of excise duties on only three commodities were given to the States in 1951-56, 40% of excise duties on all commodities were given in 1979-84. The rise in the devolved percentages of these two taxes reflect the Finance Commission's recognition that the States need buoyant revenue transfers to keep pace with economic growth and their increasing expenditure needs. In the past, the Indian income tax proved to be a relatively stable source of revenue, a major portion of which could be transferred to the States. Excise duties have been fairly buoyant and are major revenue

generators for the Center. A.K. Agarwal has observed:

There has been a remarkable expansion in the revenue from excise taxation in recent years partly as a result of the increase in production, the raising of the rates of old excise duties, and partly by bringing new products under the purview of excise taxation.*

Table 4.3 presents some historical data on Central collections of income tax and excise duties as percentages of Gross Domestic Product (GDP). It shows that income taxes have decreased from 1.22 to 0.98 percent of GDP between 1969-70 and 1986-87. In contrast, excise taxes have increased from 4.14 percent to 4.94 percent. Thus, excise duties have been buoyant sources of revenue for the Central government and were used more heavily for Central revenue sharing in recent periods.

Grants were generally used as "residuary" forms of assistance, i.e. to fill the budgetary gaps remaining after the usual tax devolutions. The determination of grant amounts is discussed in the next section.

* A.K. Agarwal. 1987. Problems of Indian Fiscal Structure. New Delhi: Mittal Publications, p. 35.

TABLE 4.3
CENTRAL TAX COLLECTIONS AS PERCENTAGES OF GDP
(percent)

YEAR	GDP (Million Rs.)	INCOME TAXES AS % OF GDP	EXCISE DUTIES AS % OF GDP
1969-70	368,500	1.22	4.14
1972-73	478,700	1.22	5.17
1975-76	740,800	1.64	5.19
1979-80	1,075,400	1.25	5.59
1982-83	1,775,900	0.94	5.70
1985-86	2,617,300	0.92	4.94
1986-87	2,927,900	0.98	4.94

Sources: (i) IMF International Financial Statistics (1988): p. 410, (ii) Tata Services Limited, Statistical Outline of India.: (various issues).

Commission Policy: Nature of Transfers

This section first shows that the inter-state distribution of devolved taxes has been based on transparent criteria such as the percentage of population and individuals below the poverty line in each State. Next, it analyzes the impact of the devolution patterns from the point of view of income redistribution, and shows that the poorer states have benefited relative to the richer ones. Finally, it shows that the main criterion used to determine the amounts of grants needed by each State is the fiscal "gap" on the Revenue account.

The Inter-State Distribution of Devolved Taxes

The inter-state distribution of tax transfers is of special concern to States because tax transfers are unconditional and give the States more fiscal latitude than discretionary transfers. A State may wind up with a Revenue surplus after tax devolution. (States that have deficits after devolution receive grants-in-aid to cover gaps) and can use it for purposes such as developmental expenditure. The Finance Commission also can design the tax devolution pattern to redistribute incomes in favor of poorer States. As the income tax and excise duties are the main portion of devolved taxes, this section focuses on them.

Income Tax: As mentioned earlier, the States' share in income tax has risen over the years (Appendix III). From 1951 to 1984, two criteria were used (with marginal variations in weights) for the inter-state allocation of income tax: State population and State income tax contribution. The Fifth, Sixth, and Seventh Commissions gave 90% and 10% weights to these criteria respectively.

Appendix IV presents data on Finance Commission income tax devolutions by State (excluding Sikkim, which does not receive tax devolutions) for 1979-84. A simple linear regression was used to relate State devolved income taxes (DIT) to three variables: 1981 population (P), income tax

contributions (ITC), and 1983 per-capita State Domestic Product (PCSDP). The estimated equation is:

$$\text{DIT} = -61.12 + 71.52 (P) + 0.06 (\text{ITC}) + 0.03 (\text{PCSDP})$$

$(t=44.1) \quad (t=5.51) \quad (t=0.42)$

$$R^2 = 0.99$$

$$N = 21$$

The population and tax contribution coefficients are positive and significantly different from zero, but the per-capita State Domestic Product coefficient is non-significant. These results confirm that population was the key variable influencing the inter-state distribution of income taxes.

Excise Duties: The States' share in excise duties also rose dramatically (Appendix III) between 1951-56 and 1979-84. The first six Commissions used population and backwardness as criteria for inter-state allocations, giving greater weight to population. The Seventh Commission used four factors having equal weights:

- (i) population,
- (ii) inverse of per-capita State Domestic Product,
- (iii) percentage of people below the poverty line, and
- (iv) a "revenue equalization" formula.⁵

⁵ See: Report of the Seventh Finance Commission (1978): p. 87.

Appendix V presents data on excise duty devolutions to each State (excluding Sikkim) for 1979-84 and the results of a simple linear regression of State devolved excise duties (DED) on 1981 population (P), 1983 per-capita State Domestic Product (PCSDP), and 1983 poverty percentage (POV) of each State. The estimated equation is:

$$\text{DED} = 3523.67 + 209.12 (P) - 1.77 (\text{PCSDP}) + 572.68 (\text{POV})$$

$(t=16.33) \quad (t=-4.30) \quad (t=0.17)$

$R^2 = 0.98$
 $N = 21$

The equation shows that the coefficient for population is positive and significantly non-zero, and the coefficient for per-capita State Domestic Product is negative and also statistically significant. The R^2 is 0.98 which signifies a good fit and implies that the key factors influencing devolutions are population and per-capita State Domestic Product.

Total Devolved Taxes: It is useful to ascertain the key variables influencing overall tax transfers. Appendix VI presents the data and results of a simple linear regression of total devolved taxes (TDT) per State on 1981 State population (P), 1983 per-capita State Domestic Product (PCSDP), and 1983 poverty percent (POV). The estimated equation is:

$$\text{TDT} = 224.75 + 283.53 (P) - 0.37 (\text{PCSDP}) + 2143.84 (\text{POV})$$

$$\qquad\qquad\qquad (t=40.72) \qquad\qquad (t=-1.65) \qquad\qquad (t=1.14)$$

$$R^2 = 0.99$$

$$N = 21$$

The results show that the coefficient for population is positive and significantly non-zero. The coefficient for per-capita State Domestic Product, in contrast, is negative but not significantly non-zero. The value of its sign indicates that the strongly negative relation between excise devolutions and per-capita State Domestic Product dominates the regression. This is consistent with our expectations, since the ratio of devolved income tax to excise duties was only 0.38 during this period (Chapter 4, Table 4.2). The results also show that the poverty percent variable has limited explanatory power. The R^2 for the regression is extremely high (0.99), confirming that population is the main criterion for the inter-state total tax distribution.

Income Redistribution Impact of Tax Devolutions

It is often claimed that Finance Commission transfers (taxes and grants included) have a regressive or non-significant redistributive impact (Gulati & George, Chelliah).⁶ It is argued that the per-capita transfers to low-income States are usually less than those to middle and high-income ones. Since devolved taxes account for such a high percentage of total transfers, it follows that per-capita devolved tax transfers also have a regressive impact. The latter deduction is only supported by the facts if per-capita tax devolutions are considered in isolation--if population is the main criterion for inter-state tax distribution (and it is a scaling factor), then it would appear that per-capita tax transfers do not favor poor States. However, if Central tax collections from each State are factored into the analysis, the inter-state distribution of taxes is seen to be highly progressive. The comparison of collections per State with

⁶ Chelliah's study relates the per-capita Finance Commission transfers to the per-capita incomes of the States in a double-log regression model of the following form:

$$\log F = a + b \cdot \log (Y)$$

where: F = Finance Commission transfer per State
Y = Per-capita income of State

The regression coefficient (b) gives the constant income elasticity of the transfers. The coefficients for three periods were calculated (the Third Plan, the Annual Plans, and the Fourth Plan) and found to be negative. Since they were not statistically significant even at a 10% level of significance, the findings were inconclusive.

devolutions per State is justified for two reasons:

(i) since India has a very progressive income tax system plus excise duties are producer-level taxes, tax collections are higher in rich States, and

(ii) even though the Constitution does not provide for it, the States could levy the same taxes instead of the Center.

The estimation of the net elasticity of devolutions minus collections indicates the true impact of the inter-state income tax distribution. Since data on income tax collections by State are easily available, the analysis can be conducted on income tax collections and devolutions. Unfortunately, data on excise duty collections are not widely available. The statewise breakdown of excise collections has not been published in the Explanatory Memorandum on the Budget of the Central Government, probably because it is difficult to compile the data. On the one hand, the excise collection breakdowns which are made by the Central Board of Excises for various points ("collectorate" cities) are not equivalent to State breakdowns. On the other hand, even if the data on State collections were available, they would have to be adjusted for differences between the legal points of collection of excise (producer-level) taxes and points of economic incidence. Since the data have not yet been compiled, the distributional effect of excise devolutions

cannot be ascertained. However, it can be hypothesized that the net effect is progressive because (i) excise collections are likely to be higher in rich States, i.e., those with higher levels of production, and (ii) "backwardness" (as measured by factors such as State Domestic Product) is given a large weight in excise devolutions.

Separate log-log regressions of income tax collections per capita (CPC), and income tax devolutions per capita (DPC) on per-capita State Domestic Product (PCSDP) are given in Appendix VII. They cover the 1979-84 period. The following equations were estimated:

(i) Collections equation:

$$\log (\text{CPC}) = -16.91 + 2.48 \log (\text{PCSDP}) \\ (\text{t}=3.88)$$

$$R^2 = 0.44 \\ N = 21$$

(ii) Devolutions equation:

$$\log (\text{DPC}) = + 1.33 + 0.18 \log (\text{PCSDP}) \\ (\text{t}=1.93)$$

$$R^2 = 0.16 \\ N = 21$$

The first equation shows that collections are significantly elastic with respect to income--the coefficient is +2.48 and statistically significant, and the R^2 is reasonably high. The second equation indicates that tax devolutions are fairly income-inelastic--the coefficient is 0.18 and statistically

significant (the explanatory power of the equation is limited-
-R² is only 0.16). The net elasticity of income tax
devolutions is indicated by the following equation:

$$\begin{aligned} \text{Net Elasticity} &= \text{Elasticity of Devolutions with respect to} \\ &\quad \text{Income} \\ &\quad \text{minus} \\ &\quad \text{Elasticity of Collections with respect to} \\ &\quad \text{Income} \\ &= (0.18) - (2.48) \\ &= - 2.30 \end{aligned}$$

These results show that the net effect of income tax transfers
is progressive because the net elasticity of income tax
devolutions with respect to per-capita SDP is negative and its
absolute magnitude is greater than one.

The Inter-State Distribution of Grants

Finance Commission grants are of two types: block grants
and specific grants. Block grants are used to fill the
Revenue account deficit gaps of States, after adding tax
devolutions to revenue calculations. Hence, if a Commission's
tax awards reduced the number of States with post-devolution
deficits, it needed to make fewer block grants. Specific
grants are given for special purposes such as infrastructure
upgradation in selected States. Their amounts are usually
less than block amounts.

The criteria used for determining the amounts and interstate distribution of grants were tested by a simple linear regression of total grants given to each State (TGT) on the 1981 State population (P), 1983 per-capita State Domestic Product (PCSDP), 1983 poverty percent (POV), and the Revenue account deficit (RAD) for the five-year period. (Data and results are given in Appendix VIII.) The estimated equation is:

$$\text{TGT} = 371.39 + 9.39(P) - 0.19(\text{PCSDP}) - 346.38(\text{POV}) + 1.10(\text{RAD})$$

(t=4.41)
(t=-2.84)
(t=-0.65)
(t=20.78)

$$R^2 = 0.98$$

$$N = 21$$

The results show that the coefficients for population, per-capita State Domestic Product, and the Revenue account deficit are statistically significant. While total grants are positively related to population and the Revenue account deficit, they are negatively related to per-capita SDP.

When yearly per-capita grants (PCGT) are regressed on the same dependent variables as above, the estimated equation is:

$$\text{PCGT} = -1203.91 - 6.07(P) + 0.36(\text{PCSDP}) + 1923.43(\text{POV}) + 1.18(\text{RAD})$$

(t=-0.40)
(t=0.76)
(t=0.51)
(t=3.11)

$$R^2 = 0.53$$

$$N = 21$$

These results show that the revenue account deficit is the only significant factor at work on a per-capita basis. The R^2 of 0.53 implies a reasonably good fit.

CONCLUSION

This paper has shown that Center-State transfers are a crucial component of State finances. First, they help to correct the vertical fiscal imbalance between States' own revenues and expenditures. Chapter 1 showed that the States receive approximately 60% of their revenues in the form of their own revenues and the rest from the Central government. Second, Central revenue transfers have the potential to reduce inter-state disparities in the levels of public services.

It was seen that the Finance Commission transfer mechanism is a key part of the federal financial system. Finance Commission transfers are important to the States not only because they are above 30% of total transfers, but also because of their special characteristics relative to other transfer forms (especially discretionary ones):

(i) they are largely unconditional sums of money, given in the form of taxes and block grants, which the States can use for any expenditure,

(ii) they are distributed among the States on the basis of transparent and clearly-defined criteria, and

(iii) they are distributed in a progressive manner that benefits the poorer states relative to the richer ones.

In contrast, discretionary transfers are usually conditional or given for specific projects. They are not distributed

between the States on the basis of clearly-stated criteria and studies indicate that they arbitrarily favor States that have political clout with the ruling party at the Center. For these reasons, the State governments tend to prefer receiving Finance Commission transfers to discretionary ones.¹ Finance Commission transfers also have an important impact upon the allowable sizes of State Plans (Chapter 3).

The share of resources devolved to the States by the Finance Commission expanded relative to the shares transferred by the Planning Commission and Discretionary sources in the last Plan period. In the light of the characteristics of Finance Commission tax devolutions and grants, it would be preferable if the Central government increased the Finance Commission's share in future. During the period of study (1951-84), the Finance Commission was restricted to making transfers for only the Non-Plan Revenue accounts of the State budgets. Only very recently, in 1989, it has been asked to consider the Plan Revenue account needs of the States as well. This is a laudable change in the Central guidelines for its workings.

¹ K.K. George. 1986. "Discretionary Budgetary Transfers: A Review." Economic and Political Weekly. p. 1993.

The role and functioning of the Finance Commission should be examined carefully, after taking into account the recent trend of increasing fiscal dependence of the States on the Center. This necessitates looking at the relationship between all three types of Center-State revenue transfers and State expenditures. On the revenue side, the aggregate amounts of transfers should be assessed with regard to their ability to keep up with State expenditure needs. On the expenditure side, State expenditures should be scrutinized and the "fiscal responsibility" criterion should be applied to all aspects of the transfer-design process. (In the past, the Finance Commission considered factors such as "efficiency and economy in administration", and "tax effort" only in developing grant formulae.) This is especially important because the "overdraft" form of discretionary transfer, obtained from the Central Bank, overrides the transfer norms developed by the Finance and Planning Commissions (Chapter 3). It is imperative that the Finance Commission convene a meaningful discussion on these issues between different groups such as academics and government officials at the Central and State levels.

APPENDIX I

Article 280 of the Indian Constitution mandates the President to appoint a Finance Commission once every five years. It is the Commission's duty to make recommendations to the President on three matters: (i) the allocation between the Center and the States of the net proceeds of taxes which "have to, or may be," divided between them (these taxes are specified in other Constitutional articles), and the inter-state distribution of the States' share, (ii) the principles which should govern the Central government's Grants-in Aid of the revenues of the States, and (iii) any other matter referred to the Commission by the President, "in the interests of sound finance."

Article 280 empowers the Parliament to legislate on the Commission's (i) procedure and powers, and (ii) appointment and qualifications of members. In 1951, Parliament passed the Finance Commission Act. It states that "The Commission shall determine their procedure and in the performance of their functions shall have all the powers of a Civil court..."¹ In other words, the Commission has a quasi-judicial status--it can summon witnesses, requisition any public document, etc. The Finance Commission Act also prescribes qualifications for

¹ The Finance Commission Act (1951), as reproduced in the report of the Eighth Finance Commission (1984).

members; they should either have qualifications of High Court judges, or have experience/expert knowledge of public finance/economics.

Article 270 provides for the compulsory sharing of taxes that are levied and collected by the Center with the States. Specifically, these are income taxes (except those on agricultural income). The article's definition of income tax explicitly excludes (i) the corporation tax,² or (ii) any surcharges, which can be levied by the Center for its uses, on the income tax. The article empowers the Finance Commission to make recommendations on the percentage of income taxes to be devolved to the States as well as their inter-state distribution. If the President is satisfied with them, he/she implements the recommendations by order. Thus, Parliament is not directly concerned with income tax devolution.

Article 272 deals with the taxes levied and collected by the Center that may be shared with the States: Central excise duties. The President "authorizes" the Finance Commission to make recommendations on the types and percentages of excise

² The exclusion of corporation tax is very significant from a decentralization point of view. According to the Far Eastern Economic Review (April 6, 1989), corporation tax revenues increased from Rs. 43.8 crores (1 Crore=10 million) in 1953 to Rs. 2,339 crores in 1983. Over the same period, income tax revenues increased from Rs. 143 crores to Rs. 1,563 crores.

duties to be transferred, and their inter-state distribution. Parliament has the sole power to implement the recommendations through appropriate legislation.

Based on Article 280's provision for "sound finance," the President also authorizes the Commission to consider taxes levied and collected by the Center but entirely assigned to the States. Article 269 covers two of the three tax types: estate duties (except those on agricultural land), and taxes on railway fares.³ The third type--additional excise duties--is covered in an intergovernmental agreement. The Finance Commission recommends the inter-state distribution of these three tax types. As in the case of Central excise duties (Article 272), recommendations have to be implemented by Parliament.

Article 275 provides for grants-in-aid of the revenues of States, which are to be provided under Parliamentary law or via Presidential Order. Presidential grants are usually referred to the Finance Commission, which recommends their amounts and inter-state distribution.

³ Recently, taxes on railway fares have been shared in a different way--a flat grant amount is given to the States.

APPENDIX II--Table A.II
FINANCE COMMISSION TRANSFERS, 1955-83
(Millions of Rupees)

Year	Devolved		Total		GDP (4)	(1) as % of (4)	(2) as % of (4)	Central			State		
	Taxes (1)	Grants (2)	Transfers (3)	Revenues (5)				* (1) as % of (5)	(2) as % of (5)	Revenues (6)	(1) as % of (6)	(2) as % of (6)	
1955	740	240	980	102,600	0.72	0.23	5,840	12.67	4.11	5,543	13.35	4.33	
1960	1,650	630	2,280	150,200	1.10	0.42	10,350	15.94	6.09	10,118	16.31	6.23	
1965	2,760	880	3,640	241,100	1.14	0.36	23,840	11.58	3.69	18,503	14.92	4.76	
1966	3,730	1,690	5,420	276,600	1.35	0.61	25,290	14.75	6.68	21,352	17.47	7.91	
1967	4,170	1,650	5,820	322,900	1.29	0.51	25,450	16.39	6.48	24,330	17.14	6.78	
1968	4,920	1,660	6,580	332,800	1.48	0.50	27,510	17.88	6.03	28,167	17.47	5.89	
1969	6,220	1,790	8,010	368,500	1.69	0.49	30,530	20.37	5.86	31,719	19.61	5.64	
1970	7,550	1,710	9,260	402,600	1.88	0.42	33,280	22.69	5.14	35,184	21.46	4.86	
1971	9,440	1,680	11,120	433,600	2.18	0.39	40,560	23.27	4.14	42,256	22.34	3.98	
1972	10,670	1,770	12,440	478,700	2.23	0.37	45,730	23.33	3.87	49,123	21.72	3.60	
1973	11,740	1,640	13,380	589,400	1.99	0.28	49,690	23.63	3.30	55,520	21.15	2.95	
1974	12,240	5,060	17,300	696,000	1.76	0.73	62,460	19.60	8.10	64,315	19.03	7.87	
1975	15,990	5,190	21,180	740,800	2.16	0.70	74,710	21.40	6.95	79,382	20.14	6.54	
1976	16,900	5,160	22,060	802,000	2.11	0.64	84,520	20.00	6.11	90,370	18.70	5.71	
1977	18,060	6,000	24,060	898,500	2.01	0.67	94,290	19.15	6.36	99,306	18.19	6.04	
1978	19,560	6,320	25,880	977,500	2.00	0.65	108,540	18.02	5.82	116,467	16.79	5.43	
1979	34,040	2,740	36,780	1,075,400	3.17	0.25	108,140	31.48	2.53	136,293	24.98	2.01	
1980	37,890	2,980	40,870	1,358,100	2.79	0.22	121,110	31.29	2.46	162,933	23.25	1.83	
1981	42,570	3,090	45,660	1,594,200	2.67	0.19	149,460	28.48	2.07	184,546	23.07	1.67	
1982	46,390	4,150	50,540	1,775,900	2.61	0.23	175,420	26.45	2.37	211,255	21.96	1.96	
1983	50,880	4,150	55,030	2,072,700	2.45	0.20	198,800	25.59	2.09	240,138	21.19	1.73	

* Revenues = Revenue account receipts

Sources: Report of Eighth Finance Commission (1984): p. 156.
IMF International Financial Statistics (1988): p. 410.

APPENDIX III--Table A.III

FINANCE COMMISSION RECOMMENDATIONS: TAX DEVOLUTION
(percent)

PLAN	PERIOD	INCOME TAX			EXCISE DUTIES		
		% to States	Criteria Popn.*	Colln.*	% to States	Criteria Popn.	Bkwdness*
I	1951-56	55	80	20	40, on 3 goods	100	0
II	1956-61	60	90	10	25, on 8 goods	90	10
III	1961-66	66	80	20	20, on 35 goods	n.a.	n.a.
AN- NUAL	1966-69	75	80	20	20, on all goods	80	20
IV	1969-74	75	90	10	20, on all goods	80	20
V	1974-79	80	90	10	20, on all goods	75	25
VI	1979-84	85	90	10	40, on all goods	25	75

* Popn.= Population, Colln.= Collection, and Bkwdness.= Backwardness.

Sources: (i) Christine Wallich. State Finances in India: Revenue Sharing, (ii) Raja Chelliah. Trends in Issues in Indian Federal Finance.

APPENDIX III--Table A.III (continued)

FINANCE COMMISSION RECOMMENDATIONS: GRANTS

PLAN	PERIOD	GRANTS Criteria & Awards
I	1951-56	<ol style="list-style-type: none"> 1. Budgetary needs and the Revenue gap. 2. Help to States which faced additional burden due to partition. 3. Assistance to less developed States with special grants. 4. Grants for unforeseeable factors like relief factors based on tax effort. <p>Recommended grants for 10 States.</p>
II	1956-61	<ol style="list-style-type: none"> 1. Requirements of the States for development during Second Five-Year Plan. 2. Provision for uncertain contingencies. 3. Ad hoc assistance for border policing in Assam for Naga disturbances. 4. Grants-in-aid for problems arising out of reorganization of States. <p>Recommended grants for 11 States.</p>
III	1961-66	<ol style="list-style-type: none"> 1. Fiscal Needs, Non-Plan programs. 2. Short-term and long-term committed expenditures. 3. Development of social services and communication facilities. 4. Maintenance and upkeep of the existing Plan projects. 5. 75% of the Revenue component of the Five-Year Plan should be covered (the Union Government did not accept this proposal). <p>Recommended grants for the development of communication facilities: Rs. 90 million to 10 States. Recommended general grants for 14 States.</p>

Sources: Christine Wallich. State Finances in India: Revenue Sharing.

APPENDIX III--Table A.III (concluded)

FINANCE COMMISSION RECOMMENDATIONS: GRANTS

PLAN	PERIOD	GRANTS Criteria & Awards
AN- NUAL	1966-69	<ol style="list-style-type: none"> 1. Did not make any specific grants. 2. Grants for debt servicing, keeping in view expenditure and economy. <p align="center">Recommended special grants for 6 States and general grants for 10 States.</p>
IV	1969-74	<ol style="list-style-type: none"> 1. Did not favor specific grants. 2. States' needs on Revenue account. 3. The interest charges on their debt and the maintenance and upkeep of Plan schemes completed by 1968-69. 4. Fiscal management. 5. Special problems of certain States. 6. Provision for amortization or repayment of debt including fresh borrowing from 1969-70 to 1973-74. <p align="center">Recommended grants for 10 States.</p>
V	1974-79	<ol style="list-style-type: none"> 1. Closing budgetary gaps. 2. Grants for maintenance and upkeep of Plan schemes completed by 1973-74. 3. Interest charges in respect of debt. 4. The requirements of certain States to upgrade general administration. 5. Specific grants for social services and to reduce regional disparities. <p align="center">Recommended general grants for 19 States.</p>
VI	1979-84	<ol style="list-style-type: none"> 1. Closing budgetary gaps. 2. Grants for improvement of administrative infrastructure. 3. Relief expenditure, if necessary.

Sources: Christine Wallich. State Finances in India: Revenue Sharing.

APPENDIX IV--Table A.IV

SEVENTH FINANCE COMMISSION TRANSFERS, BY STATE:
Income Taxes

NO.	STATE	DEVOLVED INCOME TAXES (Million Rs.)	1981 POPULATION (millions)	INCOME TAXES RAISED (1979-84) (Million Rs.)	1983 PER- CAPITA SDP (Rs.)
1	Andhra Pradesh	4,165	53.55	1,845	2,146
2	Assam	1,309	19.90	517	1,886
3	Bihar	4,952	69.91	778	1,322
4	Gujarat	3,093	34.09	7,650	3,131
5	Haryana	944	12.92	678	2,993
6	Himachal Pradesh	309	4.28	98	2,253
7	Jammu & Kashmir	425	5.99	319	2,301
8	Karnataka	2,825	37.14	2,377	2,209
9	Kerala	2,050	25.45	1,509	2,069
10	Madhya Pradesh	3,818	52.18	1,395	1,840
11	Maharashtra	5,686	62.78	20,029	3,236
12	Manipur	98	1.42	35	1,728
13	Meghalaya	92	1.34	31	1,753
14	Nagaland	44	0.78	9	2,825
15	Orissa	1,941	26.37	320	1,927
16	Punjab	1,409	16.79	2,638	3,685
17	Rajasthan	2,265	34.26	1,332	1,967
18	Tamil Nadu	4,179	48.41	4,203	1,918
19	Tripura	134	2.05	21	1,772
20	Uttar Pradesh	8,009	110.86	3,339	1,518
21	West Bengal	4,162	54.58	4,487	2,196
	TOTAL:	51,910	675.05	53,609	

NOTES:

1. Since 1984, three new states have come into existence--Arunachal Pradesh, Goa, and Mizoram. Sikkim is excluded because income taxes were not levied there during the period.
2. All figures are in current Rupees, unless otherwise specified.

SOURCES:

Report of Eighth Finance Commission (1984): p. 96, p. 150 (appdx), p.233 (appdx).
First Report of Ninth Finance Commission (1988): annexures V.3, V.5.

APPENDIX IV (continued)

DEVOLVED INCOME TAXES REGRESSION
(1979-84)

Regression Output:			
Constant			-61.1154
Std Err of Y Est			156.9450
R Squared			0.9956
No. of Observations			21.0000
Degrees of Freedom			17.0000
	Popn.	Tax Contribn.	Per-cap. SDP
X Coefficient(s)	71.5246	0.0633	0.0325
Std Err of Coef.	1.62	0.01	0.08
T-Statistic	44.10	5.51	0.42

APPENDIX V--Table A.V

SEVENTH FINANCE COMMISSION TRANSFERS, BY STATE:
Excise Duties

NO.	STATE	DEVOLVED EXCISE DUTIES (Million Rs.)	1981 POPULATION (millions)	1983 PER- CAPITA SDP (Rs.)	1983 POVERTY PERCENT (percent)
1	Andhra Pradesh	10,492	53.55	2,146	36.46%
2	Assam	3,807	19.90	1,886	23.82%
3	Bihar	17,753	69.91	1,322	49.76%
4	Gujarat	5,592	34.09	3,131	24.46%
5	Haryana	1,604	12.92	2,993	15.98%
6	Himachal Pradesh	710	4.28	2,253	13.56%
7	Jammu & Kashmir	1,144	5.99	2,301	16.37%
8	Karnataka	6,647	37.14	2,209	35.27%
9	Kerala	5,501	25.45	2,069	26.74%
10	Madhya Pradesh	11,895	52.18	1,840	46.50%
11	Maharashtra	9,041	62.78	3,236	35.17%
12	Manipur	297	1.42	1,728	12.73%
13	Meghalaya	273	1.34	1,753	28.50%
14	Nagaland	132	0.78	2,825	22.11%
15	Orissa	6,382	26.37	1,927	42.63%
16	Punjab	1,671	16.79	3,685	13.83%
17	Rajasthan	6,560	34.26	1,967	35.06%
18	Tamil Nadu	10,415	48.41	1,918	39.36%
19	Tripura	508	2.05	1,772	23.64%
20	Uttar Pradesh	24,933	110.86	1,518	45.56%
21	West Bengal	10,942	54.58	2,196	39.25%
	TOTAL:	136,300	675.05		

NOTES:

1. Since 1984, three new states have come into existence--Arunachal Pradesh, Goa, and Mizoram. Sikkim is excluded because excise duties were not levied there during the period.
2. All figures are in current Rupees, unless otherwise specified.

SOURCES:

Report of Seventh Finance Commission (1978): p. 125
 Report of Eighth Finance Commission (1984): p. 150 (appdx), p. 156 (appdx).
 First Report of Ninth Finance Commission (1988): annexures V.3, V.5.

APPENDIX V (continued)

DEVOLVED EXCISE DUTIES REGRESSION
(1979-84)

Regression Output:			
Constant			3523.6709
Std Err of Y Est			938.3628
R Squared			0.9819
No. of Observations			21.0000
Degrees of Freedom			17.0000
	Popn.	Per-cap. SDP	Poverty Pct.
X Coefficient(s)	209.1195	-1.7665	572.6764
Std Err of Coef.	12.81	0.41	3465.24
T-Statistic	16.33	-4.30	0.17

APPENDIX VI--Table A.VI

SEVENTH FINANCE COMMISSION TRANSFERS, BY STATE:
Total Devolved Taxes

NO.	STATE	DEVOLVED TAXES (Million Rs.)	YRLY DEVOLVED TAXES/ CAPITA (Rs.)	1981 POPULATION (millions)	1983 PER- CAPITA SDP (Rs.)	1983 POVERTY PERCENT (percent)
1	Andhra Pradesh	15,029	561.30	53.55	2,146	36.46%
2	Assam	4,969	499.51	19.90	1,886	23.82%
3	Bihar	21,499	614.99	69.91	1,322	49.76%
4	Gujarat	9,639	565.55	34.09	3,131	24.46%
5	Haryana	3,086	477.59	12.92	2,993	15.98%
6	Himachal Pradesh	1,103	515.11	4.28	2,253	13.56%
7	Jammu & Kashmir	1,591	531.32	5.99	2,301	16.37%
8	Karnataka	10,050	541.25	37.14	2,209	35.27%
9	Kerala	7,662	602.00	25.45	2,069	26.74%
10	Madhya Pradesh	15,339	587.93	52.18	1,840	46.50%
11	Maharashtra	17,141	546.02	62.78	3,236	35.17%
12	Manipur	378	531.46	1.42	1,728	12.73%
13	Meghalaya	367	549.10	1.34	1,753	28.50%
14	Nagaland	179	462.19	0.78	2,825	22.11%
15	Orissa	8,153	618.33	26.37	1,927	42.63%
16	Punjab	4,195	499.77	16.79	3,685	13.83%
17	Rajasthan	8,835	515.74	34.26	1,967	35.06%
18	Tamil Nadu	14,764	609.98	48.41	1,918	39.36%
19	Tripura	597	581.20	2.05	1,772	23.64%
20	Uttar Pradesh	32,027	577.78	110.86	1,518	45.56%
21	West Bengal	15,726	576.26	54.58	2,196	39.25%
	TOTAL:	192,326		675.05		

NOTES:

1. Since 1984, three new states have come into existence--Arunachal Pradesh, Goa, and Mizoram. Sikkim is excluded.
2. Grants include Revenue Gap grants, Upgradation Grants, and Margin Money Grants.
3. A 2.5 % population growth rate was assumed in calculating 1983 population, for the 1983 poverty percent estimate.
4. The Forecast Revenue (account) Deficit After Devolution (of taxes) is for the period 1979-84.
5. All figures are in current Rupees, unless otherwise specified.

SOURCES:

Report of Seventh Finance Commission (1978): pp. 88-89.
Report of Eighth Finance Commission (1984): p. 96, p. 150 (appdx.).
First Report of Ninth Finance Commission (1988): annexures V.3, V.5.

APPENDIX VI (continued)

DEVOLVED TAXES REGRESSION
(1979-84)

Regression Output:			
Constant			224.7484
Std Err of Y Est			510.1469
R Squared			0.9968
No. of Observations			21.0000
Degrees of Freedom			17.0000
	Popn.	Per-cap. SDP	Poverty Pct.
X Coefficient(s)	283.5254	-0.3690	2143.8438
Std Err of Coef.	6.96	0.22	1883.90
T-Statistic	40.72	-1.65	1.14

APPENDIX VII--Table A.VII

INCOME TAX COLLECTIONS AND DEVOLUTIONS, BY STATE: (Seventh Commission Period)

NO.	STATE	INCOME TAX	INCOME TAX	1983 PER-
		COLLECTION	DEVOLUTION	CAPITA SDP
		PER CAPITA	PER CAPITA	(Rs.)
		(Rs.)	(Rs.)	(Rs.)
		(1)	(2)	(3)
1	Andhra Pradesh	6.89	15.55	2,146
2	Assam	5.19	13.16	1,886
3	Bihar	2.22	14.17	1,322
4	Gujarat	44.89	18.15	3,131
5	Haryana	10.49	14.61	2,993
6	Himachal Pradesh	4.57	14.43	2,253
7	Jammu & Kashmir	10.67	14.18	2,301
8	Karnataka	12.80	15.21	2,209
9	Kerala	11.86	16.11	2,069
10	Madhya Pradesh	5.35	14.64	1,840
11	Maharashtra	63.80	18.11	3,236
12	Manipur	4.88	13.74	1,728
13	Meghalaya	4.67	13.83	1,753
14	Nagaland	2.19	11.39	2,825
15	Orissa	2.43	14.72	1,927
16	Punjab	31.42	16.78	3,685
17	Rajasthan	7.78	13.22	1,967
18	Tamil Nadu	17.37	17.26	1,918
19	Tripura	2.04	13.05	1,772
20	Uttar Pradesh	6.02	14.45	1,518
21	West Bengal	16.44	15.25	2,196
	TOTAL:			

NOTES:

1. Since 1984, three new states have come into existence--Arunachal Pradesh, Goa, and Mizoram. Sikkim is excluded because income taxes were not levied there during the period.
2. All figures are in current Rupees, unless otherwise specified.

SOURCES:

Report of Eighth Finance Commission (1984): p. 96, p. 150 (appdx), p. 233 (appdx).
 First Report of Ninth Finance Commission (1988): annexures V.3, V.5.

APPENDIX VII (continued)

LOG-LOG REGRESSION OF TAX COLLECTIONS PER CAPITA
ON SDP PER CAPITA (1979-84)

Regression Output:		
Constant		-16.9124
Std Err of Y Est		0.7411
R Squared		0.4424
No. of Observations		21.0000
Degrees of Freedom		19.0000
	Log of Per-cap. SDP	
X Coefficient(s)	2.4755	
Std Err of Coef.	0.64	
T-Statistic	3.88	

LOG-LOG REGRESSION OF TAX DEVOLUTIONS PER CAPITA
ON SDP PER CAPITA (1979-84)

Regression Output:		
Constant		1.3322
Std Err of Y Est		0.1069
R Squared		0.1635
No. of Observations		21.0000
Degrees of Freedom		19.0000
	Log of Per-cap. SDP	
X Coefficient(s)	0.1773	
Std Err of Coef.	0.09	
T-Statistic	1.93	

APPENDIX VIII--Table A.VIII

SEVENTH FINANCE COMMISSION TRANSFERS, BY STATE:
Grants

NO.	STATE	GRANTS (Million Rs.)	YRLY GRANTS/ CAPITA (Rs.)	1981 POPULATION (millions)	1983 PER- CAPITA SDP (Rs.)	1983 POVERTY PERCENT (percent)	FORECAST PERIOD DEFICIT AFTER DEVOLUTION (Million Rs.)
1	Andhra Pradesh	196	7.32	53.55	2,146	36.46%	0
2	Assam	217	21.82	19.90	1,886	23.82%	0
3	Bihar	630	18.03	69.91	1,322	49.76%	0
4	Gujarat	0	0.00	34.09	3,131	24.46%	0
5	Haryana	0	0.00	12.92	2,993	15.98%	0
6	Himachal Pradesh	2,148	1003.55	4.28	2,253	13.56%	2,071
7	Jammu & Kashmir	2,178	727.71	5.99	2,301	16.37%	1,996
8	Karnataka	0	0.00	37.14	2,209	35.27%	0
9	Kerala	42	3.28	25.45	2,069	26.74%	0
10	Madhya Pradesh	636	24.37	52.18	1,840	46.50%	0
11	Maharashtra	0	0.00	62.78	3,236	35.17%	0
12	Manipur	1,563	2199.44	1.42	1,728	12.73%	1,463
13	Meghalaya	975	1459.13	1.34	1,753	28.50%	926
14	Nagaland	2,227	5746.58	0.78	2,825	22.11%	2,184
15	Orissa	1,692	128.31	26.37	1,927	42.63%	1,369
16	Punjab	0	0.00	16.79	3,685	13.83%	0
17	Rajasthan	193	11.26	34.26	1,967	35.06%	0
18	Tamil Nadu	272	11.24	48.41	1,918	39.36%	0
19	Tripura	1,402	1365.61	2.05	1,772	23.64%	1,366
20	Uttar Pradesh	1,120	20.21	110.86	1,518	45.56%	0
21	West Bengal	245	8.98	54.58	2,196	39.25%	0
	TOTAL:	15,736		675.05			

NOTES:

1. Since 1984, three new states have come into existence--Arunachal Pradesh, Goa, and Mizoram. Sikkim has been excluded.
2. Grants include Revenue Gap grants, Upgradation Grants, and Margin Money Grants.
3. A 2.5 % population growth rate was assumed in calculating 1983 population, for the 1983 poverty pct. estimate.
4. The Forecast Revenue (account) Deficit After Devolution (of taxes) is for the period 1979-84.
5. All figures are in current Rupees, unless otherwise specified.

SOURCES:

- Report of Seventh Finance Commission (1978): pp. 88-89.
 Report of Eighth Finance Commission (1984): p. 96, p. 150 (appdx.).
 First Report of Ninth Finance Commission (1988): annexures V.3, V.5.

APPENDIX VIII

GRANTS REGRESSION
(1979-84)

Regression Output:

Constant		371.3890		
Std Err of Y Est		142.6317		
R Squared		0.9751		
No. of Observations		21.0000		
Degrees of Freedom		16.0000		
	Popn.	Per-capita SDP	Poverty Pct.	Rev. Deficit
X Coefficient(s)	9.3870	-0.1864	-346.3761	1.0966
Std Err of Coef.	2.13	0.07	530.61	0.05
T-Statistic	4.41	-2.84	-0.65	20.78

GRANTS (PER CAPITA) REGRESSION
(1979-84)

Regression Output:

Constant		-1203.9061		
Std Err of Y Est		1020.4186		
R Squared		0.5328		
No. of Observations		21.0000		
Degrees of Freedom		16.0000		
	Popn.	Per-capita SDP	Poverty Pct.	Rev. Deficit
X Coefficient(s)	-6.0662	0.3580	1923.4273	1.1756
Std Err of Coef.	15.23	0.47	3796.07	0.38
T-Statistic	-0.40	0.76	0.51	3.11

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